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April 26, 2018

VIA PRIVATE CARRIER

Mr. James R. Carroll
Program Administrator
Land Restoration Program
Land Management Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject: Transmittal of the Groundwater Monitoring Well and Vapor Monitoring Point Installation Report, Block I Maintenance Building and Surrounding Areas
Lockheed Martin Corporation; Middle River Complex
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland

Dear Mr. Carroll:

For your review please find enclosed two hard copies with a CD of the above-referenced document. This document presents data collected to address data gaps in groundwater (both vertically and horizontally) and to assess vapor intrusion pathways to the Maintenance Building in Block I at Lockheed Martin's Middle River Complex in Middle River, Maryland.

If possible, we respectfully request to receive MDE's comments by June 8, 2018.

Please let me know if you have any questions. My office phone is (301) 548-2227.

Sincerely,

Lynnette Drake
Remediation Analyst, Environmental Remediation

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GROUNDWATER MONITORING WELL AND VAPOR MONITORING POINT INSTALLATION REPORT BLOCK I MAINTENANCE BUILDING AND SURROUNDING AREAS LOCKHEED MARTIN MIDDLE RIVER COMPLEX 2323 EASTERN BOULEVARD MIDDLE RIVER, MARYLAND

Prepared for:
Lockheed Martin Corporation

Prepared by:
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April 2018

Approved by:
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Revision: 0



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ACRONYMS

ACM	asbestos-containing material
bgs	below ground surface
cis-1,2-DCE	*cis*-1,2-dichloroethene
COC	contaminant(s) of concern
COMAR	*Code of Maryland Regulations*
CSM	conceptual site model
DCA	dichloroethane
DCE	dichloroethene
DO	dissolved oxygen
DPT	direct-push technology
DRO	diesel-range organics
ECD	electron-capture device
EGIS	environmental geographic information system
ESH	environment, safety, and health
ft	feet
GC	gas chromatograph
GPR	ground-penetrating radar
GRO	gasoline-range organics
HASP	health and safety plan
Hg	mercury
HI	hazard index
IA	indoor air
IDW	investigation-derived waste
LMCPI	LMC Properties, Inc.
Lockheed Martin	Lockheed Martin Corporation
MB	Maintenance Building

MDE	Maryland Department of the Environment
MTBE	methyl-tert butyl ether
µg/kg	microgram(s) per kilogram
µg/L	microgram(s) per liter
MRAS	MRA Systems, Inc.
MRC	Middle River Complex
MS	mass spectrometer
NTU	nephlometric turbidity unit
ORP	oxidation reduction potential
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PID	photoionization detector
ppb	part(s) per billion
ppm	part(s) per million
PPE	personal protective equipment
PVC	polyvinyl chloride
QA	quality assurance
QC	quality control
SV	sub-slab soil vapor
SVOC	semivolatile organic compounds
TCA	trichloroethane
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
Tetra Tech	Tetra Tech, Inc.
TMB	trimethylbenzene
TO-15	Toxic Organic-15
TPH	total petroleum hydrocarbons

trans-1,2-DCE	*trans*-1,2-dichloroethene
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VI	vapor intrusion
VISL	vapor intrusion screening-level
VMP	vapor monitoring point
VOC(s)	volatile organic compounds
WMP	waste management plan

SECTION 1
INTRODUCTION

This report summarizes activities completed as part of an ongoing investigation west of Building A and the Building A basement in Tax Block I at the Middle River Complex (MRC) in Middle River, Maryland (Figure 1-1). This investigation was conducted to address data gaps in groundwater (both vertically and horizontally) and to assess vapor intrusion pathways to the Maintenance Building in Block I. The objectives of this report are to document:

- installation and sampling of 11 groundwater monitoring wells west of Building A and the Building A basement to assess the vertical and horizontal distribution of chlorinated volatile organic compounds (VOCs) (primarily trichloroethene [TCE]), and to determine if a contiguous plume is emanating from source areas under Building A
- installation of seven direct-push technology (DPT) borings and vertical water-screening/sampling intended to refine additional groundwater monitoring well locations and the depths of screened intervals
- installation (using Vapor Pin® technology) and sampling of 10 sub-slab soil vapor monitoring points (VMPs) in the Maintenance Building to assess potential vapor intrusion (VI) pathways

Recent investigations in Building A and the Building A basement have identified elevated TCE concentrations in sub-slab soil vapor (SV), infiltrated water, and, on occasion, in basement indoor air. In March and April 2017, a gas chromatography/mass spectrometer (GC/MS) with an electron-capture detector (ECD) was used to continuously monitor trichloroethene concentrations at targeted floor features and within breathing zones in the southern portion of the Building A basement. Water samples were collected from targeted floor features (i.e., sumps, storm drains) and analyzed for volatile organic compounds. Trichloroethene was detected in eight of the 15 floor features sampled, ranging from 0.70*J* (estimated value) to 5,100 micrograms per liter (µg/L), with the highest concentration (5,100 µg/L) detected in heater room sump HRS5. HRS5 is associated with former heater room (A-9) near column D26 in the Building A basement. This sump has

historically exhibited the highest trichloroethene levels in air, water, and portable-gas chromatograph (GC)/mass spectrometer (MS) sampling.

These results prompted an additional investigation to assess chemical concentrations in groundwater flowing downgradient (i.e., westward) from Building A and the Building A basement toward Cow Pen Creek. This site investigation was performed in 2017. Additional wells were advanced downgradient of known trichloroethene plumes (and toward Cow Pen Creek) to evaluate the vertical and horizontal extent of groundwater contamination. Borings were advanced via direct-push technology, and vertical groundwater profiling was used to refine additional monitoring well locations and targeted screen intervals. Soil vapor samples were also collected to assess sub-slab conditions under the Maintenance Building. This building is west of Building A and within the contaminated groundwater flow field emanating from Building A. The Maintenance Building is currently used by the on-site maintenance contractor (EMCOR), and includes a small office area, a lunchroom, and open warehouse space.

SECTION 2
SITE DESCRIPTION

This section briefly summarizes groundwater conditions west of Building A and the Building A basement. Four areas of trichloroethene (TCE) in groundwater have been identified west of Building A and heading toward Cow Pen Creek (identified as TCE Areas #1 through #4 on Figure 2-1). Downgradient TCE plumes associated with possible source areas identified under Building A might be affecting indoor air via vapor intrusion (VI) in Building A and the Building A basement, the Maintenance Building, and the Drop Hammer Building (TCE Areas #1 and #3 on Figure 2-1), and/or by groundwater infiltrating into sumps.

TCE in shallow subsurface soil beneath Building A likely resulted from releases from former vapor degreasers, underground storage tanks, and possibly from former plating, painting, and/or milling operations. Releases might also have occurred through leaking equipment or equipment overflows and/or spills (Tetra Tech, 2017a). Vapor degreasers were historically in Building A at the locations of current sub-slab vapor monitoring points (VMPs) SV-136-A and SV-168-A; vapor degreasers were also once in the former plating shop area (Figure 2-1). The groundwater emanating from Building A that exhibits elevated TCE concentrations is downgradient of these known and possible source areas.

Before the 2017 site investigation, the conceptual side model (CSM) for this area of the MRC identified four TCE areas west of Building A as being in the surficial aquifer (Figure 2-1), at: well MW96A–B (west of Building A and east of the maintenance building); wells MW53A-B (west of the Maintenance Building and hydraulically downgradient of wells MW96A–B); well MW90B (west of the Drop Hammer Building and Building A); and well MW08B (downgradient, toward Cow Pen Creek). The surficial aquifer beneath the site has been historically divided into three hydraulically connected zones for study purposes: the upper (A), intermediate (B), and lower (C) surficial aquifer. “A” wells typically range from approximately seven to 40 feet below grade; the “B” wells typically range from approximately 20–50 feet below grade, and the “C” wells typically range from approximately 45–80 feet below grade. These relatively shallow permeable zones (part

of the Patapsco formation) are underlain by the Arundel formation at depths of 70–100 feet. The Arundel formation is a regionally extensive, thick, dense clay, confining-unit.

Maximum TCE concentrations have been consistently detected in the first (and largest) area (labeled TCE Area #1 on Figure 2-1) west of Building A at well MW96A (3,300–4,000 micrograms per liter [µg/L] from 2010–2016). Lower TCE concentrations were detected hydraulically upgradient at wells MW109A (0.21–12 µg/L) and MW109B (4.1–110 µg/L). The width of the TCE-impacted groundwater within Area #1 extends north from well MW49A (0.33 µg/L) and southward to well MW17A (17 µg/L). TCE Area #1 is directly downgradient of two of the known TCE sources, including the former location of vapor degreasers near VMPs 136-A and 168-A, and the former plating shop to the south.

The second TCE area (labeled TCE Area #2 on Figure 2-1) is defined by two well pairs (MW53A [10–350 µg/L TCE] and MW53B [12–246 µg/L TCE], and MW110A [17–33 µg/L TCE] and MW110B [11–38 µg/L TCE]). Area #2 is southwest and hydraulically downgradient of well MW96A–B. TCE concentrations detected here are approximately one order of magnitude lower than those detected at MW96A (3,300–4,000 µg/L) between 2010 and 2016. Whether the TCE source for wells MW53A–B is the same as the source for MW96A–B is currently unknown, because volatile organic compounds (VOCs) have not been detected at downgradient and side-gradient wells installed in the surficial-aquifer (MW69A–B, MW41A, MW75A, and MW52A). However, TCE might be present in a deeper permeable -zone below the screened interval of these wells.

The third TCE area (labeled TCE Area #3 on Figure 2-1) has been identified at the western and northern extent of the Drop Hammer Building at well MW90B. TCE concentrations at MW90B ranged from 28 to 370 µg/L between 2009 and 2016; these concentrations fluctuate and are higher than those detected in shallow upgradient wells MW64A (TCE not detected to 0.4 µg/L) and MW17A (TCE at 5–63 µg/L). A fourth area of TCE contamination in groundwater (labeled TCE Area #4 on Figure 2-1) has been identified at well MW08B, where TCE concentrations below the state groundwater standard have been detected near Cow Pen Creek. However, well MW08B might be too far north to be directly downgradient of TCE-impacted groundwater detected at wells

MW110A–B, MW53A–B, and MW90B. TCE Area #4 is farther downgradient from TCE Areas #1 and #2, and might also be influenced by two of the known upgradient TCE sources under Building A, including the former locations of vapor degreasers near VMPs 136-A and 168-A, and the former plating shop to the south.

Additional cross-sectional analysis of the new wells installed for this investigation indicate upper and deeper high permeable zones separated by a thick clay unit throughout most of the localized region west of Building A toward Cow Pen Creek. Whether the four areas of TCE described above are isolated or contiguous was previously unknown. Groundwater samples with elevated TCE levels obtained from the newly installed wells in September 2017 appear to indicate that these three areas might not be distinct (i.e., might not originate from separate TCE sources), but rather might be part of a larger TCE plume emanating from beneath Building A.

SECTION 3
INVESTIGATION APPROACH AND FIELD METHODOLOGY

This report documents field activities conducted as part of an ongoing investigation west of Building A and the Building A basement at the Lockheed Martin Middle River Complex (MRC), in Middle River, Maryland. This investigation was conducted to fill data-gaps for groundwater west of Building A, both vertically and horizontally, and to assess possible vapor intrusion pathways to the Maintenance Building in Block I, with a focus on trichloroethene (TCE) contamination. The scope of work associated with this field investigation includes:

- installation and sampling of 11 groundwater monitoring wells west of Building A
- installation of seven direct-push technology (DPT) borings with vertical groundwater screening and sampling
- installation of 10 vapor monitoring points (VMPs) in the Maintenance Building using Vapor Pin® technology
- subsequent soil vapor (SV) sampling

Results from this investigation assisted with further delineation of TCE in groundwater flowing downgradient from Building A and the Building A basement toward Cow Pen Creek, and documented sub-slab conditions under the Maintenance Building.

3.1 MOBILIZATION/DEMOBILIZATION

On September 5, 2017, Tetra Tech mobilized the drilling subcontractor (Cascade Drilling) and Tetra Tech field personnel and equipment to the site for groundwater well drilling and installation. Subsequent mobilizations occurred on September 18, 2017 for the DPT vertical groundwater screening (performed by Ground Zero Field Services), and on September 25, 2017 for VMP installation. Mobilization includes:

- coordinating with Lockheed Martin Corporation (Lockheed Martin) and MRC personnel for facility access and approval of boring locations
- constructing an equipment decontamination area
- obtaining "Miss Utility" and MRC utility clearances for the DPT vertical groundwater screening boring and monitoring well and VMP locations, along with using a private utility-locating firm
- implementing a site-specific health and safety plan (HASP)
- managing investigation-derived waste (IDW)
- mobilizing subcontractors, equipment, and materials to the site

Demobilization includes the following:

- demobilizing subcontractors, equipment, and materials from the site
- general site cleanup and trash removal
- managing IDW

Tetra Tech provided notification to and coordinated access arrangements through Lockheed Martin Security, EMCOR (site maintenance), and MRA Systems, Inc. (MRAS) to gain access to the Maintenance Building and areas west of Building A and the Building A basement. MRC tenants were informed and updated about the field investigation at biweekly meetings conducted by LMC Properties, Inc., (LMCPI). LMCPI was notified of the field tasks and schedule, and approved the work and schedule before Tetra Tech mobilized to the field.

The field operations leader coordinated mobilization and demobilization (including equipment inventories, to ensure equipment availability), purchasing and leasing equipment, and staging equipment for efficient loading and transport to and from the site before and after each field activity. Before field operations began, Tetra Tech personnel reviewed the site-specific HASP and the respective "safe work" permits therein. Tetra Tech held mandatory daily health and safety tailgate meetings before all field events.

Subcontractors present for that day's field activities were included in these daily meetings. The Tetra Tech site health and safety officer documented pertinent topics covered and personnel in

attendance. Tetra Tech also followed the waste management plan (WMP) conforming to *Lockheed Martin Energy, Environment, Safety, and Health (EESH) Remediation Waste Management Procedure No. EROP 03, Revision 4* (effective April 17, 2009).

3.2 SITE ACCESS AND UTILITY CLEARANCE

Site access, utility clearances, notifications and approvals, and project documentation conform to the provisions of *Lockheed Martin's Remediation Contractor's Environment, Safety and Health (ESH) Handbook, Revision 4, May 1, 2016*. Before starting any intrusive field activities, Tetra Tech obtained the required permits, completed the digging authorization form and risk-handling checklist, and obtained the required signatures. Each location for DPT borings, monitoring wells, and VMPs was screened for subsurface utilities. In addition to calling in a "Miss Utility" ticket, Tetra Tech obtained available MRC-facility engineering and utility maps, and contracted with a private utility-locating service (Enviroscan, Inc. [Enviroscan]) to locate and mark any underground utilities. Enviroscan used standard utility-locating equipment representing the best available technology. Examples of such commonly used equipment include a Fisher TW-6 electromagnetic pipe- and cable-locator/tracer, a RadioDetection cable-avoidance tool, a Genny pipe- and cable locator/tracer, a RadioDetection RD4000 multi-frequency pipe- and cable-tracer, and a Geophysical Survey Systems, Inc. subsurface interface radar system (GSSI SIR-2000) ground-penetrating radar (GPR)-system.

All utilities within a 30-foot radius of each designated outdoor location were located and marked on the ground with the appropriate unique paint color corresponding to each utility. Utilities in the Maintenance Building were not marked with paint. Alternative methods were used indoors for VMP installation, including using removable tape for marking and measuring utility and VMP locations. All new sampling locations were recorded in the site logbook. Permits, the "Miss Utility" clearance, and the Enviroscan utility-screening report are in Appendix A.

Boring locations were offset in the field based on the subsurface utility mark-out. No site operations were affected during these actions. Tetra Tech coordinated with EMCOR to install VMPs in the Maintenance Building when the areas were not in use (i.e., VMPs were not installed in the lunchroom area while workers were eating or taking breaks). During the DPT and well

installation, Tetra Tech used traffic cones and caution tape to isolate the work areas, and maintained open pathways for pedestrian and vehicle traffic.

3.3 MONITORING WELL INSTALLATION AND DEVELOPMENT

Eleven new groundwater monitoring wells (MW117B, MW118A/B, MW119A/B, MW120A/B, MW121A/B, MW122A, and MW131B) were installed west of Building A on September 6–12, 2017, as shown on Figure 3-1. Ten wells were originally planned, but an additional shallow monitoring well (MW122A) was also installed, based on field observations. While drilling the borehole for MW117A/B, two permeable layers were identified for target screened intervals. The shallower screened interval, originally targeted as MW117A, was set in the deeper of the two shallow permeable layers. The actual depth of this screened interval (which was more in the typical range for an intermediate "B" well) led to changing the well identification for MW117A to MW131B. Therefore, two intermediate "B" wells (MW131B and MW117B) were nested in the same borehole. An additional shallow well (MW122A) was installed east of MW131B/MW117B (toward Building A) to target the upper permeable layer identified while drilling the original MW/117A/B borehole. Although the same shallow permeable layer was not present in the offset borehole for MW122A (because the subsurface geology west of Building A is heterogeneous), well MW122A was nevertheless installed, following discussion among and subsequent approval from the project team.

These 11 monitoring wells were installed to provide additional groundwater data to determine if a contiguous plume is emanating from source areas under Building A, if distinct separate source areas are present, or if multiple releases over time from the same source have occurred. A detailed summary of monitoring well locations and rationale is in Table 3-1. Figure 3-1 shows the monitoring well locations. A shallow ("A") monitoring well and an intermediate ("B") monitoring well were installed at each location, with the exception of MW122A and MW131B, which were installed based on the geology (permeable layers) encountered in the field while drilling the boring for nearby well cluster MW117. A permeable layer from 31 to 38 feet below grade (in the typical "B" well-screen depth range) was identified when drilling the boring for well pair MW117A/B. Since the screened interval originally designated as MW117A was set in this deeper permeable

layer, the well was renamed MW131B, and an additional well (MW122A) was installed nearby to target the original target shallow layer (12–16 feet below grade).

3.3.1 Borehole Drilling and Soil Sampling

Borings for the monitoring wells were advanced using a low-profile mini-sonic rig (rotasonic method) operated by a Maryland-licensed driller (Cascade Drilling, Marietta, Ohio). The rotasonic method used a four-inch by six-inch drill-rod/override-casing setup (with temporary casing) for the single well (MW122A), and a six-inch by eight-inch drill-rod/override-casing setup (with temporary casing) for nested wells (two wells in one borehole). Nested wells were installed at locations MW131B/MW117B, MW118A/B, MW119A/B, MW120A/B, and MW121A/B. Boring logs are in Appendix B.

Soil was continuously sampled during drilling using a 10-foot core barrel. Soil samples were collected for soil screening, including lithologic characterization, visual observations (e.g., staining, discolorations, etc.), and odor detection. Soil samples were screened for volatile organic compounds (VOCs) using a portable photoionization detector (PID) and a consistent headspace-screening methodology (e.g., sealable plastic-bag technique). Headspace sampling in the field consisted of cutting the soil core along its long axis, instantly placing one side of the core sample into a sealable plastic bag, and immediately closing the top of the bag. The other portion of the sample was placed into a sample container to prevent VOC dissipation during screening.

The soil in the bag was gently disturbed to allow VOCs to be released from the soil matrix. The samples were then allowed to stand for five to 10 minutes before a PID reading was obtained. After five to 10 minutes, the tip of the PID was inserted into the plastic bag and readings were monitored until a peak (i.e., maximum) total-VOC concentration had been reached. The peak VOC concentration was then recorded on the soil boring form and in the field notebook.

The soil in the bag used for PID screening was not used as the laboratory VOC sample aliquot. Ten soil samples were collected for laboratory analyses based on field screening results, and targeting the well-screen intervals, permeable zones, and changes in geology. Soil samples collected during soil boring drilling were analyzed for the following parameters using the listed methods:

- VOCs by SW846 Method 8260C
- semivolatile organic compounds (SVOCs), including 1,4-dioxane, by SW846 Method 8270D SIM
- total petroleum hydrocarbons (TPH) gasoline-range organics (GRO) and diesel-range organics (DRO) by SW846 Method 8015D

Soil sample identifications, sampling depths, and PID readings for the 10 soil samples collected for laboratory analysis are in the table below:

Soil sample ID	Depth below grade (feet)	Photoionization detector (PID) reading (parts per million)
SB-131B-33–35	33–35	3.2
SB-117B-47–50	47–50	0.5
SB-118A-10–13	10–13	0.1
SB-118B-53–55	53–55	2.1
SB-119A-10–12.5	10–12.5	1.4
SB-119B-56–58	56–58	5.5
SB-120B-43–45	43–45	5.0
SB-120B-48–50	48–50	2.8
SB-121A-26.5–28.5	26.5–28.5	0.0
SB-121B-30.5–32.5	30.5–32.5	1.4

No evidence of contamination (e.g., staining, sheen, etc.) was observed in any soil sample collected from the monitoring well borings. Collected soil samples were analyzed by the laboratory chemical methods listed in Table 3-1. “Soil Sample Log Sheets” are in Appendix C.

3.3.2 Well Construction

Groundwater monitoring wells were constructed of two-inch-diameter, flush-threaded, Schedule-40 polyvinyl chloride (PVC) well casing with a manufactured PVC well-screen. Well screens ranged from five to 10 feet in length, with 0.010-inch wire-wrapped openings. The screen length was based on the depth to groundwater and thickness of the targeted permeable formation. A sand filter-pack of washed #1 filter sand was placed around the well screen to at least two feet above the top of the well screen. Following placement of the sand pack, each well was

pre-developed (using a combination of surging and pumping) via a submersible pump to clear fine soil. The depth to sand was measured using a weighted tape.

A two-foot-thick bentonite seal was installed above the sand pack using bentonite pellets, and it was allowed to hydrate during installation. Project-approved water from an on-site fire hydrant was used to hydrate the bentonite. Grout (consisting of Type II Portland cement and powdered bentonite) was placed above the bentonite seal to approximately two feet below grade. Grout was made by mixing a 94-pound bag of Type II Portland cement, nine pounds of powdered sodium bentonite, and no more than eight gallons of water per bag of cement.

A protective, locking, flush-mounted well cover was secured over each well casing for protection. The PVC well casing was cut below grade and made watertight by installing a locking, expandable, sanitary seal in the well casing top. Concrete was installed above the grout in the annular space between the well borehole and outer well casing, up to approximately six-inches below grade, to provide a surface seal for the well, and to support the flush-mounted cover. The flush-mounted cover was set in a two square-foot concrete pad.

The highest point on the top of the PVC well casing was marked using an indelible marker. A Maryland-licensed surveyor surveyed the marked location of the well. Well construction details were recorded in the field logbook and on a well construction form. Well construction details are in the boring logs in Appendix B.

3.3.3 Well Development

Each well was developed following installation to remove fines from the well filter pack and casing, and to ensure a hydraulic connection between the well and the geologic formation. Well development was done as soon as possible after installation, and (once a minimum of 24-hours had elapsed following well construction) to allow the grout to set up. Each well was developed by hand bailing to remove heavy sediment, then by gentle surging and purging with a submersible pump to remove fines and sediment from the sand pack and well screen. Well development at four shallow wells (MW119A through MW122A) was performed via hand bailing only, because the water volume generated was inadequate for pump bailing.

Development began at the bottom of the well screen, working up incrementally to the top of the screened interval, and then back down to the bottom of the well. During well development, water-level drawdown measurements and groundwater parameters (including pH, temperature, specific conductance, dissolved oxygen [DO], oxidation-reduction potential [ORP], and turbidity) were collected periodically using a Horiba U-22 water-quality meter until pumping was complete, and recorded in the appropriate site-specific logbook and on a well development record (Appendix D). Water quality parameters measured using a water quality meter were recorded only for wells that produced an adequate volume of water. Water quality parameters were not recorded for the four shallow wells that were hand bailed.

Turbidity readings were also collected, using a separate turbidity meter (due to the instability of turbidity meters on multi-meters), and recorded in the field logbook and on a well development record (see Appendix D). Well development continued until groundwater was clear and free of suspended solids, or for a maximum of three hours, whichever occurred first. All development water was collected in United States Department of Transportation (USDOT)-approved, properly labeled, 55-gallon steel drums and stored in a facility-approved location.

3.4 WELL PURGING AND SAMPLING

Water levels in monitoring wells were measured before sampling and after allowing equilibration with the aquifer (following development) for at least one week. Water level measurements were recorded in the appropriate site-specific field logbook and on "Groundwater Sample Log Sheets" (Appendix E). Well depths were also recorded when water level measurements were collected.

Groundwater was sampled from the new monitoring wells on October 9–11, 2017. The wells were sampled using the low-flow purging/sampling method, whereby water was pumped from the wells at a low flow rate and water quality parameters were monitored and recorded during the purging. The wells were purged using a peristaltic pump and disposable Teflon® tubing, or hand bailed (for wells that did not contain an adequate volume of water for pumping). Groundwater was withdrawn using the peristaltic pump at flow rates between 100 and 300 milliliters per minute for wells that produced an adequate volume of water. The final adjustment of the purge rate depended upon water stabilization and how fast the well recharged without significant drawdown.

During groundwater purging, water-level drawdown measurements and groundwater parameters (including pH, temperature, specific conductance, DO, ORP, and turbidity) were collected approximately every five minutes until purging was complete. Water quality parameters were measured using an in-line Horiba U-22 water quality meter. Turbidity readings were collected using a separate LaMotte turbidity meter (due to the instability of turbidity readings from multi-meters). Purging continued until the parameters stabilized, as described below. Water quality parameters were recorded in the appropriate site-specific logbook, as well as on groundwater sample log sheets (Appendix E).

Stabilization was considered achieved when three consecutive readings were within ±0.1 standard unit for pH, ±3% for conductivity, ±10 millivolts for ORP, and ±10% for turbidity (target of <50 nephlometric turbidity units [NTUs]), or when the well had been purged dry, or after a maximum of two hours had elapsed. If the monitoring well had been purged dry, the water level in the well was allowed to recover at least 80% of its initial static water level before groundwater was sampled. All purged water was collected in 55-gallon steel drums, which were staged in the Lockheed Martin-approved central staging area at the facility's fenced Lot D. Groundwater samples collected from the newly installed wells (with the exception of MW119A and MW122A) were analyzed at TestAmerica, Inc. of North Canton, Ohio and ALS Environmental of Middletown, Pennsylvania (for hexavalent chromium only) for the following parameters:

- VOCs by SW846 Method 8260C
- SVOCs, including 1,4-dioxane, by SW846 Method 8270D SIM
- TPH-GRO and -DRO by SW846 Method 8015D
- total and dissolved metals by SW846 Method 6020A (including mercury by Method 7471A)
- polychlorinated biphenyls (PCBs) by United States Environmental Protection Agency (USEPA) Method 680
- hexavalent chromium by USEPA Method 218.6

MW119A and MW122A were only analyzed for VOCs and TPH-GRO because these wells produced only a small volume of water.

Groundwater samples to be analyzed for VOCs and TPH-GRO were collected first, followed by samples to be analyzed for SVOCs/1,4-dioxane, TPH-DRO, metals, PCBs, and hexavalent chromium. Samples for each analytical parameter were placed in a cooler containing ice immediately upon collection (for example, VOC containers were placed in a cooler containing ice immediately after the VOC containers had been filled and closed). Before sampling each day, a trip blank was placed in each cooler that would hold VOC samples for that sampling day; the trip blank accompanied the VOC samples throughout the day and was sent along with the samples to the laboratory. Trip blanks were analyzed for VOCs by SW846 Method 8260C. No other quality assurance/quality control (QA/QC) samples were collected. Samples were analyzed on a standard turnaround of 21 calendar days.

3.5 DIRECT-PUSH TECHNOLOGY VERTICAL GROUNDWATER SCREENING

On September 18–20, 2017, a Maryland-licensed driller (Ground Zero Field Services) used a Geoprobe™ 6000 series direct-push technology (DPT) drill rig to advance temporary borings in the area downgradient of well clusters MRC-MW53A/B, MRC-MW110A/B, and MRC-MW90B. The Geoprobe® SP-15 sampling system was also used to collect groundwater samples. Borings were advanced along transects using a Triad approach to a target depth of approximately 40 feet below ground surface (bgs), with the aim of finding the center of the groundwater TCE plumes (Figure 3-1). A FROG-4000™ field-portable gas chromatograph (GC) photoionization detector (PID) was used to analyze water samples for TCE, which allowed for real-time data and decision-making. Real-time data allowed effective placement of successive borings and selection of targeted sampling intervals.

The objective of advancing these DPT borings was to characterize the downgradient extent of VOCs (specifically TCE) and to refine future groundwater monitoring well locations and screening depths. Borings were located along two transects (transects #1 and #2 on Figure 3-1) perpendicular to the expected center-axis of each targeted TCE plume. Vertical water-profiling data was collected along the two transects to help identify the center axis of the downgradient TCE plumes (Figure 3-1).

Advancement of up to five borings was proposed along each transect (up to 10 borings total). Transect #1 is approximately 200 feet downgradient from monitoring well clusters MRC-MW53A/B and MRC-MW110A/B, and transect #2 is approximately 150 feet downgradient from monitoring well MRC-MW90B. Groundwater samples were to be collected every five feet in each boring, starting from the water table (approximately 10 feet bgs) down to a targeted depth of 40 feet bgs, for up to seven samples per boring. Drill rig refusal prevented some borings from reaching terminal depth; refusal was encountered in DPT-1B at 43.5 feet, and at 35 feet in DPT-1C. A significant clay layer was encountered to approximately 40–50 feet bgs that did not produce water, and it prevented sampling of many targeted intervals. The original target depth of the DPT borings was 40 feet below grade; however, after identifying the clay unit throughout most of the shallow subsurface, the field program was adjusted to target sampling groundwater in the permeable layer beneath the clay, in lieu of conducting the vertical water profiling; this permeable unit extends deeper than 40 feet below grade.

Groundwater samples were collected by inserting a stainless-steel screen inside a stainless-steel sheath and attaching a drive head to the sheath. A steel expendable point was then attached to the other end of the sheath and a drive rod was threaded to the top. Once attached, the entire assembly was driven into the subsurface using the percussion of the Geoprobe® rig. Drive rods were added to the string of tools as the sampler was advanced to the targeted depth interval. Once the target depth had been reached, stainless-steel extension rods were inserted down the center of the drive rods to hold the expendable point in place, and the drive rods were then retracted. With the stainless-steel screen exposed to groundwater, the extension rods were removed. New Teflon® tubing was then lowered into the screen section.

The subsurface geology observed during the DPT investigation consists of impermeable, tight clays and silts that did not produce water. A thick clay layer was encountered starting from approximately five to 10 feet bgs to approximately 40–50 feet bgs. On the second day of the field program (September 19, 2017), the driller brought a Geoprobe™ 7000 series drill rig to the site in an attempt to get through the thick clay layer; this rig has more torque and power than the 6000 series drill rig. Eight of 10 proposed borings were successfully drilled; borings DPT-1D and DPT-1E were not attempted, due to unsuccessful results. Water was not produced throughout the

length of the borehole in five (DPT-1B, DPT-1C, DPT-2A, DPT-2B, and DPT-2E) of eight borings. Water samples were collected from the deeper zone (below the thick clay unit) in three borings (DPT-1A, DPT-2C, and DPT-2D).

A peristaltic pump was used to collect the groundwater samples, which were analyzed for TCE by experienced Tetra Tech personnel using a FROG-4000™ field portable GC PID immediately after each sample had been collected. In addition, two split samples (DPT-1A-40–45 and DPT-2D-45–50) were sent to an off-site laboratory for VOC analysis by SW846 Method 8260C to provide a relative comparison of data from the laboratory vs. field instrumentation. No soil samples were collected from the DPT borings. Detected TCE values at each depth sampled per boring location were recorded in a field book. After sampling was concluded at a targeted interval, all downhole equipment was withdrawn from the borehole and decontaminated using a mild detergent (Alconox) solution wash and a potable water rinse. The above sampling procedure was then repeated for each successive sampling interval. Boreholes were abandoned with bentonite in accordance with Maryland abandonment standards set forth in *Code of Maryland Regulations* (COMAR) 26.04.04.11.

3.6 VAPOR MONITORING POINT INSTALLATION AND SAMPLING

Historical groundwater data indicate that TCE-impacted groundwater is moving west from Building A and might be under the EMCOR Maintenance Building. Maximum TCE concentrations in the first (and largest) area of TCE west of Building A have been consistently detected at well MRC-MW96A (3,300–4,000 µg/L between 2010 and 2017), located east and upgradient of the Maintenance Building. The objective of this investigation was to verify whether soil vapor (SV) is accumulating under the building.

3.6.1 Vapor Monitoring Point Installation

Before VMP installation, appropriate procedures were followed to address the potential presence of asbestos-containing materials (ACM). An outside contractor (A&I), licensed in Maryland to manage all aspects of asbestos, was consulted about the proposed VMP locations before any intrusive work began to determine if ACM were present. ACM was not found at any of the VMP

installation locations in the Maintenance Building, based on the contractor's site knowledge of the floor material and subsequent visual inspection.

On September 25–26, 2017, 10 new VMPs (SV-178-MB through SV-187-MB) were installed in the Maintenance Building (Figure 3-2). VMP locations strategically targeted enclosed areas where staff congregates (office space and lunch/break room), and provided spatial coverage across the building. VMPs were located away from any significant breaches/cracks or sumps/drains in the building floor that might be possible preferential pathways and allow for venting of soil vapor from the subsurface that may affect actual subsurface concentrations. Table 3-2 summarizes the VMP locations and rationales.

Vapor Pins® were installed at each location using a standard hammer drill. Dust generated during hammer drilling was collected using a standard Shop-Vac®. The collected concrete dust was bagged and disposed of in the facility solid-waste stream. The Vapor Pin® probe is self-sealing, so bentonite and Portland cement are not necessary for installation; therefore, water was not required. The installation of Vapor Pins® did not generate investigation-derived waste (IDW) (e.g., concrete-cutting water or residual soil cuttings) that would require containerization, characterization, and off-site disposal. Following installation, probe seals were leak-tested using a helium tracer gas and a monitor, and no leaks were detected. After installation and leak testing, all VMPs were allowed to stand unused for at least two weeks to allow SV to equilibrate. This time span exceeds the minimum recommended by USEPA guidance (USEPA, 2015).

3.6.2 Vapor Monitoring Point Sampling

Each SV sample was collected over one hour using preconditioned Summa® canisters to assure subsurface equilibration and avoid high negative pressure that might mobilize subsurface vapor and bias the results. Each sampling location was routinely inspected during the sampling period to ensure appropriate operation of sampling devices, sample integrity, and to document conditions within the area that might affect results. Samples were collected and analyzed for VOCs by USEPA Method Toxic Organic-15 (TO-15) (USEPA, 1999). SV samples were collected in accordance with standard operating procedures developed by the USEPA Environmental Response Team for soil

vapor sampling (USEPA, 1996), and methodologies developed by the USEPA Office of Research and Development (USEPA, 2004).

Individual evacuated Summa® canisters were used to collect all SV samples, in accordance with USEPA Method TO-15. These specially treated, stainless steel, one-liter canisters were equipped with in-line particulate filters and integral controllers to set the rate of filling during sampling. SV samples were collected through Teflon® tubing attached to the stainless steel Vapor Pins®. Before sampling, the Teflon® tubing was purged of atmospheric air by attaching the tubing to a low-flow sampling pump set at a flow rate of approximately 200 cubic centimeters per minute to minimize mobilization of subsurface vapor and prevent sample bias. One to three volumes (i.e., the volume of the sampling probe and tube) were purged to ensure that collected samples represented sub-slab conditions.

Samples were collected by opening the valve on the canister, which allowed air to enter the canister at the rate set by the controller. Controllers were calibrated in the laboratory and shipped to the field with a sufficient flow rate that maintained the necessary vacuum pressure in the Summa® canister for the one-hour sampling interval. All starting pressures of the Summa® canister ranged between -30 and -25 inches of mercury (Hg), and ending pressures ranged between -6 and 0 inches Hg. Summa® canisters were certified clean (less than 0.2 parts per billion [ppb] by volume of targeted compounds) by the laboratory before sending, in accordance with Section 8.4 of the TO-15 methodology (USEPA, 1999). SV sample log sheets are in Appendix F.

After sampling had been completed, each canister was closed and sent to an off-site laboratory (TestAmerica, Inc. in Knoxville, Tennessee) under proper chain of custody procedures. Each sample was submitted for analysis by USEPA Method TO-15. Tetra Tech's *Site Characterization Report* (Tetra Tech, 2006) identified specific compounds considered primary contributing factors to potential risk at MRC via a vapor intrusion (VI) exposure scenario. These target compounds identified in groundwater and SV samples might have been historically used and released at the MRC, and could potentially enter indoor air via subsurface migration. All samples collected during this investigation were analyzed for the following contaminants of concern (COC):

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

3.7 SAMPLE NOMENCLATURE

A master site logbook was maintained at the site as an overall record of field activities. Each soil sample collected during this investigation was identified with a unique sample-identification tag consisting of the sample-type designation (i.e., SB for soil boring), followed by the well boring number, followed by the sampling depth. For example, the soil sample collected at well location 117A at a depth of 33–35 feet bgs is identified as "SB-117A-33–35." Each groundwater sample collected during this investigation was identified with a unique sample-identification tag consisting of the site designation (i.e., MRC for Middle River Complex), followed by the sample-type designation (i.e., MW for monitoring well) and well location number (i.e., 118B), followed by the sampling date. For example, the groundwater sample collected at well location 118B on October 11, 2017 is identified as "MRC-MW118B-101117."

Each DPT water sample collected during this investigation is identified with a unique sample-identification tag consisting of the sample-type designation (i.e., DPT for direct-push technology), followed by the transect number (1 or 2), followed by a letter (A, B, C…) for its transect location, followed by the sampling depth. For example, the DPT water sample collected along transect #1 at location A at a depth of 40–45 feet bgs is identified as "DPT-1A-40–45." Each SV sample collected during this investigation is identified with a unique sample-identification tag consisting of the sample-type designation (i.e., SV for soil vapor), followed by the location number, followed by the building identifier (i.e., MB for Maintenance Building), followed by "1" for the first sampling event. For example, the SV sample from the Maintenance Building at location SV-178 was identified as "SV-178-MB-1."

3.8 SURVEYING

On November 28, 2017 a professional Maryland-licensed field surveyor (Precision Surveying and Mapping of Baltimore, Maryland) from a qualified, state licensed, land-surveying firm provided horizontal and vertical coordinates for each new groundwater monitoring well. Surveyed locations are accurate to the nearest 0.01 foot for vertical elevations in the North American Vertical Datum 1988 and to the nearest 0.1 foot horizontal coordinates in the North American Datum 1983 at the top of the well casings. Ground elevations at the wells were surveyed within a vertical accuracy of 0.1 foot. The survey data were used to update the MRC environmental geographic information system (EGIS).

3.9 DOCUMENTATION

A bound field logbook with consecutively numbered pages was assigned specifically for this project. All entries were recorded in indelible black ink. Any erroneous data in the logbook requiring corrections or modifications were crossed out using a single line, dated, and initialed. At the end of each workday, the responsible sampler signed the logbook pages, and any unused portions of logbook pages were crossed out, signed, and dated. The logbook contained all pertinent project information.

Sample documentation consists of chain of custody reports and matrix-specific sampling log sheets. The chain of custody report is a standardized form summarizing and documenting pertinent

sample information, such as sample identification and type, matrix, date and time of collection, preservation, and requested analysis. Sample custody procedures to document sample acquisition and integrity were properly followed. Signed chains of custody are provided in the data validation reports in Appendix G. Field sheets were also completed for each VMP, DPT, and monitoring well sampling location, including sample log sheets, boring logs, and well construction diagrams. Information recorded on the field sheets includes start and stop times, Summa® can and regulator identification numbers, start and stop pressures, water level data, water quality parameters, and general field observation notes.

3.10 SAMPLE HANDLING

Proper custody procedures were followed throughout all phases of sample collection and handling. Chain of custody protocols were used throughout sample handling to establish the evidentiary integrity of sample containers. These protocols demonstrate that the samples were handled and transferred in a manner that would eliminate (or detect) possible tampering. Sample containers were released under signature from the laboratory and were accepted under signature by the sampler or individual responsible for maintaining custody until the sample containers were transferred to the sampling team.

Samples were released under signature from the sampling team and were accepted under signature by the laboratory. Transport containers returning to the laboratory were sealed with strapping tape and a tamper-resistant custody seal. The custody seal includes the signature of the individual releasing the transport container, along with the date and time.

3.11 EQUIPMENT DECONTAMINATION

Drilling equipment at each boring/well location was cleaned using a high-pressure steam cleaner or manually washed (the latter for the DPT sampling equipment). For well drilling, decontamination water was collected in the recirculation basin and pumped into 55-gallon drums for storage. Drilling and DPT equipment was also cleaned before beginning work, between drilling locations, and at the conclusion of the drilling/DPT program. During well development and groundwater sampling, reusable groundwater level measuring and sampling equipment (e.g., water level meter) was decontaminated before and after each use. Dedicated, disposable equipment (such

as pump tubing) was used for groundwater purging and sampling. Decontamination of reusable small equipment entailed an Alconox® and potable water wash. All decontamination fluids were collected in USDOT-approved 55-gallon steel drums and stored at the Lockheed Martin-approved central staging area at the facility's Lot D, pending waste-profile sampling results.

3.12 WASTE MANAGEMENT

The 2017 MRC waste management plan (Tetra Tech, 2017b) conforming to *Lockheed Martin's Remediation Contractor's ESH Handbook*, *Revision 2* was followed during this investigation to store, manage, test, and dispose of IDW. IDW (consisting of all drill cuttings and soil cuttings, decontamination rinse water, purge water, tubing, and personal protective equipment [PPE]) was generated during this investigation. PPE and tubing IDW was placed in trash bags and then in a facility trash receptacle to be disposed of as general refuse. Soil cuttings and water were collected and stored in USDOT-approved 55-gallon drums. All drums were appropriately labeled and logged on a drum inventory form. Wastes were characterized and disposed of in accordance with applicable state and federal regulations and the 2017 MRC waste management plan.

After IDW generation, the drums were relocated to a drum staging area (located in Block E/Lot D) identified by Lockheed Martin personnel. Samples of IDW were collected and submitted to be analyzed for VOCs, PCBs, toxicity characteristic leaching procedure (TCLP) metals, and ignitability. All IDW was profiled as nonhazardous based on waste characterization sampling, and all drums were removed from the site on November 16, 2017 by Clean Harbors of Baltimore, Maryland. IDW documentation is in Appendix H.

3.13 DATA VALIDATION

Following receipt of the soil, groundwater, and SV analytical data, data were validated by an independent chemist in accordance with USEPA Region 3 protocols. Chemical data were supplied by the laboratory as hard-copy reports and electronic databases. All data were validated for all QA/QC parameters, including laboratory QA/QC and accuracy, precision, completeness, and comparability, in accordance with USEPA guidance. This review is based on the *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2017a), *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2017b), and the

specifics of the analytical method used. Data validation reports, including complete chain of custody documentation, are in Appendix G (on compact disc). Chemical data tables are also in Appendix G.

Collectively, these data are acceptable for their intended use, except for data that have been qualified as unreliable. For this validation, the following data qualifiers (i.e., flags) were applied to the chemical results presented in this report:

U Not detected. The analyte is considered not detected at the reported value.

J The analyte is considered present in the sample. However, the value is estimated and might not be accurate or precise.

J- The result is an estimated quantity, but the result might be biased low.

NJ The analyte has been tentatively identified. This qualifier indicates presumptive evidence of a compound. Special methods might be required to confirm its presence or absence in future sampling efforts.

UJ The analyte was not detected. However, the quantitation or detection limit might be inaccurate or imprecise.

These flags appear on the chemical results tables in Section 4 and Appendix G.

SECTION 4
RESULTS

This section presents the results of the groundwater monitoring well installation and sampling, the vertical groundwater screening conducted west of Building A and the Building A basement, and the sub-slab vapor sampling conducted in the Maintenance Building. Also presented below are cross-sections and an analysis of trichloroethene (TCE) based on the data in this report.

4.1 SOIL

Ten soil samples were collected from the monitoring well soil borings for laboratory analyses based on field screening results targeting the well-screen intervals, permeable zones, and changes in geology. Tables in Appendix G present all analytical data, including nondetects. Validated soil chemical data were used to generate a statistical summary table (Table 4-1) and a detection table (Table 4-2) summarizing positive detections of chemical analytes in the monitoring well boring soil samples. Table 4-1 lists chemicals detected in the soil samples, ranked from the most frequently to the least frequently detected (this table does not include analytes that were not detected in any sample). Table 4-2 shows the detected analyte concentrations screened against Maryland Department of the Environment (MDE) residential and nonresidential soil cleanup standards. No chemical detected in soil samples exceeds its respective screening criterion.

TCE was detected in six of 10 soil samples at concentrations ranging from 0.62*J* to 77 micrograms per kilogram (µg/kg), with the highest detection in sample SB-120B-43–45. Other chlorinated VOCs detected include *cis*-1,2-dichloroethene (*cis*-1,2-DCE) in four of 10 samples at concentrations ranging from 2.8*J* to 47 µg/kg (highest detection in sample SB-131B-33–35); 1,1-dichloroethene (1,1-DCE) in three of 10 samples at concentrations ranging from 1.4*J* to 9.3 µg/kg (highest detection in sample SB-120B-43–45; and *trans*-1,2-dichloroethene (*trans*-1,2-DCE) and vinyl chloride, each detected in two of 10 samples, at concentrations of 1.3*J* to 1.9*J* µg/kg and 0.72*J* to 2.1*J* µg/kg, respectively, with the highest concentrations of both in

sample SB-131B-33–35. Petroleum-related compounds, including benzene (14 µg/kg), xylenes (0.53*J* µg/kg), and methyl tert-butyl ether (MTBE) (1.7*J* µg/kg) were detected in one of 10 soil samples (SB-119B-56–58). This coincides with an existing localized benzene plume east of the Maintenance Building near monitoring wells MW96B (720 µg/kg benzene, detected in 2017) and MW17A (110 µg/kg benzene, detected in 2017) (Tetra Tech, 2017b).

4.2 GROUNDWATER

4.2.1 Vertical Groundwater Screening

Eight vertical groundwater screening borings were advanced during this investigation. Two of 10 proposed borings (DPT-1D and DPT-1E) were not advanced, due to unsuccessful results. Water could not be collected from five (DPT-1B, DPT-1C, DPT-2A, DPT-2B, and DPT-2E) of eight borings attempted. Water was collected from the deeper zone below the thick clay unit in three borings (DPT-1A, DPT-2C and DPT-2D). Figure 4-1 shows vertical groundwater screening results for TCE.

On September 18, 2017, three borings were attempted along Transect #1 (DPT-1A, DPT-1B and DPT-1C). No water was observed in DPT-1C, but two water samples were collected from DPT-1A (0–5 feet and 5–10 feet) and one water sample was collected from DPT-1B (0–5 feet). No TCE was detected in either water sample collected. Refusal was encountered at 43.5 feet bgs in DPT-1B and at 35 feet bgs in DPT-1C. Shallow groundwater collected from DPT-1A and DPT-1B was most likely water perched on top of the thick clay layer.

Two borings (DPT-1A and DPT-2C) were advanced on September 19, 2017. A water sample was collected for TCE analysis at 40–45 feet bgs from boring DPT-1A, which had a TCE concentration of 28.9 parts per billion (ppb). Water was observed in boring DPT-2C from 0–5 feet bgs and 45-50 feet bgs. Samples collected from these two intervals were also analyzed for TCE using the FROG 4000™, but TCE was not detected in either sample.

Drilling refusal with the Geoprobe™ 6000 series drill rig prompted the project team to consider other viable drilling options that would increase the potential of reaching the permeable layer below the clay. After collaboration, Tetra Tech instructed the driller to mobilize a higher-powered

Geoprobe™ 7000 series drill rig to the site. Borings DPT-1B and DPT-1C were re-drilled using the new drill rig; however, attempts to collect water samples from the permeable layer below the thick clay layer were unsuccessful. Advancement of boring DPT-2E to a depth of 40–45 feet bgs succeeded, but the boring was dry and no water was collected.

Detection of TCE at 28.9 ppb in boring DPT-1A below the clay layer prompted Tetra Tech to collect grab water samples from three of the newly installed wells (MW119B, MW120B, and MW121B). These grab samples were field-analyzed using the FROG 4000™ portable GC PID, which indicated TCE in all three wells at concentrations of 624 ppb (MW119B), 794 ppb (MW120B), and 124 ppb (MW121B). These data confirm that contamination is present at depth, that it is likely associated with the Building A TCE source area, and that the permeable zone below the thick clay layer in the area of the transects might be the target zone for TCE contamination further west of Building A and the Building A basement heading toward Cow Pen Creek.

On September 20, 2017, borings DPT-2A and DPT-2B were advanced to 50 feet bgs; both borings were dry. Soil in this area was tight and difficult to penetrate. Boring DPT-2D was also advanced to 50 feet bgs, and approximately 15 feet of water was observed in the borehole. TCE (9.9 ppb) was detected in the groundwater sample collected from DPT-2D at 50 feet bgs. Field-screening of the vertical groundwater samples was limited to samples that could be collected despite the thick clay layer; however, two field detections of TCE beneath the clay layer in DPT-1A (28.9 ppb) and DPT-2D (9.9 ppb) indicate that TCE is present in groundwater at depth.

In addition to the water samples analyzed by the FROG 4000™ GC PID, two split samples (DPT-1A-40–45 and DPT-2D-45–50) were sent to an off-site laboratory for VOC analysis by SW846 Method 8260C, to provide a relative comparison of laboratory vs. field instrument data. TCE was detected in DPT-1A-40–45 at a concentration of 31 µg/L (approximately six times the screening criterion), and was nondetect (ND) in DPT-2D-45–50. In comparing the FROG 4000™ data to the laboratory analytical data (using a direct 1 ppb to 1 µg/L comparison based on the instruments reading in different units), the results for DPT-1A-40–45 are very similar, with 28.9 ppb detected with the FROG 4000™ and 31 µg/L detected in the laboratory sample. For

sample DPT-2D-45–50, the FROG 4000™ was nondetect, whereas the laboratory analytical sample was 9.9 µg/L.

Drilling refusal encountered by both DPT drill rigs indicates that rotasonic drilling is required to drill through the clay layer at 5–10 feet bgs to approximately 40–50 feet bgs in this area of the MRC. Proper vertical groundwater screening in the permeable zone beneath the clay was not possible using the DPT rigs scoped for the investigation. This determination led Tetra Tech to end the DPT field program after three days.

4.2.2 Monitoring Wells

Groundwater level data—Eleven new groundwater monitoring wells (MW117B, MW118A/B, MW119A/B, MW120A/B, MW121A/B, MW122A, and MW131B) were installed from September 6–12, 2017 in the area west of Building A and the Building A basement. Groundwater samples were collected from the newly installed wells on October 9–11, 2017. The table below presents the October 9–11, 2017 groundwater level measurements and computed elevations for the newly installed monitoring wells.

These groundwater level data will be incorporated into future investigations to establish the groundwater elevation contour maps for the shallow "A" and intermediate "B" surficial aquifer wells. Historically, shallow groundwater flow follows the site topography and flows radially from the hydraulically upgradient northern portion of the MRC (at Eastern Boulevard and immediately south of Buildings A, B, and C) to the southeast, south, and southwest, toward Dark Head Cove and Cow Pen Creek. In the area west of Building A, groundwater tends to flow west/southwest toward Cow Pen Creek.

Well ID	Elevation at top of PVC well casing NAVD 1988 (feet)	Depth to groundwater below top of PVC casing October 9–11, 2017 (feet)	Groundwater elevation October 9–11, 2017 NAVD 1988 (feet)
MW117B	32.69	18.46	14.23
MW131B	32.67	18.17	14.50
MW118A	32.87	7.33	25.54
MW118B	32.89	18.74	14.15
MW119A	30.39	11.49	18.90
MW119B	30.38	16.34	14.04
MW120A	28.86	8.02	20.84
MW120B	28.85	14.95	13.90
MW121A	24.65	13.42	11.23
MW121B	24.64	10.65	13.99
MW122A	32.70	13.98	18.72

MW—monitoring well
NAVD—North American Vertical Datum
PVC—polyvinyl chloride

Groundwater chemical data—Validated groundwater chemical data were used to generate a statistical summary table (Table 4-3) and a detection table (Table 4-4) summarizing analytes detected in monitoring well groundwater samples. Table 4-3 lists chemicals detected in the groundwater samples, ranked from the most frequently to the least frequently detected. (This table does not include analytes that were not detected in any sample.) Table 4-4 shows the detected analyte concentrations screened against current Maryland Department of the Environment (MDE) groundwater standards (MDE, 2008). Appendix G presents all analytical data for 2017, including chemicals analyzed for but not detected. TCE and benzene results are the primary focus of discussion, because they are primary indicators of solvent and petroleum VOC contamination, and they most frequently exceed groundwater standards at MRC. Chlorinated VOC-degradation daughter products of TCE (e.g., dichloroethenes, vinyl chloride [VC], etc.) or other petroleum related VOCs (e.g., methyl tert butyl ether [MTBE], benzene isomers, naphthalene, etc.) are typically co-located with these primary VOCs.

Chlorinated VOCs—TCE was detected in 11 of 13 groundwater samples at concentrations ranging from 1.2 to 1,400 micrograms per liter (µg/L), with the highest detection in well MW120B. TCE concentrations in groundwater are presented on Figure 4-1. TCE exceeds its screening criteria (5 µg/L) in eight of 13 groundwater samples. The highest TCE detected in the newly installed wells was found predominantly in the "B" zone intermediate wells (MW119B and MW120B) screened below the thick clay layer (referred to as the deep high-permeable zone). TCE in the lower permeable zone below the shallow clay layer appears to extend from MW109B in a south/southwest direction, with the highest concentration at MW120B, and continuing south of MW90B toward DPT transect #2.

The highest historical TCE concentrations in groundwater have been detected in the upper permeable zone in well MW96A (3,300 µg/L). TCE in newly installed shallow well MW122A was detected at only 1.2 µg/L; however, this well is screened within a clay unit. TCE in newly installed well MW131B, located close to Building A and within 15 feet of well MW122A, was detected at 71 µg/L; this well is screened deeper (28.3 to 38.3 feet below grade) in the lower permeable zone.

TCE in the lower permeable zone appears to extend from MW131B off Building A, and head south/southwest past MW119B toward well MW120B. MW131B is due west of two known TCE source areas (SV-136-A and SV-168-A) beneath the main floor of Building A. These are the former vapor degreaser locations, and these results appear to substantiate the elevated TCE concentration detected immediately west of the building. However, significantly higher TCE concentrations detected slightly downgradient of MW131B at MW96A appear to indicate an additional localized, shallow source near or just upgradient of MW96A, as TCE concentrations in this well are three orders of magnitude higher (i.e., three powers of 10) than what has been detected upgradient. TCE in the upper permeable zone appears to have more of an overall westerly flow from Building A, past the Maintenance Building and heading toward transect #1 and Cow Pen Creek (Figure 4-1).

Other chlorinated VOCs detected include: *cis*-1,2-DCE in nine of 13 samples at concentrations ranging from 0.66 to 320 µg/L (highest detection in well MW117A), and 1,1-DCE in five of 13 samples at concentrations ranging from 0.33*J* to 200 µg/L (highest detection in well MW120B). *cis*-1,2-DCE exceeds its screening criterion in three of 13 samples, whereas 1,1-DCE exceeds its

screening criterion in two of 13 samples. Vinyl chloride was only detected in one well (MW131B), at a concentration of 17 µg/L, which is approximately eight times higher than its screening criterion (2 µg/L). This high VC concentration might indicate degradation of TCE from upgradient sources farther east and under Building A (where vapor degreasers were formerly located at SV-136-A and SV-168-A).

Petroleum compounds—Benzene was detected in four of 13 groundwater samples ranging from 0.53*J* to 53 µg/L, with the highest concentration detected in well MW119B. Benzene exceeds its screening criterion (5 µg/L) in two wells (MW119B and MW120A). Toluene was detected below its screening criterion (1000 µg/L) in seven of 13 groundwater samples, ranging from 0.23 to 2.7 µg/L, with the highest concentration detected in well MW119A. Xylenes were also detected below its screening criterion (10,000 µg/L) in three of 13 groundwater samples, ranging from 0.72*J* to 2.1 µg/L, with the highest concentration detected in well MW120A. This coincides with an existing localized benzene plume east of the Maintenance Building near monitoring wells MW96B (720 µg/kg benzene detected there in 2017) and MW17A (110 µg/kg benzene detected in 2017). These wells are near underground wastewater lines that act as preferential pathways for contaminants. Data from MW120A suggest that benzene in groundwater extends farther south.

Benzene exceedances have increased from 2016–2017 in two wells west of Building A: MW17A (from 42 µg/L in 2016 to 110 µg/L in 2017) and MW96B (from 670 µg/L in 2016 to 720 µg/L in 2017). However, benzene concentrations decreased in several other wells: MW109B (98 µg/L to 34 µg/L), MW110B (49 µg/L to 42 µg/L), and MW53B (130 µg/L to 17 µg/L). Benzene was not detected in wells MW113A and MW114A in 2017, but had previously been detected since well installation in 2014.

TPH-DRO was detected in six of nine groundwater samples at concentrations ranging from 230*J* to 1,200 µg/L, with the highest detection in well MW120A. TPH-GRO was detected in four of 11 groundwater samples, at concentrations ranging from 120 to 440 µg/L, with the highest detection in well MW120B. All detections of TPH-DRO and TPH-GRO exceed their respective screening criteria (47 µg/L).

***1,4-Dioxane*—**The screening level used for 1,4-dioxane is the California Department of Health Services advisory level (3 µg/L); Maryland has no drinking water or groundwater standard or advisory for 1,4-dioxane. 1,4-Dioxane was detected in four of nine samples ranging in concentration from 2.7 to 10 µg/L. Two detections exceed the screening criteria: 10 µg/L in MW120B and 6.4 µg/L in MW131B. 1,4-Dioxane was also detected west of Building A at concentrations exceeding its screening level during annual groundwater monitoring in spring 2017, in samples from wells MW69A (6.3 µg/L), MW96A (4 µg/L), MW110A (5.8 µg/L), and MW110B (5.8 µg/L). No additional investigations for 1,4-dioxane are warranted, however, due to its low concentrations and its presence in downgradient wells (MW08A and MW08B) near Cow Pen Creek at concentrations less than 3 µg/L.

***Metals*—**Total metals (from unfiltered samples) concentrations above MDE standards are typically found throughout the MRC. Table 4-3 includes a statistical summary of metals in site groundwater, and Table 4-4 summarizes detections of metals in groundwater samples and exceedances of Maryland groundwater standards. Concentrations of three metals exceed Maryland groundwater standards (for drinking water) in one or more samples. Nickel (in four of nine samples), beryllium (in one of nine samples), and vanadium (in two of nine samples) exceed their standards; their maximum concentrations (1,700, 12, and 23 µg/L, respectively) exceed their respective groundwater standards by approximately 20 times (nickel), three times (beryllium), and six times (vanadium). Concentrations of the remaining metals do not exceed standards. Other typical metals detected at MRC, but below MDE standards, include barium, cobalt, lead, and zinc. Metals have not contributed to site risk, and additional investigation and/or remediation for metals is not planned.

***Hexavalent chromium*—**Hexavalent chromium was detected in three of nine samples, at concentrations well below its MDE standard (100 µg/L); concentrations range from 0.17*J*- to 54.9*J*- µg/L, with the highest detection in well MW118A. Monitoring well MW118A is west of the former plating shop area in Building A, where hexavalent chromium was historically used in plating operations. A deionization system operated off of a Building A dock near MW118A; rinse water from the former plating shop rinse (used to demineralize and strip off metals and acids) was

recirculated back to the system at that location. Hexavalent chromium was not detected above the Maryland standards in any sample collected (Tetra Tech, 2017b).

Polychlorinated biphenyls (PCBs)—PCBs were not detected in any groundwater sample, and have not been historically detected in and around the area of the Maintenance Building west of Building A.

4.3 SUB-SLAB SOIL VAPOR

On September 25–26, 2017, 10 new VMPs (SV-178-MB through SV-187-MB) were installed in the Maintenance Building. VMP locations strategically targeted enclosed areas where staff congregates (office space and lunch/break room), and provide spatial coverage across the building. Samples were collected and analyzed for VOCs by USEPA Method Toxic Organic 15 (TO-15) (USEPA, 1999).

Three large bay doors on the east side of the Maintenance Building were open during sampling. The outside temperature during sampling was approximately 62 degrees Fahrenheit, and the barometric pressure was 30.28 inches, with overcast skies. Winds averaged approximately nine miles per hour, out of the northeast.

Validated sub-slab soil vapor (SV) chemical data were used to generate a statistical summary table (Table 4-5) and a detection table (Table 4-6) summarizing positive detections of chemical analytes in the SV samples. Table 4-5 lists chemicals detected in the SV samples, ranked from the most frequently to the least frequently detected (this table does not include analytes that were not detected in any sample). Table 4-6 shows the detected analyte concentrations screened against target shallow soil gas concentrations derived using the United States Environmental Protection Agency (USEPA) vapor intrusion screening level (VISL) calculator, and the commercial/industrial values based on lowest value (1×10^{-5} cancer risk [i.e., a one-in-100,000 probability] or a hazard index [HI] of 1). (USEPA, 2014).

The calculator divides indoor-air (IA) screening levels by a conservative (i.e., more protective of human health and the environment) attenuation factor of 0.03. The attenuation factor represents the adjustment applied to IA screening levels to account for concentration reductions due to

diffusive, advective, and/or other attenuating mechanisms as vapor migrates from the sub-slab to IA. No analytes detected in SV exceed their respective screening criteria. Sub-slab soil vapor results are on Figure 4-2.

Trichloroethene (TCE) was detected in two of 10 SV samples at concentrations ranging from 0.39*J* to 2*J* µg/m^3, with the highest detection in sample SV-183-MB. 1,1-DCA was detected in all 10 samples at concentrations ranging from 0.52*J* to 1,700 µg/m^3 (highest concentration at SV-183-MB). Other chlorinated VOCs detected include 1,1-DCE (in four of 10 samples at concentrations ranging from 1.6 to 270 µg/m^3) and 1,1,1-trichloroethane (1,1,1-TCA) (in two of 10 samples at concentrations ranging from four to 190 µg/m^3), both exhibiting the highest detection at SV-183-MB.

The petroleum compounds benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected at low concentrations in all samples, except for SV-183-MB, where only benzene was detected. All petroleum concentrations are several orders of magnitude below their respective screening criteria. Similar to the soil sampling data, this coincides with an existing localized benzene plume upgradient and east of the Maintenance Building (Figure 4-1) near monitoring wells MW96B and MW17A. Low-level petroleum concentrations beneath the Maintenance Building might also be attributable to historical operations in and around the building.

The highest VOC concentrations were detected in the open central portion of the warehouse at sampling locations SV-182-MB and SV-183-MB. No elevated concentrations were detected in the enclosed areas (office space and lunch/break room) of the Maintenance Building. The absence of elevated SV concentrations indicates that the elevated VOC groundwater concentrations detected east of the Maintenance Building are not affecting SV, possibly due to the thick clay layer identified in the shallow subsurface that would hinder vapor intrusion.

4.4 2017 CROSS-SECTION AND TCE PLUME ANALYSIS

This section discusses geological cross-sections and trichloroethene (TCE) concentrations west of Building A and the Building A basement. Additional cross-sectional analysis of the wells newly installed for this investigation identifies the geology and maps a permeable layer beneath the thick clay unit, referred to as the deeper, high-permeable zone. The cross-section locations are shown

on Figure 4-1, and the geological cross-sections with associated groundwater TCE concentrations are in Appendix I.

The cross-sectional analysis distinctly indicates an upper permeable zone and a lower permeable zone throughout most of the localized region west of Building A toward Cow Pen Creek. Four cross-sections (A–A', B–B', C–C', and D–D') transecting this area are in Appendix I. The locations of these cross-sections are on Figure 4-1. Whether the four areas of TCE described in Section 2 are isolated or contiguous was previously unknown. Groundwater samples with elevated TCE levels obtained in September 2017 from the newly installed wells appear to indicate that these three areas might not be distinct (i.e., might not originate from separate TCE sources), but are rather part of a larger TCE plume emanating from beneath the building (Figure 4-1).

Maximum TCE concentrations have been consistently detected at well MW96A in the upper high permeable zone; elevated TCE concentrations have also been detected in surrounding wells screened in the deeper high-permeable zone (MW119B and MW131B). TCE was detected at a low concentration (nondetect to 1.2 µg/L) at monitoring wells MW109A and MW122A. MW109A is screened within the upper high permeable zone upgradient of MW96A. The screened interval for MW122A is in the upper zone; however, the well screen is set within the clay unit. This suggests a possible localized source of TCE just upgradient of, or near, MW96A. TCE concentrations at MW117A are evidently in the deeper permeable zone, as its well screen was set deeper, due to the presence of a thick clay unit.

The area west of Building A is characterized by heterogeneous geology, as indicated by the aforementioned clay layer and intermittent sand layers, as seen in boring logs from wells MW96 and MW109 (Appendix B). MW96 has moist, sandy lithology from 12 to 15 feet below grade that does not exist in nearby well MW109, located only 39 feet upgradient. Both wells are screened at 10–15 feet bgs; however, MW96A had a TCE concentration of 3,300 µg/L, whereas TCE was not detected in MW109A. A groundwater TCE concentration of 550 µg/L detected in new well MW119B, south of MW96A/B, indicates that the plume within the upper high permeability zone extends farther south.

Subsurface heterogeneity might account for the differences observed in contaminant concentrations between these two wells, and/or a separate source area might exist near MW96A. Dense clay and silty-clay soil beneath Building A, together with the absence of precipitation infiltration (due to the large building footprint and associated pavement), has likely limited downward movement of TCE to soil directly beneath the building floor, and subsequently to groundwater. This is supported by historical soil and groundwater data that indicate low or no concentrations of TCE in soil borings under Building A. However, elevated TCE concentrations have been detected in sumps in water collected from beneath the Building A basement, and in lower permeable zone wells (e.g., MW120B), indicating a downward movement of TCE through preferential pathways moving westward from Building A toward Cow Pen Creek.

The upper permeable zone is evident throughout most of the localized region west of Building A, but appears to pinch out in areas moving west toward Cow Pen Creek. Analysis of the cross sections indicates that the shallow TCE found near wells MW53A and MW110A might be in a shallow permeability zone that pinches out. The upper permeable zone pinches out west of MW110A in cross-section A–A'; it is not evident in DPT-1A and MW08. The upper permeable-zone is evident in cross-sections B–B' and C–C', except near well MW109, where TCE was not detected in 2017.

The upper permeable zone does not appear in any transect #2 DPT borings (DPT-2A through DPT-2E); thick clay was encountered in these borings from the surface to approximately 45–50 ft below grade. TCE in the “B”-level wells in this area might be part of a more contiguous impacted zone in deeper groundwater beneath the clay unit, as seen in cross-section A–A'. TCE (28.9 µg/L) was detected in September 2017 in groundwater at boring DPT-1A from a depth of 40–44 feet below ground surface (bgs), indicating that the deeper plume extends farther west toward Cow Pen Creek.

The lower permeable zone west of Building A toward Cow Pen Creek has not been completely delineated by historical borings and monitoring wells installed to date. The lower permeable zone is evident in cross-section A–A' from MW131B/MW117B, close to Building A, and extends toward Cow Pen Creek and MW08B; however, the lower permeable zone is only evident in borings

installed during previous investigations at depths deep enough to intercept it. The lower permeable zone is evident at the bottom of DPT boring DPT-1A in transect #1, and in DPT borings DPT-2C and DPT-2D in transect #2, but DPT refusal prevented access to this zone at other borings in the transect.

These results indicate that the lower permeable zone is shallower closer to Building A, and dips to approximately 20–30 feet as this stratigraphic unit extends toward Cow Pen Creek. TCE was detected at 9.9 µg/L in the lower permeable zone at DPT-2D, with much higher concentrations detected in new upgradient wells MW119B (550 µg/L) and MW120B (1,400 µg/L); all these concentrations indicate that TCE is in groundwater at elevated concentrations in the lower permeable zone. This suggests that TCE from either a local source or an upgradient source in Building A (i.e., former plating shop and/or vapor degreasers) has migrated to depth, and was not detected by shallow wells closer to Building A. The deeper western groundwater investigation scheduled for 2018 will provide additional characterization of the lower permeable zone, and will further delineate the vertical and horizontal extent of TCE-impacted groundwater west of Building A toward Cow Pen Creek.

SECTION 5
SUMMARY AND CONCLUSIONS

The investigation objectives were to:

- install and sample 11 groundwater monitoring wells west of Building A and the Building A basement to assess the vertical and horizontal distribution of chlorinated volatile organic compounds (VOCs) (primarily trichloroethene [TCE]) and to determine if a contiguous plume is emanating from source areas under Building A
- conduct direct-push technology (DPT) borings and vertical water screening and sampling to refine additional groundwater monitoring well locations and the depths of screened intervals, and to install them using Vapor Pin® technology
- sample 10 sub-slab soil vapor monitoring points (VMPs) in the Maintenance Building to assess potential vapor intrusion (VI) pathways

5.1 GROUNDWATER

Groundwater screening has identified elevated trichloroethene (concentrations in downgradient samples collected from newly installed lower permeable zone monitoring wells (e.g., MW119B, MW120B, MW121B, and MW131B) and direct-push technology (DPT) boring locations (DPT-1A and DPT-2D). Trichloroethene was also detected at lower levels in newly installed upper permeable zone monitoring wells (e.g., MW119A and MW121A). Subsurface soil west of Building A, heading toward Cow Pen Creek, appears to consist of an upper and lower permeable zone separated by a thick clay layer.

The highest historical trichloroethene concentration in groundwater was detected in the upper permeable zone in well MW96A (3,300 micrograms per liter [µg/L] in 2017) east of the Maintenance Building. In the upper permeable zone, the trichloroethene plume appears to flow to the west. Trichloroethene in newly installed upgradient well MW122A (located just west of Building A) was detected at only 1.2 µg/L; however, this well is screened within a clay unit. Trichloroethene in newly installed well MW131B, located close to Building A and within 15 feet

west of well MW122A, was detected at 71 µg/L; this well is screened deeper (28.3–38.3 feet below grade) in the lower permeable zone.

Trichloroethene in the lower permeable zone appears to extend from MW131B off Building A, heading south/southwest past MW119B toward well MW120B. Residual source material underneath Building A might contribute to contaminant concentrations observed at wells MW117A, MW119B, and MW120B. MW131B is due west of two known trichloroethene source areas (SV 136-A and SV-168-A) beneath the main floor of Building A; these are the former locations of vapor degreasers, and this might substantiate the elevated trichloroethene detected immediately west of the building. However, significantly higher trichloroethene concentrations detected slightly downgradient of MW131B at MW96A appear to indicate an additional localized shallow source near or just upgradient of MW96A, rather than being associated with a current source area upgradient beneath Building A, as trichloroethene concentrations in this well are three orders of magnitude higher than what has been detected upgradient.

This, along with the multiple plumelets observed, suggests that several contaminant releases to the subsurface might have occurred during historical operations both under Building A and possibly west of Building A (e.g., area of MW96A). An elevated concentration of trichloroethene was also found in downgradient well MW120B (1,400 µg/L) in the lower permeable zone, as compared to that in upgradient well MW119B (550 µg/L), which also seems to support this area as the source of several contaminant releases.

Refusal was encountered during direct-push technology drilling that prevented full vertical and horizontal delineation of trichloroethene in groundwater. Elevated trichloroethene concentrations detected in water samples collected previously from target floor features in the Building A basement, and the detection of trichloroethene in groundwater on the western side of Building A, suggest that additional investigation is needed. This will be completed in 2018 to assess the downgradient groundwater flowing from beneath Building A and the Building A basement toward Cow Pen Creek. Additional deeper soil borings, groundwater screening within borings, and the installation of deeper groundwater monitoring wells, will be used to evaluate the vertical and

horizontal extent of contamination. Borings in 2018 will be advanced via rotosonic technology, because of the significant clay layers detected in shallow subsurface soil during this investigation.

The supplemental deeper groundwater investigation will target permeable intervals identified in several borings west of Building A; this zone is beneath a shallow, relatively thick clay unit encountered during the direct-push technology (DPT) investigation detailed in this report. These permeable layer(s), when encountered, have produced groundwater with detectable levels of trichloroethene. The vertical and lateral groundwater profiling to be conducted during the supplemental deeper groundwater investigation will help refine additional monitoring well locations and help determine the appropriate depth for the deep monitoring well screens installed downgradient of the known trichloroethene plumes and toward Cow Pen Creek.

5.2 SUB-SLAB SOIL VAPOR

Ten vapor monitoring points (VMPs) were installed in the Maintenance Building that strategically targeted enclosed areas where staff congregate (office space and lunch/break room), and that provide spatial coverage across the building. Detected analyte concentrations were screened against target shallow soil gas concentrations derived using commercial/industrial values from the United States Environmental Protection Agency (USEPA) vapor intrusion screening level (VISL) calculator, and based on lowest value for either a 1×10^{-5} cancer risk or a hazard index (HI) of 1 (USEPA, 2014).

No analytes detected in sub-slab soil vapor (SV) exceed their respective screening criteria. Trichloroethene (TCE) was detected in two of 10 sub-slab soil vapor samples collected from the Maintenance Building, at concentrations of 0.39*J* and 2*J* micrograms per cubic meter, with the highest detection in sample SV-183-MB. The petroleum compounds benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected at low concentrations in all samples, except for SV-183-MB, where only benzene was detected. All petroleum concentrations are several orders of magnitude below their respective screening criteria. The highest volatile organic compound concentrations were detected in the open central portion of the warehouse at sampling locations SV-182-MB and SV-183-MB. Elevated concentrations of volatiles were not detected in the enclosed areas (office space and lunch/break room) of the Maintenance Building.

The absence of elevated sub-slab soil vapor concentrations indicates that the elevated volatile organic compound concentrations detected in groundwater east of the Maintenance Building are not affecting sub-slab soil vapor, possibly due to the thick clay layer in the shallow subsurface that might hinder vapor intrusion. A second round of confirmation sampling will be conducted in February 2018. A sub-slab soil vapor investigation in this building is unwarranted at present, based on the presence of trichloroethene in groundwater in the lower permeable zone, rather than in the upper permeable zone near the Maintenance Building. Future annual groundwater sampling will include nearby shallow wells, and sub-slab soil vapor sampling in the Maintenance Building might be conducted if elevated trichloroethene concentrations are detected in those wells.

SECTION 6
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FIGURES

Figure 1-1 Site Location Map, Area West of Building A and Building A Basement

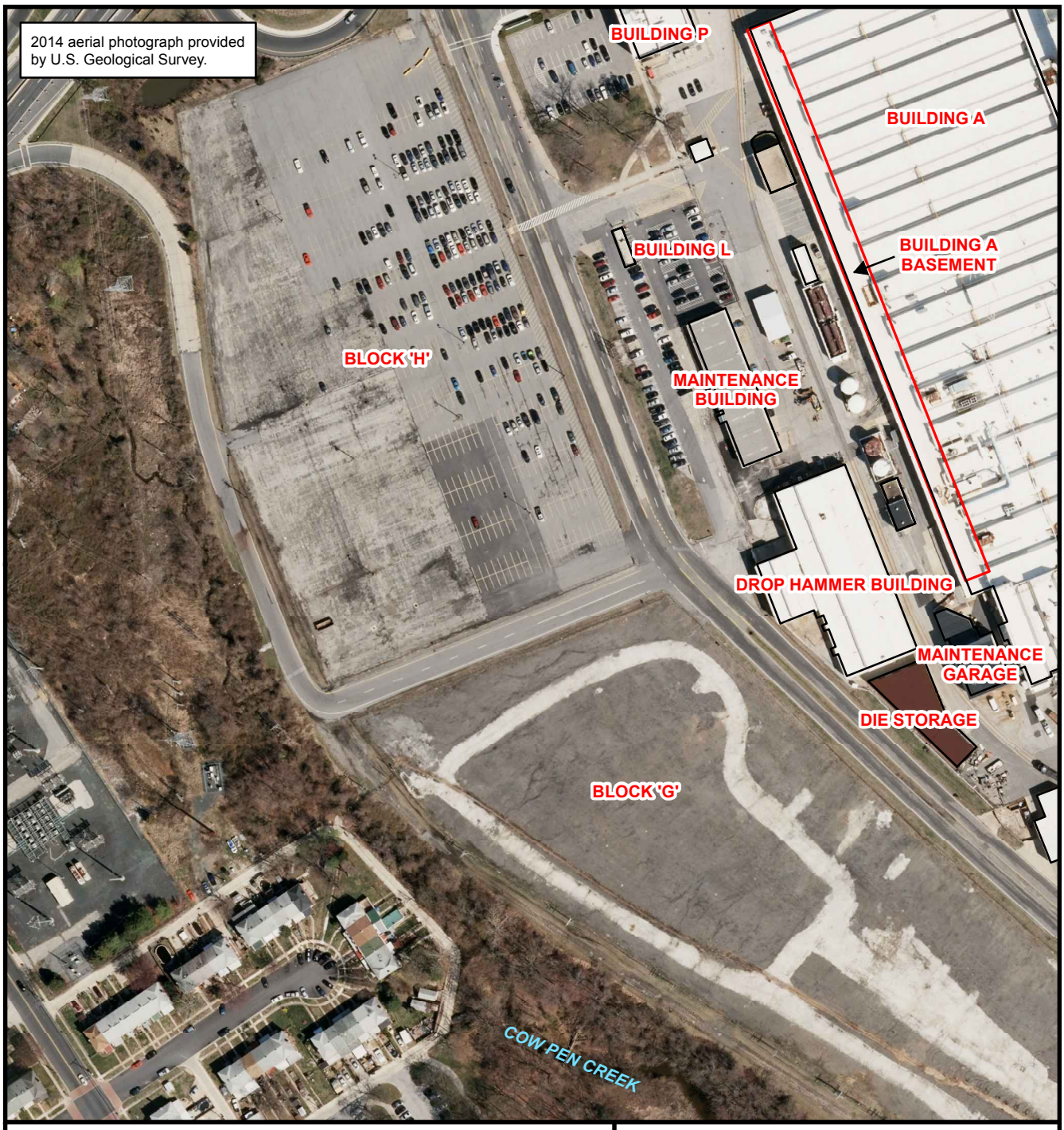
Figure 2-1 2016 TCE Concentrations, Block I Maintenance Building, and Surrounding Areas

Figure 3-1 Monitoring Well and DPT Groundwater Screening Boring Location Map, Block I Maintenance Building and Surrounding Areas

Figure 3-2 2016 Vapor Monitoring Point Location Map, Maintenance Building

Figure 4-1 Distribution of Trichloroethene in Groundwater, 2017

Figure 4-2 Sub-Slab Soil Vapor Chlorinated VOC Results, Maintenance Building



LEGEND

STRUCTURE

FIGURE 1-1
SITE LOCATION MAP
AREA WEST OF BUILDING A
AND BUILDING A BASEMENT

Lockheed Martin Middle River Complex
Middle River, Maryland

DATE MODIFIED: 02/01/18

CREATED BY: JEE

0 75 150 Feet

N

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\maintenance_bldg_site_layout.mxd)
02/01/18 -- JEE

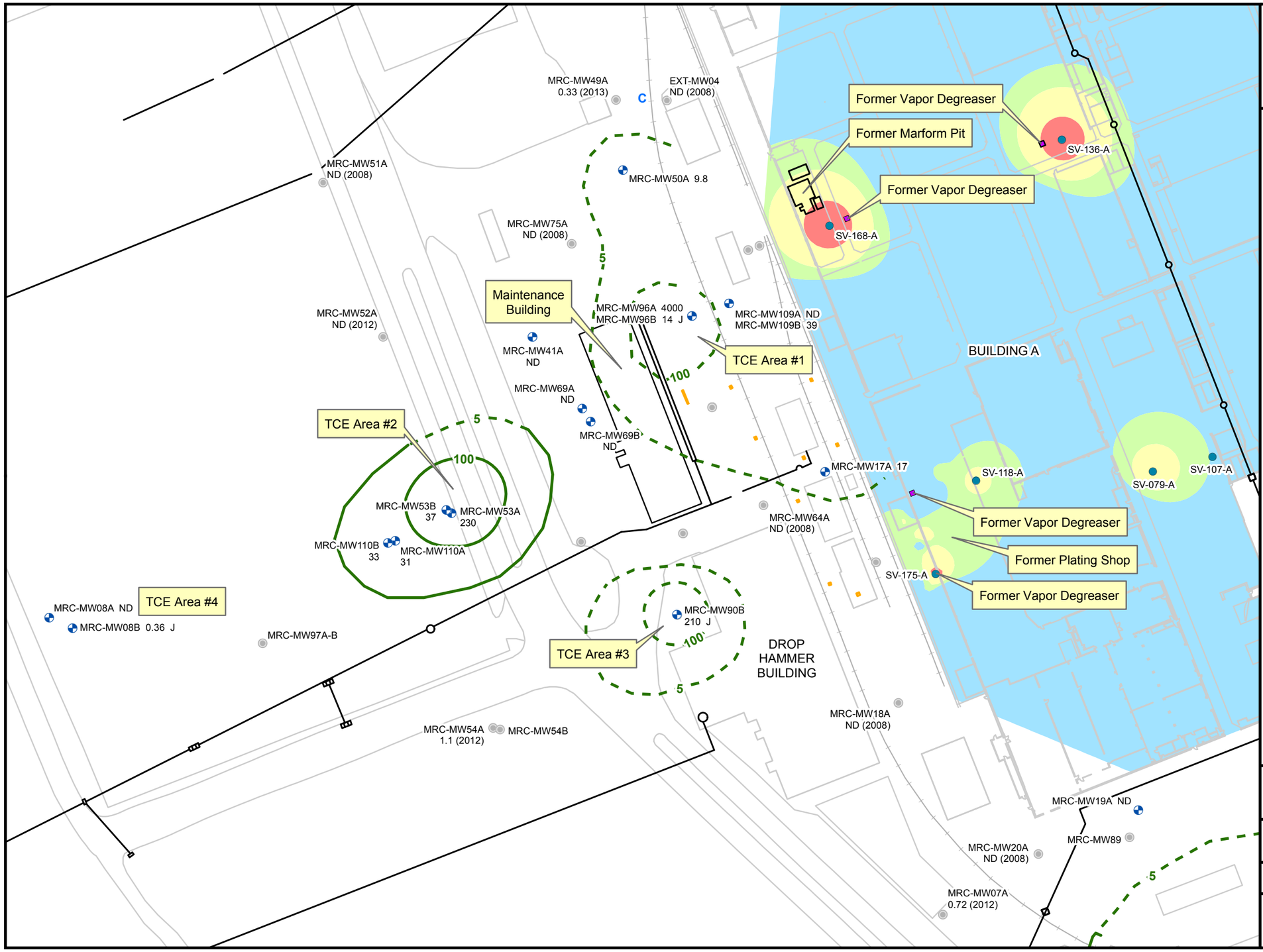


FIGURE 2-1

2016 TCE CONCENTRATIONS, BLOCK I MAINTENANCE BUILDING AND SURROUNDING AREAS

LEGEND

- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL SAMPLED FOR TCE IN 2016
- SUB-SLAB SOIL VAPOR SAMPLE LOCATION
- WELL NOT SAMPLED FOR TCE
- ABANDONED WELL BORING
- TCE GROUNDWATER ISOCONCENTRATION (UG/L, DASHED WHERE INFERRED)
- FORMER VAPOR DEGREASERS
- STORM DRAIN LINE
- SURVEYED STORM DRAIN INLET
- STRUCTURE
- RAILROAD TRACKS
- 15 — MAXIMUM CONCENTRATION IN WELL (UG/L)
- (2008) — YEAR OF MOST RECENT SAMPLE IF WELL WAS NOT SAMPLED IN 2016

J = ESTIMATED VALUE
MPE = MULTI-PHASE EXTRACTION
ND = NOT DETECTED
NS = NOT SAMPLED
PCE = TETRACHLOROETHENE
TCE = TRICHLOROETHENE
UG/L = MICROGRAMS PER LITER

GROUNDWATER STANDARD FOR TCE IS 5 UG/L.
THE VALUE SHOWN IS THE HIGHER OF THE SAMPLE OR SAMPLE DUPLICATE.

FEBRUARY 2016 SUB-SLAB VAPOR TCE CONCENTRATION

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

Lockheed Martin Middle River Complex
Middle River, Maryland

0 50 100 Feet

N

DATE MODIFIED: 01/31/18

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\bldg_a_tce_hotspot_sitemap_nov2016.mxd)
01/31/18 -- JEE

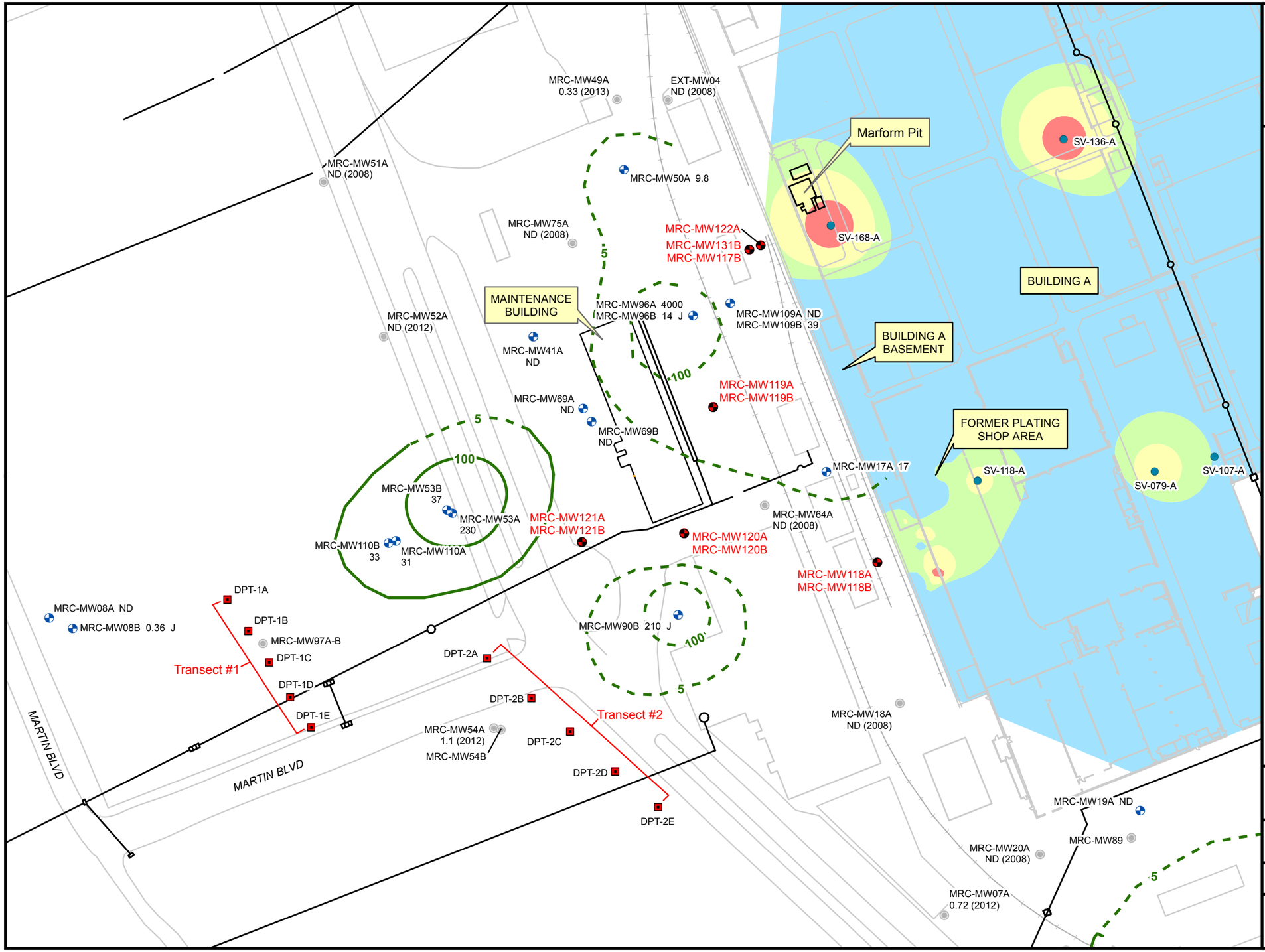


FIGURE 3-1

MONITORING WELL AND DPT GROUNDWATER SCREENING BORING LOCATION MAP, BLOCK I MAINTENANCE BUILDING AND SURROUNDING AREAS

LEGEND

- NEW MONITORING WELL
- DPT BORING
- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL SAMPLED FOR TCE IN 2016
- SURFACE VAPOR SAMPLE LOCATION
- WELL NOT SAMPLED FOR TCE
- ABANDONED WELL BORING
- TCE ISOCONCENTRATION (UG/L, DASHED WHERE INFERRED)
- STORM DRAIN LINE
- STRUCTURE
- RAILROAD TRACKS
- 15 — MAXIMUM CONCENTRATION IN WELL (UG/L)
- (2008) — YEAR OF MOST RECENT SAMPLE IF WELL WAS NOT SAMPLED IN 2016

J = ESTIMATED VALUE
MPE = MULTI-PHASE EXTRACTION
ND = NOT DETECTED
NS = NOT SAMPLED
TCE = TRICHLOROETHENE
UG/L = MICROGRAMS PER LITER

GROUNDWATER STANDARD FOR TCE IS 5 UG/L.
THE VALUE SHOWN IS THE HIGHER OF THE SAMPLE OR SAMPLE DUPLICATE.

FEBRUARY 2016 SUB-SLAB VAPOR TCE CONCENTRATION

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

Lockheed Martin Middle River Complex
Middle River, Maryland

0 50 100 Feet

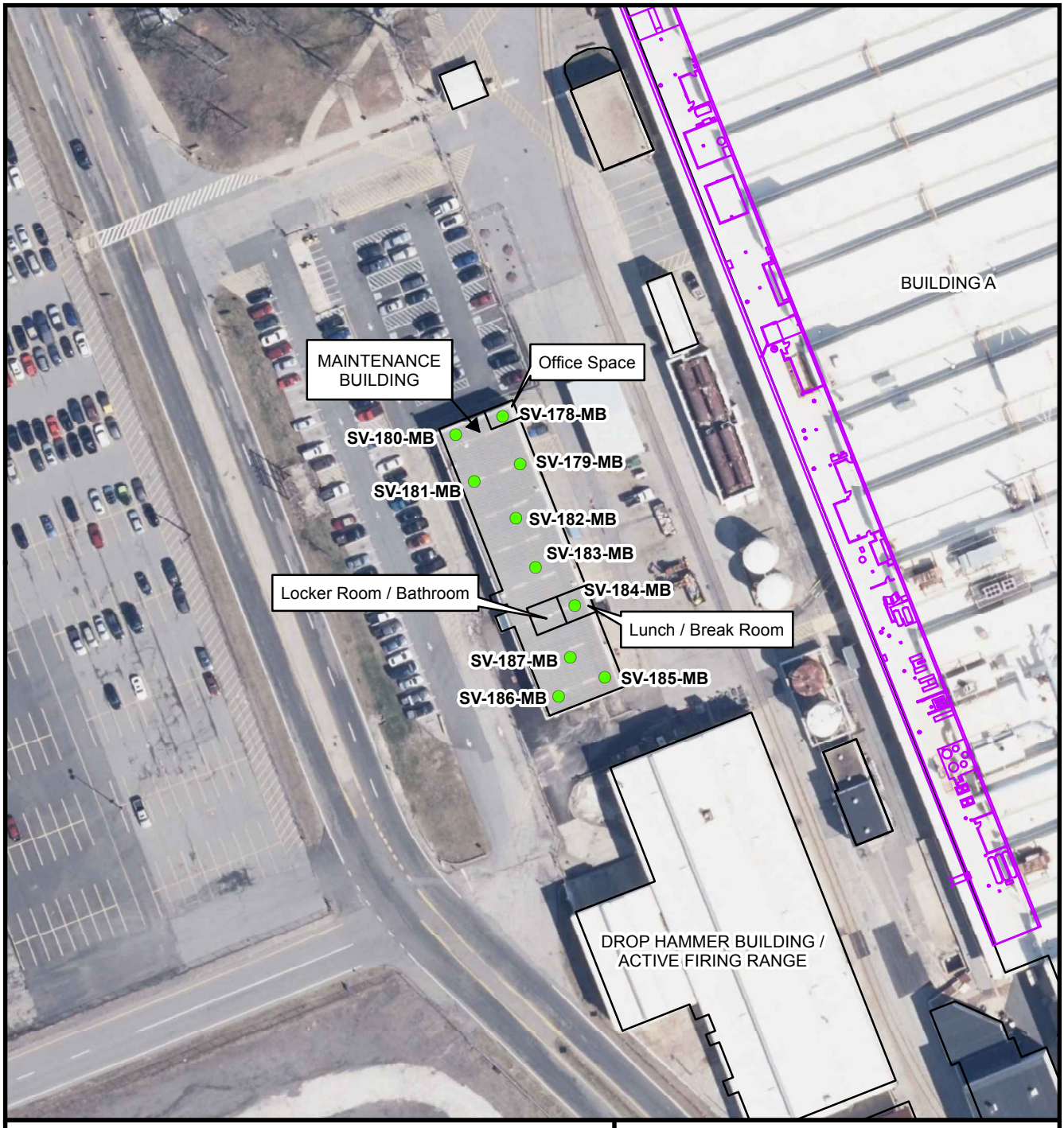
N

DATE MODIFIED: 02/05/18

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\maintenance_bldg_samplocs_oct2017.mxd)
02/05/18 -- JEE



LEGEND

- NEW VAPOR MONITORING POINT (VMP)
- STRUCTURE
- BUILDING A BASEMENT INTERIOR LAYOUT
- SV SOIL VAPOR
- MB MAINTENANCE BUILDING

2014 aerial photograph provided by U.S. Geological Survey.

0 50 100 Feet

N

FIGURE 3-2

VAPOR MONITORING POINT LOCATION MAP
MAINTENANCE BUILDING

Lockheed Martin Middle River Complex
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
12/27/17	JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\maintenance_bldg_proplocs_may2017.mxd)
12/27/17 -- JEE

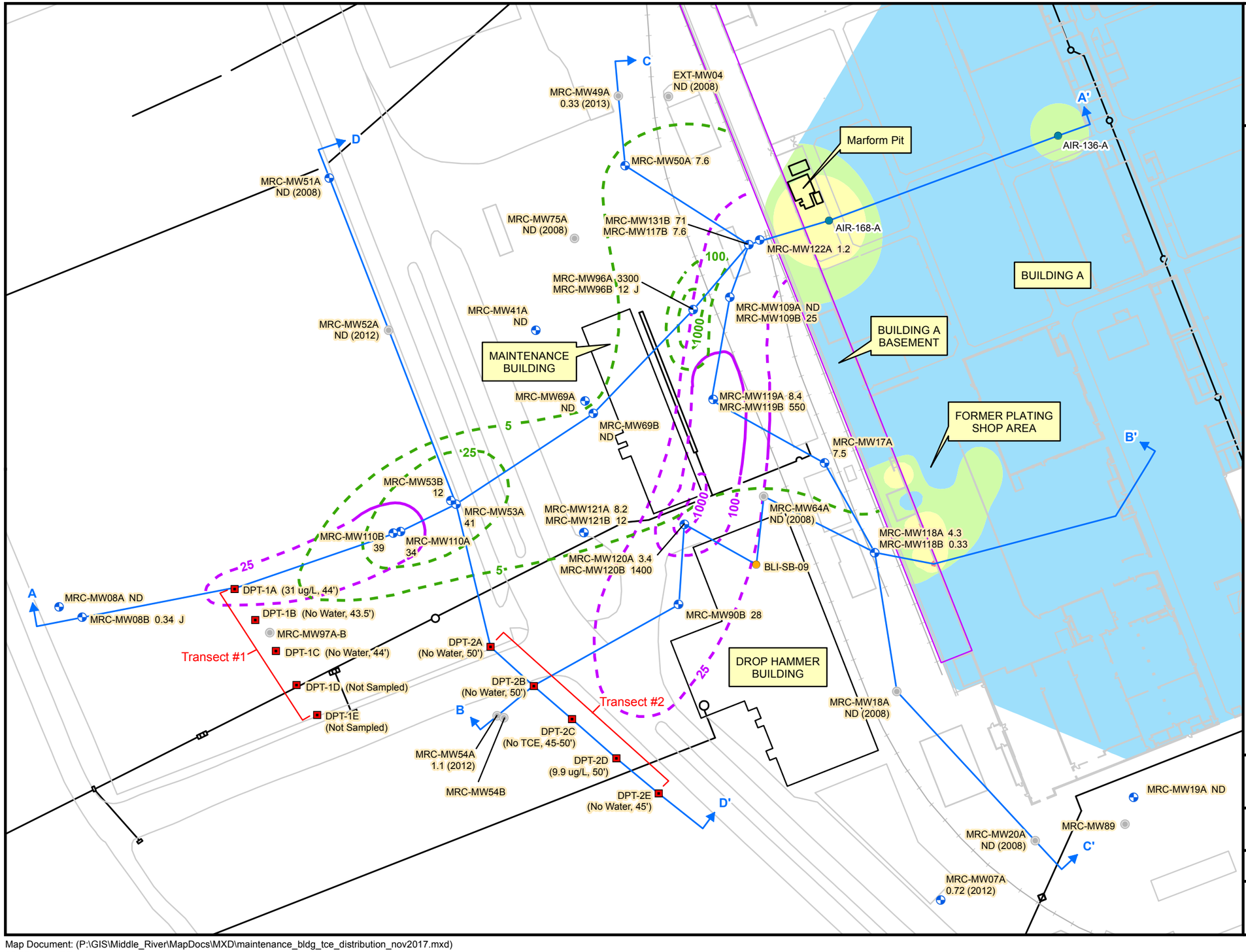


FIGURE 4-1

DISTRIBUTION OF TCE IN GROUNDWATER, 2017 MAINTENANCE BUILDING AND SURROUNDING AREAS

LEGEND

- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL (2017)
- SOIL BORING
- DPT BORING
- WELL NOT SAMPLED FOR TCE
- SURFACE VAPOR SAMPLE LOCATION
- CROSS-SECTION TRANSECT
- UPPER PERMEABLE ZONE TCE ISOCONCENTRATION (UG/L, DASHED WHERE INFERRED)
- LOWER PERMEABLE ZONE TCE ISOCONCENTRATION (UG/L, DASHED WHERE INFERRED)
- STORM DRAIN LINE
- STRUCTURE
- RAILROAD TRACKS
- 15 MAXIMUM CONCENTRATION IN WELL (UG/L)
- (2008) YEAR OF MOST RECENT SAMPLE IF WELL WAS NOT SAMPLED IN 2017

J = ESTIMATED VALUE
MPE = MULTI-PHASE EXTRACTION
ND = NOT DETECTED
NS = NOT SAMPLED
TCE = TRICHLOROETHENE
UG/L = MICROGRAMS PER LITER

GROUNDWATER STANDARD FOR TCE IS 5 UG/L.
THE VALUE SHOWN IS THE HIGHER OF THE SAMPLE OR SAMPLE DUPLICATE.

AUGUST 2017 SUB-SLAB VAPOR TCE CONCENTRATION

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

Lockheed Martin Middle River Complex
Middle River, Maryland

0 50 100 Feet

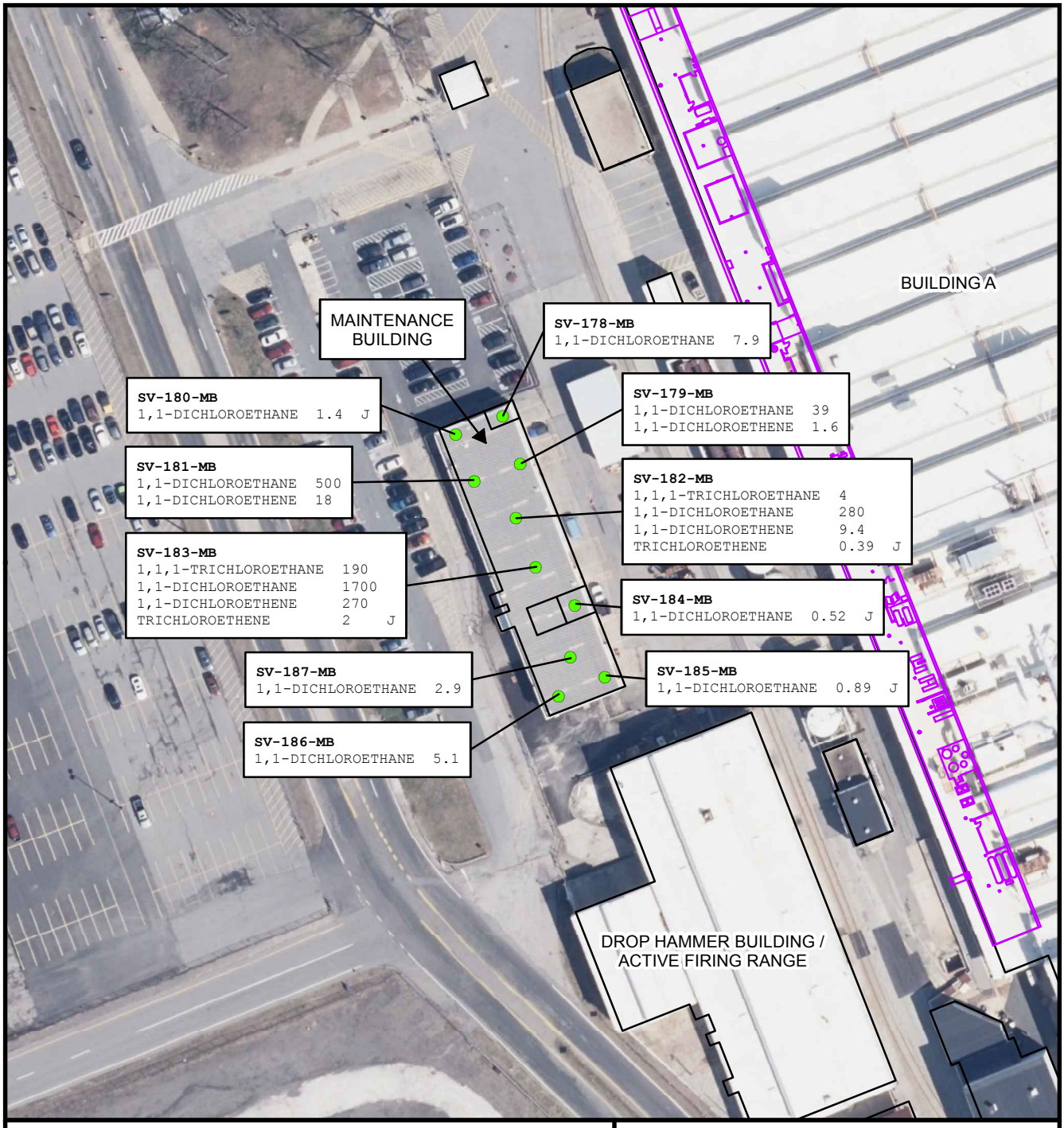
N

DATE MODIFIED: 02/05/18

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\maintenance_bldg_tce_distribution_nov2017.mxd)
02/05/18 -- JEE



LEGEND

- VAPOR MONITORING POINT
- STRUCTURE
- BUILDING A BASEMENT INTERIOR LAYOUT
- SV SOIL VAPOR
- MB MAINTENANCE BUILDING

All results shown in milligrams per cubic meter (mg/m^3).
2014 aerial photograph provided by U.S. Geological Survey.

0 50 100 Feet

N

FIGURE 4-2

SUB-SLAB SOIL VAPOR CHLORINATED VOC RESULTS, MAINTENANCE BUILDING

Lockheed Martin Middle River Complex
Middle River, Maryland

DATE MODIFIED: 01/04/18

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\maintenance_bldg_vapor_tags_oct2017.mxd)
01/04/18 -- JEE

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Table 4-5 Statistical Summary of Analytes Detected in Sub-Slab Soil Vapor Samples, 2017

Table 4-6 Detected Analytes and Screening Level Exceedances in Sub-Slab Soil Vapor Samples, 2017

Table 3-1

Monitoring Well and DPT Soil and Groundwater Sample Summary and Rationale
Block I Maintenance Building and Surrounding Areas
Lockheed Martin Middle River Complex, Middle River, Maryland

Well number	Location	Well/Boring bottom depth[1]	Soil sample analysis (method)	Groundwater sample analysis (method)	Rationale/purpose
MRC-MW131B/MW117B	Outside of and adjacent to Building A near northern TCE soil vapor area (SV-168-A)	131B – 38.3 feet below grade 117B – 50.5 feet below grade	Collected two soil samples for laboratory chemical analyses based on field screening results and/or indications of contamination (e.g., staining, sheen, etc.) VOCs (8260C); SVOCs including 1,4-dioxane (8270D SIM); TPH-GRO and diesel–range organics (DRO) by (8015D).	VOCs (8260C); SVOCs including 1,4-dioxane (8270D SIM); TPH-GRO and TPH-DRO (8015D); total and dissolved metals (6020A, 7471A); PCBs (680); hexavalent chromium (218.6)	To provide groundwater chemical-monitoring data points to assess downgradient groundwater conditions adjacent to three soil-vapor VOC source areas beneath Building A. Well depths were selected to monitor the area directly west of Building A targeting the permeable silty and sandy soil located in these two areas. The well screens targeted two permeable water-bearing intervals while targeting similar elevations coincident with the well screen intervals of existing impacted downgradient wells. While drilling the borehole for MW117A/B, two permeable layers were identified for target screened intervals. The screened interval originally designated asMW117A was set in the deeper of the two permeable layers, therefore the well was renamed MW131B. An additional shallow well (MW122A) was installed east of MW131B/MW117B toward Building A targeting the shallow permeable layer identified while drilling the boring for original well pair MW117.
MRC-MW118A/B	Outside of and adjacent to Building A near southern TCE soil vapor area (SV-118-A and SV-175-A)	A - 13 feet below grade B - 55 feet below grade	As above	As above	

Table 3-1

Monitoring Well and DPT Soil and Groundwater Sample Summary and Rationale
Block I Maintenance Building and Surrounding Areas
Lockheed Martin Middle River Complex, Middle River, Maryland

Well number	Location	Well/Boring bottom depth	Soil sample analysis (method)	Groundwater sample analysis (method)	Rationale/purpose
MRC-MW119A/B	In asphalt lot area between Building A and Maintenance Building, and between wells MRC-MW96A/B and MRC-MW-64A.	A - 13 feet below grade B - 60 feet below grade	As above	As above **Due to a low volume of water, MW119A was only analyzed for VOCs, TPH-GRO and hexavalent chromium*	To provide groundwater chemical-monitoring data to assess groundwater conditions downgradient of and between two soil-vapor VOC source areas beneath Building A. These wells filled a data gap by refining the southern extent of elevated VOCs in groundwater in an area not previously evaluated between well MRC-MW96A with the maximum TCE concentration for the area (4,000 µg/L), and well MRC-MW17A near the edge of the TCE plume with a relatively low TCE concentration (17 µg/L). MRC-MW119A will monitor the more permeable silty and sandy soil above shallow clay in this area. MRC-MW119B will monitor deeper silty and sandy soil below clay in this area. Well screens were placed targeting similar elevations coincident with the well screen intervals of existing impacted upgradient wells.

Table 3-1

Monitoring Well and DPT Soil and Groundwater Sample Summary and Rationale
Block I Maintenance Building and Surrounding Areas
Lockheed Martin Middle River Complex, Middle River, Maryland

Well number	Location	Well/Boring bottom depth	Soil sample analysis (method)	Groundwater sample analysis (method)	Rationale/purpose
MRC-MW120A/B	In asphalt roadway between Maintenance Building and Drop Hammer Building	A – 13.5 feet below grade B - 50 feet below grade	As above	As above	The rationale for these wells was the same as MRC-MW119A/B (above) except that they filled soil and groundwater chemical data gaps further south and west (i.e., hydraulically downgradient) between the Maintenance Building and Drop Hammer Building. Well screens were placed targeting similar elevations coincident with the well screen intervals of existing impacted upgradient and downgradient wells.
MRC-MW121A/B	In asphalt roadway downgradient of the Maintenance Building and between two known TCE plumes.	A - 29 feet below grade (screened within clay unit showing some moisture) B - 42 feet below grade	As above	As above	The rationale for these wells was the same as MRC-MW119A/B (above), except that they addressed gaps in soil and groundwater chemical data downgradient of the Maintenance Building and between two known TCE plumes centered around wells MRC-MW53A/B and MRC-MW90B. Well screens were placed targeting similar elevations coincident with the well screen intervals of the existing impacted upgradient and sidegradient wells.

Table 3-1

Monitoring Well and DPT Soil and Groundwater Sampling Summary and Rationale
Block I Maintenance Building and Surrounding Areas
Lockheed Martin Middle River Complex, Middle River, Maryland

Well number	Location	Well/Boring bottom depth	Soil sample analysis (method)	Groundwater sample analysis (method)	Rationale/purpose
MRC-MW122A	East of MW117B/MW131B toward Building A.	A – 15 feet below grade	No sample collected	**Due to a low volume of water, MW122A was only analyzed for VOCs and TPH-GRO.*	While drilling the borehole for MW117B/MW131B, two shallow permeable layers were identified for target screened intervals. The screened interval for MW131B was set in the deeper of the two permeable layers, and an additional shallow well (MW122A) was installed east of MW117B/MW131B toward Building A in the upper the permeable layer identified while drilling MW117B/MW131B. Although the same shallow permeable layer was not present in the borehole for MW122A (the subsurface geology is heterogeneous in the area west of Building A), the well was still installed.

Table 3-1

Monitoring Well and DPT Soil and Groundwater Sample Summary and Rationale
Block I Maintenance Building and Surrounding Areas
Lockheed Martin Middle River Complex, Middle River, Maryland

Well number	Location	Well/Boring bottom depth	Soil sample analysis (method)	Groundwater sample analysis (method)	Rationale/purpose
DPT-1A through DPT-1C DPT-2A through DPT-2E	Southern portion of Block H/ Parking Lot 2, downgradient of well clusters MRC-MW53A/B and MRC-MW110A/B. Northeastern portion of Block G/Parking Lot No. 3Parking Lot 2 downgradient of well location MRC-MW90B.	Eight of ten proposed borings were drilled. Borings DPT-1D and DPT-1E were not attempted based on unsuccessful results. Water was not able to be collected from five (DPT-1B, DPT-1C, DPT-2A, DPT-2B and DPT-2E) of the eight borings attempted. Water was collected from the deeper zone below the thick shallow clay unit in three borings (DPT-1A, DPT-2C and DPT-2D).	No soil samples were collected.	TCE analysis using Frog 4000™ portable gas chromatograph/mass spectrometer.	The rationale for these borings was to refine additional groundwater monitoring well locations and depth of screen intervals for deeper wells to be installed further downgradient of the known TCE plumes heading toward Cow Pen Creek.

DPT = direct-push technology
DRO = diesel-range organics
GRO = gasoline-range organics
MRC = Middle River Complex
MW = monitoring well
PCB = polychlorinated biphenyl
SV = soil vapor
SVOCs = semi-volatile organic compounds
TCE = trichloroethene
TPH = total petroleum hydrocarbons
µg/L = micrograms per liter
USEPA = United States Environmental Protection Agency
VOCs = volatile organic compounds

Table 3-2

Summary of Vapor Monitoring Point Sampling Locations and Rationale
Maintenance Building
Middle River Complex, Middle River, Maryland

Vapor monitoring point number	Vapor monitoring point location	Sample analysis (laboratory method)	Rationale/ purpose
SV-178-MB	Maintenance Building office space in northeastern corner of building	VOCs (TO-15)	To assess the sub-slab conditions in a small office space within the Maintenance Building.
SV-184-MB	Maintenance Building lunchroom in east/central portion of building	VOCs (TO-15)	To assess the sub-slab conditions in the lunchroom space within the Maintenance Building.
SV-179-MB, SV-180-MB, SV-181-MB, SV-182-MB, SV-183-MB,SV-185-MB, SV-186-MB, SV-187-MB	Maintenance Building open warehouse space	VOCs (TO-15)	To assess the sub-slab conditions in the open warehouse space of the Maintenance Building.

MB = Maintenance Building
SV = soil vapor
TCE = trichloroethene
VOCs = volatile organic compounds

Table 4-1

Statistical Summary of Analytes Detected in Subsurface Soil Samples- 2017
Lockheed Martin Middle River Complex, Middle River, Maryland

Parameter	Frequency of detection	Minumum dected result	Maximum dected result	Location of maximum	Sample with maximum result	Minimum nondetect	Maximum nondetect	Average-detects	Average-all samples	Standard deviation	Sampling date
Volatile organic compounds (µg/kg)											
TRICHLOROETHENE	6/10	0.62 J	77	SB-120B	SB-120B-43-45'	0.42	0.47	20.42	12.34	23.90	20170908
CIS-1,2-DICHLOROETHENE	4/10	2.8 J	47	SB-131B	SB-131B-33-35'	0.29	0.35	18.05	7.31	15.00	20170910
1,1-DICHLOROETHENE	3/10	1.4 J	9.3	SB-120B	SB-120B-43-45'	0.56	0.68	4.03	1.42	2.81	20170908
2-BUTANONE	2/10	1.8 J	3.3 J	SB-118A	SB-118A-10-13'	1.3	1.6	2.55	1.10	0.85	20170907
ACETONE	2/10	9.9 J	17 J	SB-118A	SB-118A-10-13'	3.4	19	13.45	4.90	5.38	20170907
TRANS-1,2-DICHLOROETHENE	2/10	1.3 J	1.9 J	SB-131B	SB-131B-33-35'	0.39	0.48	1.60	0.49	0.60	20170910
VINYL CHLORIDE	2/10	0.72 J	2.1 J	SB-131B	SB-131B-33-35'	0.29	0.35	1.41	0.41	0.62	20170910
4-ISOPROPYLTOLUENE	1/10	0.37 J	0.37 J	SB-119A	SB-119A-10-12.5'	0.19	0.23	0.37	0.13	0.08	20170909
BENZENE	1/10	14	14	SB-119B	SB-119B-56-58'	0.33	0.4	14.00	1.57	4.37	20170909
CARBON DISULFIDE	1/10	0.42 J	0.42 J	SB-118A	SB-118A-10-13'	0.22	0.27	0.42	0.15	0.09	20170907
CHLOROBENZENE	1/10	0.46 J	0.46 J	SB-118B	SB-118B-53-55'	0.35	0.42	0.46	0.22	0.09	20170907
CHLOROFORM	1/10	0.37 J	0.37 J	SB-120B	SB-120B-43-45'	0.24	0.29	0.37	0.15	0.08	20170908
METHYL TERT-BUTYL ETHER	1/10	1.7 J	1.7 J	SB-119B	SB-119B-56-58'	0.28	0.34	1.70	0.31	0.49	20170909
O-XYLENE	1/10	0.53 J	0.53 J	SB-119B	SB-119B-56-58'	0.23	0.28	0.53	0.17	0.13	20170909
TERTIARY-BUTYL ALCOHOL	1/10	6.5 J	6.5 J	SB-118B	SB-118B-53-55'	2.5	3	6.50	1.89	1.62	20170907
TOTAL XYLENES	1/10	0.53 J	0.53 J	SB-119B	SB-119B-56-58'	0.41	0.5	0.53	0.26	0.10	20170909
Tentatively identified compounds-volatiles (µg/kg)											
1-METHYL-4-(1-METHYLETHYL)-CYCLOHEXANI	1/1	55 NJ	55 NJ	SB-119A	SB-119A-10-12.5'	NULL	NULL	55.00	55.00	NULL	20170909
BICYCLO[2.2.1]HEPTANE, 2,2,3-TRIMETHYL-	1/1	12 NJ	12 NJ	SB-119A	SB-119A-10-12.5'	NULL	NULL	12.00	12.00	NULL	20170909
BUTANE, 2-METHYL-	1/1	9.5 NJ	9.5 NJ	SB-119B	SB-119B-56-58'	NULL	NULL	9.50	9.50	NULL	20170909
Semivolatile organic compounds (µg/kg)											
CAPROLACTAM	1/10	57 J	57 J	SB-121B	SB-121B-30.5-32.5'	42	47	57.00	25.55	11.08	20170906
Petroleum hydrocarbons (µg/kg)											
TPH (C06-C10)	3/10	31 J	140	SB-119A	SB-119A-10-12.5'	14	57	79.33	32.55	42.07	20170909
Petroleum hydrocarbons (mg/kg)											
TPH (C10-C32)	3/10	8.6 J	29 J	SB-119B	SB-119B-56-58'	7.4	18	20.87	10.02	9.28	20170909

Notes:
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
J = estimated value
NJ = the analyte has been tentatively identified. This qualifier indicates presumptive evidence of a compound.

Associated Samples:

SB-131B-33-35'	NORMAL	20170910
SB-117B-47-50'	NORMAL	20170910
SB-118A-10-13'	NORMAL	20170907
SB-118B-53-55'	NORMAL	20170907
SB-119A-10-12.5'	NORMAL	20170909
SB-119B-56-58'	NORMAL	20170909
SB-120B-43-45'	NORMAL	20170908
SB-120B-48-50'	NORMAL	20170908
SB-121A-26.5-28.5'	NORMAL	20170906
SB-121B-30.5-32.5'	NORMAL	20170906

Table 4-2

Detected Analytes and Screening-Level Exceedances in Subsurface Soil Samples - 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH BOTTOM DEPTH	MDE Soil Standard Industrial	MDE Soil Standard Residential	SB-131B SB-131B-33-35' 20170910 33 35	SB-117B SB-117B-47-50' 20170910 47 50	SB-118A SB-118A-10-13' 20170907 10 13	SB-118B SB-118B-53-55' 20170907 53 55	SB-119A SB-119A-10-12.5' 20170909 10 12.5
Volatile organic compounds (µg/kg)							
1,1-DICHLOROETHENE	**5100000**	**390000**	1.4 J	--	--	--	--
2-BUTANONE	**61000000**	**4700000**	--	--	3.3 J	--	1.8 J
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	0.37 J
ACETONE	**92000000**	**7000000**	--	--	17 J	9.9 J	--
BENZENE	**52000**	**12000**	--	--	--	--	--
CARBON DISULFIDE	**10000000**	**780000**	--	--	0.42 J	--	--
CHLOROBENZENE	**2000000**	**160000**	--	--	--	0.46 J	--
CHLOROFORM	**1000000**	**78000**	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	**1000000**	**78000**	47	--	--	--	--
METHYL TERT-BUTYL ETHER	**720000**	**160000**	--	--	--	--	--
O-XYLENE	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	6.5 J	--
TOTAL XYLENES	**20000000**	**1600000**	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	**2000000**	**160000**	1.9 J	--	--	--	--
TRICHLOROETHENE	**7200**	**1600**	8.9	--	0.62 J	--	--
VINYL CHLORIDE	**4000**	**90**	2.1 J	--	--	--	--
Tentatively Identified compounds (µg/kg)							
1-METHYL-4-(1-METHYLETHYL)-CYCLOHEXANE	--	--	NA	NA	NA	NA	55 NJ
BICYCLO[2.2.1]HEPTANE, 2,2,3-TRIMETHYL	--	--	NA	NA	NA	NA	12 NJ
BUTANE, 2-METHYL-	--	--	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/kg)							
CAPROLACTAM	--	--	--	--	--	--	--
Petroleum hydrocarbons (ug/kg)							
TPH (C06-C10)	**620000**	**230000**	31 J	--	--	--	140
Petroleum hydrocarbons (mg/kg)							
TPH (C10-C32)	**620**	**230**	--	--	--	8.6 J	25 J

Notes:
Shaded cells indicate a concentration greater than risk-based screen
-- = not available
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
J = estimated value
NA = not analyzed
U = nondetect

Table 4-2

Detected Analytes and Screening-Level Exceedances in Subsurface Soil Samples - 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION			SB-119B	SB-120B		SB-121A	SB-121B
SAMPLE ID	MDE Soil	MDE Soil	SB-119B-56-58'	SB-120B-43-45'	SB-120B-48-50'	SB-121A-26.5-28.5'	SB-121B-30.5-32.5'
SAMPLE DATE	Standard	Standard	20170909	20170908	20170908	20170906	20170906
TOP DEPTH	Industrial	Residential	56	43	48	26.5	30.5
BOTTOM DEPTH			58	45	50	28.5	32.5
Volatile organic compounds (µg/kg)							
1,1-DICHLOROETHENE	**5100000**	**390000**	--	9.3	1.4 J	--	--
2-BUTANONE	**61000000**	**4700000**	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	--	--	--	--	--
ACETONE	**92000000**	**7000000**	--	--	--	--	--
BENZENE	**52000**	**12000**	14	--	--	--	--
CARBON DISULFIDE	**10000000**	**780000**	--	--	--	--	--
CHLOROBENZENE	**2000000**	**160000**	--	--	--	--	--
CHLOROFORM	**1000000**	**78000**	--	0.37 J	--	--	--
CIS-1,2-DICHLOROETHENE	**1000000**	**78000**	18	4.4 J	2.8 J	--	--
METHYL TERT-BUTYL ETHER	**720000**	**160000**	1.7 J	--	--	--	--
O-XYLENE	--	--	0.53 J	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	--	--	--	--	--
TOTAL XYLENES	**20000000**	**1600000**	0.53 J	--	--	--	--
TRANS-1,2-DICHLOROETHENE	**2000000**	**160000**	1.3 J	--	--	--	--
TRICHLOROETHENE	**7200**	**1600**	13	77	22	--	1 J
VINYL CHLORIDE	**4000**	**90**	0.72 J	--	--	--	--
Tentatively Identified compounds (µg/kg)							
1-METHYL-4-(1-METHYLETHYL)-CYCLOHEXANE	--	--	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTANE, 2,2,3-TRIMETHYL	--	--	NA	NA	NA	NA	NA
BUTANE, 2-METHYL-	--	--	9.5 NJ	NA	NA	NA	NA
Semivolatile organic compounds (µg/kg)							
CAPROLACTAM	--	--	--	--	--	--	57 J
Petroleum hydrocarbons (ug/kg)							
TPH (C06-C10)	**620000**	**230000**	67 J	--	--	--	--
Petroleum hydrocarbons (mg/kg)							
TPH (C10-C32)	**620**	**230**	29 J	--	--	--	--

Notes:
Shaded cells indicate a concentration greater than risk-based screen
-- = not available
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
J = estimated value
NA = not analyzed
U = nondetect

Table 4-3

Statistical Summary of Analytes Detected in Groundwater Samples- 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

Parameter	Frequency of detection	Minumum dected result	Maximum dected result	Location of maximum	Sample with maximum result	Minimum nondetect	Maximum nondetect	Average-detects	Average-all samples	Standard deviation	Sampling date
Volatile organic compounds (µg/L)											
TRICHLOROETHENE	11/13	1.2	1400	MRC-MW120B	MRC-MW120B-101017	0.33	0.33	190.65	161.34	401.09	20171010
ACETONE	9/13	2.2 J	51 J	MRC-MW120A	MRC-MW120A-101117	1.80	88.00	19.43	18.95	16.66	20171011
CIS-1,2-DICHLOROETHENE	9/13	0.66 J	320	MRC-MW131B	MRC-MW131B-100917	0.30	0.30	69.17	47.94	98.26	20171009
TOLUENE	7/13	0.23 J	2.7	MRC-MW119A	MRC-MW119A-101117	0.23	12.00	1.32	1.46	1.69	20171011
CARBON DISULFIDE	6/13	0.34 J	12	MRC-MW119A	MRC-MW119A-101117	0.34	17.00	5.22	3.51	4.00	20171011
CHLOROFORM	6/13	0.34 J	1.8	MRC-MW118A	MRC-MW118A-101117	0.31	16.00	1.14	1.55	2.13	20171011
1,1-DICHLOROETHENE	5/13	0.33 J	200	MRC-MW120B	MRC-MW120B-101017	0.27	0.27	50.32	19.44	55.58	20171010
BENZENE	4/13	0.53 J	53	MRC-MW119B	MRC-MW119B-101017	0.28	14.00	16.26	5.72	14.52	20171010
2-BUTANONE	3/13	1.4 J	4.3 J	MRC-MW119A	MRC-MW119A-101117	1.00	51.00	3.07	4.09	7.02	20171011
TOTAL XYLENES	3/13	0.72 J	2.1	MRC-MW120A	MRC-MW120A-101117	0.24	12.00	1.27	1.10	1.67	20171011
TRANS-1,2-DICHLOROETHENE	3/13	0.37 J	17	MRC-MW131B	MRC-MW131B-100917	0.29	15.00	9.79	2.94	5.61	20171009
1,1,1-TRICHLOROETHANE	1/13	1.6	1.6	MRC-MW118A	MRC-MW118A-101117	0.23	12.00	1.60	0.93	1.68	20171011
1,1-DICHLOROETHANE	1/13	0.48 J	0.48 J	MRC-MW118A	MRC-MW118A-101117	0.25	13.00	0.48	0.91	1.82	20171011
1,2,4-TRICHLOROBENZENE	1/13	0.45 J	0.45 J	MRC-MW121B	MRC-MW121B-100917	0.27	14.00	0.45	0.98	1.96	20171009
CYCLOHEXANE	1/13	4.6	4.6	MRC-MW120A	MRC-MW120A-101117	0.44	22.00	4.60	1.86	3.19	20171011
METHYL CYCLOHEXANE	1/13	1.8	1.8	MRC-MW120A	MRC-MW120A-101117	0.45	23.00	1.80	1.70	3.21	20171011
METHYL TERT-BUTYL ETHER	1/13	0.27 J	0.27 J	MRC-MW119A	MRC-MW119A-101117	0.27	14.00	0.27	0.96	1.96	20171011
METHYLENE CHLORIDE	1/13	0.72 J	0.72 J	MRC-MW119A	MRC-MW119A-101117	0.53	27.00	0.72	1.99	3.82	20171011
TRICHLOROFLUOROMETHANE	1/13	4.9	4.9	MRC-MW118A	MRC-MW118A-101117	0.50	25.00	4.90	2.09	3.60	20171011
VINYL CHLORIDE	1/13	17	17	MRC-MW131B	MRC-MW131B-100917	0.45	23.00	17.00	2.71	5.37	20171009
Semivolatile organic compounds (µg/L)											
1,4-DIOXANE	4/9	2.7	10	MRC-MW120B	MRC-MW120B-101017	0.47	0.50	5.48	2.57	3.48	20171010
Metals (µg/L)											
BARIUM	9/9	20	710	MRC-MW120A	MRC-MW120A-101117	NULL	NULL	198.44	198.44	230.11	20171011
COBALT	9/9	2.2	1100	MRC-MW119B	MRC-MW119B-101017	NULL	NULL	206.80	206.80	349.54	20171010
NICKEL	9/9	5.5	1700	MRC-MW119B	MRC-MW119B-101017	NULL	NULL	271.72	271.72	548.15	20171010
CHROMIUM	8/9	1.4 J	57	MRC-MW118A	MRC-MW118A-101117	0.98	0.98	10.88	9.72	17.85	20171011
COPPER	8/9	1.7 J	230	MRC-MW119B	MRC-MW119B-101017	1.70	1.70	50.40	44.89	82.69	20171010
VANADIUM	8/9	0.93 J	23	MRC-MW121B	MRC-MW121B-100917	0.82	0.82	5.24	4.70	7.08	20171009
ZINC	8/9	20	1500	MRC-MW119B	MRC-MW119B-101017	15.00	15.00	287.25	256.17	475.76	20171010
ARSENIC	7/9	0.82 J	3.8 J	MRC-MW121B	MRC-MW121B-100917	0.75	0.75	2.11	1.72	1.35	20171009
CADMIUM	7/9	0.21 J	3.4	MRC-MW119B	MRC-MW119B-101017	0.21	0.21	1.08	0.86	1.11	20171010
BERYLLIUM	6/9	0.38 J	12	MRC-MW119B	MRC-MW119B-101017	0.31	0.31	2.81	1.93	3.82	20171010
LEAD	6/9	0.73 J	7.7	MRC-MW119B	MRC-MW119B-101017	0.45	0.45	2.87	1.99	2.52	20171010
MOLYBDENUM	5/9	1.1 J	20	MRC-MW120A	MRC-MW120A-101117	1.10	1.10	8.06	4.72	7.03	20171011
SELENIUM	5/9	1.1 J	3.3 J	MRC-MW118A	MRC-MW118A-101117	0.89	0.89	1.88	1.24	0.97	20171011
THALLIUM	3/9	0.22 J	0.3 J	MRC-MW119B	MRC-MW119B-101017	0.20	0.20	0.25	0.15	0.08	20171010
ANTIMONY	2/9	0.92 J	2.4	MRC-MW121B	MRC-MW121B-100917	0.57	0.57	1.66	0.59	0.71	20171009
MERCURY	1/9	1.3	1.3	MRC-MW119B	MRC-MW119B-101017	0.13	0.13	1.30	0.20	0.41	20171010

Table 4-3

Statistical Summary of Analytes Detected in Groundwater Samples- 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

Parameter	Frequency of detection	Minumum dected result	Maximum dected result	Location of maximum	Sample with maximum result	Minimum nondetect	Maximum nondetect	Average-detects	Average-all samples	Standard deviation	Sampling date
Dissolved metals (µg/L)											
BARIUM	9/9	15	540	MRC-MW119B	MRC-MW119B-101017	NULL	NULL	181.44	181.44	194.38	20171010
COBALT	9/9	0.59 J	1400	MRC-MW119B	MRC-MW119B-101017	NULL	NULL	231.10	231.10	448.81	20171010
NICKEL	8/9	9.8	2100	MRC-MW119B	MRC-MW119B-101017	1.50	1.50	356.98	317.39	678.96	20171010
CHROMIUM	6/9	1.2 J	57	MRC-MW118A	MRC-MW118A-101117	0.98	0.98	11.63	7.92	18.48	20171011
COPPER	6/9	2.7	310	MRC-MW119B	MRC-MW119B-101017	1.70	1.70	59.45	39.92	101.59	20171010
ARSENIC	5/9	0.81 J	3.4 J	MRC-MW121B	MRC-MW121B-100917	0.75	0.75	1.76	1.15	1.03	20171009
BERYLLIUM	5/9	0.35 J	15	MRC-MW119B	MRC-MW119B-101017	0.31	0.31	3.82	2.19	4.84	20171010
ZINC	5/9	26	2000	MRC-MW119B	MRC-MW119B-101017	15.00	15.00	531.20	298.44	646.08	20171010
CADMIUM	4/9	0.45 J	4.3	MRC-MW119B	MRC-MW119B-101017	0.21	0.21	1.85	0.88	1.44	20171010
MOLYBDENUM	4/9	1.2 J	13	MRC-MW121B	MRC-MW121B-100917	1.10	1.10	5.05	2.55	4.06	20171009
SELENIUM	4/9	1.2 J	3.4 J	MRC-MW118A	MRC-MW118A-101117	0.89	0.89	2.08	1.17	1.04	20171011
LEAD	3/9	0.46 J	9	MRC-MW119B	MRC-MW119B-101017	0.45	0.45	3.55	1.33	2.89	20171010
VANADIUM	3/9	0.97 J	19	MRC-MW121B	MRC-MW121B-100917	0.82	0.82	7.16	2.66	6.14	20171009
THALLIUM	2/9	0.2 J	0.31 J	MRC-MW119B	MRC-MW119B-101017	0.20	0.20	0.26	0.13	0.07	20171010
ANTIMONY	1/9	1.9 J	1.9 J	MRC-MW121B	MRC-MW121B-100917	0.57	0.57	1.90	0.46	0.54	20171009
Miscellaneous parameters (µg/L)											
HEXAVALENT CHROMIUM	3/9	0.17 J-	54.9 J-	MRC-MW118A	MRC-MW118A-101117	0.05	0.25	18.99	6.36	18.21	20171011
Petroleum hydrocarbons (µg/L)											
TPH (C06-C10)	4/11	120	440	MRC-MW120B	MRC-MW120B-101017	49.00	49.00	285.00	119.23	152.92	20171010
TPH (C10-C32)	6/9	230 J	1200	MRC-MW120A	MRC-MW120A-101117	210.00	220.00	588.33	428.33	397.16	20171011

J = estimated value

J- = estimated value, biased low

µg/L = micrograms per liter

Associated Samples:

DPT-1A-40-45'	MRC-MW118A-101117	MRC-MW120B-101017
DPT-2D-45-50'	MRC-MW118B-101117	MRC-MW121A-101017
MRC-MW131B-100917	MRC-MW119A-101117	MRC-MW121B-100917
MRC-MW117B-100917A	MRC-MW119B-101017	MRC-MW122A-101017
	MRC-MW120A-101117	

Table 4-4

Detected Analytes and Screening-Level Exceedances in Groundwater Samples - 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standard[1,2]	DPT-1A DPT-1A-40-45' 20170919	DPT-2D DPT-2D-45-50' 20170920	MRC-MW131B MRC-MW131B-100917 20171009	MRC-MW117B MRC-MW117B-100917A 20171009	MRC-MW118A MRC-MW118A-101117 20171011	MRC-MW118B MRC-MW118B-101117 20171011	MRC-MW119A MRC-MW119A-101117 20171011
Volatile organic compounds (µg/L)								
1,1,1-TRICHLOROETHANE	**200**	--	--	--	--	1.6	--	--
1,1-DICHLOROETHANE	**90**	--	--	--	--	0.48 J	--	--
1,1-DICHLOROETHENE	**7**	--	--	6.8 J	--	--	--	0.33 J
1,2,4-TRICHLOROBENZENE	**70**	--	--	--	--	--	--	--
2-BUTANONE	**700**	--	3.5 J	--	--	--	--	4.3 J
ACETONE	**550**	2.2 J	--	--	16	5.6 J	13 J	43 J
BENZENE	**5**	1.9	--	--	--	--	--	0.53 J
CARBON DISULFIDE	**100**	--	0.34 J	--	5.1	0.37 J	8.1	12
CHLOROFORM	**80**	1.6	--	--	1.1	1.8	0.34 J	0.61 J
CIS-1,2-DICHLOROETHENE	**70**	3.1	--	**320**	2.4	--	--	4.6
CYCLOHEXANE	**NC**	--	--	--	--	--	--	--
METHYL CYCLOHEXANE	**NC**	--	--	--	--	--	--	--
METHYL TERT-BUTYL ETHER	**20**	--	--	--	--	--	--	0.27 J
METHLYLENE CHLORIDE	**5**	--	--	--	--	--	--	0.72 J
TOLUENE	**1000**	2.5	2.1	--	0.27 J	--	1.2	2.7
TOTAL XYLENES	**10000**	1 J	0.72 J	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	**100**	--	--	17	--	--	--	--
TRICHLOROETHENE	**5**	**31**	--	**71**	**7.6**	4.3	--	**8.4**
TRICHLOROFLUOROMETHANE	**NC**	--	--	5 U	--	4.9	--	--
VINYL CHLORIDE	**2**	--	--	**17**	--	--	--	--
Semivolatile organic compounds (µg/L)								
1,4-DIOXANE	**3**	NA	NA	**6.4**	--	--	--	NA
Total metals (µg/L)								
ANTIMONY	**6**	NA	NA	0.92 J	--	--	--	NA
ARSENIC	**10**	NA	NA	1.4 J	--	0.82 J	1.4 J	NA
BARIUM	**2000**	NA	NA	170	50	170	34	NA
BERYLLIUM	**4**	NA	NA	1.6	--	--	0.75 J	NA
CADMIUM	**5**	NA	NA	0.43 J	--	2	--	NA
CHROMIUM	**100**	NA	NA	1.4 J	5.4	57	5.5	NA
COBALT	**NC**	NA	NA	290	16	14	12	NA
COPPER	**1300**	NA	NA	2.6	--	1.7 J	140	NA
LEAD	**15**	NA	NA	0.73 J	--	--	2.1	NA
MERCURY	**2**	NA	NA	0.13 U	--	--	--	NA
MOLYBDENUM	**NC**	NA	NA	1.1 J	--	1.5 J	4.7 J	NA
NICKEL	**73**	NA	NA	**350**	17	15	13	NA
SELENIUM	**50**	NA	NA	1.4 J	--	3.3 J	--	NA
THALLIUM	**2**	NA	NA	0.2 U	--	--	--	NA
VANADIUM	**3.7**	NA	NA	1.9 J	0.93 J	1.5 J	**6.3**	NA
ZINC	**5000**	NA	NA	140	20	--	97	NA

Table 4-4

Detected Analytes and Screening-Level Exceedances in Groundwater Samples - 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standard[1,2]	DPT-1A DPT-1A-40-45' 20170919	DPT-2D DPT-2D-45-50' 20170920	MRC-MW131B MRC-MW131B-100917 20171009	MRC-MW117B MRC-MW117B-100917A 20171009	MRC-MW118A MRC-MW118A-101117 20171011	MRC-MW118B MRC-MW118B-101117 20171011	MRC-MW119A MRC-MW119A-101117 20171011
Dissolved metals (µg/L)								
ANTIMONY	**6**	NA	NA	--	--	--	--	NA
ARSENIC	**10**	NA	NA	1 J	--	--	--	NA
BARIUM	**2000**	NA	NA	160	45	170	28	NA
BERYLLIUM	**4**	NA	NA	1.6	--	--	0.46 J	NA
CADMIUM	**5**	NA	NA	--	--	2.1	--	NA
CHROMIUM	**100**	NA	NA	--	--	57	1.5 J	NA
COBALT	**NC**	NA	NA	290	13	13	9.3	NA
COPPER	**1300**	NA	NA	--	--	2.7	26	NA
LEAD	**15**	NA	NA	--	--	--	0.46 J	NA
MOLYBDENUM	**NC**	NA	NA	--	--	1.2 J	2.5 J	NA
NICKEL	**73**	NA	NA	**360**	13	15	9.8	NA
SELENIUM	**50**	NA	NA	1.2 J	--	3.4 J	--	NA
THALLIUM	**2**	NA	NA	--	--	--	--	NA
VANADIUM	**3.7**	NA	NA	--	--	1.5 J	0.97 J	NA
ZINC	**5000**	NA	NA	160	--	--	26	NA
Miscellaneous parameters (µg/L)								
HEXAVALENT CHROMIUM	**100**	NA	NA	--	--	54.9 J-	0.17 J-	NA
Petroleum hydrocarbons (µg/L)								
TPH (C06-C10)	**47**	NA	NA	**120**	--	--	--	--
TPH (C10-C32)	**47**	NA	NA	**240 J**	--	**280 J**	--	NA

Table 4-4

Detected Analytes and Screening-Level Exceedances in Groundwater Samples - 2017
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standard[1,2]	MRC-MW119B MRC-MW119B-101017 20171010	MRC-MW120A MRC-MW120A-101117 20171011	MRC-MW120B MRC-MW120B-101017 20171010	MRC-MW121A MRC-MW121A-101017 20171010	MRC-MW121B MRC-MW121B-100917 20171009	MRC-MW122A MRC-MW122A-101017 20171010
Volatile organic compounds (µg/L)							
1,1,1-TRICHLOROETHANE	**200**	--	--	--	--	0.23 U	0.23 U
1,1-DICHLOROETHANE	**90**	--	--	--	--	0.25 U	0.25 U
1,1-DICHLOROETHENE	**7**	**44**	0.46 J	**200**	--	--	--
1,2,4-TRICHLOROBENZENE	**70**	--	--	--	--	0.45 J	--
2-BUTANONE	**700**	--	--	--	--	1.4 J	--
ACETONE	**550**	--	51 J	--	23	8.1 J	13
BENZENE	**5**	**53**	**9.6**	--	--	--	--
CARBON DISULFIDE	**100**	--	--	--	--	--	5.4
CHLOROFORM	**80**	--	--	--	--	--	1.4
CIS-1,2-DICHLOROETHENE	**70**	**170**	1	**120**	0.66 J	--	0.8 J
CYCLOHEXANE	**NC**	--	4.6	--	--	--	--
METHYL CYCLOHEXANE	**NC**	--	1.8	--	--	--	--
METHYL TERT-BUTYL ETHER	**20**	--	--	--	--	--	--
METHLYLENE CHLORIDE	**5**	--	--	--	--	--	--
TOLUENE	**1000**	--	0.24 J	--	0.23 J	--	--
TOTAL XYLENES	**10000**	--	2.1	--	--	--	--
TRANS-1,2-DICHLOROETHENE	**100**	12 J	--	--	--	--	0.37 J
TRICHLOROETHENE	**5**	**550**	3.4	**1400**	**8.2**	**12**	1.2
TRICHLOROFLUOROMETHANE	**NC**	--	--	--	--	--	--
VINYL CHLORIDE	**2**	--	--	--	--	--	--
Semivolatile organic compounds (µg/L)							
1,4-DIOXANE	**3**	2.8	2.7	**10**	--	--	NA
Total metals (µg/L)							
ANTIMONY	**6**	--	--	--	--	2.4	NA
ARSENIC	**10**	3 J	3.5 J	--	0.85 J	3.8 J	NA
BARIUM	**2000**	440	710	100	92	20	NA
BERYLLIUM	**4**	**12**	0.38 J	1.7	--	0.44 J	NA
CADMIUM	**5**	3.4	0.37 J	0.53 J	0.59 J	0.21 J	NA
CHROMIUM	**100**	2.4	3.9	4.5	--	6.9	NA
COBALT	**NC**	1100	160	190	77	2.2	NA
COPPER	**1300**	230	2	15	1.9 J	10	NA
LEAD	**15**	7.7	0.96 J	1.3	--	4.4	NA
MERCURY	**2**	1.3	--	--	--	--	NA
MOLYBDENUM	**NC**	--	20	--	--	13	NA
NICKEL	**73**	**1700**	25	**200**	**120**	5.5	NA
SELENIUM	**50**	1.7 J	1.1 J	--	--	1.9 J	NA
THALLIUM	**2**	0.3 J	0.24 J	0.22 J	--	--	NA
VANADIUM	**3.7**	2 J	2.7 J	3.6 J	--	**23**	NA
ZINC	**5000**	1500	20	300	170	51	NA

Table 4-4

Detected Analytes and Screening-Level Exceedances in Groundwater Samples - 2017
Lockheed Martin Middle River Complex. Middle River, Maryland
Page 4 of 4

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standard[1,2]	MRC-MW119B MRC-MW119B-101017 20171010	MRC-MW120A MRC-MW120A-101117 20171011	MRC-MW120B MRC-MW120B-101017 20171010	MRC-MW121A MRC-MW121A-101017 20171010	MRC-MW121B MRC-MW121B-100917 20171009	MRC-MW122A MRC-MW122A-101017 20171010
Dissolved metals (µg/L)							
ANTIMONY	**6**	--	--	--	--	1.9 J	NA
ARSENIC	**10**	1.6 J	2 J	--	0.81 J	3.4 J	NA
BARIUM	**2000**	540	480	95	100	15	NA
BERYLLIUM	**4**	**15**	--	1.7	0.35 J	--	NA
CADMIUM	**5**	4.3	--	0.45 J	0.56 J	--	NA
CHROMIUM	**100**	1.3 J	5.5	1.2 J	--	3.3	NA
COBALT	**NC**	1400	90	180	84	0.59 J	NA
COPPER	**1300**	310	--	4.5	4.8	8.7	NA
LEAD	**15**	9	--	--	--	1.2	NA
MOLYBDENUM	**NC**	--	3.5 J	--	--	13	NA
NICKEL	**73**	**2100**	38	**190**	**130**	--	NA
SELENIUM	**50**	2.1 J	--	--	--	1.6 J	NA
THALLIUM	**2**	0.31 J	--	0.2 J	--	--	NA
VANADIUM	**3.7**	--	--	--	--	**19**	NA
ZINC	**5000**	2000	--	280	190	--	NA
Miscellaneous parameters (µg/L)							
HEXAVALENT CHROMIUM	**100**	--	--	--	--	1.9 J-	NA
Petroleum hydrocarbons (µg/L)							
TPH (C06-C10)	**47**	**360**	**220**	**440**	--	--	--
TPH (C10-C32)	**47**	**230 J**	**1200**	--	**770**	**810**	NA

Shaded cells indicate detected concentration exceeds groundwater screening level

1 Screening levels for all analytes except 1,4-dioxane are Maryland Department of the Environment (MDE) groundwater standards (MDE, 2008).
2 The screening level for 1.4-dioxane is State of California drinking water action level (MDE standard not available).

µg/L - micrograms per liter
mg/L - milligrams per liter
NC - no criterion
J - estimated value
NA - not analyzed

Table 4-5

Statistical Summary of Analytes Detected in Sub-Slab Soil Vapor Samples- 2017
Lockheed Martin Middle River Complex, Middle River, Maryland

Parameter	Frequency of detection	Minumum dected result	Maximum dected result	Location of maximum	Sample with maximum result	Minimum nondetect	Maximum nondetect	Average-detects	Average-all samples	Standard deviation	Sampling date
Volatile organic compounds (µg/m^3)											
1,1-DICHLOROETHANE	10/10	0.52 J	1700	SV-183	SV-183-MB-1	NULL	NULL	253.77	253.77	535.00	20171012
BENZENE	10/10	0.4 J	1.3	SV-186	SV-186-MB-1	NULL	NULL	0.77	0.77	0.25	20171012
DICHLORODIFLUOROMETHANE	10/10	2.3	2.9	SV-181	SV-181-MB-1	NULL	NULL	2.57	2.57	0.19	20171012
METHYLENE CHLORIDE	10/10	5.4	8	SV-186	SV-186-MB-1	NULL	NULL	6.74	6.74	0.80	20171012
1,2,4-TRIMETHYLBENZENE	9/10	1 J	1.8 J	SV-178	SV-178-MB-1	1.2	1.2	1.33	1.26	0.32	20171012
ETHYLBENZENE	9/10	0.68 J	1.1 J	SV-186/187	SV-186/187-MB-1	1.2	1.2	0.92	0.89	0.18	20171012
TOLUENE	9/10	4.2	7.3	SV-178	SV-178-MB-1	4.5	4.5	6.11	5.73	1.65	20171012
TOTAL XYLENES	9/10	3.9	6	SV-178	SV-178-MB-1	1	1	5.08	4.62	1.62	20171012
CHLORODIFLUOROMETHANE	8/10	0.93 J	1.3 J	SV-178	SV-178-MB-1	0.27	0.53	1.12	0.94	0.41	20171012
CHLORODIFLUOROMETHANE	8/10	0.93 J	1.3 J	SV-181	SV-181-MB-1	0.27	0.53	1.12	0.94	0.41	20171012
1,1-DICHLOROETHENE	4/10	1.6	270	SV-183	SV-183-MB-1	0.28	0.28	74.75	29.98	84.54	20171012
CHLOROFORM	4/10	0.56 J	2.8	SV-178	SV-178-MB-1	0.37	0.37	1.35	0.65	0.83	20171012
1,1,1-TRICHLOROETHANE	2/10	4	190	SV-183	SV-183-MB-1	0.33	2	97.00	19.72	59.84	20171012
CARBON TETRACHLORIDE	2/10	0.48 J	0.55 J	SV-179	SV-179-MB-1	0.47	0.94	0.52	0.31	0.13	20171012
TETRACHLOROETHENE	2/10	0.61 J	0.94 J	SV-186	SV-186-MB-1	0.54	1.1	0.78	0.40	0.23	20171012
TRICHLOROETHENE	2/10	0.39 J	2 J	SV-183	SV-183-MB-1	0.38	0.38	1.20	0.39	0.57	20171012
1,2-DICHLOROETHANE	1/10	0.59 J	0.59 J	SV-179	SV-179-MB-1	0.38	0.77	0.59	0.25	0.13	20171012
VINYL CHLORIDE	1/10	0.75 J	0.75 J	SV-183	SV-183-MB-1	0.37	0.37	0.75	0.24	0.18	20171012

J = estimated value
µg/m^3 = micrograms per cubic meter
ppbv = parts per billion volume

Associated Samples:

SV-178-MB-1	20171012	SV-181-MB-1	20171012	SV-184-MB-1	20171012	SV-187-MB-1	20171012
SV-179-MB-1	20171012	SV-182-MB-1	20171012	SV-185-MB-1	20171012		
SV-180-MB-1	20171012	SV-183-MB-1	20171012	SV-186-MB-1	20171012		

Table 4-6

Detected Analytes and Screening Level Exceedances in Sub-Slab Soil Vapor Samples-2017
Lockheed Martin Middle River Complex, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Target Shallow Soil Gas Concentration ($\mu g/m^3$)(1)	Key	SV-178 SV-178-MB-1 20171012	SV-179 SV-179-MB-1 20171012	SV-180 SV-180-MB-1 20171012	SV-181 SV-181-MB-1 20171012	SV-182 SV-182-MB-1 20171012	SV-183 SV-183-MB-1 20171012	SV-184 SV-184-MB-1 20171012	SV-185 SV-185-MB-1 20171012	SV-186 SV-186-MB-1 20171012	SV-187 SV-187-MB-1 20171012
Volatile organic compounds ($\mu g/m^3$)												
BENZENE	550	ca	0.76 J	0.66 J	0.4 J	0.62 J	0.8 J	1 J	0.59 J	0.93 J	1.3	0.63 J
CARBON TETRACHLORIDE	700	ca	--	0.55 J	--	--	--	--	0.48 J	--	--	--
CHLORODIFLUOROMETHANE	7,500,000	nc	1.3 J	1.1 J	1.2 J	1.3 J	1.1 J	--	0.96 J	0.93 J	--	1.1 J
CHLOROFORM	180	ca	2.8	1.1 J	--	0.56 J	--	0.93 J	--	--	--	--
DICHLORODIFLUOROMETHANE	15,000	nc	2.5	2.7	2.4	2.9	2.8	2.6 J	2.5	2.3	2.4	2.6
1,1-DICHLOROETHANE	2,600	ca	7.9	39	1.4 J	500	280	1700	0.52 J	0.89 J	5.1	2.9
1,2-DICHLOROETHANE	160	ca	--	0.59 J	--	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	30,000	nc	--	1.6	--	18	9.4	270	--	--	--	--
ETHYLBENZENE	1,700	ca	1 J	0.95 J	0.71 J	0.93 J	0.68 J	--	0.79 J	1 J	1.1 J	1.1 J
METHYLENE CHLORIDE	88,000	nc	6.6	5.9	6.7	6.6	7.2	7.8	5.4	7	8	6.2
TETRACHLOROETHENE	5,900	nc	--	--	--	--	--	--	--	0.61 J	0.94 J	--
TOLUENE	740,000	nc	7.3	6.7	4.2	6.8	4.3	--	5.4	6.5	6.9	6.9
1,1,1-TRICHLOROETHANE	750,000	nc	--	--	--	--	4	190	--	--	--	--
TRICHLOROETHENE	293	nc	--	--	--	--	0.39 J	2 J	--	--	--	--
1,2,4-TRIMETHYLBENZENE	1,020	nc	1.8 J	1 J	1.1 J	1.3 J	1.2 J	--	1.5 J	1.3 J	1.3 J	1.5 J
VINYL CHLORIDE	930	ca	--	--	--	--	--	0.75 J	--	--	--	--
TOTAL XYLENES	15,000	nc	6	5.1	3.9	5.3	4	--	4.5	5.6	5.5	5.8

Notes: All sample concentrations are in micrograms per cubic meter ($\mu g/m^3$)
Shaded cells indicate a concentration greater than risk-based screening level
$\mu g/m^3$ = micrograms per cubic meter
-- = not available
J = estimated value
U = nondetect
UJ = non-detected value is estimated
USEPA = United States Environmental Protection Agency
VISL = vapor intrusion screening level
ca = screening value based on carcinogenic effects
nc = screening value based on noncarcinogenic effects
(1) VISLs for soil vapor calculated from USEPA's online VISL calculator; lowest value selected from 1x10-5 cancer risk or HI=1 for commercial/industrial exposure setting

APPENDICES

APPENDICES

Appendix A—Permits, "Miss Utility" and Utility Clearance Reports

Appendix B—Soil Boring and Well Construction Logs

Appendix C—Soil Sample Log Sheets

Appendix D—Well Development Records

Appendix E—Groundwater Sample Log Sheets

Appendix F—Soil Vapor Sample Log Sheets

Appendix G—Data Validation Reports and Chemical-Data Tables

Appendix H—Investigation-Derived Waste (IDW) Documentation

Appendix I—Cross-Sections

Appendix A—Permits, “Miss Utility” and Utility Clearance Reports

ENVIROSCAN, INC.

August 29, 2017

Mr. Tony Apanavage
Tetra Tech NUS, Inc.
20251 Century Boulevard
Suite 200
Germantown, MD 20874-7114

RE: Geophysical Survey
Utility Clearance – Client Designated Areas
Lockheed Martin Corporation
Middle River, MD
Enviroscan Reference Number 081732

Dear Mr. Apanavage:

On August 24, 2017, Enviroscan, Inc. visited the above-referenced site with the purpose of locating underground metallic and non-metallic utilities (i.e. sanitary, storm, gas, telephone, water and electric lines) at client-designated areas (see Figures 1 and 2).

During the survey, each location was scanned with a Radiodetection RD-8000, Radiodetection C.A.T.^{3}, and a GSSI dual frequency ground penetrating radar (GPR) system. Electric lines, signal lines, storm pipes, and unknown utilities were marked on the ground with semi-permanent marking paint. Please note that several underground utilities are shown on Figure 2 where historic maps, provided by the client, show possible utilities at location MRC-MW120A/B. The geophysical survey was unable to detect these underground utilities; however, they are indicated on the figure for cautionary purposes. Extreme caution should be taken at **MRC-MW120A/B**.

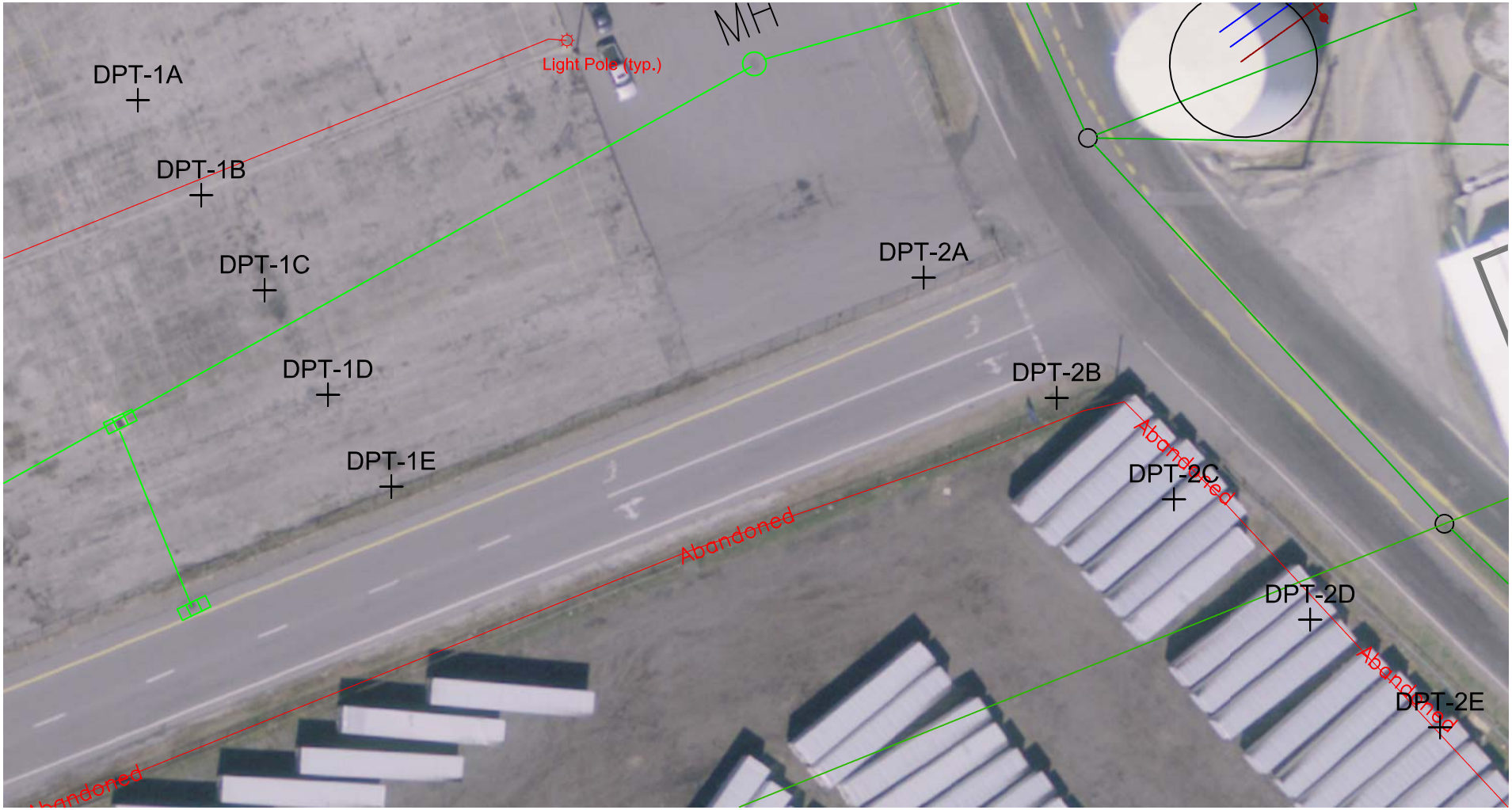
The above-referenced geophysical survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology. Enviroscan does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen site-specific conditions. However, we make every effort to identify and notify the client of such limitations or conditions. In addition, please note that the completion of this survey does not relieve any party of applicable legal obligations to notify the appropriate One-Call center prior to digging or drilling.

As always, we appreciate this opportunity to have worked with you again. If you have any questions, please do not hesitate to contact me.

Sincerely,
Enviroscan, Inc.

Charles H. Rhine, M.Sc., P.G.
Senior Geophysics Project Manager

enc.: Figure 1: Geophysical Survey Results Area 1
Figure 2: Geophysical Survey Results Area 2



Geophysical Survey Legend

- Electrical Line
- Telcom Line
- Storm Line
- Fuel Line
- Unknown Utility
- Historic Utility (by others)

0 50' 100'

The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on that survey date.

Coordinates in Maryland State Plane (feet) NAD-83 Datum.

Prepared by:

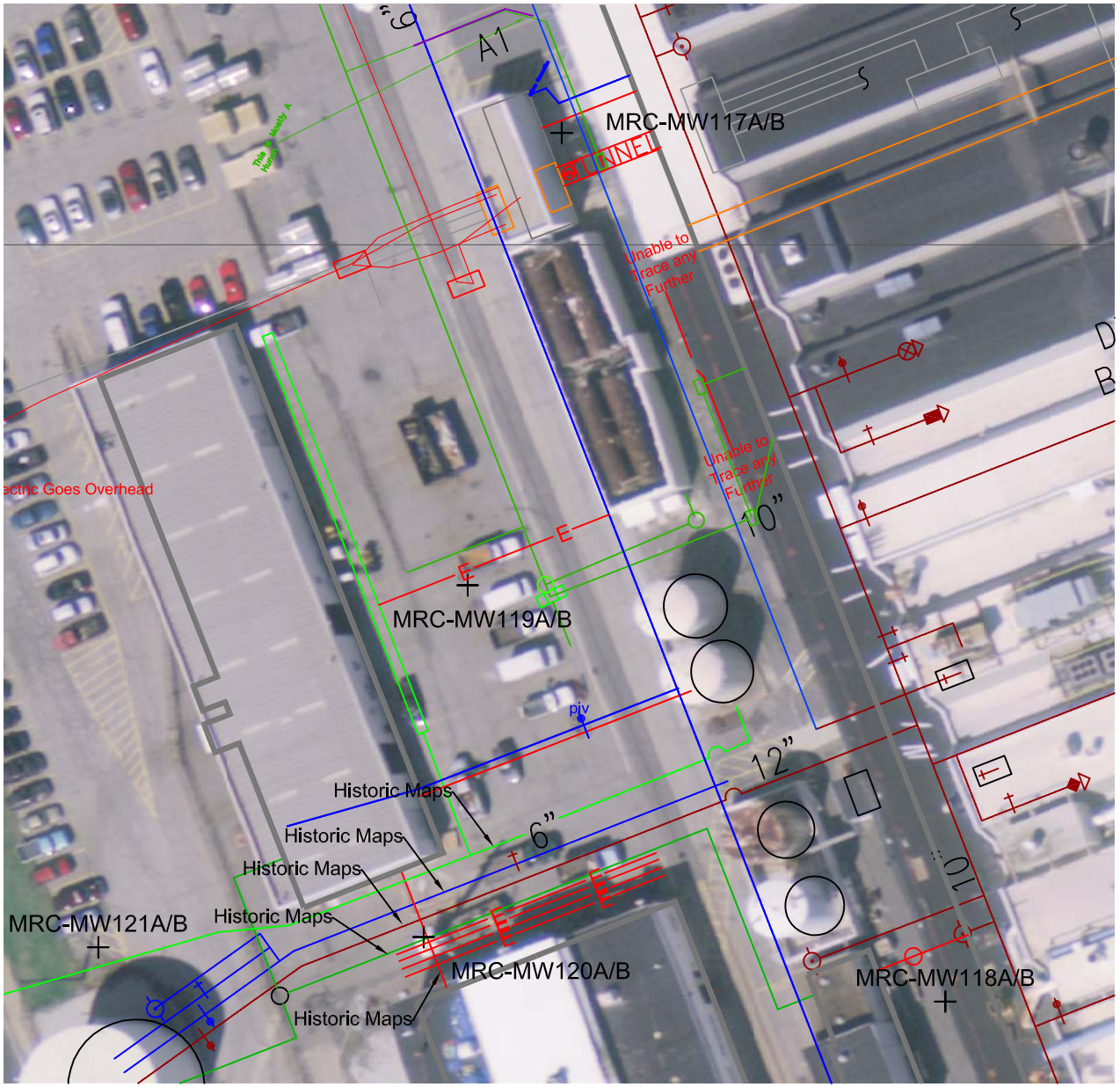
Enviroscan, Inc.
1051 Columbia Avenue
Lancaster, PA
(717) 396-8922

Geophysical Survey Results Area 1

Middle River Complex
Middle River, MD

Figure 1

Project Number	Survey Date	Drawn by:
081732	08/24/17	CHR
Original Scale: 1" = 50'	Revision/Issue: 08/29/17	Approved by:



Geophysical Survey Legend

- Electrical Line
- Telcom Line
- Storm Line
- Fuel Line
- Unknown Utility
- Historic Utility (by others)

0 50' 100'

The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on that survey date.

Coordinates in Maryland State Plane (feet) NAD-83 Datum.

Prepared by:

Enviroscan, Inc.
1051 Columbia Avenue
Lancaster, PA
(717) 396-8922

Geophysical Survey Results Area 2

MIddle RIver Complex
Middle River, MD

Figure 2

Project Number	Survey Date	Drawn by:
081732	08/24/17	CHR
Original Scale: 1" = 50'	Revision/Issue: 08/29/17	Approved by:

ENVIROSCAN, INC.

September 25, 2017

Mr. Tony Apanavage
Tetra Tech NUS, Inc.
20251 Century Boulevard
Suite 200
Germantown, MD 20874-7114

RE: Geophysical Survey
Utility Clearance – Ten Client-Designated Areas Inside Maintenance Building
Lockheed Martin Corporation – Middle River Complex
Middle River, MD
Enviroscan Reference Number 091731

Dear Mr. Apanavage:

On September 22, 2017, Enviroscan, Inc. visited the above-referenced site with the purpose of locating underground metallic and non-metallic utilities (i.e. sanitary, storm, gas, telephone, water and electric lines) at ten client-designated proposed soil vapor intrusion point locations inside the building.

During the survey, each location was scanned with a Radiodetection RD-8000, Radiodetection C.A.T.^{3}, a GSSI ground penetrating radar (GPR) system with a dual-frequency 300/800 megaHertz (mHz) scanning antenna, and a higher frequency GSSI HandyScan GPR system with a 1.6 gigaHertz (gHz) scanning antenna. No utilities or other structures were detected beneath any of the ten locations.

The above-referenced geophysical survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology. Enviroscan does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen site-specific conditions. However, we make every effort to identify and notify the client of such limitations or conditions. In addition, please note that the completion of this survey does not relieve any party of applicable legal obligations to notify the appropriate One-Call center prior to digging or drilling.

As always, we appreciate this opportunity to have worked with you again. If you have any questions, please do not hesitate to contact me.

Sincerely,
Enviroscan, Inc.

Maxwell E. Griffiths
Project Geophysicist

1051 Columbia Avenue ● Lancaster, PA 17603 ● 717.396.8922 ● Fax 717.396.8746 ● email@enviroscan.com ● www.enviroscan.com

LOCKHEED MARTIN

Dig Permit

See Enterprise Operations Procedure EO-28, Digging Projects, for instructions.

Date	Project Manager
August 23, 2017	Tom Blackman (Lockheed Martin) Tony Apanavage (Tetra Tech)

Building/Location

Total of 5 monitoring well locations and 10 direct push soil borings west of Building A, and in Lot #2 and Lot #3

Purpose of investigation

Investigate TCE plumes emanating from Building A/Building A basement heading west to Lot 2/3 and Cow Pen Creek.

Company/LM organization performing dig

Tetra Tech overseeing Ground Zero and Cascade Drilling

Planned dig date	Duration	Start time
September 5, 2017 to September 22, 2017.	Total of 18 days	0700
Expected depth	**Width**	**Length**
Depth up to approximately 50 feet	Approximately 3-6 inches	N/A

Underground utilities identified?	Overhead utilities?	Electrical lines?	Gas lines?
☒ Yes ☐ No	☒ Yes ☐ No ☐ N/A	☒ Yes ☐ No	☐ Yes ☒ No
Sewer?	**Water?**	**Telecommunications?**	**Other? Specify: Storm drain**
☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No ☐ N/A	☒ Yes ☐ No

Site-specific or customer utility locating requirements completed?

☒ Yes ☐ No ☐ N/A

Sketch of dig project (or attach drawing)

See Attached

A private utility locating contractor (Enviroscan) will be used to mark subsurface utilities on August 24, 2017.

Miss Utility Ticket # TBD.

Project Manager TA Tony Apanavage (TetraTech)	Date August 23, 2017	Customer SECURITY	Date 8/31/17
Telecommunications, TA	Date	Customer ENCON	Date 8/31/17
ESH Scott Hinkle	Date 8/31/17	Customer MENS	Date 9/5/17
Building/Facility Manager CRO			Date

Form EO-28-1 (January 26, 2009)

LOCKHEED MARTIN

Risk Handling Checklist

Project Manager: Use this checklist to develop risk handling plans before the dig starts. You must also review Enterprise Operations Procedure EO-28, Digging Projects.

General Questions	☒	What Lockheed Martin processes could be affected by the dig? **No Lockheed Martin processes or operations are expected to be impacted, work areas will be localized and coned off to allow traffic to get by. Tetra Tech will work with Lockheed Martin and their tenants to minimize potential impacts.**
	☒	What are the safety hazards? **Utilities, slips/trips/falls, vehicle traffic, drill rig safety, pinch points**
	☒	What could fail? **Drill rig components**
	☒	How could it fail? **A component of the drill rig could potentially fail. An inspection of the equipment will be conducted daily to ensure proper working condition. Each drill rig shall have an operating emergency stop button.**
	☒	Does the area need to be returned to its normal state when the work is complete? **Yes, each boring will be properly abandoned, brought back to grade and surface completed to match the surrounding area or with a flush mount well casing.**
	☐	How could the dig affect operations/test/production? **No operations will be affected**
	☐	Have potential risks been addressed with area management? **No risks identified**
	☒	Am I comfortable with any risk handling plans, understanding the potential impact? **YES**
Traffic Control	☒	Ensure proper signage and communication. **Proper signage, traffic cones etc... will be placed to safely divert traffic around the work area.**
	☒	Coordinate road or access closures through Industrial Security before starting the dig. **LMCPI, Security, EMCOR and the site tenant leads will be notified of the field schedule.**
	☒	Ensure the work area is isolated from foot traffic by placing barriers and warning lights as required by EO-28.
	☒	Ensure that vehicle traffic will be safe. **Use of traffic cones, barriers and/or caution tape**
	☐	Ensure that product transport will be safe. **N/A**
Excavation	☒	Review facility drawings to identify utilities. Research old drawings as necessary. **Available site engineering and utility maps**
	☒	Discuss the project with Facility Engineering/Maintenance staff that may have unique knowledge about the construction area not documented in facility drawings.
	☒	Process form EO-28-1, Dig Permit. Use this opportunity to explain the process and relate expectations to the contractor/LM organization that will perform the dig.
	☒	Have LM Telecommunications and the local utility identification service locate and mark utilities/underground obstacles.
	☒	Coordinate with other ongoing projects in the affected area. **Will coordinate with nearby sediment removal action project**
	☐	Make every effort not to excavate around live utilities in service. Schedule an outage in advance or have Maintenance temporarily shut down and isolate the utilities while excavating. **Underground utilities marked by Miss Utility and private utility locating service, borings will be offset if required based on utility mark out**
	☐	If live utilities cannot be shut down while excavating, know where to isolate or shut them down if they are damaged while excavating.**N/A**
	☐	Have a spotter(s) work with the equipment operator. Hand dig when necessary. **N/A**
	☐	Excavate along the side of the utility; not on top. **N/A**
	☐	Weather may affect the dig. Ensure water pipes are protected during freezing weather, especially if the trench will be left open over night. Rain may cause the side of the trench to slough, which can undermine and break pipes/conduit. **N/A**
	☐	Ensure care when moving trench boxes in and out of trenches so pipes/conduit aren't damaged by the boxes. **N/A**
	☒	Ensure surface drainage is controlled so that water doesn't get into the excavation and undermine soil supporting utilities.
	☒	Ensure stocked material is kept far enough back (minimum 2 feet) so that material and rocks don't fall on utilities in the open hole. **Well materials will be staged in Lot D away from the drilling locations.**
	☒	Ensure backfilling is done carefully: Re-bed utilities with proper material, filling all voids below. Keep inappropriate material from falling on or being placed in the trench. Be careful when compacting backfill in the two feet directly above the utility. **Borings will be abandoned with bentonite and surface completed appropriately**
	☐	Keeps the as-built utility drawing in the field while the excavation site is open. Take pictures if possible (horizontal alignment and elevations), if known utilities deviate from facility drawings or if utilities are found that are not on facility drawings. Give the modified as-built drawings to the Building/Facility Manager, who will update the drawing database. **Field geologist will maintain site maps onsite and photographs will be taken to document all phases of the project**
	☒	Ensure that the equipment operator digs slowly and remains in control. **Drill rig will be operated by Maryland licensed well driller**
Personal	☐	Ensure that trenching and shoring methods comply with the applicable OSHA regulations and are overseen by a "Competent Person," as defined in those regulations. **N/A**
	☒	Regularly inspect methods to prevent violations.

☐ Ensure LM employees do not dig or enter any excavation that is more than four feet deep. **N/A**	
Project Manager signature indicating completion of checklist review Anthony  Apanavage	Date August 23, 2017

Caldwell, Dale

From: md@occinc.com
Sent: Tuesday, September 12, 2017 11:23 AM
To: Apanavage, Tony
Subject: Ticket: 17597494

NOTICE OF INTENT TO EXCAVATE		**STANDARD**		**UPDATE**			
Ticket No:	17597494			**Update Of:**	17562124	**Update No:**	1
Transmit Date:	9/12/17	**Time:**	11:22 AM				
Release Date:	9/12/17	**Time:**	11:21 AM	**Type:**	CALL		
Response Due By:	9/15/17	**Time:**	11:59 PM				
Expiration Date:	9/29/17	**Time:**	11:59 PM				

Caller Information

Company:	TETRA TECH	**Type:**	CONTRACTOR
Contact Name:	ANTHONY APANAVAGE	**Fax:**	(301) 528-3000
Phone:	(301) 528-3021		
Caller Address:	20251 CENTURY BLVD SUITE# 200	GERMANTOWN, MD 20874	
Email Address:	tony.apanavage@tetratech.com		
Job Site Contact:	ANTHONY CELL	**Phone:**	(301) 233-8230

Dig Site Information

Type of Work:	INSTALLING OF GROUND WATER MONITORING WELLS AND SOIL BORINGS		
Work Done For:	LOCHHEED MARTIN		
Permit #:		**Explosives:**	N
Contract Job#:			

Dig Site Location

State:	MD	**County:**	BALTIMORE
Place:	MIDDLE RIVER		
Subdivision:			
Address / Street:	MARTIN BLVD		
Nearest Intersecting Street:	EASTERN BLVD		

Extent of Work:

THE ADDRESS IS 195 CHESAPEAKE PARK PLAZA RD THIS IS LOCHHEED MARTIN MIDDLE RIVER COMPLEX FACILITY ALL LOCATORD PLEASE CALL ANTHOINY CELL AT 301-233-8230 BEFORE ARRIVING ON SITE HE WILL ARRANGE A MEETING TO SHOW THE LOCATION OF THE DIG SITE STARTING FROM THE INTERSECTIONOF RT 150 (EASTERN BLVD) TRAVEL APPROX 900FT SOUTH ON MARTIN BLVD AT THIS POINT ON THE SOUTHERN END OF THE PARKING LOT MARK 400FT ON EITHER SIDE OF THE ROAD THIS IS FOR 15FT SOIL BORINGS AND WELLS LOCATIONS

Comments:

UPDATE-TO EXTEND DAYS

Excavation Coordinates for # Polygons: 1

Poly 1: NW Lat:	39.3298888	**Lon:**	-76.4377981	**SE Lat:**	39.3278464	**Lon:**	-76.4339028

Members Notified

District	Company Name	Phone Number
BGEBA	BGE ELECTRIC-USIC	(800) 778-9140
BGEBAG	BGE GAS-USIC	(800) 778-9140
CBW04	BALTIMORE CITY DPW-OCCLS	(410) 712-0202
TDEX01	TERRADEX	(650) 227-3254

Excavator Responsibilities

* EXCAVATORS MUST ENSURE ACCURACY OF TICKET AND MAPPING BY CLICKING ON THIS LINK

* Free yourself from hold times with ITIC.
No one likes to wait. That's why Miss Utility offers online ticketing (ITIC) at MissUtility.net. Using this fully automated systems requires a short training session, so click here to get started so you can get in the Miss Utility Express Lane. It's fast, easy, and free. Get off the phone and get oneline with ITIC.

Caldwell, Dale

From: md@occinc.com
Sent: Monday, August 28, 2017 1:16 PM
To: Apanavage, Tony
Subject: Ticket: 17562124

NOTICE OF INTENT TO EXCAVATE		**STANDARD**			
Ticket No:	17562124				
Transmit Date:	8/28/17	**Time:**	1:16 PM		
Release Date:	8/28/17	**Time:**	1:02 PM	**Type:**	CALL
Response Due By:	8/30/17	**Time:**	11:59 PM		
Expiration Date:	9/15/17	**Time:**	11:59 PM		

Caller Information

Company:	TETRA TECH	**Type:**	CONTRACTOR
Contact Name:	ANTHONY APANAVAGE	**Fax:**	(301) 528-3000
Phone:	(301) 528-3021		
Caller Address:	20251 CENTURY BLVD SUITE# 200	GERMANTOWN, MD 20874	
Email Address:	tony.apanavage@tetratech.com		
Job Site Contact:	ANTHONY CELL	**Phone:**	(301) 233-8230

Dig Site Information

Type of Work:	INSTALLING OF GROUND WATER MONITORING WELLS AND SOIL BORINGS		
Work Done For:	LOCHHEED MARTIN		
Permit #:		**Explosives:**	N
Contract Job#:			

Dig Site Location

State:	MD	**County:**	BALTIMORE
Place:	MIDDLE RIVER		
Subdivision:			
Address / Street:	MARTIN BLVD		
Nearest Intersecting Street:	EASTERN BLVD		

Extent of Work:

THE ADDRESS IS 195 CHESAPEAKE PARK PLAZA RD THIS IS LOCHHEED MARTIN MIDDLE RIVER COMPLEX FACILITY ALL LOCATORD PLEASE CALL ANTHOINY CELL AT 301-233-8230 BEFORE ARRIVING ON SITE HE WILL ARRANGE A MEETING TO SHOW THE LOCATION OF THE DIG SITE STARTING FROM THE INTERSECTIONOF RT 150 (EASTERN BLVD) TRAVEL APPROX 900FT SOUTH ON MARTIN BLVD AT THIS POINT ON THE SOUTHERN END OF THE PARKING LOT MARK 400FT ON EITHER SIDE OF THE ROAD THIS IS FOR 15FT SOIL BORINGS AND WELLS LOCATIONS

Comments:

Excavation Coordinates for # Polygons: 1

Poly 1: NW Lat:	39.3298888	**Lon:**	-76.4377981	**SE Lat:**	39.3278464	**Lon:**	-76.4339028

Members Notified

District	Company Name	Phone Number
BGEBA	BGE ELECTRIC-USIC	(800) 778-9140
BGEBAG	BGE GAS-USIC	(800) 778-9140
CBW04	BALTIMORE CITY DPW-OCCLS	(410) 712-0202
QWESTM01	QWEST COMMUNICATIONS	(800) 283-4237
TDEX01	TERRADEX	(650) 227-3254

Excavator Responsibilities

* EXCAVATORS MUST ENSURE ACCURACY OF TICKET AND MAPPING BY CLICKING ON THIS LINK

* Free yourself from hold times with ITIC.
No one likes to wait. That's why Miss Utility offers online ticketing (ITIC) at MissUtility.net. Using this fully automated systems requires a short training session, so click here to get started so you can get in the Miss Utility Express Lane. It's fast, easy, and free. Get off the phone and get oneline with ITIC.

Appendix B—Soil Boring and Well Construction Logs

WELL NUMBER MRC-MW131B/117B

Tetra Tech
20251 Century Blvd

CLIENT Lockheed Martin Coorporation
PROJECT NAME MRC WESTERN TCE INVESTIGATION
PROJECT NUMBER 112ic08076
PROJECT LOCATION MIDDLE RIVER, MARYLAND
DATE STARTED 9/10/17 **COMPLETED** 9/10/17
GROUND ELEVATION 31 ft **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Cascade
DRILLING METHOD Rotosonic
NOTES 9 (0.75 feet) thick concrete
LOGGED BY W. O'Niell
NORTHING 606239.3275 ft **EASTING** 1472099.066 ft **DATUM:** MD STATE NAD 1983

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0	Concrete		0.8 Concrete 30.3	PID = 0	Casing Top Elev: 25 (ft) Casing Type: 2 PVC Cement
	ML		Brown (7YR 5/6) SILT with sand & small gravel, non plastic, slightly moist,mod. stiff	PID = 0 PID = 0	
			3.5 27.5	PID = 0	
	CH		Brown (7YR 5/6) to Gray (N4) CLAY, plastic, slightly moist,sandy at top, mod. soft	PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0	
5					
10				PID = 0	
			12.0 19.0	PID = 0.9	Cement and bentonite grout
	ML		Grayish (2.5Y 7/2) silt, non plastic, slightly moist, some sand, mod. soft	PID = 1.1	
			14.0 17.0		
15	SM		Red (2.5 YR 5/8) silty SAND, non plastic, moist to wet, soft	PID = 0.6	
			16.0 15.0		
	CL		17.0 Red (2.5 YR 5/8) sandy CLAY, low plastic, slightly moist, mod. stiff 14.0		
	CL		Red (10YR 4/8) CLAY, low plasticity, dry, stiff	PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0	
20					
				PID = 0	Bentonite Chips
25				PID = 0	
			25.5 5.5	PID = 0	
	CL		Off white to red (5YR 4/6) sandy CLAY, low plasticity, slight moisture, mod. stiff, rock frags at 28.5'	PID = 0.5	#1 Silica Filter Pack
			28.5 2.5	PID = 1.7	
	CL		Red (5YR 4/6) silty CLAY, low plasticity, slight moisture, mod. stiff		
30			30.0 1.0		

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WELL NUMBER MRC-MW131B/117B

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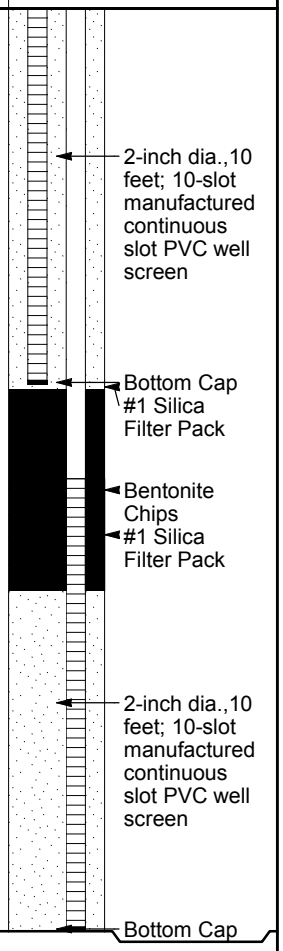
CLIENT Lockheed Martin Coorporation **PROJECT NAME** MRC WESTERN TCE INVESTIGATION

PROJECT NUMBER 112ic08076 **PROJECT LOCATION** MIDDLE RIVER, MARYLAND

DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION		ENVIRONMENTAL DATA
30	GM		Red (10 YR 4/8) GRAVEL with silt and sand, non plastic, wet, hard	0.0	PID = 1.5
			31.0		
	SM		Red orange (7.5 YR 7/8) silty SAND with some clay, non-plastic, moist to wet, mostly soft, rock frags at 32.75'		PID = 2.6
					PID = 3.2
35			35.0	-4.0	
	SP		Red orange (7.5 YR 7/8) silty SAND to SAND, non-plastic, wet, soft		PID = 1.3
					PID = 0.9
			38.0	-7.0	
	CL		Red (10YR 5/8) sandy and silty CLAY, low plasticity, slight moisture, mod stiff		PID = 0
40			40.5	-9.5	PID = 0.2
	SC		Red (10YR 5/8) sandy CLAY to clayey SAND, low to non plastic, moist to wet, mod stiff		
					PID = 0.3
45					PID = 0.4
					PID = 0.5
50			50.0	-19.0	



Bottom of borehole at 50.6 feet.

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WELL NUMBER MRC-MW118A/B

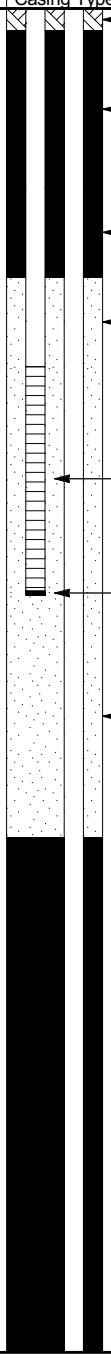
Tetra Tech
20251 Century Blvd

CLIENT Lockheed Martin Coorporation
PROJECT NAME MRC WESTERN TCE INVESTIGATION
PROJECT NUMBER 112ic08076
PROJECT LOCATION MIDDLE RIVER, MARYLAND
DATE STARTED 9/7/17 **COMPLETED** 9/7/17
GROUND ELEVATION 32.5 ft **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Cascade
DRILLING METHOD Rotosonic
NOTES 4 (0.33 feet) thick asphalt
LOGGED BY W. O'Niell
NORTHING 605927.713 ft **EASTING** 1472227.7628 ft **DATUM:** MD STATE NAD 1983

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0		Asphalt		0.3 Asphalt 32.2	PID = 0
		GM		Brown (5YR 4/4 to 5/4) FILL mix of sand, silt, GRAVEL and clay, non plastic, dry,mod. stiff	PID = 0
				2.5 30.0	PID = 0
		CL		Red brown (2.5YR 4/8) to gray (N8) silty to sandy CLAY, low plasticity, very slight moisture	PID = 0
				4.0 28.5	PID = 0
5		SM		Red brown (2.5YR 6/8) silty SAND , non plastic, very slight moisture at top, some clay and moist at 6 feet, wet at 8 feet, mod. soft	PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0.2
10	8-13(ft)			9.5 23.0	
		ML		Red brown (2.5YR 6/8) sandy CLAY, low plasticity, slight moisture, mod. soft	PID = 0.1
				11.0 21.5	
		ML		Gray brown (7.5YR 5/1) sandy CLAY, low plasticity, moist, mod. soft	
				12.0 20.5	
		ML		Red brown (2.5YR 6/8) sandy CLAY, low plasticity, slight moisture, mod. soft	
				13.0 19.5	
15				Red (10YR 4/8) CLAY with some silt and black inclusions, low plasticity, dry, stiff`	PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
20		CL			PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
25					PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
30					PID = 0

WELL DIAGRAM

Casing Top Elev: 16.21 (ft)
Casing Type: 2 PVC



- Cement
- Cement and bentonite grout
- Bentonite Chips
- #1 Silica Filter Pack
- 2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
- Bottom Cap
- #1 Silica Filter Pack

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WELL NUMBER MRC-MW118A/B

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CLIENT Lockheed Martin Coorporation **PROJECT NAME** MRC WESTERN TCE INVESTIGATION

PROJECT NUMBER 112ic08076 **PROJECT LOCATION** MIDDLE RIVER, MARYLAND

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
30				Red (10YR 4/8) CLAY with some silt and black inclusions, low plasticity, dry, stiff` *(continued)*	PID = 0	Bentonite Chips
					PID = 0.1	
					PID = 0	
					PID = 0	
					PID = 0	
35					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
40		CL			PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
45					PID = 0	#1 Silica Filter Pack
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
				48.0 -15.5	PID = 0	
		SM		Brown (7.5YR 6/4) silty to clayey SAND, non plastic, wet, soft to mod. stiff	PID = 0	
				49.5 -17.0	PID = 0	
50	45-55(ft)			Red (10YR 4/8) to gray (N7) CLAY with silt, low plasticity, very slight moisture, stiff	PID = 0	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
		CL			PID = 0	
					PID = 0	
				53.0 -20.5	PID = 0	
		GM		Brown (7.5YR 6/4) silty SAND with GRAVEL, non plastic, wet to moist, mod. stiff	PID = 2.1	
55				55.0 -22.5		Bottom Cap

Bottom of borehole at 55.1 feet.

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WELL NUMBER MRC-MW119A/B

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CLIENT Lockheed Martin Coorporation
PROJECT NAME MRC WESTERN TCE INVESTIGATION
PROJECT NUMBER 112ic08076
PROJECT LOCATION MIDDLE RIVER, MARYLAND
DATE STARTED 9/9/17 **COMPLETED** 9/9/17
GROUND ELEVATION 30.5 ft **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Cascade
DRILLING METHOD Rotosonic
NOTES 11 (0.92 feet) asphalt and concrete
LOGGED BY W. O'Niell
NORTHING 606075.1769 ft **EASTING** 1472058.2489 ft **DATUM:** MD STATE NAD 1983

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0		Asphalt		0.9 Asphalt & concrete 29.6	PID = 0	Casing Top Elev: 33.39 (ft) Casing Type: 2 PVC Cement
				Red brown (2.5YR 5/4) to gray (N7) CLAY with monor silt and fine sand, plastic, very slight moisture,mod. stiff	PID = 0	
		CH			PID = 0	Cement and bentonite grout
					PID = 0	
5					PID = 0	
					PID = 0.1	Bentonite Chips
				6.0 24.5	PID = 0.1	
				Brown (7YR 5/6) red brown (10YR 5/6)clayey SAND, non plastic, slightly moist, mod. soft	PID = 0.2	#1 Silica Filter Pack
		SC			PID = 1.3	
10	8-13(ft)				PID = 1.4	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
				12.0 18.5		
		CL		12.5 Red brown (10YR 5/6) silty SAND, low plasticity, wet at lower interface, mod. soft 18.0	PID = 0.1	Bottom Cap
				Red brown (5YR 6/6) CLAY with silt, minor gravel, non plastic, dry, stiff, friable below 20 feet	PID = 0.1	#1 Silica Filter Pack
15					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
20					PID = 0	
					PID = 0	
		CL			PID = 0	
					PID = 0	
					PID = 0	
25					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
30					PID = 0	

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WELL NUMBER MRC-MW119A/B

Tetra Tech
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CLIENT Lockheed Martin Coorporation **PROJECT NAME** MRC WESTERN TCE INVESTIGATION

PROJECT NUMBER 112ic08076 **PROJECT LOCATION** MIDDLE RIVER, MARYLAND

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
30		CL		Red brown (5YR 6/6) CLAY with silt, minor gravel, non plastic, dry, stiff, friable below 20 feet *(continued)*	PID = 0	Bentonite Chips
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
35					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
40					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
45					PID = 0	
					PID = 0	
					PID = 0	
				48.0 -17.5	PID = 0	
		SM		Yellow orange (10 YR 6/6) top foot to red (2.5YR 6/4) silty SAND, non plastic, wet, soft	PID = 4.8	#1 Silica Filter Pack
50					PID = 0.9	
					PID = 1.4	
	50-60(ft)				PID = 4.4	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
55					PID = 5.5	
					PID = 5.1	
				59.0 -28.5		Bottom Cap
60				Bottom of borehole at 60.1 feet.		

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WELL NUMBER MRC-MW120A/B

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CLIENT Lockheed Martin Coorporation
PROJECT NAME MRC WESTERN TCE INVESTIGATION
PROJECT NUMBER 112ic08076
PROJECT LOCATION MIDDLE RIVER, MARYLAND
DATE STARTED 9/8/17 **COMPLETED** 9/8/17
GROUND ELEVATION 29 ft **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Cascade
DRILLING METHOD Rotosonic
NOTES 9 (0.75 feet) thick asphalt
LOGGED BY W. O'Niell
NORTHING 605950.3187 ft **EASTING** 1472043.0684 ft **DATUM:** MD STATE NAD 1983

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0		Asphalt		0.8 Asphalt 28.3	PID = 0	Casing Top Elev: 9.7 (ft) Casing Type: 2 PVC Cement
		ML		Brown (2.5YR 4/4) SILT with clay, low to non plastic, very slight moisture,mod. stiff	PID = 0 PID = 0 PID = 0 PID = 0 PID = 0	Cement and bentonite grout
5					PID = 0 PID = 0	Bentonite Chips
				7.5 21.5	PID = 0	#1 Silica Filter Pack
10	8.5-13.5(ft)	SC		Gray brown (7.5YR 4/1 to N7) clayey SAND with some silty sand & small clay lenses, moist, soft	PID = 0 PID = 0	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
				13.5 15.5	PID = 0	Bottom Cap
15		CL		Red (2.5YR 5/8) CLAY with some silt and black inclusions, low plasticity, dry, stiff`	PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0 PID = 0	#1 Silica Filter Pack
20						
25						Bentonite Chips
30						

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WELL NUMBER MRC-MW120A/B

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CLIENT Lockheed Martin Coorporation **PROJECT NAME** MRC WESTERN TCE INVESTIGATION

PROJECT NUMBER 112ic08076 **PROJECT LOCATION** MIDDLE RIVER, MARYLAND

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
30		CL		Red (2.5YR 5/8) CLAY with some silt and black inclusions, low plasticity, dry, stiff` *(continued)*	PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
					PID = 0	
35					PID = 0	
					PID = 0	
				37.0 -8.0	PID = 0.5	
		SM		Red orange (10YR 6/6) silty SAND, non plastic, wet, soft rock frags at top		#1 Silica Filter Pack
40					PID = 0	
					PID = 0	
					PID = 0	
					PID = 5	
45	40-50(ft)				PID = 0	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 0	
					PID = 0	
					PID = 2.8	
50				50.0 -21.0		Bottom Cap

Bottom of borehole at 50.1 feet.

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WELL NUMBER MRC-MW121A/B

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CLIENT Lockheed Martin Coorporation
PROJECT NAME MRC WESTERN TCE INVESTIGATION
PROJECT NUMBER 112ic08076
PROJECT LOCATION MIDDLE RIVER, MARYLAND
DATE STARTED 9/6/17 **COMPLETED** 9/6/17
GROUND ELEVATION 25 ft **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Cascade
DRILLING METHOD Rotosonic
NOTES
LOGGED BY W. O'Niell
NORTHING 605947.0107 ft **EASTING** 1471926.8985 ft **DATUM:** MD STATE NAD 1983

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0		GM		Brown (10YR 3/6) FILL - mix of gravel, silt sand, non plastic, moist, mod. soft, some rock in upper foot	PID = 0
					PID = 0
					PID = 0
3.0					
				Gray (N6) clayey SILT, low plasticity, slight moisture, mod soft	PID = 0
					PID = 0
5					PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
10					PID = 0
					PID = 0
					PID = 0
					PID = 7.2
					PID = 2.2
					PID = 11.4
15		GM			PID = 2.2
					PID = 1.3
					PID = 2
					PID = 1.4
					PID = 1.8
20					PID = 0
					PID = 0
					PID = 0
					PID = 0
	19-29(ft)				PID = 0
25					PID = 0
					PID = 0
					PID = 0
26.5					-1.5
		ML		Off white to red (2.5y 8/2 to 2.5YR 5/6) sandy CLAY with silt, low plasticity, moist, mod stiff	PID = 0
					PID = 0
28.5					-3.5
		ML		Red brown (2.5YR 5/6) CLAY with silt, low plasticity, very slight moisture, stiff	PID = 0
30					PID = 0

WELL DIAGRAM

Casing Top Elev: 9.57 (ft)
Casing Type: 2 PVC

- Cement
- Cement and bentonite grout
- Bentonite Chips
- #1 Silica Filter Pack
- 2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
- Bottom Cap

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WELL NUMBER MRC-MW121A/B

Tetra Tech
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CLIENT Lockheed Martin Coorporation **PROJECT NAME** MRC WESTERN TCE INVESTIGATION

PROJECT NUMBER 112ic08076 **PROJECT LOCATION** MIDDLE RIVER, MARYLAND

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION		ENVIRONMENTAL DATA	WELL DIAGRAM
30				30.5	-5.5	PID = 0	Bentonite Chips
		SM		Yellow (10YR 7/8) silty SAND, non plastic, wet, mod soft		PID = 0	#1 Silica Filter Pack
				32.5	-7.5	PID = 0	
		CL		33.0 Red (2.5YR 5/6) CLAY, low plasticity, very slight moisture, stiff	-8.0		
		SM		Red (7YR 6/6) sandy SILT to silty SAND, non plastic, wet, mod soft		PID = 0	
				34.5	-9.5	PID = 0	
35		CL		35.0 Red (5YR 7/8) white and purple CLAY with silt, low plasticity, very slight moisture, stiff	-10.0	PID = 0	
	32-42(ft)			Red (5YR 7/8) silty SAND with clay, non plastic, moist, mod stiff		PID = 0.1	
		CL				PID = 0.1	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
						PID = 0.2	
40				40.0	-15.0	PID = 0.1	
							Bottom Cap

Bottom of borehole at 42.1 feet.

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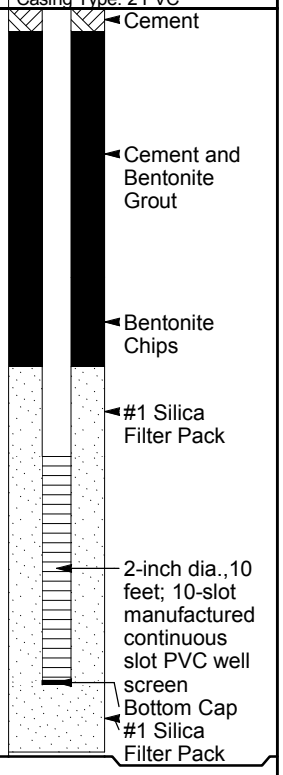
WELL NUMBER MRC-MW122A

Tetra Tech
20251 Century Blvd

CLIENT Lockheed Martin Coorporation
PROJECT NAME MRC WESTERN TCE INVESTIGATION
PROJECT NUMBER 112ic08076
PROJECT LOCATION MIDDLE RIVER, MARYLAND
DATE STARTED 9/11/17 **COMPLETED** 9/11/17
GROUND ELEVATION 31 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade
DRILLING METHOD Rotosonic
NOTES 9 (0.75 feet) thick concrete
LOGGED BY W. O'Niell
NORTHING 606243.3063 ft **EASTING** 1472108.0889 ft **DATUM:** MD STATE NAD 1983

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0		Concrete		0.8 Concrete 30.3	PID = 0
		ML		Brown (7YR 5/6) SILT with fine sand & gravel, non plastic, slightly moist,mod. stiff	PID = 0
					PID = 0
					PID = 0
				3.5 27.5	PID = 0
		CH		Brown (7YR 5/6) CLAY, plastic, moist, some sand at top, mod. soft	PID = 0
5					PID = 0
					PID = 0
					PID = 0
					PID = 0
					PID = 0
10					PID = 0
	10-15(ft)				PID = 0
					PID = 0.1
		ML		Grayish (2.5Y 7/2) silt, non plastic, slightly moist, some sand, mod. soft	PID = 0.1
					PID = 0.1
15				15.0 16.0	PID = 0.1
		CL		Red (10 YR 4/8) CLAY, low plasticiy, slightly moist, stiff	PID = 0.1
				16.7 14.3	

Bottom of borehole at 16.7 feet.



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Appendix C—Soil Sample Log Sheets

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: LMC Well install
Project Site Name: Middle River
Project No.: 112IC08109

Sample ID No.: SB-~~47A~~ 13HB - 33-35'	Sampled By: W. Oniell
Sample Location:	Sample Date: 09/10/2017
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1330 Method: Rotosonic Monitor Reading (ppm): 3.2	33-35'	Reddish yellow	Silty sand w/ clay moist to wet

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°C	1	4oz.	clear glass	✓
sVOCs incl. 1,4 dioxane	8270D SIM	"	1	4oz.	"	✓
TPH-DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s): [signature]

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: LMC well install
Project Site Name: Middle River
Project No.: 112IC08109

Sample ID No.: SB-117B-47-50'	Sampled By: W. O'Neill
Sample Location: Middle River, MD	Sample Date: 09/10/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [x] Sediment
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Time: 1340 / Method: Rotosonic / Monitor Reading (ppm): 0.5	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	47-50'	10YR 5/8	red clayey sand moist to wet

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°C	1	4oz	clear glass	✓
sVOCs incl. 1,4 dioxane	8270D SIM	"	1	4oz	"	✓
TPH-DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC well install
Project Site Name: Middle Rio
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-MW117B	Casing ID (in.):	2"
Drilling Co.:	Cascade	Depth to Bottom (ft.):	38.5'
Date Installed:	09/10/17	Static Water Level Before (ft.):	N/A
Date Developed:	09/12/17	Static Water Level After (ft.):	N/A
Dev. Method:	12 V. Sub mersible pump	Screen Length (ft.):	10'
Pump Type:	Hurricane"	Specific Capacity:	
Developed By:	Larry Hunsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1030	6"	0	N/A				Offscale	waiting for turbidity to go down
1049	0"	9		too turbid to test			"	pumped dry / waiting recharge
1101	0"	9	30.65'					resume pumping
1123	0"	16.6	dry					pumped dry
1136	0"	16.6	30.90'	22.55	5.24	0.763	1391	restart pump
1150	0"	20.8	below pump	22.08	5.38	0.956	2704	moving ~~pump~~ pump = variability
1204	0"	25.3	"	22.91	5.39	0.979	1487	
1219	0"	27.7	"	22.65	5.29	0.936	offscale	turn up speed & pump dry wait for recharge
1236	0"	27.7	~~28.35~~	~~22.65~~	~~5.29~~	~~0.893~~	~~offscale~~	restart pump
1245	0"	31.6	28.35	22.65	5.29	0.893	offscale	
1258	0"	34.0	below pump	23.29	5.29	0.939	2124	
1312	0"	37.3	"	22.76	5.24	0.984	69	cleaned up rapidly!
1315			"					waiting for recharge
1330	0"	42	"	22.40	5.25	0.976		got cloudy again, pumped dry again

Recharge

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC well install
Project Site Name: Middle River
Project Number: 112IC08107

WELL INFORMATION:

Well No.:	MRC-MW117B	Casing ID (in.):	2"
Drilling Co.:	Cascade	Depth to Bottom (ft.):	56.5'
Date Installed:	9/10/17	Static Water Level Before (ft.):	N/A Not taken w/ meter
Date Developed:	9/12/17	Static Water Level After (ft.):	
Dev. Method:	12V submersible pump	Screen Length (ft.):	5'
Pump Type:	Hurricane II	Specific Capacity:	
Developed By:	Larry Hansbarger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
0900	~6	0	N/A	N/A	N/A	N/A	N/A	
0946	0	50	"	21.98	4.74	0.158	1769	moving pump inlet down screen
1010	0	60	"	20.15	4.52	0.084	730	so parameter values will vary.
1020	0	70	"	20.10	4.17	0.080	68.8	
1030	0	80	"	19.54	4.04	0.079	48.8	good!

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC Well install
Project Site Name: Middle River
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-MW119 A	Casing ID (in.):	2"
Drilling Co.:	Cascade	Depth to Bottom (ft.):	13'
Date Installed:	9/9/17	Static Water Level Before (ft.):	10.05
Date Developed:	9/12/17	Static Water Level After (ft.):	
Dev. Method:	12 v. submersible pump	Screen Length (ft.):	5'
Pump Type:	hurricane	Specific Capacity:	
Developed By:	Larry Hunsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1450	0	0						Pumped dry in ≈ 2 min
1503	0	0.7 gal	below pump					pumped dry
1542	0	0.7	"					restart pump
1546	0	1.9	"				offscale	dry - thick w/ silt
1616	0	1.9	"					restart pump
1621	0	2.1	"					dry
1706	0	2.3	"					restart pump
well is not yielding significant water								

start @ 1" of water in drum

1st drum 50.4

TETRA TECH

2nd drum start w/ 20.1 gal
3rd drum start @ 80 gal

MONITORING WELL DEVELOPMENT RECORD

Event: time well install
Project Site Name: Middle River
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-MW119B	Casing ID (in.):	2"
Drilling Co.:	Casade	Depth to Bottom (ft.):	60'
Date Installed:	09/09/17	Static Water Level Before (ft.):	N/A
Date Developed:	09/12/17	Static Water Level After (ft.):	
Dev. Method:	12 v. sub. pump	Screen Length (ft.):	10'
Pump Type:	hurricane	Specific Capacity:	
Developed By:	Larry Hinsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1355	~~[illegible]~~ 55	0						
1405	0	22	24.9'	22.61	4.72	0.493	1204	
1415	0	41.7	28.7	21.19	4.42	0.467	1653	
1425	0	75	32.6	20.67	4.25	0.507	956	
1435	0	96.5	25.85	20.28	4.07	0.545	994	Slow flow
1440	0	100	24.13	19.96	3.90	0.576	62.1	
1445	0	105	23.73	19.48	3.90	0.570	25.5	Good
1450	0							

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC well install
Project Site Name: Middle River, MD
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-120B	Casing ID (in.):	2
Drilling Co.:	Cascade	Depth to Bottom (ft.):	55'
Date Installed:	9/8/17	Static Water Level Before (ft.):	14.76
Date Developed:	9/12/17	Static Water Level After (ft.):	
Dev. Method:	R.V. submersible pump	Screen Length (ft.):	10'
Pump Type:	hurricane	Specific Capacity:	
Developed By:	Larry Hunsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1642		0	19.89					Start pump/pump dies after 2 min.
1728	3	0						
1742	0	50	19.62	22.96	5.20	0.343	2742	
1752	0	80	20.84	20.84	5.05	0.329	1652	
1802	0	115	19.94	20.44	4.94	0.326	1373	
1812	0	136.7	20.18	19.74	4.62	0.303	746	
1817	0	150	20.21	19.31	4.70	0.292	91	stop

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC well install
Project Site Name: Middle River LMC
Project No.: 112IC03109

Sample ID No.: SB-118A-10-13'	Sampled By: Wentell
Sample Location: Middle River, MD	Sample Date: 09/07/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Time: 1700	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Robosonic	10 - 13'	7.5YR5/1	Sand clay moist
Monitor Reading (ppm): 0.1			

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260 C	4°C	1	4oz	clear glass	✓
SVOCs + 1,4 dioxane	8270D SIM	"	1	4oz	"	✓
TPH - DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC well install
Project Site Name: LMC Middle Run
Project No.: 112IC08109

Sample ID No.: SB-118B-53-55'	Sampled By: W. ONeill
Sample Location: Middle Run, MD	Sample Date: 09/07/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [x] Sediment
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Time: 1715 / Method: Rotosonic / Monitor Reading (ppm): 2.1	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	53-55'	7.5YR5/6	Brown sand silt gravel mix moist to wet

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°C	1	4oz	clear glass	✓
SVOCs + 1,4 dioxane	8270D SIM	"	1	"	"	✓
TPH - DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC/LMC well install
Project Site Name: Middle River (MRC)
Project No.: 112IC08109

Sample ID No.: SB-119A-10-12.5'	Sampled By: W. Ontell
Sample Location: Middle River, MD	Sample Date: 09/09/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Time: 1420 / Method: Rotosonic / Monitor Reading (ppm): 1.4	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	10 - 12.5'	Brown	clayey sand to silty sand SC to SM wet to moist

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°C	1	4oz	Clear glass	✓
SVOCs 1,4 dioxane	8270D SIM	"	1	4oz	"	✓
TPH - DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC/LINC Lwell INSTALL
Project Site Name: Middle River MRC
Project No.: 112IC08109

Sample ID No.: SB-119B-56-58'	Sampled By: W. ONeill
Sample Location: Middle River, MD	Sample Date: 09/09/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [X] Sediment
- [X] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Time: 1440 / Method: Rotosonic / Monitor Reading (ppm):	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	56-58'	2.5Y 4/2	5.1 ft sand, wet

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°C	1	4oz.	Clear glass	✓
SVOCs incl. 1,4 dioxane	8270D SIM	"	1	4oz.	"	✓
TPH - DRO/GRO	8015D	"	1	9oz.	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MKC Well install
Project Site Name: Middle River LMC
Project No.: 112IC 08109

Sample ID No.: SB-120B-43-45'	Sampled By: W. ONiell
Sample Location: Middle River, MD	Sample Date: 09/08/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [X] Sediment
- [X] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Time: 1510
Method: Rotosonic
Monitor Reading (ppm):

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
43-45	2.5YR 5/2	Red brown silty Sand SM

MULTIPLE / COMPOSITE SAMPLE DATA:

Method:
PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°	1	4oz	clear glass	✓
SVOCs, Methylene	8270D SIM	"	1	"	"	✓
TPH-DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC well install
Project Site Name: Lockheed Martin
Project No.: 112 IC 08109

Sample ID No.: SB-120B-48-50'	Sampled By: D. Oneil
Sample Location: middle River, MD	Sample Date: 09/08/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Time: 1520
Method: Rotosonic
Monitor Reading (ppm):

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
48-50'	5YR6/4	Brown Sand (SP) wet

MULTIPLE / COMPOSITE SAMPLE DATA:

Method:
PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°	1	4 oz	clear glass	✓
SVOCs	8270D SIM	"	1	"	"	✓
TPH-DRO/GRO	8015D	"	1	9 oz.	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC Assessment
Project Site Name: Middle River
Project No.: 112IC 08109

Sample ID No.: SB-121A-26.5-28.5'	Sampled By: WON
Sample Location: Middle River, MD	Sample Date: 09/06/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

- [ ] Surface Soil
- [N] Subsurface Soil
- [X] Sediment
- [X] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Time: 1300
Method: Rutosonic
Monitor Reading (ppm): 0.0

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
26.5'-28.5'	2.5Y 8/2	sandy clay w some silt

MULTIPLE / COMPOSITE SAMPLE DATA:

Method:
PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol. oz	Bottle Type	Collected
5 VOCs remaining VOCs	SW846 8260C	4°C	1	4	Clear glass	✓
1,4 dioxane	" 8270D SIM		1	4	"	✓
TPH, GRO, DRO	SW6 8015D		1	4	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s): WON

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: MRC Assessment
Project Site Name: Middle River
Project No.: 112IC08102

Sample ID No.: SB-121B-30.5-32.5'	Sampled By: W. ONEIL
Sample Location: Middle River, MD	Sample Date: 09/06/17
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Time: 1315
Method: Rotosonic
Monitor Reading (ppm): 1.4

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
30.5'-32.5'	10YR7/8	silty sand

MULTIPLE / COMPOSITE SAMPLE DATA:

Method:
PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol. oz	Bottle Type	Collected
VOCs	8260C	4°C	1	4	clear glass	✓
SVOCs incl. 1,4-dioxane	8270D SIM	1'	1	4	1'	✓
TPH, GRO, DRO	3015D	1'	1	4	1'	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

TETRA TECH

Event: LMC well install
Project Site Name: Middle River
Project No.: 112IC08109

Sample ID No.: SB-122A-13-15'	Sampled By: (L) · ONeill
Sample Location: Middle River, MD	Sample Date: 09/10/2017
QA/QC Duplicate ID: N/A	MS/MSD Collected: YES (NO)

MATRIX / CONCENTRATION:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Time: 1350	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Rotosonic	13-15'	2.5YR 5/8	red clayey to silty sand moist
Monitor Reading (ppm):			

MULTIPLE / COMPOSITE SAMPLE DATA:

Method: PID Readings (Range in ppm):

Sample ID	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	4°C	1	4oz	clear glass	✓
sVOCs incl. 1,4-dioxane	8270D SIM	"	1	4oz	"	✓
TPH-DRO/GRO	8015D	"	1	9oz	"	✓

OBSERVATIONS / NOTES:

MAP:

Coordinates:	N	E	

Signature(s):

Appendix D—Well Development Records

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC well install
Project Site Name: Middle Rio
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-MW117B	Casing ID (in.):	2"
Drilling Co.:	Cascade	Depth to Bottom (ft.):	38.5'
Date Installed:	09/10/17	Static Water Level Before (ft.):	N/A
Date Developed:	09/12/17	Static Water Level After (ft.):	N/A
Dev. Method:	12 V. Sub mersible pump	Screen Length (ft.):	10'
Pump Type:	Hurricane"	Specific Capacity:	
Developed By:	Larry Hunsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1030	6"	0	N/A				Offscale	waiting for turbidity to go down
1049	0"	9		too turbid to test			"	pumped dry / waiting recharge
1101	0"	9	30.65'					resume pumping
1123	0"	16.6	dry					pumped dry
1136	0"	16.6	30.90'	22.55	5.24	0.763	1391	restart pump
1150	0"	20.8	below pump	22.08	5.38	0.956	2704	moving ~~pump~~ pump = variability
1204	0"	25.3	"	22.91	5.39	0.979	1487	
1219	0"	27.7	"	22.65	5.29	0.936	offscale	turn up speed & pump dry wait for recharge
1236	0"	27.7	~~28.35~~	~~22.65~~	~~5.29~~	~~0.893~~	~~offscale~~	restart pump
1245	0"	31.6	28.35	22.65	5.29	0.893	offscale	
1258	0"	34.0	below pump	23.29	5.29	0.939	2124	
1312	0"	37.3	"	22.76	5.24	0.984	69	cleaned up rapidly!
1315			"					waiting for recharge
1330	0"	42	"	22.40	5.25	0.976		got cloudy again, pumped dry again

Recharge

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC well install
Project Site Name: Middle River
Project Number: 112IC08107

WELL INFORMATION:

Well No.:	MRC-MW117B	Casing ID (in.):	2"
Drilling Co.:	Cascade	Depth to Bottom (ft.):	56.5'
Date Installed:	9/10/17	Static Water Level Before (ft.):	N/A Not taken w/ meter
Date Developed:	9/12/17	Static Water Level After (ft.):	
Dev. Method:	12V submersible pump	Screen Length (ft.):	5'
Pump Type:	Hurricane II	Specific Capacity:	
Developed By:	Larry Hansbarger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
0900	~6	0	N/A	N/A	N/A	N/A	N/A	
0946	0	50	"	21.98	4.74	0.158	1769	moving pump inlet down screen
1010	0	60	"	20.15	4.52	0.084	730	so parameter values will vary.
1020	0	70	"	20.10	4.17	0.080	68.8	
1030	0	80	"	19.54	4.04	0.079	48.8	good!

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC Well install
Project Site Name: Middle River
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-MW119 A	Casing ID (in.):	2"
Drilling Co.:	Cascade	Depth to Bottom (ft.):	13'
Date Installed:	9/9/17	Static Water Level Before (ft.):	10.05
Date Developed:	9/12/17	Static Water Level After (ft.):	
Dev. Method:	12 v. submersible pump	Screen Length (ft.):	5'
Pump Type:	hurricane	Specific Capacity:	
Developed By:	Larry Hunsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1450	0	0						Pumped dry in ≈ 2 min
1503	0	0.7 gal	below pump					pumped dry
1542	0	0.7	"					restart pump
1546	0	1.9	"				offscale	dry - thick w/ silt
1616	0	1.9	"					restart pump
1621	0	2.1	"					dry
1706	0	2.3	"					restart pump
well is not yielding significant water								

start @ 1" of water in drum

1st drum 50.4

TETRA TECH

2nd drum start w/ 20.1 gal
3rd drum start @ 80 gal

MONITORING WELL DEVELOPMENT RECORD

Event: time well install
Project Site Name: Middle River
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-MW119B	Casing ID (in.):	2"
Drilling Co.:	Casade	Depth to Bottom (ft.):	60'
Date Installed:	09/09/17	Static Water Level Before (ft.):	N/A
Date Developed:	09/12/17	Static Water Level After (ft.):	
Dev. Method:	12 v. sub. pump	Screen Length (ft.):	10'
Pump Type:	hurricane	Specific Capacity:	
Developed By:	Larry Hinsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1355	~~[illegible]~~ 55	0						
1405	0	22	24.9'	22.61	4.72	0.493	1204	
1415	0	41.7	28.7	21.19	4.42	0.467	1653	
1425	0	75	32.6	20.67	4.25	0.507	956	
1435	0	96.5	25.85	20.28	4.07	0.545	994	Slow flow
1440	0	100	24.13	19.96	3.90	0.576	62.1	
1445	0	105	23.73	19.48	3.90	0.570	25.5	Good
1450	0							

TETRA TECH

MONITORING WELL DEVELOPMENT RECORD

Event: LMC well install
Project Site Name: Middle River, MD
Project Number: 112IC08109

WELL INFORMATION:

Well No.:	MRC-120B	Casing ID (in.):	2
Drilling Co.:	Cascade	Depth to Bottom (ft.):	55'
Date Installed:	9/8/17	Static Water Level Before (ft.):	14.76
Date Developed:	9/12/17	Static Water Level After (ft.):	
Dev. Method:	R.V. submersible pump	Screen Length (ft.):	10'
Pump Type:	hurricane	Specific Capacity:	
Developed By:	Larry Hunsberger		

DEVELOPMENT DATA:

Time	Estimated Sediment Thickness (ft.)	Cumulative Water Volume (Gal.)	Water Level (ft. below TOC)	Temp. (C°)	pH (S.U.)	SC (mS/cm)	Turbidity (NTU)	Remarks: (odor, color, etc.)
1642		0	19.89					Start pump/pump dies after 2 min.
1728	3	0						
1742	0	50	19.62	22.96	5.20	0.343	2742	
1752	0	80	20.84	20.84	5.05	0.329	1652	
1802	0	115	19.94	20.44	4.94	0.326	1373	
1812	0	136.7	20.18	19.74	4.62	0.303	746	
1817	0	150	20.21	19.31	4.70	0.292	91	stop

Appendix E—Groundwater Sample Log Sheets

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH

Event: DPT Groundwater sampling
Project Site Name: MRC
Project No.: 112IC0805

Sample ID: DPT-1A-40-45'	Sampled By: W. ONeil
QA/QC Duplicate ID: N/A	Sample Date: 9/19/2017
MS/MSD Collected: YES (NO)	Sample Time: 1030
WELL INFORMATION:	
~~Well~~ ID: DPT-1A (DPT boring)	Purge Date: 9/19/2017
Well Diameter (in): ~2"	Static Water Level (ft-BTOR): N/A
Top of Screen (ft-BTOR): 40	PID Monitor Reading: 0.0
Bottom of Screen (ft-BTOR): 45	Purge Method: peristaltic pump
Total ~~Well~~ Depth (ft-BTOR): 45	Sample Method: "
EQUIPMENT INFORMATION:	
Water Quality Instrument: N/A	Pump Controller: Geo Pump
Turbidity Meter: N/A	

PURGE DATA:

Time (Hrs)	H_20 Level (ft-BTOR)	Flow mL / min.	Color	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTU)	Temp. (C°)	ORP (mV)	Salinity (% or ppt)	Other
N/A											

FINAL PURGE / SAMPLE DATA:

Start Purge	End Purge	Total (min.)	Total Vol. (gal. / L.)	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTU)	Temp. (C°)	ORP (mV)	Salinity (% or ppt)	Other

ANALYSIS, PRESERVATION AND BOTTLE REQUIRMENTS

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260c	HCl/4°C	3	40	clear glass	✓

OBSERVATIONS / NOTES:

Coordinates:	N	E	Signature(s):

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH

Event: LMC ~~[illegible]~~ DPT Sampling
Project Site Name: MRC
Project No.: 112IC08109

Sample ID: DPT - 2D - 45-50'	Sampled By: W. Oniel
QA/QC Duplicate ID: N/A	Sample Date: 09/20/17
MS/MSD Collected: YES (NO)	Sample Time: 1440

WELL INFORMATION:

~~Well~~ ID: N/A DPT rig ≈ 2" DPT-2D	Purge Date: N/A 09/20/19
~~Well~~ Diameter (in): N/A	Static Water Level (ft-BTOR): N/A
Top of Screen (ft-BTOR): 45'	PID Monitor Reading: 0.0
Bottom of Screen (ft-BTOR): 50'	Purge Method: peristaltic pump
Total ~~Well~~ Depth (ft-BTOR): 50'	Sample Method: " "

EQUIPMENT INFORMATION:

Water Quality Instrument: N/A	Pump Controller: Geo pump
Turbidity Meter: N/A	

PURGE DATA:

Time (Hrs)	H_2O Level (ft-BTOR)	Flow mL / min.	Color	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTU)	Temp. (C°)	ORP (mV)	Salinity (% or ppt)	Other

FINAL PURGE / SAMPLE DATA:

Start Purge	End Purge	Total (min.)	Total Vol. (gal. / L.)	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTU)	Temp. (C°)	ORP (mV)	Salinity (% or ppt)	Other

ANALYSIS, PRESERVATION AND BOTTLE REQUIRMENTS

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected
VOCs	8260C	HCl/4°C	3	40 ml	clear glass	✓

OBSERVATIONS / NOTES:

Coordinates:	N	E	Signature(s):

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10-9-17
PLANT NAME MRC
SITE NAME Block I 1318 T4
MONITORING WELL IDENTIFICATION MRC-MW-178A
SAMPLE TIME 1435

PURGING DEVICE Peri pump
SAMPLING DEVICE Horiba U-52
OVA (ppm) In Well Casing ✓ In Breathing Zone ✓
EXPLOSIMETER (%LEL) In Well Casing ✓
TOTAL WELL DEPTH (feet) 38.85
SAMPLER'S SIGNATURE [signature]

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC ~~(µMHOS)~~ mS/cm	pH	DO (mg/L)	Turbidity (NTU)	ORP	~~Gallons~~ Purged Salinity	Bore Hole Volumes Purged	Flow Rate (mL/min)
1400	Steel plug		18.17									
1405			18.86	20.80	1.23	6.19	1.53	45.4	8	0.6		200
1410			19.12	20.64	1.21	5.94	1.45	39.9	1	0.6		150
1415			19.15	20.79	1.21	5.98	1.21	31.4	-11	0.6		100
1420			19.22	20.84	1.20	5.98	1.12	37.9	-21	0.6		100
1425			19.28	20.96	1.18	6.00	1.14	30.3	-28	0.6		100
1430			19.29	20.96	1.18	6.00	1.14	30.9	-28	0.6		100

Comments: _____

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10-09-2017

PLANT NAME MRC / LMC

SITE NAME MRC / LMC

MONITORING WELL IDENTIFICATION MRC-MW117B

SAMPLE TIME 1600

PURGING DEVICE Peristaltic pump

SAMPLING DEVICE "

OVA (ppm) In Well Casing N/A In Breathing Zone ___

EXPLOSIMETER (%LEL) In Well Casing N/A

TOTAL WELL DEPTH (feet) 50.24'

SAMPLER'S SIGNATURE [signature]

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC ~~(µmhos)~~ mScm	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged	Bore Hole Volumes Purged	Flow Rate (mL/min)	Salinity
1510			18.46	—	—	—	—	—	—	0	—	—	
1515			18.94	20.96	0.863	6.60	2.81	68.1	-92	0.16		120	0.2
1520			18.96	20.86	0.486	7.50	4.82	62.8	-185	0.32		"	0.2
1525			18.96	20.79	0.388	7.64	4.61	64.0	-209	0.50		"	0.2
1535			18.96	20.71	0.385	7.62	5.15	67.0	-215	0.82		"	0.2
1540			18.96	20.63	0.382	7.64	3.54	64.0	-218	0.98		"	0.2
1545			18.96	20.62	0.381	7.62	3.23	66.4	-219	1.14		"	0.2
1550			18.96	20.63	0.380	7.60	3.20	74.2	-218	1.30		"	0.2
1555			18.96	20.60	0.379	7.58	3.18	70.1	-216	1.46		"	0.2

Comments: sample @ 1600

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10/10-11/17
PLANT NAME MR2
SITE NAME Block I
MONITORING WELL IDENTIFICATION MW-118A
SAMPLE TIME 10/11/17 1343

PURGING DEVICE Peri pump
SAMPLING DEVICE Horiba U-52
OVA (ppm) In Well Casing ___ In Breathing Zone ✓
EXPLOSIMETER (%LEL) In Well Casing ✓
TOTAL WELL DEPTH (feet) 13.90
SAMPLER'S SIGNATURE M Wilkes

	Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged Salinity	Bore Hole Volumes Purged	Flow Rate (mL/min)
10/10	1705			7.33	25.32	1.67	7.00	7.18	8.8	65			
10/11	1300			7.41	21.96	1.58	6.19	2.00	46.5	-50	0.8		100
	1305			7.51	22.26	1.62	6.21	1.97	44.3	-38	0.8		110
	1310			7.49	22.55	1.69	6.26	1.96	42.3	-10	0.9		100
	1315			7.51	22.73	1.71	6.27	1.94	42.7	11	0.9		150
	1320			7.54	22.89	1.73	6.29	1.94	42.5	35	0.9		160
	1325			7.54	23.01	1.73	6.30	1.95	41.0	65	0.9		150
	1330			7.55	23.11	1.73	6.33	1.97	41.9	85	0.9		159
	1335			7.56	23.16	1.73	6.34	1.98	41.1	95	0.9		155
	1340			7.57	23.25	1.73	6.35	1.99	41.3	103	0.9		150
10/31	1455			7.65	23.79	1.74	6.37	2.10	34.3	116	0.9		150

Comments: Continuous

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10/11/17
PLANT NAME MRC
SITE NAME Block I
MONITORING WELL IDENTIFICATION MW-118B
SAMPLE TIME 10/11/17 1150

PURGING DEVICE Peel pump
SAMPLING DEVICE Horiba U52
OVA (ppm) In Well Casing / In Breathing Zone /
EXPLOSIMETER (%LEL) In Well Casing /
TOTAL WELL DEPTH (feet) 55.83
SAMPLER'S SIGNATURE

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons ~~Purged~~ Bailing	Bore Hole Volumes Purged	Flow Rate (mL/min)
1055	START		18.74						-			
1100			19.30	22.62	0.283	6.34	7.48	72.6	-85	0.1		150
1105			19.29	22.09	0.274	6.19	6.72	73.9	-85	0.1		100
1110			19.30	21.81	0.268	6.14	6.34	66.5	-85	0.1		150
1115			19.31	21.68	0.261	6.01	5.92	73.7	-81	0.1		150
1120			19.30	21.54	0.260	6.01	5.53	69.6	-81	0.1		150
1125			19.30	21.50	0.259	5.96	5.23	68.4	-81	0.1		150
1135			19.19	21.42	0.257	5.93	4.58	73.4	-84	0.1		175
1140			19.23	21.34	0.256	5.90	4.38	69.2	-83	0.1		150
1145	Post @ 1250		19.25	21.33	0.255	5.90	4.19	68.3	-84	0.1		150
SAMPLE 1150	~2 gal purged		19.27	21.58	0.257	5.96	2.20	48.3	-122			150

Comments:

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10/10-11/17
PLANT NAME MR2
SITE NAME Alcoa T.
MONITORING WELL IDENTIFICATION MW-119A
SAMPLE TIME 10/11/17 1015

PURGING DEVICE Peri. pump
SAMPLING DEVICE Horiba U52
OVA (ppm) In Well Casing ✓ In Breathing Zone ✓
EXPLOSIMETER (%LEL) In Well Casing ✓
TOTAL WELL DEPTH (feet) 12.84
SAMPLER'S SIGNATURE [signature]

	Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged	Bore Hole Volumes Purged	Flow Rate (mL/min)
10/10	1650			11.49	25.41	1.60	7.02	8.80	177	-141			

Comments: Only ✓ VOCs

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10/10/17

PLANT NAME MRC

SITE NAME Block I

MONITORING WELL IDENTIFICATION MW-119B

SAMPLE TIME 1440

PURGING DEVICE Peri Pump

SAMPLING DEVICE Hydro 152

OVA (ppm) In Well Casing / In Breathing Zone /

EXPLOSIMETER (%LEL) In Well Casing /

TOTAL WELL DEPTH (feet) 60.15

SAMPLER'S SIGNATURE [signature]

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	~~Gallons Purged~~ Sat/Ap	Bore Hole Volumes Purged	Flow Rate (mL/min)
1400			16.34									
1405	[illegible]		16.55	25.07	0.593	5.56	0.48	190	97	0.3		200
1410			16.55	23.73	0.595	5.27	0.39	142	91	0.3		250
1415			16.57	23.24	0.592	5.08	0.36	126	93	0.3		250
1420			16.57	23.06	0.593	4.98	0.34	~~91~~ 104	91	0.3		250
1425			16.57	22.96	0.590	4.92	0.32	75.0	87	0.3		250
1430			16.57	22.86	0.589	4.90	0.30	53.2	84	0.3		250
1435			16.57	22.83	0.590	4.90	0.29	43.2	80	0.3		250
1440	SAMPLE											
1525	[illegible]		16.59	25.65	1.08	5.15	0.39	2.8	130	0.6		250

Comments:

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE MAC 10/10-11/17

PLANT NAME MAC

SITE NAME Block I

MONITORING WELL IDENTIFICATION MW-120A

SAMPLE TIME 10/11/17 0905

PURGING DEVICE Bailer

SAMPLING DEVICE Hand Held

OVA (ppm) In Well Casing ✓ In Breathing Zone ✓

EXPLOSIMETER (%LEL) In Well Casing ✓

TOTAL WELL DEPTH (feet) 13.45

SAMPLER'S SIGNATURE [signature]

	Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged	Bore Hole Volumes Purged	Flow Rate (mL/min)
10/10	1241	Purged dry from		8.02	25.80	3.16	6.57	5.54	166	-106	2.5	~3	
10/11	0900			9.20									
	SAMPLE @ 0905												
	Dup @ 0915												

Comments: _____

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10/10/17
PLANT NAME MR2
SITE NAME Block I
MONITORING WELL IDENTIFICATION MW-120B
SAMPLE TIME 1155

PURGING DEVICE Peri pump
SAMPLING DEVICE Horiba U-52
OVA (ppm) In Well Casing ✓ In Breathing Zone ✓
EXPLOSIMETER (%LEL) In Well Casing ✓
TOTAL WELL DEPTH (feet) 50.93
SAMPLER'S SIGNATURE J. Miller

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged Salinity	Bore Hole Volumes Purged	Flow Rate (mL/min)
1110	WAVES		14.95									
1115			15.03	24.91	0.322	6.14	2.61	5.78	61	0.2		150
1120			15.00	23.36	0.324	5.57	2.28	6.24	74	0.2		200
1125			15.02	22.55	0.321	5.28	2.07	6.23	72	0.2		250
1130			15.00	22.16	0.320	5.12	1.94	7.91	68	0.2		300
1135			15.02	21.89	0.319	5.01	1.83	8.34	71	0.2		250
1140			15.03	21.76	0.318	4.95	1.72	10.5	75	0.2		250
1145			15.03	21.70	0.317	4.92	1.64	13.4	76	0.2		250
1150			15.02	21.69	0.317	4.89	1.56	15.1	85	0.2		250
1155	SAMPLE		15.03	25.15	0.315	5.36	3.91	26.6	121	0.1		250
1240	POST											

Comments:

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH

Event: MRC Sampling
Project Site Name:
Project No.: 112IC08104

Sample ID: MRC-	Sampled By: W. Oswell
QA/QC Duplicate ID:	Sample Date:
MS/MSD Collected: YES NO	Sample Time:
WELL INFORMATION:	
Well ID: MRC-MW121A	Purge Date: 10-09-2017
Well Diameter (in): 2	Static Water Level (ft-BTOR): 13.42
Top of Screen (ft-BTOR): 18.98	PID Monitor Reading: NA
Bottom of Screen (ft-BTOR): 28.98	Purge Method:
Total Well Depth (ft-BTOR): 28.98	Sample Method:
EQUIPMENT INFORMATION:	
Water Quality Instrument:	Pump Controller:
Turbidity Meter:	

PURGE DATA:

Time (Hrs)	H_2O Level (ft-BTOR)	Flow mL / min	Color	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTU)	Temp. (C°)	ORP (mV)	Salinity (% or ppt)	Other
10/9/2017 1038		50									
1108	11.59	120	~~Clear~~	9.60	0.587	1.75	5.7	21.12	85	0.2	
1150	Dry				HAND	BAILED					

FINAL PURGE / SAMPLE DATA:

Start Purge	End Purge	Total (min.)	Total Vol. (gal. / L)	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTU)	Temp. (C°)	ORP (mV)	Salinity (% or ppt)	Other

ANALYSIS, PRESERVATION AND BOTTLE REQUIREMENTS

Analysis	Method	Preservative	Number	Vol.	Bottle Type	Collected

OBSERVATIONS / NOTES:

Bailed dry @ 11.50 after removing ~ 5 gallons = 2 WV

Coordinates:	N	E	Signature(s):

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET ___ OF ___

DATE 10/09/17

PLANT NAME LMC-MRC

SITE NAME

MONITORING WELL IDENTIFICATION MWRIR-100917

SAMPLE TIME 1150

PURGING DEVICE Peri pump

SAMPLING DEVICE Horiba U52

OVA (ppm) In Well Casing _____ In Breathing Zone _____

EXPLOSIMETER (%LEL) In Well Casing _____

TOTAL WELL DEPTH (feet) 42.20

SAMPLER'S SIGNATURE _____

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	EC (µMHOS)	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged Solinity	Bore Hole Volumes Purged	Flow Rate (mL/min)
			10.65									
1046	Sheen											
1048			11.51	21.55	0.521	10.59	9.21	8.3	417	0.3		250
1054			11.61	21.40	0.526	11.2	9.13	0.71	15	0.3		150
1100			11.58	21.12	0.507	9.60	6.75	-0.50	85	0.3		175
1108			11.58	21.38	0.500	10.83	6.21	1.2	6	0.2		175
1113			11.58	21.06	0.506	10.79	6.18	50.3	12	0.2		175
1118			11.57	20.78	0.503	10.86	5.99	98.6	9	0.2		200
1123			11.57	20.52	0.503	10.88	5.95	91.6	9	0.2		200
1128			11.57	20.40	0.494	10.87	5.71	91.2	8	0.2		200
1133			11.57	21.38	0.482	11.66	5.58	88.5	8	0.2		~~250~~ 200
1138			11.57	~~20.29~~	0.473	10.84	5.47	81.5	6	0.2		~~250~~ 150

0.0

Comments:

SAMPLE @ 1150

PUMP

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

3008010125A.DWG

GROUNDWATER MONITOR WELL
FIELD DATA LOG SHEET - PURGING

SHEET 1 OF ___

DATE 10-9-2017

PLANT NAME MRC

SITE NAME MRC / LMC

MONITORING WELL IDENTIFICATION MW-MRC 122A

SAMPLE TIME ___

PURGING DEVICE Bailer

SAMPLING DEVICE ___

OVA (ppm) In Well Casing N/A In Breathing Zone ___

EXPLOSIMETER (%LEL) In Well Casing N/A

TOTAL WELL DEPTH (feet) 14.55

SAMPLER'S SIGNATURE ___

Time	Light Immiscible Level (feet)	Dense Immiscible Level (feet)	Water Level (feet)	Temp (Deg. C)	COND. EC (~~MMHOS~~) mS/cm	pH	DO (mg/L)	Turbidity (NTU)	ORP	Gallons Purged	Bore Hole Volumes Purged	Flow Rate (mL/min)
1342	—	—	13.98'	22.02	0.816	7.37	4.35	675	-58	0.1	1	N/A

Comments: Only 1 Vol

Note: All immiscible layers and water levels are measured from the notch in the top of the well casing.

Appendix F—Soil Vapor Sample Log Sheets

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-178-MB-1	IAQ Sample ID:
SV Canister #: 11164	IAQ Canister #:
SV Regulator #: 11550	IAQ Regulator #:
SV Start Time: 1050	IAQ Start Time:
SV Start Pressure: -30	IAQ Start Pressure:
SV Stop Time: 1150	IAQ Stop Time:
SV Stop Pressure: -3	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

LOCATED IN OFFICE SPACE

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-179-MB-1	IAQ Sample ID:
SV Canister #: 09822	IAQ Canister #:
SV Regulator #: 11490	IAQ Regulator #:
SV Start Time: 1049	IAQ Start Time:
SV Start Pressure: -30	IAQ Start Pressure:
SV Stop Time: 1149	IAQ Stop Time:
SV Stop Pressure: -4	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-180-MB-1	IAQ Sample ID:
SV Canister #: 11573	IAQ Canister #:
SV Regulator #: 11527	IAQ Regulator #:
SV Start Time: 1057	IAQ Start Time:
SV Start Pressure: -30	IAQ Start Pressure:
SV Stop Time: 1151	IAQ Stop Time:
SV Stop Pressure: -4	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-181-MB-1	IAQ Sample ID:
SV Canister #: 10344	IAQ Canister #:
SV Regulator #: 09653	IAQ Regulator #:
SV Start Time: 1057	IAQ Start Time:
SV Start Pressure: -30	IAQ Start Pressure:
SV Stop Time: 1151	IAQ Stop Time:
SV Stop Pressure: -2	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-182-MB-1	IAQ Sample ID:
SV Canister #: 10969	IAQ Canister #:
SV Regulator #: 10021	IAQ Regulator #:
SV Start Time: 1049	IAQ Start Time:
SV Start Pressure: -30	IAQ Start Pressure:
SV Stop Time: 1149	IAQ Stop Time:
SV Stop Pressure: -3	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-183-MB-1	IAQ Sample ID:
SV Canister #: 10941	IAQ Canister #:
SV Regulator #: 11272	IAQ Regulator #:
SV Start Time: 1048	IAQ Start Time:
SV Start Pressure: -30	IAQ Start Pressure:
SV Stop Time: 1148	IAQ Stop Time:
SV Stop Pressure: -4	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE		INDOOR AIR QUALITY SAMPLE	
SV Sample ID:	SV-184-MB-1	IAQ Sample ID:	
SV Canister #:	09792	IAQ Canister #:	
SV Regulator #:	10845	IAQ Regulator #:	
SV Start Time:	1047	IAQ Start Time:	
SV Start Pressure:	-25	IAQ Start Pressure:	
SV Stop Time:	1147	IAQ Stop Time:	
SV Stop Pressure:	-4	IAQ Stop Pressure:	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

LOCATED IN LUNCH/BREAK ROOM

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-185-MB-1	IAQ Sample ID:
SV Canister #: 09577	IAQ Canister #:
SV Regulator #: 11245	IAQ Regulator #:
SV Start Time: 1045	IAQ Start Time:
SV Start Pressure: -27	IAQ Start Pressure:
SV Stop Time: 1145	IAQ Stop Time:
SV Stop Pressure: -0	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE	INDOOR AIR QUALITY SAMPLE
SV Sample ID: SV-186-MB-1	IAQ Sample ID:
SV Canister #: 11520	IAQ Canister #:
SV Regulator #: 10863	IAQ Regulator #:
SV Start Time: 1046	IAQ Start Time:
SV Start Pressure: -29	IAQ Start Pressure:
SV Stop Time: 1146	IAQ Stop Time:
SV Stop Pressure: -2	IAQ Stop Pressure:

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH

SOIL VAPOR AND INDOOR AIR QUALITY SAMPLE LOG SHEET

Project Site Name: MRC MAINTENANCE BUILDING Date: 10/12/17

Project Number - Task: 112IC08109 Sampled By: MWILKS

SAMPLING DATA:

SOIL VAPOR SAMPLE		INDOOR AIR QUALITY SAMPLE	
SV Sample ID:	SV-187-MB-1	IAQ Sample ID:	
SV Canister #:	11278	IAQ Canister #:	
SV Regulator #:	09704	IAQ Regulator #:	
SV Start Time:	1046	IAQ Start Time:	
SV Start Pressure:	-30	IAQ Start Pressure:	
SV Stop Time:	1146	IAQ Stop Time:	
SV Stop Pressure:	-6	IAQ Stop Pressure:	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO15	1 L SUMMA	✓

LOCATION:

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Appendix G—Data Validation Reports and Chemical-Data Tables

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-85941-1

Job Description: MRC Waste Characterization Block I

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

Attention: Tony Apanavage



Approved for release.
John McFadden
Project Manager I
10/18/2017 5:02 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
10/18/2017

cc: Samantha Brenner
Kelly Carper
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Waste Characterization Block I

Report Number: 240-85941-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 10/4/2017 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Sample WC-IS-100317 (240-85941-2) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The sample was prepared and analyzed on 10/11/2017.

Carbon disulfide was detected in method blank MB 240-298471/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The continuing calibration verification (CCV) associated with batch 240-298471 recovered above the upper control limit for: Carbon disulfide and 2-Chloroethyl vinyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples TB-100317 (240-85941-1) and WC-IW-100317 (240-85941-3) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 10/12/2017.

Hexachlorobutadiene was detected in method blank MB 240-298687/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The continuing calibration verification (CCV) analyzed in batch 240-298687 was outside the method criteria for 1,1,2-Trichloro-1,2,2-trifluoroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The following samples were received preserved with hydrochloric acid: TB-100317 (240-85941-1) and WC-IW-100317 (240-85941-3).

The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

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

POLYCHLORINATED BIPHENYLS (PCBS)
Sample WC-IS-100317 (240-85941-2) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The sample was prepared on 10/05/2017 and analyzed on 10/06/2017.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WC-IS-100317 (240-85941-2), (240-85941-C-2-B MS) and (240-85941-C-2-C MSD). Reagents: 3261309, 3154251 and 3277006.

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

POLYCHLORINATED BIPHENYLS (PCBS)
Sample WC-IW-100317 (240-85941-3) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The sample was prepared on 10/05/2017 and analyzed on 10/07/2017.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

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

TCLP METALS (ICP)
Samples WC-IS-100317 (240-85941-2) and WC-IW-100317 (240-85941-3) were analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Methods 1311/6010B. The samples were leached on 10/05/2017 and 10/12/2017, prepared on 10/06/2017 and 10/13/2017 and analyzed on 10/09/2017 and 10/17/2017.

Barium, Chromium and Selenium were detected in method blank LB 240-297819/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Arsenic, Chromium and Selenium were detected in method blank LB 240-298849/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

TCLP MERCURY
Samples WC-IS-100317 (240-85941-2) and WC-IW-100317 (240-85941-3) were analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 10/05/2017 and 10/12/2017, prepared on 10/06/2017 and 10/13/2017 and analyzed on 10/06/2017 and 10/17/2017.

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

FLASHPOINT
Sample WC-IS-100317 (240-85941-2) was analyzed for flashpoint in accordance with EPA SW-846 Method 1010. The sample was analyzed on 10/05/2017.

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

FLASHPOINT
Sample WC-IW-100317 (240-85941-3) was analyzed for flashpoint in accordance with EPA SW-846 Method 1010. The sample was analyzed on 10/12/2017.

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

PERCENT SOLIDS
Sample WC-IS-100317 (240-85941-2) was analyzed for percent solids in accordance with ASTM Method D2216-80. The sample was analyzed on 10/05/2017.

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

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

Client Sample ID: TB-100317 — Lab Sample ID: 240-85941-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J	10	1.8	ug/L	1		8260C	Total/NA
Hexachlorobutadiene	0.78	J B	1.0	0.36	ug/L	1		8260C	Total/NA

Client Sample ID: WC-IS-100317 — Lab Sample ID: 240-85941-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.7	J	25	1.6	ug/Kg	1	☼	8260C	Total/NA
Acetone	12	J	25	3.8	ug/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.28	J B	6.2	0.26	ug/Kg	1	☼	8260C	Total/NA
Arsenic	0.0049	J B	0.050	0.0033	mg/L	1		6010B	TCLP
Barium	0.43	J	0.50	0.0024	mg/L	1		6010B	TCLP
Chromium	0.0054	J B	0.050	0.00055	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010A	Total/NA

Client Sample ID: WC-IW-100317 — Lab Sample ID: 240-85941-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21		10	1.8	ug/L	1		8260C	Total/NA
Barium	0.021	J B	0.50	0.0024	mg/L	1		6010B	TCLP
Chromium	0.0068	J B	0.050	0.00055	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-100317 Lab Sample ID: 240-85941-1

Date Collected: 10/03/17 00:00 **Matrix: Water**
Date Received: 10/04/17 09:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.46	U	1.0	0.46	ug/L			10/12/17 14:09	1
1,1,1-Trichloroethane	0.23	U	1.0	0.23	ug/L			10/12/17 14:09	1
1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32	ug/L			10/12/17 14:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41	ug/L			10/12/17 14:09	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/12/17 14:09	1
1,1-Dichloroethene	0.27	U	1.0	0.27	ug/L			10/12/17 14:09	1
1,1-Dichloropropene	0.28	U	1.0	0.28	ug/L			10/12/17 14:09	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/12/17 14:09	1
1,2,3-Trichloropropane	0.54	U	1.0	0.54	ug/L			10/12/17 14:09	1
1,2,3-Trimethylbenzene	0.22	U	5.0	0.22	ug/L			10/12/17 14:09	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/12/17 14:09	1
1,2,4-Trimethylbenzene	0.24	U	1.0	0.24	ug/L			10/12/17 14:09	1
1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47	ug/L			10/12/17 14:09	1
1,2-Dichlorobenzene	0.26	U	1.0	0.26	ug/L			10/12/17 14:09	1
1,2-Dichloroethane	0.30	U	1.0	0.30	ug/L			10/12/17 14:09	1
1,2-Dichloropropane	0.30	U	1.0	0.30	ug/L			10/12/17 14:09	1
1,3-Dichlorobenzene	0.32	U	1.0	0.32	ug/L			10/12/17 14:09	1
1,3-Dichloropropane	0.29	U	1.0	0.29	ug/L			10/12/17 14:09	1
1,4-Dichlorobenzene	0.23	U	1.0	0.23	ug/L			10/12/17 14:09	1
2,2-Dichloropropane	0.34	U	1.0	0.34	ug/L			10/12/17 14:09	1
2-Butanone (MEK)	1.0	U	10	1.0	ug/L			10/12/17 14:09	1
2-Chloroethyl vinyl ether	0.65	U	10	0.65	ug/L			10/12/17 14:09	1
2-Chlorotoluene	0.28	U	1.0	0.28	ug/L			10/12/17 14:09	1
2-Hexanone	1.2	U	10	1.2	ug/L			10/12/17 14:09	1
4-Chlorotoluene	0.23	U	1.0	0.23	ug/L			10/12/17 14:09	1
p-Isopropyltoluene	0.29	U	1.0	0.29	ug/L			10/12/17 14:09	1
4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71	ug/L			10/12/17 14:09	1
Acetone	**2.3**	**J**	10	1.8	ug/L			10/12/17 14:09	1
Benzene	0.28	U	1.0	0.28	ug/L			10/12/17 14:09	1
Bromobenzene	0.31	U	1.0	0.31	ug/L			10/12/17 14:09	1
Bromoform	0.43	U	1.0	0.43	ug/L			10/12/17 14:09	1
Bromomethane	0.42	U	1.0	0.42	ug/L			10/12/17 14:09	1
Carbon disulfide	0.34	U	1.0	0.34	ug/L			10/12/17 14:09	1
Carbon tetrachloride	0.35	U	1.0	0.35	ug/L			10/12/17 14:09	1
Chlorobenzene	0.32	U	1.0	0.32	ug/L			10/12/17 14:09	1
Dibromochloromethane	0.25	U	1.0	0.25	ug/L			10/12/17 14:09	1
Chloroethane	0.41	U	1.0	0.41	ug/L			10/12/17 14:09	1
Chloroform	0.31	U	1.0	0.31	ug/L			10/12/17 14:09	1
Chloromethane	0.43	U	1.0	0.43	ug/L			10/12/17 14:09	1
cis-1,2-Dichloroethene	0.30	U	1.0	0.30	ug/L			10/12/17 14:09	1
cis-1,3-Dichloropropene	0.26	U	1.0	0.26	ug/L			10/12/17 14:09	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			10/12/17 14:09	1
Bromochloromethane	0.47	U	1.0	0.47	ug/L			10/12/17 14:09	1
Dichlorodifluoromethane	0.50	U	1.0	0.50	ug/L			10/12/17 14:09	1
Bromodichloromethane	0.30	U	1.0	0.30	ug/L			10/12/17 14:09	1
tert-Butyl alcohol (TBA)	4.6	U	50	4.6	ug/L			10/12/17 14:09	1
Ethylbenzene	0.26	U	1.0	0.26	ug/L			10/12/17 14:09	1
Hexachlorobutadiene	**0.78**	**J B**	1.0	0.36	ug/L			10/12/17 14:09	1
Diisopropyl ether	0.44	U	10	0.44	ug/L			10/12/17 14:09	1

Client Sample ID: TB-100317 — Lab Sample ID: 240-85941-1

Date Collected: 10/03/17 00:00 — **Matrix: Water**
Date Received: 10/04/17 09:45

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	0.21	U	1.0	0.21	ug/L			10/12/17 14:09	1
Methyl tert-butyl ether	0.27	U	1.0	0.27	ug/L			10/12/17 14:09	1
Methylene Chloride	0.53	U	1.0	0.53	ug/L			10/12/17 14:09	1
m-Xylene & p-Xylene	0.24	U	2.0	0.24	ug/L			10/12/17 14:09	1
Naphthalene	0.25	U	1.0	0.25	ug/L			10/12/17 14:09	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			10/12/17 14:09	1
N-Propylbenzene	0.45	U	1.0	0.45	ug/L			10/12/17 14:09	1
o-Xylene	0.28	U	1.0	0.28	ug/L			10/12/17 14:09	1
sec-Butylbenzene	0.27	U	1.0	0.27	ug/L			10/12/17 14:09	1
Styrene	0.23	U	1.0	0.23	ug/L			10/12/17 14:09	1
Tert-amyl methyl ether	0.29	U	5.0	0.29	ug/L			10/12/17 14:09	1
Ethyl t-butyl ether	0.35	U	5.0	0.35	ug/L			10/12/17 14:09	1
Tetrachloroethene	0.30	U	1.0	0.30	ug/L			10/12/17 14:09	1
Toluene	0.23	U	1.0	0.23	ug/L			10/12/17 14:09	1
trans-1,2-Dichloroethene	0.29	U	1.0	0.29	ug/L			10/12/17 14:09	1
trans-1,3-Dichloropropene	0.31	U	1.0	0.31	ug/L			10/12/17 14:09	1
Trichloroethene	0.33	U	1.0	0.33	ug/L			10/12/17 14:09	1
Trichlorofluoromethane	0.50	U	1.0	0.50	ug/L			10/12/17 14:09	1
Vinyl acetate	0.28	U	2.0	0.28	ug/L			10/12/17 14:09	1
Vinyl chloride	0.45	U	1.0	0.45	ug/L			10/12/17 14:09	1
Xylenes, Total	0.24	U	2.0	0.24	ug/L			10/12/17 14:09	1
tert-Butylbenzene	0.26	U	1.0	0.26	ug/L			10/12/17 14:09	1
1,2-Dibromoethane	0.23	U	1.0	0.23	ug/L			10/12/17 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*73 - 120*		*10/12/17 14:09*	*1*
Dibromofluoromethane (Surr)	*108*		*69 - 124*		*10/12/17 14:09*	*1*
4-Bromofluorobenzene (Surr)	*103*		*69 - 120*		*10/12/17 14:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 138*		*10/12/17 14:09*	*1*

Client Sample ID: WC-IS-100317 — Lab Sample ID: 240-85941-2

Date Collected: 10/03/17 08:25 — **Matrix: Solid**
Date Received: 10/04/17 09:45 — **Percent Solids: 77.4**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.44	U	6.2	0.44	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,1,1-Trichloroethane	0.28	U	6.2	0.28	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,1,2,2-Tetrachloroethane	0.32	U	6.2	0.32	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	U	6.2	0.60	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,1-Dichloroethane	0.41	U	6.2	0.41	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,1-Dichloroethene	0.67	U	6.2	0.67	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,1-Dichloropropene	0.23	U	6.2	0.23	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2,3-Trichlorobenzene	0.43	U	6.2	0.43	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2,3-Trichloropropane	0.48	U	6.2	0.48	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2,3-Trimethylbenzene	0.12	U	6.2	0.12	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2,4-Trichlorobenzene	0.30	U	6.2	0.30	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2,4-Trimethylbenzene	0.31	U	6.2	0.31	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2-Dibromo-3-Chloropropane	0.84	U	12	0.84	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2-Dichlorobenzene	0.27	U	6.2	0.27	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1

Client Sample ID: WC-IS-100317 **Lab Sample ID: 240-85941-2**
Date Collected: 10/03/17 08:25 **Matrix: Solid**
Date Received: 10/04/17 09:45 **Percent Solids: 77.4**

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.36	U	6.2	0.36	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2-Dichloropropane	0.38	U	6.2	0.38	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,3-Dichlorobenzene	0.36	U	6.2	0.36	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,3-Dichloropropane	0.28	U	6.2	0.28	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,4-Dichlorobenzene	0.43	U	6.2	0.43	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
2,2-Dichloropropane	0.37	U	6.2	0.37	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
2-Butanone (MEK)	**1.7**	**J**	25	1.6	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
2-Chloroethyl vinyl ether	3.5	U	62	3.5	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
2-Chlorotoluene	0.46	U	6.2	0.46	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
2-Hexanone	0.72	U	25	0.72	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
4-Chlorotoluene	0.30	U	6.2	0.30	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
p-Isopropyltoluene	0.22	U	6.2	0.22	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
4-Methyl-2-pentanone (MIBK)	1.1	U	25	1.1	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Acetone	**12**	**J**	25	3.8	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Benzene	0.39	U	6.2	0.39	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Bromobenzene	0.33	U	6.2	0.33	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Bromoform	0.49	U	6.2	0.49	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Bromomethane	0.73	U	6.2	0.73	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Carbon disulfide	**0.28**	**J B**	6.2	0.26	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Carbon tetrachloride	0.31	U	6.2	0.31	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Chlorobenzene	0.41	U	6.2	0.41	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Dibromochloromethane	0.37	U	6.2	0.37	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Chloroethane	0.47	U	6.2	0.47	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Chloroform	0.28	U	6.2	0.28	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Chloromethane	0.47	U	6.2	0.47	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
cis-1,2-Dichloroethene	0.35	U	6.2	0.35	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
cis-1,3-Dichloropropene	0.32	U	6.2	0.32	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Dibromomethane	0.47	U	6.2	0.47	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Bromochloromethane	0.44	U	6.2	0.44	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Dichlorodifluoromethane	0.43	U	6.2	0.43	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Bromodichloromethane	0.41	U	6.2	0.41	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
tert-Butyl alcohol (TBA)	2.9	U	250	2.9	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Ethylbenzene	0.33	U	6.2	0.33	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Hexachlorobutadiene	0.54	U	6.2	0.54	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Diisopropyl ether	0.30	U	12	0.30	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Isopropylbenzene	0.25	U	6.2	0.25	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Methyl tert-butyl ether	0.33	U	6.2	0.33	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Methylene Chloride	0.30	U	6.2	0.30	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
m-Xylene & p-Xylene	0.49	U	12	0.49	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Naphthalene	0.41	U	6.2	0.41	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
n-Butylbenzene	0.31	U	6.2	0.31	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
N-Propylbenzene	0.35	U	6.2	0.35	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
o-Xylene	0.27	U	6.2	0.27	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
sec-Butylbenzene	0.23	U	6.2	0.23	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Styrene	0.33	U	6.2	0.33	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Tert-amyl methyl ether	0.26	U	6.2	0.26	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Ethyl t-butyl ether	0.16	U	6.2	0.16	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Tetrachloroethene	0.46	U	6.2	0.46	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Toluene	0.42	U	6.2	0.42	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1

Client Sample ID: WC-IS-100317 **Lab Sample ID: 240-85941-2**
Date Collected: 10/03/17 08:25 **Matrix: Solid**
Date Received: 10/04/17 09:45 **Percent Solids: 77.4**

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.47	U	6.2	0.47	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
trans-1,3-Dichloropropene	0.26	U	6.2	0.26	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Trichloroethene	0.51	U	6.2	0.51	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Trichlorofluoromethane	0.30	U	6.2	0.30	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Vinyl acetate	1.1	U F1	12	1.1	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Vinyl chloride	0.35	U	6.2	0.35	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
Xylenes, Total	0.49	U	12	0.49	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
tert-Butylbenzene	0.26	U	6.2	0.26	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1
1,2-Dibromoethane	0.43	U	6.2	0.43	ug/Kg	☼	10/11/17 01:40	10/11/17 08:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*66 - 125*	*10/11/17 01:40*	*10/11/17 08:28*	*1*
Dibromofluoromethane (Surr)	*86*		*43 - 131*	*10/11/17 01:40*	*10/11/17 08:28*	*1*
4-Bromofluorobenzene (Surr)	*95*		*61 - 132*	*10/11/17 01:40*	*10/11/17 08:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 127*	*10/11/17 01:40*	*10/11/17 08:28*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	30	U	62	30	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1
Aroclor-1221	29	U	62	29	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1
Aroclor-1232	20	U	62	20	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1
Aroclor-1242	25	U	62	25	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1
Aroclor-1248	21	U	62	21	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1
Aroclor-1254	17	U	62	17	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1
Aroclor-1260	22	U	62	22	ug/Kg	☼	10/05/17 08:47	10/06/17 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*14 - 128*	*10/05/17 08:47*	*10/06/17 20:33*	*1*
DCB Decachlorobiphenyl	*69*		*10 - 132*	*10/05/17 08:47*	*10/06/17 20:33*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0049**	**J B**	0.050	0.0033	mg/L		10/13/17 14:00	10/17/17 00:21	1
Barium	**0.43**	**J**	0.50	0.0024	mg/L		10/13/17 14:00	10/17/17 00:21	1
Cadmium	0.00029	U	0.050	0.00029	mg/L		10/13/17 14:00	10/17/17 00:21	1
Chromium	**0.0054**	**J B**	0.050	0.00055	mg/L		10/13/17 14:00	10/17/17 00:21	1
Lead	0.0019	U	0.050	0.0019	mg/L		10/13/17 14:00	10/17/17 00:21	1
Selenium	0.0051	U	0.050	0.0051	mg/L		10/13/17 14:00	10/17/17 00:21	1
Silver	0.00092	U	0.050	0.00092	mg/L		10/13/17 14:00	10/17/17 00:21	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	U	0.0020	0.00013	mg/L		10/13/17 14:00	10/17/17 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	**>200**		1.00	1.00	Degrees F			10/05/17 16:25	1
Percent Solids	**77.4**		0.1	0.1	%			10/05/17 08:32	1
Percent Moisture	**22.6**		0.1	0.1	%			10/05/17 08:32	1

Client Sample ID: WC-IW-100317 **Lab Sample ID: 240-85941-3**
Date Collected: 10/03/17 08:00 **Matrix: Water**
Date Received: 10/04/17 09:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.46	U	1.0	0.46	ug/L			10/12/17 14:32	1
1,1,1-Trichloroethane	0.23	U	1.0	0.23	ug/L			10/12/17 14:32	1
1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32	ug/L			10/12/17 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41	ug/L			10/12/17 14:32	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/12/17 14:32	1
1,1-Dichloroethene	0.27	U	1.0	0.27	ug/L			10/12/17 14:32	1
1,1-Dichloropropene	0.28	U	1.0	0.28	ug/L			10/12/17 14:32	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/12/17 14:32	1
1,2,3-Trichloropropane	0.54	U	1.0	0.54	ug/L			10/12/17 14:32	1
1,2,3-Trimethylbenzene	0.22	U	5.0	0.22	ug/L			10/12/17 14:32	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/12/17 14:32	1
1,2,4-Trimethylbenzene	0.24	U	1.0	0.24	ug/L			10/12/17 14:32	1
1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47	ug/L			10/12/17 14:32	1
1,2-Dichlorobenzene	0.26	U	1.0	0.26	ug/L			10/12/17 14:32	1
1,2-Dichloroethane	0.30	U	1.0	0.30	ug/L			10/12/17 14:32	1
1,2-Dichloropropane	0.30	U	1.0	0.30	ug/L			10/12/17 14:32	1
1,3-Dichlorobenzene	0.32	U	1.0	0.32	ug/L			10/12/17 14:32	1
1,3-Dichloropropane	0.29	U	1.0	0.29	ug/L			10/12/17 14:32	1
1,4-Dichlorobenzene	0.23	U	1.0	0.23	ug/L			10/12/17 14:32	1
2,2-Dichloropropane	0.34	U	1.0	0.34	ug/L			10/12/17 14:32	1
2-Butanone (MEK)	1.0	U	10	1.0	ug/L			10/12/17 14:32	1
2-Chloroethyl vinyl ether	0.65	U	10	0.65	ug/L			10/12/17 14:32	1
2-Chlorotoluene	0.28	U	1.0	0.28	ug/L			10/12/17 14:32	1
2-Hexanone	1.2	U	10	1.2	ug/L			10/12/17 14:32	1
4-Chlorotoluene	0.23	U	1.0	0.23	ug/L			10/12/17 14:32	1
p-Isopropyltoluene	0.29	U	1.0	0.29	ug/L			10/12/17 14:32	1
4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71	ug/L			10/12/17 14:32	1
Acetone	**21**		10	1.8	ug/L			10/12/17 14:32	1
Benzene	0.28	U	1.0	0.28	ug/L			10/12/17 14:32	1
Bromobenzene	0.31	U	1.0	0.31	ug/L			10/12/17 14:32	1
Bromoform	0.43	U	1.0	0.43	ug/L			10/12/17 14:32	1
Bromomethane	0.42	U	1.0	0.42	ug/L			10/12/17 14:32	1
Carbon disulfide	0.34	U	1.0	0.34	ug/L			10/12/17 14:32	1
Carbon tetrachloride	0.35	U	1.0	0.35	ug/L			10/12/17 14:32	1
Chlorobenzene	0.32	U	1.0	0.32	ug/L			10/12/17 14:32	1
Dibromochloromethane	0.25	U	1.0	0.25	ug/L			10/12/17 14:32	1
Chloroethane	0.41	U	1.0	0.41	ug/L			10/12/17 14:32	1
Chloroform	0.31	U	1.0	0.31	ug/L			10/12/17 14:32	1
Chloromethane	0.43	U	1.0	0.43	ug/L			10/12/17 14:32	1
cis-1,2-Dichloroethene	0.30	U	1.0	0.30	ug/L			10/12/17 14:32	1
cis-1,3-Dichloropropene	0.26	U	1.0	0.26	ug/L			10/12/17 14:32	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			10/12/17 14:32	1
Bromochloromethane	0.47	U	1.0	0.47	ug/L			10/12/17 14:32	1
Dichlorodifluoromethane	0.50	U	1.0	0.50	ug/L			10/12/17 14:32	1
Bromodichloromethane	0.30	U	1.0	0.30	ug/L			10/12/17 14:32	1
tert-Butyl alcohol (TBA)	4.6	U	50	4.6	ug/L			10/12/17 14:32	1
Ethylbenzene	0.26	U	1.0	0.26	ug/L			10/12/17 14:32	1
Hexachlorobutadiene	0.36	U	1.0	0.36	ug/L			10/12/17 14:32	1
Diisopropyl ether	0.44	U	10	0.44	ug/L			10/12/17 14:32	1

Client Sample ID: WC-IW-100317 **Lab Sample ID: 240-85941-3**
Date Collected: 10/03/17 08:00 **Matrix: Water**
Date Received: 10/04/17 09:45

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	0.21	U	1.0	0.21	ug/L			10/12/17 14:32	1
Methyl tert-butyl ether	0.27	U	1.0	0.27	ug/L			10/12/17 14:32	1
Methylene Chloride	0.53	U	1.0	0.53	ug/L			10/12/17 14:32	1
m-Xylene & p-Xylene	0.24	U	2.0	0.24	ug/L			10/12/17 14:32	1
Naphthalene	0.25	U	1.0	0.25	ug/L			10/12/17 14:32	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			10/12/17 14:32	1
N-Propylbenzene	0.45	U	1.0	0.45	ug/L			10/12/17 14:32	1
o-Xylene	0.28	U	1.0	0.28	ug/L			10/12/17 14:32	1
sec-Butylbenzene	0.27	U	1.0	0.27	ug/L			10/12/17 14:32	1
Styrene	0.23	U	1.0	0.23	ug/L			10/12/17 14:32	1
Tert-amyl methyl ether	0.29	U	5.0	0.29	ug/L			10/12/17 14:32	1
Ethyl t-butyl ether	0.35	U	5.0	0.35	ug/L			10/12/17 14:32	1
Tetrachloroethene	0.30	U	1.0	0.30	ug/L			10/12/17 14:32	1
Toluene	0.23	U	1.0	0.23	ug/L			10/12/17 14:32	1
trans-1,2-Dichloroethene	0.29	U	1.0	0.29	ug/L			10/12/17 14:32	1
trans-1,3-Dichloropropene	0.31	U	1.0	0.31	ug/L			10/12/17 14:32	1
Trichloroethene	0.33	U	1.0	0.33	ug/L			10/12/17 14:32	1
Trichlorofluoromethane	0.50	U	1.0	0.50	ug/L			10/12/17 14:32	1
Vinyl acetate	0.28	U	2.0	0.28	ug/L			10/12/17 14:32	1
Vinyl chloride	0.45	U	1.0	0.45	ug/L			10/12/17 14:32	1
Xylenes, Total	0.24	U	2.0	0.24	ug/L			10/12/17 14:32	1
tert-Butylbenzene	0.26	U	1.0	0.26	ug/L			10/12/17 14:32	1
1,2-Dibromoethane	0.23	U	1.0	0.23	ug/L			10/12/17 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*73 - 120*		*10/12/17 14:32*	*1*
Dibromofluoromethane (Surr)	*104*		*69 - 124*		*10/12/17 14:32*	*1*
4-Bromofluorobenzene (Surr)	*99*		*69 - 120*		*10/12/17 14:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*61 - 138*		*10/12/17 14:32*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.048	U	0.096	0.048	ug/L		10/05/17 12:53	10/07/17 19:56	1
Aroclor-1221	0.087	U	0.096	0.087	ug/L		10/05/17 12:53	10/07/17 19:56	1
Aroclor-1232	0.067	U	0.096	0.067	ug/L		10/05/17 12:53	10/07/17 19:56	1
Aroclor-1242	0.058	U	0.096	0.058	ug/L		10/05/17 12:53	10/07/17 19:56	1
Aroclor-1248	0.048	U	0.096	0.048	ug/L		10/05/17 12:53	10/07/17 19:56	1
Aroclor-1254	0.029	U	0.096	0.029	ug/L		10/05/17 12:53	10/07/17 19:56	1
Aroclor-1260	0.038	U	0.096	0.038	ug/L		10/05/17 12:53	10/07/17 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*50*		*21 - 120*	*10/05/17 12:53*	*10/07/17 19:56*	*1*
DCB Decachlorobiphenyl	*20*		*10 - 120*	*10/05/17 12:53*	*10/07/17 19:56*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0033	U	0.050	0.0033	mg/L		10/06/17 14:00	10/09/17 22:05	1
Barium	**0.021**	**J B**	0.50	0.0024	mg/L		10/06/17 14:00	10/09/17 22:05	1
Cadmium	0.00029	U	0.050	0.00029	mg/L		10/06/17 14:00	10/09/17 22:05	1
Chromium	**0.0068**	**J B**	0.050	0.00055	mg/L		10/06/17 14:00	10/09/17 22:05	1

Client Sample ID: WC-IW-100317 **Lab Sample ID: 240-85941-3**
Date Collected: 10/03/17 08:00 **Matrix: Water**
Date Received: 10/04/17 09:45

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0019	U	0.050	0.0019	mg/L		10/06/17 14:00	10/09/17 22:05	1
Selenium	0.0051	U	0.050	0.0051	mg/L		10/06/17 14:00	10/09/17 22:05	1
Silver	0.00092	U	0.050	0.00092	mg/L		10/06/17 14:00	10/09/17 22:05	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	U	0.0020	0.00013	mg/L		10/06/17 14:00	10/06/17 19:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	1.00	Degrees F			10/12/17 11:07	1

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.46	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.23	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.32	ug/L	8260C
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	0.41	ug/L	8260C
1,1-Dichloroethane	1.0	0.25	ug/L	8260C
1,1-Dichloroethene	1.0	0.27	ug/L	8260C
1,1-Dichloropropene	1.0	0.28	ug/L	8260C
1,2,3-Trichlorobenzene	1.0	0.35	ug/L	8260C
1,2,3-Trichloropropane	1.0	0.54	ug/L	8260C
1,2,3-Trimethylbenzene	5.0	0.22	ug/L	8260C
1,2,4-Trichlorobenzene	1.0	0.27	ug/L	8260C
1,2,4-Trimethylbenzene	1.0	0.24	ug/L	8260C
1,2-Dibromo-3-Chloropropane	2.0	0.47	ug/L	8260C
1,2-Dibromoethane	1.0	0.23	ug/L	8260C
1,2-Dichlorobenzene	1.0	0.26	ug/L	8260C
1,2-Dichloroethane	1.0	0.30	ug/L	8260C
1,2-Dichloropropane	1.0	0.30	ug/L	8260C
1,3-Dichlorobenzene	1.0	0.32	ug/L	8260C
1,3-Dichloropropane	1.0	0.29	ug/L	8260C
1,4-Dichlorobenzene	1.0	0.23	ug/L	8260C
2,2-Dichloropropane	1.0	0.34	ug/L	8260C
2-Butanone (MEK)	10	1.0	ug/L	8260C
2-Chloroethyl vinyl ether	10	0.65	ug/L	8260C
2-Chlorotoluene	1.0	0.28	ug/L	8260C
2-Hexanone	10	1.2	ug/L	8260C
4-Chlorotoluene	1.0	0.23	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	10	0.71	ug/L	8260C
Acetone	10	1.8	ug/L	8260C
Benzene	1.0	0.28	ug/L	8260C
Bromobenzene	1.0	0.31	ug/L	8260C
Bromochloromethane	1.0	0.47	ug/L	8260C
Bromodichloromethane	1.0	0.30	ug/L	8260C
Bromoform	1.0	0.43	ug/L	8260C
Bromomethane	1.0	0.42	ug/L	8260C
Carbon disulfide	1.0	0.34	ug/L	8260C
Carbon tetrachloride	1.0	0.35	ug/L	8260C
Chlorobenzene	1.0	0.32	ug/L	8260C
Chloroethane	1.0	0.41	ug/L	8260C
Chloroform	1.0	0.31	ug/L	8260C
Chloromethane	1.0	0.43	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.30	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.26	ug/L	8260C
Dibromochloromethane	1.0	0.25	ug/L	8260C
Dibromomethane	1.0	0.46	ug/L	8260C
Dichlorodifluoromethane	1.0	0.50	ug/L	8260C
Diisopropyl ether	10	0.44	ug/L	8260C
Ethyl t-butyl ether	5.0	0.35	ug/L	8260C
Ethylbenzene	1.0	0.26	ug/L	8260C
Hexachlorobutadiene	1.0	0.36	ug/L	8260C
Isopropylbenzene	1.0	0.21	ug/L	8260C
Methyl tert-butyl ether	1.0	0.27	ug/L	8260C
Methylene Chloride	1.0	0.53	ug/L	8260C

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	RL	MDL	Units	Method
m-Xylene & p-Xylene	2.0	0.24	ug/L	8260C
Naphthalene	1.0	0.25	ug/L	8260C
n-Butylbenzene	1.0	0.21	ug/L	8260C
N-Propylbenzene	1.0	0.45	ug/L	8260C
o-Xylene	1.0	0.28	ug/L	8260C
p-Isopropyltoluene	1.0	0.29	ug/L	8260C
sec-Butylbenzene	1.0	0.27	ug/L	8260C
Styrene	1.0	0.23	ug/L	8260C
Tert-amyl methyl ether	5.0	0.29	ug/L	8260C
tert-Butyl alcohol (TBA)	50	4.6	ug/L	8260C
tert-Butylbenzene	1.0	0.26	ug/L	8260C
Tetrachloroethene	1.0	0.30	ug/L	8260C
Toluene	1.0	0.23	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.29	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.31	ug/L	8260C
Trichloroethene	1.0	0.33	ug/L	8260C
Trichlorofluoromethane	1.0	0.50	ug/L	8260C
Vinyl acetate	2.0	0.28	ug/L	8260C
Vinyl chloride	1.0	0.45	ug/L	8260C
Xylenes, Total	2.0	0.24	ug/L	8260C

Method: 8260C - Volatile Organic Compounds by GC/MS
Prep: 5030C

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	5.0	0.36	ug/Kg	8260C
1,1,1-Trichloroethane	5.0	0.23	ug/Kg	8260C
1,1,2,2-Tetrachloroethane	5.0	0.26	ug/Kg	8260C
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	0.49	ug/Kg	8260C
1,1-Dichloroethane	5.0	0.33	ug/Kg	8260C
1,1-Dichloroethene	5.0	0.54	ug/Kg	8260C
1,1-Dichloropropene	5.0	0.19	ug/Kg	8260C
1,2,3-Trichlorobenzene	5.0	0.35	ug/Kg	8260C
1,2,3-Trichloropropane	5.0	0.39	ug/Kg	8260C
1,2,3-Trimethylbenzene	5.0	0.10	ug/Kg	8260C
1,2,4-Trichlorobenzene	5.0	0.24	ug/Kg	8260C
1,2,4-Trimethylbenzene	5.0	0.25	ug/Kg	8260C
1,2-Dibromo-3-Chloropropane	10	0.68	ug/Kg	8260C
1,2-Dibromoethane	5.0	0.35	ug/Kg	8260C
1,2-Dichlorobenzene	5.0	0.22	ug/Kg	8260C
1,2-Dichloroethane	5.0	0.29	ug/Kg	8260C
1,2-Dichloropropane	5.0	0.31	ug/Kg	8260C
1,3-Dichlorobenzene	5.0	0.29	ug/Kg	8260C
1,3-Dichloropropane	5.0	0.23	ug/Kg	8260C
1,4-Dichlorobenzene	5.0	0.35	ug/Kg	8260C
2,2-Dichloropropane	5.0	0.30	ug/Kg	8260C
2-Butanone (MEK)	20	1.3	ug/Kg	8260C
2-Chloroethyl vinyl ether	50	2.8	ug/Kg	8260C
2-Chlorotoluene	5.0	0.37	ug/Kg	8260C
2-Hexanone	20	0.58	ug/Kg	8260C
4-Chlorotoluene	5.0	0.24	ug/Kg	8260C
4-Methyl-2-pentanone (MIBK)	20	0.89	ug/Kg	8260C

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Prep: 5030C

Analyte	RL	MDL	Units	Method
Acetone	20	3.1	ug/Kg	8260C
Benzene	5.0	0.32	ug/Kg	8260C
Bromobenzene	5.0	0.27	ug/Kg	8260C
Bromochloromethane	5.0	0.36	ug/Kg	8260C
Bromodichloromethane	5.0	0.33	ug/Kg	8260C
Bromoform	5.0	0.40	ug/Kg	8260C
Bromomethane	5.0	0.59	ug/Kg	8260C
Carbon disulfide	5.0	0.21	ug/Kg	8260C
Carbon tetrachloride	5.0	0.25	ug/Kg	8260C
Chlorobenzene	5.0	0.33	ug/Kg	8260C
Chloroethane	5.0	0.38	ug/Kg	8260C
Chloroform	5.0	0.23	ug/Kg	8260C
Chloromethane	5.0	0.38	ug/Kg	8260C
cis-1,2-Dichloroethene	5.0	0.28	ug/Kg	8260C
cis-1,3-Dichloropropene	5.0	0.26	ug/Kg	8260C
Dibromochloromethane	5.0	0.30	ug/Kg	8260C
Dibromomethane	5.0	0.38	ug/Kg	8260C
Dichlorodifluoromethane	5.0	0.35	ug/Kg	8260C
Diisopropyl ether	10	0.24	ug/Kg	8260C
Ethyl t-butyl ether	5.0	0.13	ug/Kg	8260C
Ethylbenzene	5.0	0.27	ug/Kg	8260C
Hexachlorobutadiene	5.0	0.44	ug/Kg	8260C
Isopropylbenzene	5.0	0.20	ug/Kg	8260C
Methyl tert-butyl ether	5.0	0.27	ug/Kg	8260C
Methylene Chloride	5.0	0.24	ug/Kg	8260C
m-Xylene & p-Xylene	10	0.40	ug/Kg	8260C
Naphthalene	5.0	0.33	ug/Kg	8260C
n-Butylbenzene	5.0	0.25	ug/Kg	8260C
N-Propylbenzene	5.0	0.28	ug/Kg	8260C
o-Xylene	5.0	0.22	ug/Kg	8260C
p-Isopropyltoluene	5.0	0.18	ug/Kg	8260C
sec-Butylbenzene	5.0	0.19	ug/Kg	8260C
Styrene	5.0	0.27	ug/Kg	8260C
Tert-amyl methyl ether	5.0	0.21	ug/Kg	8260C
tert-Butyl alcohol (TBA)	200	2.4	ug/Kg	8260C
tert-Butylbenzene	5.0	0.21	ug/Kg	8260C
Tetrachloroethene	5.0	0.37	ug/Kg	8260C
Toluene	5.0	0.34	ug/Kg	8260C
trans-1,2-Dichloroethene	5.0	0.38	ug/Kg	8260C
trans-1,3-Dichloropropene	5.0	0.21	ug/Kg	8260C
Trichloroethene	5.0	0.41	ug/Kg	8260C
Trichlorofluoromethane	5.0	0.24	ug/Kg	8260C
Vinyl acetate	10	0.87	ug/Kg	8260C
Vinyl chloride	5.0	0.28	ug/Kg	8260C
Xylenes, Total	10	0.40	ug/Kg	8260C

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Prep: 3520C

Analyte	RL	MDL	Units	Method
Aroclor-1016	0.10	0.050	ug/L	8082A

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Prep: 3520C

Analyte	RL	MDL	Units	Method
Aroclor-1221	0.10	0.090	ug/L	8082A
Aroclor-1232	0.10	0.070	ug/L	8082A
Aroclor-1242	0.10	0.060	ug/L	8082A
Aroclor-1248	0.10	0.050	ug/L	8082A
Aroclor-1254	0.10	0.030	ug/L	8082A
Aroclor-1260	0.10	0.040	ug/L	8082A

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Prep: 3540C

Analyte	RL	MDL	Units	Method
Aroclor-1016	50	24	ug/Kg	8082A
Aroclor-1221	50	23	ug/Kg	8082A
Aroclor-1232	50	16	ug/Kg	8082A
Aroclor-1242	50	20	ug/Kg	8082A
Aroclor-1248	50	17	ug/Kg	8082A
Aroclor-1254	50	14	ug/Kg	8082A
Aroclor-1260	50	18	ug/Kg	8082A

Method: 6010B - Metals (ICP) - TCLP

Prep: 3010A
Leach: 1311

Analyte	RL	MDL	Units	Method
Arsenic	0.050	0.0033	mg/L	6010B
Arsenic	0.050	0.0033	mg/L	6010B
Barium	0.50	0.0024	mg/L	6010B
Barium	0.50	0.0024	mg/L	6010B
Cadmium	0.050	0.00029	mg/L	6010B
Cadmium	0.050	0.00029	mg/L	6010B
Chromium	0.050	0.00055	mg/L	6010B
Chromium	0.050	0.00055	mg/L	6010B
Lead	0.050	0.0019	mg/L	6010B
Lead	0.050	0.0019	mg/L	6010B
Selenium	0.050	0.0051	mg/L	6010B
Selenium	0.050	0.0051	mg/L	6010B
Silver	0.050	0.00092	mg/L	6010B
Silver	0.050	0.00092	mg/L	6010B

Method: 7470A - Mercury (CVAA) - TCLP

Prep: 7470A
Leach: 1311

Analyte	RL	MDL	Units	Method
Mercury	0.0020	0.00013	mg/L	7470A
Mercury	0.0020	0.00013	mg/L	7470A

General Chemistry

Analyte	RL	MDL	Units	Method
Flashpoint	1.00	1.00	Degrees F	1010A
Flashpoint	1.00	1.00	Degrees F	1010A

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

General Chemistry (Continued)

Analyte	RL	MDL	Units	Method
Percent Moisture	0.1	0.1	%	Moisture
Percent Solids	0.1	0.1	%	Moisture

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(66-125)	(43-131)	(61-132)	(61-127)
240-85941-2	WC-IS-100317	94	86	95	84
240-85941-2 MS	WC-IS-100317	96	87	98	81
240-85941-2 MSD	WC-IS-100317	96	91	100	85
LCS 240-298471/6	Lab Control Sample	98	93	106	88
LCS 240-298471/7	Lab Control Sample	95	89	99	84
MB 240-298471/8	Method Blank	94	90	99	87

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(73-120)	(69-124)	(69-120)	(61-138)
240-85941-1	TB-100317	94	108	103	103
240-85941-3	WC-IW-100317	93	104	99	102
240-86263-B-4 MS	Matrix Spike	95	102	99	97
240-86263-B-4 MSD	Matrix Spike Duplicate	99	102	103	95
LCS 240-298687/5	Lab Control Sample	101	94	101	103
MB 240-298687/7	Method Blank	91	105	99	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-85941-2	WC-IS-100317	56	69
240-85941-2 MS	WC-IS-100317	69	88
240-85941-2 MSD	WC-IS-100317	68	80
LCS 240-297693/11-A	Lab Control Sample	78	105
MB 240-297693/10-A	Method Blank	78	102

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(21-120)	(10-120)
240-85941-3	WC-IW-100317	50	20
240-85882-AU-1-A MSD	Matrix Spike Duplicate	59	38
240-85882-BB-1-A MS	Matrix Spike	60	34
LCS 240-297775/22-A	Lab Control Sample	60	69
MB 240-297775/21-A	Method Blank	58	73

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-298471/8
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.36	U	5.0	0.36	ug/Kg			10/11/17 01:56	1
1,1,1-Trichloroethane	0.23	U	5.0	0.23	ug/Kg			10/11/17 01:56	1
1,1,2,2-Tetrachloroethane	0.26	U	5.0	0.26	ug/Kg			10/11/17 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	U	5.0	0.49	ug/Kg			10/11/17 01:56	1
1,1-Dichloroethane	0.33	U	5.0	0.33	ug/Kg			10/11/17 01:56	1
1,1-Dichloroethene	0.54	U	5.0	0.54	ug/Kg			10/11/17 01:56	1
1,1-Dichloropropene	0.19	U	5.0	0.19	ug/Kg			10/11/17 01:56	1
1,2,3-Trichlorobenzene	0.35	U	5.0	0.35	ug/Kg			10/11/17 01:56	1
1,2,3-Trichloropropane	0.39	U	5.0	0.39	ug/Kg			10/11/17 01:56	1
1,2,3-Trimethylbenzene	0.10	U	5.0	0.10	ug/Kg			10/11/17 01:56	1
1,2,4-Trichlorobenzene	0.24	U	5.0	0.24	ug/Kg			10/11/17 01:56	1
1,2,4-Trimethylbenzene	0.25	U	5.0	0.25	ug/Kg			10/11/17 01:56	1
1,2-Dibromo-3-Chloropropane	0.68	U	10	0.68	ug/Kg			10/11/17 01:56	1
1,2-Dichlorobenzene	0.22	U	5.0	0.22	ug/Kg			10/11/17 01:56	1
1,2-Dichloroethane	0.29	U	5.0	0.29	ug/Kg			10/11/17 01:56	1
1,2-Dichloropropane	0.31	U	5.0	0.31	ug/Kg			10/11/17 01:56	1
1,3-Dichlorobenzene	0.29	U	5.0	0.29	ug/Kg			10/11/17 01:56	1
1,3-Dichloropropane	0.23	U	5.0	0.23	ug/Kg			10/11/17 01:56	1
1,4-Dichlorobenzene	0.35	U	5.0	0.35	ug/Kg			10/11/17 01:56	1
2,2-Dichloropropane	0.30	U	5.0	0.30	ug/Kg			10/11/17 01:56	1
2-Butanone (MEK)	1.3	U	20	1.3	ug/Kg			10/11/17 01:56	1
2-Chloroethyl vinyl ether	2.8	U	50	2.8	ug/Kg			10/11/17 01:56	1
2-Chlorotoluene	0.37	U	5.0	0.37	ug/Kg			10/11/17 01:56	1
2-Hexanone	0.58	U	20	0.58	ug/Kg			10/11/17 01:56	1
4-Chlorotoluene	0.24	U	5.0	0.24	ug/Kg			10/11/17 01:56	1
p-Isopropyltoluene	0.18	U	5.0	0.18	ug/Kg			10/11/17 01:56	1
4-Methyl-2-pentanone (MIBK)	0.89	U	20	0.89	ug/Kg			10/11/17 01:56	1
Acetone	3.1	U	20	3.1	ug/Kg			10/11/17 01:56	1
Benzene	0.32	U	5.0	0.32	ug/Kg			10/11/17 01:56	1
Bromobenzene	0.27	U	5.0	0.27	ug/Kg			10/11/17 01:56	1
Bromoform	0.40	U	5.0	0.40	ug/Kg			10/11/17 01:56	1
Bromomethane	0.59	U	5.0	0.59	ug/Kg			10/11/17 01:56	1
Carbon disulfide	0.241	J	5.0	0.21	ug/Kg			10/11/17 01:56	1
Carbon tetrachloride	0.25	U	5.0	0.25	ug/Kg			10/11/17 01:56	1
Chlorobenzene	0.33	U	5.0	0.33	ug/Kg			10/11/17 01:56	1
Dibromochloromethane	0.30	U	5.0	0.30	ug/Kg			10/11/17 01:56	1
Chloroethane	0.38	U	5.0	0.38	ug/Kg			10/11/17 01:56	1
Chloroform	0.23	U	5.0	0.23	ug/Kg			10/11/17 01:56	1
Chloromethane	0.38	U	5.0	0.38	ug/Kg			10/11/17 01:56	1
cis-1,2-Dichloroethene	0.28	U	5.0	0.28	ug/Kg			10/11/17 01:56	1
cis-1,3-Dichloropropene	0.26	U	5.0	0.26	ug/Kg			10/11/17 01:56	1
Dibromomethane	0.38	U	5.0	0.38	ug/Kg			10/11/17 01:56	1
Bromochloromethane	0.36	U	5.0	0.36	ug/Kg			10/11/17 01:56	1
Dichlorodifluoromethane	0.35	U	5.0	0.35	ug/Kg			10/11/17 01:56	1
Bromodichloromethane	0.33	U	5.0	0.33	ug/Kg			10/11/17 01:56	1
tert-Butyl alcohol (TBA)	2.4	U	200	2.4	ug/Kg			10/11/17 01:56	1
Ethylbenzene	0.27	U	5.0	0.27	ug/Kg			10/11/17 01:56	1
Hexachlorobutadiene	0.44	U	5.0	0.44	ug/Kg			10/11/17 01:56	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-298471/8 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 298471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diisopropyl ether	0.24	U	10	0.24	ug/Kg			10/11/17 01:56	1
Isopropylbenzene	0.20	U	5.0	0.20	ug/Kg			10/11/17 01:56	1
Methyl tert-butyl ether	0.27	U	5.0	0.27	ug/Kg			10/11/17 01:56	1
Methylene Chloride	0.24	U	5.0	0.24	ug/Kg			10/11/17 01:56	1
m-Xylene & p-Xylene	0.40	U	10	0.40	ug/Kg			10/11/17 01:56	1
Naphthalene	0.33	U	5.0	0.33	ug/Kg			10/11/17 01:56	1
n-Butylbenzene	0.25	U	5.0	0.25	ug/Kg			10/11/17 01:56	1
N-Propylbenzene	0.28	U	5.0	0.28	ug/Kg			10/11/17 01:56	1
o-Xylene	0.22	U	5.0	0.22	ug/Kg			10/11/17 01:56	1
sec-Butylbenzene	0.19	U	5.0	0.19	ug/Kg			10/11/17 01:56	1
Styrene	0.27	U	5.0	0.27	ug/Kg			10/11/17 01:56	1
Tert-amyl methyl ether	0.21	U	5.0	0.21	ug/Kg			10/11/17 01:56	1
Ethyl t-butyl ether	0.13	U	5.0	0.13	ug/Kg			10/11/17 01:56	1
Tetrachloroethene	0.37	U	5.0	0.37	ug/Kg			10/11/17 01:56	1
Toluene	0.34	U	5.0	0.34	ug/Kg			10/11/17 01:56	1
trans-1,2-Dichloroethene	0.38	U	5.0	0.38	ug/Kg			10/11/17 01:56	1
trans-1,3-Dichloropropene	0.21	U	5.0	0.21	ug/Kg			10/11/17 01:56	1
Trichloroethene	0.41	U	5.0	0.41	ug/Kg			10/11/17 01:56	1
Trichlorofluoromethane	0.24	U	5.0	0.24	ug/Kg			10/11/17 01:56	1
Vinyl acetate	0.87	U	10	0.87	ug/Kg			10/11/17 01:56	1
Vinyl chloride	0.28	U	5.0	0.28	ug/Kg			10/11/17 01:56	1
Xylenes, Total	0.40	U	10	0.40	ug/Kg			10/11/17 01:56	1
tert-Butylbenzene	0.21	U	5.0	0.21	ug/Kg			10/11/17 01:56	1
1,2-Dibromoethane	0.35	U	5.0	0.35	ug/Kg			10/11/17 01:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*66 - 125*		*10/11/17 01:56*	*1*
Dibromofluoromethane (Surr)	*90*		*43 - 131*		*10/11/17 01:56*	*1*
4-Bromofluorobenzene (Surr)	*99*		*61 - 132*		*10/11/17 01:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 127*		*10/11/17 01:56*	*1*

Lab Sample ID: LCS 240-298471/6 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 298471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	53.7		ug/Kg		107	64 - 130
1,1,1-Trichloroethane	50.0	50.9		ug/Kg		102	60 - 136
1,1,2,2-Tetrachloroethane	50.0	53.7		ug/Kg		107	78 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.9		ug/Kg		102	64 - 125
1,1-Dichloroethane	50.0	49.1		ug/Kg		98	72 - 120
1,1-Dichloroethene	50.0	51.8		ug/Kg		104	58 - 130
1,1-Dichloropropene	50.0	53.4		ug/Kg		107	70 - 126
1,2,3-Trichlorobenzene	50.0	47.2		ug/Kg		94	59 - 121
1,2,3-Trichloropropane	50.0	51.0		ug/Kg		102	79 - 120
1,2,4-Trichlorobenzene	50.0	50.4		ug/Kg		101	60 - 124
1,2,4-Trimethylbenzene	50.0	52.8		ug/Kg		106	78 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-298471/6
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	57.0		ug/Kg		114	40 - 133
1,2-Dichlorobenzene	50.0	48.8		ug/Kg		98	75 - 120
1,2-Dichloroethane	50.0	46.3		ug/Kg		93	71 - 120
1,2-Dichloropropane	50.0	52.9		ug/Kg		106	78 - 122
1,3-Dichlorobenzene	50.0	48.9		ug/Kg		98	72 - 120
1,3-Dichloropropane	50.0	52.3		ug/Kg		105	78 - 120
1,4-Dichlorobenzene	50.0	47.0		ug/Kg		94	71 - 120
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	40 - 150
2-Butanone (MEK)	100	98.7		ug/Kg		99	51 - 120
2-Chloroethyl vinyl ether	50.0	61.7		ug/Kg		123	61 - 143
2-Chlorotoluene	50.0	52.3		ug/Kg		105	78 - 120
2-Hexanone	100	117		ug/Kg		117	52 - 129
4-Chlorotoluene	50.0	51.8		ug/Kg		104	75 - 120
p-Isopropyltoluene	50.0	54.9		ug/Kg		110	76 - 126
4-Methyl-2-pentanone (MIBK)	100	117		ug/Kg		117	65 - 131
Acetone	100	101		ug/Kg		101	24 - 125
Benzene	50.0	50.3		ug/Kg		101	77 - 120
Bromobenzene	50.0	51.2		ug/Kg		102	75 - 120
Bromoform	50.0	55.8		ug/Kg		112	40 - 140
Bromomethane	50.0	52.5		ug/Kg		105	10 - 153
Carbon disulfide	50.0	51.9		ug/Kg		104	17 - 163
Carbon tetrachloride	50.0	52.4		ug/Kg		105	43 - 144
Chlorobenzene	50.0	49.3		ug/Kg		99	76 - 120
Dibromochloromethane	50.0	58.9		ug/Kg		118	46 - 125
Chloroethane	50.0	39.1		ug/Kg		78	10 - 166
Chloroform	50.0	47.5		ug/Kg		95	74 - 120
Chloromethane	50.0	44.7		ug/Kg		89	41 - 124
cis-1,2-Dichloroethene	50.0	49.6		ug/Kg		99	78 - 120
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	66 - 126
Dibromomethane	50.0	48.9		ug/Kg		98	76 - 120
Bromochloromethane	50.0	50.1		ug/Kg		100	76 - 120
Dichlorodifluoromethane	50.0	50.5		ug/Kg		101	15 - 127
Bromodichloromethane	50.0	54.6		ug/Kg		109	61 - 132
tert-Butyl alcohol (TBA)	500	583		ug/Kg		117	39 - 141
Ethylbenzene	50.0	52.8		ug/Kg		106	76 - 120
Hexachlorobutadiene	50.0	48.3		ug/Kg		97	62 - 133
Isopropylbenzene	50.0	54.6		ug/Kg		109	76 - 124
Methyl tert-butyl ether	50.0	52.1		ug/Kg		104	68 - 129
Methylene Chloride	50.0	45.8		ug/Kg		92	64 - 126
m-Xylene & p-Xylene	50.0	54.9		ug/Kg		110	78 - 120
Naphthalene	50.0	54.9		ug/Kg		110	68 - 123
n-Butylbenzene	50.0	53.0		ug/Kg		106	72 - 130
N-Propylbenzene	50.0	54.4		ug/Kg		109	77 - 126
o-Xylene	50.0	52.4		ug/Kg		105	77 - 120
sec-Butylbenzene	50.0	53.1		ug/Kg		106	78 - 125
Styrene	50.0	54.3		ug/Kg		109	80 - 120
Tetrachloroethene	50.0	51.2		ug/Kg		102	68 - 122
Toluene	50.0	51.8		ug/Kg		104	74 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-298471/6
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	50.0	52.6		ug/Kg		105	74 - 124
trans-1,3-Dichloropropene	50.0	51.9		ug/Kg		104	55 - 121
Trichloroethene	50.0	51.1		ug/Kg		102	73 - 123
Trichlorofluoromethane	50.0	44.9		ug/Kg		90	28 - 152
Vinyl acetate	50.0	55.6		ug/Kg		111	36 - 132
Vinyl chloride	50.0	43.0		ug/Kg		86	49 - 131
Xylenes, Total	100	107		ug/Kg		107	78 - 120
tert-Butylbenzene	50.0	50.9		ug/Kg		102	75 - 125
1,2-Dibromoethane	50.0	55.6		ug/Kg		111	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*66 - 125*
Dibromofluoromethane (Surr)	*93*		*43 - 131*
4-Bromofluorobenzene (Surr)	*106*		*61 - 132*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 127*

Lab Sample ID: LCS 240-298471/7
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*66 - 125*
Dibromofluoromethane (Surr)	*89*		*43 - 131*
4-Bromofluorobenzene (Surr)	*99*		*61 - 132*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 127*

Lab Sample ID: 240-85941-2 MS
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: WC-IS-100317
Prep Type: Total/NA
Prep Batch: 298472

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.44	U	30.7	24.4		ug/Kg	☼	80	11 - 129
1,1,1-Trichloroethane	0.28	U	30.7	24.4		ug/Kg	☼	79	33 - 130
1,1,2,2-Tetrachloroethane	0.32	U	30.7	28.7		ug/Kg	☼	93	16 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	U	30.7	22.6		ug/Kg	☼	74	26 - 130
1,1-Dichloroethane	0.41	U	30.7	24.3		ug/Kg	☼	79	41 - 122
1,1-Dichloroethene	0.67	U	30.7	24.7		ug/Kg	☼	81	30 - 139
1,1-Dichloropropene	0.23	U	30.7	25.1		ug/Kg	☼	82	33 - 120
1,2,3-Trichlorobenzene	0.43	U	30.7	15.1		ug/Kg	☼	49	10 - 128
1,2,3-Trichloropropane	0.48	U	30.7	26.1		ug/Kg	☼	85	10 - 178
1,2,4-Trichlorobenzene	0.30	U	30.7	16.2		ug/Kg	☼	53	10 - 120
1,2,4-Trimethylbenzene	0.31	U	30.7	24.2		ug/Kg	☼	79	10 - 146
1,2-Dibromo-3-Chloropropane	0.84	U	30.7	25.3		ug/Kg	☼	83	10 - 128
1,2-Dichlorobenzene	0.27	U	30.7	21.4		ug/Kg	☼	70	10 - 120
1,2-Dichloroethane	0.36	U	30.7	23.3		ug/Kg	☼	76	35 - 122
1,2-Dichloropropane	0.38	U	30.7	26.1		ug/Kg	☼	85	38 - 130
1,3-Dichlorobenzene	0.36	U	30.7	21.9		ug/Kg	☼	71	10 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-85941-2 MS
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: WC-IS-100317
Prep Type: Total/NA
Prep Batch: 298472

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	0.28	U	30.7	25.3		ug/Kg	☼	82	34 - 121
1,4-Dichlorobenzene	0.43	U	30.7	21.3		ug/Kg	☼	69	10 - 120
2,2-Dichloropropane	0.37	U	30.7	20.7		ug/Kg	☼	68	27 - 131
2-Butanone (MEK)	1.7	J	61.4	48.9		ug/Kg	☼	77	29 - 127
2-Chloroethyl vinyl ether	3.5	U	30.7	24.2	J	ug/Kg	☼	79	10 - 134
2-Chlorotoluene	0.46	U	30.7	25.1		ug/Kg	☼	82	10 - 142
2-Hexanone	0.72	U	61.4	54.7		ug/Kg	☼	89	21 - 136
4-Chlorotoluene	0.30	U	30.7	23.8		ug/Kg	☼	77	10 - 135
p-Isopropyltoluene	0.22	U	30.7	23.8		ug/Kg	☼	78	10 - 129
4-Methyl-2-pentanone (MIBK)	1.1	U	61.4	55.5		ug/Kg	☼	90	16 - 164
Acetone	12	J	61.4	70.5		ug/Kg	☼	95	15 - 127
Benzene	0.39	U	30.7	24.9		ug/Kg	☼	81	33 - 127
Bromobenzene	0.33	U	30.7	25.4		ug/Kg	☼	83	10 - 141
Bromoform	0.49	U	30.7	22.9		ug/Kg	☼	75	10 - 120
Bromomethane	0.73	U	30.7	24.1		ug/Kg	☼	78	13 - 138
Carbon disulfide	0.28	J B	30.7	22.9	B	ug/Kg	☼	74	15 - 131
Carbon tetrachloride	0.31	U	30.7	22.9		ug/Kg	☼	75	17 - 127
Chlorobenzene	0.41	U	30.7	23.6		ug/Kg	☼	77	15 - 122
Dibromochloromethane	0.37	U	30.7	25.5		ug/Kg	☼	83	19 - 120
Chloroethane	0.47	U	30.7	19.7		ug/Kg	☼	64	15 - 148
Chloroform	0.28	U	30.7	23.5		ug/Kg	☼	77	41 - 121
Chloromethane	0.47	U	30.7	22.4		ug/Kg	☼	73	33 - 122
cis-1,2-Dichloroethene	0.35	U	30.7	24.6		ug/Kg	☼	80	46 - 120
cis-1,3-Dichloropropene	0.32	U	30.7	23.9		ug/Kg	☼	78	13 - 127
Dibromomethane	0.47	U	30.7	23.6		ug/Kg	☼	77	24 - 126
Bromochloromethane	0.44	U	30.7	24.9		ug/Kg	☼	81	37 - 123
Dichlorodifluoromethane	0.43	U	30.7	19.6		ug/Kg	☼	64	10 - 126
Bromodichloromethane	0.41	U	30.7	25.4		ug/Kg	☼	83	22 - 127
tert-Butyl alcohol (TBA)	2.9	U	307	275		ug/Kg	☼	89	59 - 128
Ethylbenzene	0.33	U	30.7	25.4		ug/Kg	☼	83	18 - 126
Hexachlorobutadiene	0.54	U	30.7	16.4		ug/Kg	☼	54	10 - 120
Isopropylbenzene	0.25	U	30.7	24.2		ug/Kg	☼	79	10 - 128
Methyl tert-butyl ether	0.33	U	30.7	24.6		ug/Kg	☼	80	49 - 134
Methylene Chloride	0.30	U	30.7	20.0		ug/Kg	☼	65	34 - 134
m-Xylene & p-Xylene	0.49	U	30.7	24.8		ug/Kg	☼	81	10 - 136
Naphthalene	0.41	U	30.7	19.2		ug/Kg	☼	62	10 - 153
n-Butylbenzene	0.31	U	30.7	21.1		ug/Kg	☼	69	10 - 120
N-Propylbenzene	0.35	U	30.7	25.4		ug/Kg	☼	83	10 - 146
o-Xylene	0.27	U	30.7	25.0		ug/Kg	☼	82	17 - 128
sec-Butylbenzene	0.23	U	30.7	24.3		ug/Kg	☼	79	10 - 132
Styrene	0.33	U	30.7	22.9		ug/Kg	☼	75	10 - 128
Tetrachloroethene	0.46	U	30.7	26.2		ug/Kg	☼	85	17 - 126
Toluene	0.42	U	30.7	25.0		ug/Kg	☼	82	29 - 127
trans-1,2-Dichloroethene	0.47	U	30.7	24.9		ug/Kg	☼	81	32 - 134
trans-1,3-Dichloropropene	0.26	U	30.7	21.8		ug/Kg	☼	71	11 - 120
Trichloroethene	0.51	U	30.7	24.1		ug/Kg	☼	78	10 - 160
Trichlorofluoromethane	0.30	U	30.7	20.7		ug/Kg	☼	67	24 - 137
Vinyl acetate	1.1	U F1	30.7	1.1	U F1	ug/Kg	☼	0	10 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-85941-2 MS
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: WC-IS-100317
Prep Type: Total/NA
Prep Batch: 298472

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	0.35	U	30.7	21.1		ug/Kg	☼	69	31 - 134
Xylenes, Total	0.49	U	61.4	49.8		ug/Kg	☼	81	10 - 137
tert-Butylbenzene	0.26	U	30.7	33.9		ug/Kg	☼	110	10 - 143
1,2-Dibromoethane	0.43	U	30.7	25.6		ug/Kg	☼	83	25 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*66 - 125*
Dibromofluoromethane (Surr)	*87*		*43 - 131*
4-Bromofluorobenzene (Surr)	*98*		*61 - 132*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 127*

Lab Sample ID: 240-85941-2 MSD
Matrix: Solid
Analysis Batch: 298471

Client Sample ID: WC-IS-100317
Prep Type: Total/NA
Prep Batch: 298472

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.44	U	32.2	24.9		ug/Kg	☼	78	11 - 129	2	40
1,1,1-Trichloroethane	0.28	U	32.2	25.9		ug/Kg	☼	80	33 - 130	6	40
1,1,2,2-Tetrachloroethane	0.32	U	32.2	27.5		ug/Kg	☼	86	16 - 157	4	40
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	U	32.2	26.2		ug/Kg	☼	81	26 - 130	15	40
1,1-Dichloroethane	0.41	U	32.2	26.1		ug/Kg	☼	81	41 - 122	7	40
1,1-Dichloroethene	0.67	U	32.2	27.1		ug/Kg	☼	84	30 - 139	9	40
1,1-Dichloropropene	0.23	U	32.2	26.7		ug/Kg	☼	83	33 - 120	6	40
1,2,3-Trichlorobenzene	0.43	U	32.2	12.5		ug/Kg	☼	39	10 - 128	19	40
1,2,3-Trichloropropane	0.48	U	32.2	26.2		ug/Kg	☼	81	10 - 178	0	40
1,2,4-Trichlorobenzene	0.30	U	32.2	14.1		ug/Kg	☼	44	10 - 120	13	40
1,2,4-Trimethylbenzene	0.31	U	32.2	23.3		ug/Kg	☼	72	10 - 146	4	40
1,2-Dibromo-3-Chloropropane	0.84	U	32.2	27.8		ug/Kg	☼	86	10 - 128	9	40
1,2-Dichlorobenzene	0.27	U	32.2	19.8		ug/Kg	☼	62	10 - 120	8	40
1,2-Dichloroethane	0.36	U	32.2	23.7		ug/Kg	☼	74	35 - 122	2	40
1,2-Dichloropropane	0.38	U	32.2	27.3		ug/Kg	☼	85	38 - 130	5	40
1,3-Dichlorobenzene	0.36	U	32.2	20.2		ug/Kg	☼	63	10 - 120	8	40
1,3-Dichloropropane	0.28	U	32.2	26.5		ug/Kg	☼	83	34 - 121	5	40
1,4-Dichlorobenzene	0.43	U	32.2	19.6		ug/Kg	☼	61	10 - 120	8	40
2,2-Dichloropropane	0.37	U	32.2	22.5		ug/Kg	☼	70	27 - 131	8	40
2-Butanone (MEK)	1.7	J	64.3	58.1		ug/Kg	☼	88	29 - 127	17	40
2-Chloroethyl vinyl ether	3.5	U	32.2	26.8	J	ug/Kg	☼	83	10 - 134	10	40
2-Chlorotoluene	0.46	U	32.2	23.9		ug/Kg	☼	74	10 - 142	5	40
2-Hexanone	0.72	U	64.3	59.9		ug/Kg	☼	93	21 - 136	9	40
4-Chlorotoluene	0.30	U	32.2	22.1		ug/Kg	☼	69	10 - 135	7	40
p-Isopropyltoluene	0.22	U	32.2	22.5		ug/Kg	☼	70	10 - 129	6	40
4-Methyl-2-pentanone (MIBK)	1.1	U	64.3	60.5		ug/Kg	☼	94	16 - 164	8	40
Acetone	12	J	64.3	79.6		ug/Kg	☼	104	15 - 127	12	40
Benzene	0.39	U	32.2	26.5		ug/Kg	☼	82	33 - 127	6	40
Bromobenzene	0.33	U	32.2	24.5		ug/Kg	☼	76	10 - 141	4	40
Bromoform	0.49	U	32.2	23.0		ug/Kg	☼	71	10 - 120	0	40
Bromomethane	0.73	U	32.2	27.6		ug/Kg	☼	86	13 - 138	14	40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-85941-2 MSD **Client Sample ID: WC-IS-100317**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 298471 **Prep Batch: 298472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	0.28	J B	32.2	23.7	B	ug/Kg	☼	73	15 - 131	3	40
Carbon tetrachloride	0.31	U	32.2	24.1		ug/Kg	☼	75	17 - 127	5	40
Chlorobenzene	0.41	U	32.2	23.5		ug/Kg	☼	73	15 - 122	0	40
Dibromochloromethane	0.37	U	32.2	25.1		ug/Kg	☼	78	19 - 120	1	40
Chloroethane	0.47	U	32.2	22.2		ug/Kg	☼	69	15 - 148	12	40
Chloroform	0.28	U	32.2	24.9		ug/Kg	☼	77	41 - 121	6	40
Chloromethane	0.47	U	32.2	24.2		ug/Kg	☼	75	33 - 122	8	40
cis-1,2-Dichloroethene	0.35	U	32.2	26.3		ug/Kg	☼	82	46 - 120	6	40
cis-1,3-Dichloropropene	0.32	U	32.2	24.3		ug/Kg	☼	75	13 - 127	2	40
Dibromomethane	0.47	U	32.2	24.6		ug/Kg	☼	77	24 - 126	4	40
Bromochloromethane	0.44	U	32.2	25.8		ug/Kg	☼	80	37 - 123	3	40
Dichlorodifluoromethane	0.43	U	32.2	24.0		ug/Kg	☼	75	10 - 126	20	40
Bromodichloromethane	0.41	U	32.2	25.4		ug/Kg	☼	79	22 - 127	0	40
tert-Butyl alcohol (TBA)	2.9	U	322	318		ug/Kg	☼	99	59 - 128	15	39
Ethylbenzene	0.33	U	32.2	24.9		ug/Kg	☼	77	18 - 126	2	40
Hexachlorobutadiene	0.54	U	32.2	16.6		ug/Kg	☼	51	10 - 120	1	40
Isopropylbenzene	0.25	U	32.2	24.0		ug/Kg	☼	75	10 - 128	1	40
Methyl tert-butyl ether	0.33	U	32.2	26.2		ug/Kg	☼	81	49 - 134	6	40
Methylene Chloride	0.30	U	32.2	20.4		ug/Kg	☼	63	34 - 134	2	40
m-Xylene & p-Xylene	0.49	U	32.2	25.1		ug/Kg	☼	78	10 - 136	1	40
Naphthalene	0.41	U	32.2	16.9		ug/Kg	☼	52	10 - 153	13	40
n-Butylbenzene	0.31	U	32.2	19.9		ug/Kg	☼	62	10 - 120	6	40
N-Propylbenzene	0.35	U	32.2	24.3		ug/Kg	☼	76	10 - 146	4	40
o-Xylene	0.27	U	32.2	24.2		ug/Kg	☼	75	17 - 128	3	40
sec-Butylbenzene	0.23	U	32.2	23.4		ug/Kg	☼	73	10 - 132	4	40
Styrene	0.33	U	32.2	22.6		ug/Kg	☼	70	10 - 128	1	40
Tetrachloroethene	0.46	U	32.2	27.4		ug/Kg	☼	85	17 - 126	5	40
Toluene	0.42	U	32.2	25.5		ug/Kg	☼	79	29 - 127	2	40
trans-1,2-Dichloroethene	0.47	U	32.2	26.8		ug/Kg	☼	83	32 - 134	7	40
trans-1,3-Dichloropropene	0.26	U	32.2	22.1		ug/Kg	☼	69	11 - 120	1	40
Trichloroethene	0.51	U	32.2	26.2		ug/Kg	☼	81	10 - 160	8	40
Trichlorofluoromethane	0.30	U	32.2	22.7		ug/Kg	☼	71	24 - 137	10	40
Vinyl acetate	1.1	U F1	32.2	1.1	U F1	ug/Kg	☼	0	10 - 120	NC	40
Vinyl chloride	0.35	U	32.2	23.3		ug/Kg	☼	72	31 - 134	10	40
Xylenes, Total	0.49	U	64.3	49.3		ug/Kg	☼	77	10 - 137	1	40
tert-Butylbenzene	0.26	U	32.2	32.8		ug/Kg	☼	102	10 - 143	3	40
1,2-Dibromoethane	0.43	U	32.2	26.4		ug/Kg	☼	82	25 - 137	3	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*66 - 125*
Dibromofluoromethane (Surr)	*91*		*43 - 131*
4-Bromofluorobenzene (Surr)	*100*		*61 - 132*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 127*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-298687/7
Matrix: Water
Analysis Batch: 298687

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.46	U	1.0	0.46	ug/L			10/12/17 09:34	1
1,1,1-Trichloroethane	0.23	U	1.0	0.23	ug/L			10/12/17 09:34	1
1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32	ug/L			10/12/17 09:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41	ug/L			10/12/17 09:34	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/12/17 09:34	1
1,1-Dichloroethene	0.27	U	1.0	0.27	ug/L			10/12/17 09:34	1
1,1-Dichloropropene	0.28	U	1.0	0.28	ug/L			10/12/17 09:34	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/12/17 09:34	1
1,2,3-Trichloropropane	0.54	U	1.0	0.54	ug/L			10/12/17 09:34	1
1,2,3-Trimethylbenzene	0.22	U	5.0	0.22	ug/L			10/12/17 09:34	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/12/17 09:34	1
1,2,4-Trimethylbenzene	0.24	U	1.0	0.24	ug/L			10/12/17 09:34	1
1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47	ug/L			10/12/17 09:34	1
1,2-Dichlorobenzene	0.26	U	1.0	0.26	ug/L			10/12/17 09:34	1
1,2-Dichloroethane	0.30	U	1.0	0.30	ug/L			10/12/17 09:34	1
1,2-Dichloropropane	0.30	U	1.0	0.30	ug/L			10/12/17 09:34	1
1,3-Dichlorobenzene	0.32	U	1.0	0.32	ug/L			10/12/17 09:34	1
1,3-Dichloropropane	0.29	U	1.0	0.29	ug/L			10/12/17 09:34	1
1,4-Dichlorobenzene	0.23	U	1.0	0.23	ug/L			10/12/17 09:34	1
2,2-Dichloropropane	0.34	U	1.0	0.34	ug/L			10/12/17 09:34	1
2-Butanone (MEK)	1.0	U	10	1.0	ug/L			10/12/17 09:34	1
2-Chloroethyl vinyl ether	0.65	U	10	0.65	ug/L			10/12/17 09:34	1
2-Chlorotoluene	0.28	U	1.0	0.28	ug/L			10/12/17 09:34	1
2-Hexanone	1.2	U	10	1.2	ug/L			10/12/17 09:34	1
4-Chlorotoluene	0.23	U	1.0	0.23	ug/L			10/12/17 09:34	1
p-Isopropyltoluene	0.29	U	1.0	0.29	ug/L			10/12/17 09:34	1
4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71	ug/L			10/12/17 09:34	1
Acetone	1.8	U	10	1.8	ug/L			10/12/17 09:34	1
Benzene	0.28	U	1.0	0.28	ug/L			10/12/17 09:34	1
Bromobenzene	0.31	U	1.0	0.31	ug/L			10/12/17 09:34	1
Bromoform	0.43	U	1.0	0.43	ug/L			10/12/17 09:34	1
Bromomethane	0.42	U	1.0	0.42	ug/L			10/12/17 09:34	1
Carbon disulfide	0.34	U	1.0	0.34	ug/L			10/12/17 09:34	1
Carbon tetrachloride	0.35	U	1.0	0.35	ug/L			10/12/17 09:34	1
Chlorobenzene	0.32	U	1.0	0.32	ug/L			10/12/17 09:34	1
Dibromochloromethane	0.25	U	1.0	0.25	ug/L			10/12/17 09:34	1
Chloroethane	0.41	U	1.0	0.41	ug/L			10/12/17 09:34	1
Chloroform	0.31	U	1.0	0.31	ug/L			10/12/17 09:34	1
Chloromethane	0.43	U	1.0	0.43	ug/L			10/12/17 09:34	1
cis-1,2-Dichloroethene	0.30	U	1.0	0.30	ug/L			10/12/17 09:34	1
cis-1,3-Dichloropropene	0.26	U	1.0	0.26	ug/L			10/12/17 09:34	1
Dibromomethane	0.46	U	1.0	0.46	ug/L			10/12/17 09:34	1
Bromochloromethane	0.47	U	1.0	0.47	ug/L			10/12/17 09:34	1
Dichlorodifluoromethane	0.50	U	1.0	0.50	ug/L			10/12/17 09:34	1
Bromodichloromethane	0.30	U	1.0	0.30	ug/L			10/12/17 09:34	1
tert-Butyl alcohol (TBA)	4.6	U	50	4.6	ug/L			10/12/17 09:34	1
Ethylbenzene	0.26	U	1.0	0.26	ug/L			10/12/17 09:34	1
Hexachlorobutadiene	0.592	J	1.0	0.36	ug/L			10/12/17 09:34	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-298687/7
Matrix: Water
Analysis Batch: 298687

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diisopropyl ether	0.44	U	10	0.44	ug/L			10/12/17 09:34	1
Isopropylbenzene	0.21	U	1.0	0.21	ug/L			10/12/17 09:34	1
Methyl tert-butyl ether	0.27	U	1.0	0.27	ug/L			10/12/17 09:34	1
Methylene Chloride	0.53	U	1.0	0.53	ug/L			10/12/17 09:34	1
m-Xylene & p-Xylene	0.24	U	2.0	0.24	ug/L			10/12/17 09:34	1
Naphthalene	0.25	U	1.0	0.25	ug/L			10/12/17 09:34	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			10/12/17 09:34	1
N-Propylbenzene	0.45	U	1.0	0.45	ug/L			10/12/17 09:34	1
o-Xylene	0.28	U	1.0	0.28	ug/L			10/12/17 09:34	1
sec-Butylbenzene	0.27	U	1.0	0.27	ug/L			10/12/17 09:34	1
Styrene	0.23	U	1.0	0.23	ug/L			10/12/17 09:34	1
Tert-amyl methyl ether	0.29	U	5.0	0.29	ug/L			10/12/17 09:34	1
Ethyl t-butyl ether	0.35	U	5.0	0.35	ug/L			10/12/17 09:34	1
Tetrachloroethene	0.30	U	1.0	0.30	ug/L			10/12/17 09:34	1
Toluene	0.23	U	1.0	0.23	ug/L			10/12/17 09:34	1
trans-1,2-Dichloroethene	0.29	U	1.0	0.29	ug/L			10/12/17 09:34	1
trans-1,3-Dichloropropene	0.31	U	1.0	0.31	ug/L			10/12/17 09:34	1
Trichloroethene	0.33	U	1.0	0.33	ug/L			10/12/17 09:34	1
Trichlorofluoromethane	0.50	U	1.0	0.50	ug/L			10/12/17 09:34	1
Vinyl acetate	0.28	U	2.0	0.28	ug/L			10/12/17 09:34	1
Vinyl chloride	0.45	U	1.0	0.45	ug/L			10/12/17 09:34	1
Xylenes, Total	0.24	U	2.0	0.24	ug/L			10/12/17 09:34	1
tert-Butylbenzene	0.26	U	1.0	0.26	ug/L			10/12/17 09:34	1
1,2-Dibromoethane	0.23	U	1.0	0.23	ug/L			10/12/17 09:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*73 - 120*		*10/12/17 09:34*	*1*
Dibromofluoromethane (Surr)	*105*		*69 - 124*		*10/12/17 09:34*	*1*
4-Bromofluorobenzene (Surr)	*99*		*69 - 120*		*10/12/17 09:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 138*		*10/12/17 09:34*	*1*

Lab Sample ID: LCS 240-298687/5
Matrix: Water
Analysis Batch: 298687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	18.4		ug/L		92	73 - 136
1,1,1-Trichloroethane	20.0	17.8		ug/L		89	64 - 147
1,1,2,2-Tetrachloroethane	20.0	21.5		ug/L		107	58 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.1		ug/L		91	65 - 144
1,1-Dichloroethane	20.0	17.9		ug/L		90	74 - 120
1,1-Dichloroethene	20.0	17.7		ug/L		89	65 - 127
1,1-Dichloropropene	20.0	19.4		ug/L		97	80 - 122
1,2,3-Trichlorobenzene	20.0	18.1		ug/L		90	31 - 144
1,2,3-Trichloropropane	20.0	21.3		ug/L		106	53 - 134
1,2,4-Trichlorobenzene	20.0	17.6		ug/L		88	34 - 141
1,2,4-Trimethylbenzene	20.0	18.2		ug/L		91	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-298687/5
Matrix: Water
Analysis Batch: 298687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	20.0	22.3		ug/L		112	50 - 130
1,2-Dichlorobenzene	20.0	17.6		ug/L		88	80 - 120
1,2-Dichloroethane	20.0	20.4		ug/L		102	68 - 133
1,2-Dichloropropane	20.0	20.6		ug/L		103	78 - 127
1,3-Dichlorobenzene	20.0	18.0		ug/L		90	80 - 120
1,3-Dichloropropane	20.0	22.0		ug/L		110	71 - 124
1,4-Dichlorobenzene	20.0	17.8		ug/L		89	80 - 120
2,2-Dichloropropane	20.0	17.2		ug/L		86	32 - 178
2-Butanone (MEK)	40.0	45.0		ug/L		113	43 - 149
2-Chloroethyl vinyl ether	20.0	24.6		ug/L		123	58 - 123
2-Chlorotoluene	20.0	18.0		ug/L		90	80 - 120
2-Hexanone	40.0	48.5		ug/L		121	28 - 169
4-Chlorotoluene	20.0	18.2		ug/L		91	79 - 120
p-Isopropyltoluene	20.0	18.0		ug/L		90	78 - 125
4-Methyl-2-pentanone (MIBK)	40.0	47.3		ug/L		118	53 - 144
Acetone	40.0	40.0		ug/L		100	35 - 131
Benzene	20.0	19.1		ug/L		95	79 - 120
Bromobenzene	20.0	19.7		ug/L		98	73 - 120
Bromoform	20.0	20.0		ug/L		100	55 - 145
Bromomethane	20.0	18.0		ug/L		90	17 - 158
Carbon disulfide	20.0	14.9		ug/L		75	49 - 141
Carbon tetrachloride	20.0	16.7		ug/L		84	55 - 171
Chlorobenzene	20.0	19.6		ug/L		98	80 - 120
Dibromochloromethane	20.0	20.9		ug/L		105	64 - 129
Chloroethane	20.0	17.7		ug/L		89	10 - 149
Chloroform	20.0	18.5		ug/L		92	80 - 120
Chloromethane	20.0	19.6		ug/L		98	59 - 124
cis-1,2-Dichloroethene	20.0	18.1		ug/L		91	77 - 120
cis-1,3-Dichloropropene	20.0	23.0		ug/L		115	75 - 120
Dibromomethane	20.0	20.2		ug/L		101	80 - 120
Bromochloromethane	20.0	17.4		ug/L		87	78 - 120
Dichlorodifluoromethane	20.0	24.1		ug/L		121	42 - 141
Bromodichloromethane	20.0	19.3		ug/L		96	79 - 125
tert-Butyl alcohol (TBA)	200	251		ug/L		125	52 - 136
Ethylbenzene	20.0	19.4		ug/L		97	80 - 120
Hexachlorobutadiene	20.0	14.7		ug/L		73	36 - 146
Isopropylbenzene	20.0	18.3		ug/L		92	80 - 128
Methyl tert-butyl ether	20.0	19.2		ug/L		96	73 - 120
Methylene Chloride	20.0	17.1		ug/L		85	64 - 140
m-Xylene & p-Xylene	20.0	19.6		ug/L		98	80 - 120
Naphthalene	20.0	21.3		ug/L		106	31 - 127
n-Butylbenzene	20.0	15.9		ug/L		80	60 - 137
N-Propylbenzene	20.0	18.3		ug/L		92	76 - 120
o-Xylene	20.0	18.4		ug/L		92	80 - 120
sec-Butylbenzene	20.0	17.6		ug/L		88	76 - 124
Styrene	20.0	20.0		ug/L		100	80 - 121
Tetrachloroethene	20.0	18.2		ug/L		91	80 - 122
Toluene	20.0	19.7		ug/L		99	78 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-298687/5
Matrix: Water
Analysis Batch: 298687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	20.0	18.7		ug/L		94	74 - 124
trans-1,3-Dichloropropene	20.0	20.5		ug/L		102	67 - 120
Trichloroethene	20.0	19.9		ug/L		99	76 - 124
Trichlorofluoromethane	20.0	17.3		ug/L		86	27 - 176
Vinyl acetate	20.0	21.4		ug/L		107	42 - 141
Vinyl chloride	20.0	19.9		ug/L		99	65 - 124
Xylenes, Total	40.0	38.0		ug/L		95	80 - 120
tert-Butylbenzene	20.0	17.0		ug/L		85	79 - 120
1,2-Dibromoethane	20.0	22.1		ug/L		111	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*94*		*69 - 124*
4-Bromofluorobenzene (Surr)	*101*		*69 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 138*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-297693/10-A
Matrix: Solid
Analysis Batch: 297980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 297693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	24	U	50	24	ug/Kg		10/05/17 08:47	10/06/17 18:07	1
Aroclor-1221	23	U	50	23	ug/Kg		10/05/17 08:47	10/06/17 18:07	1
Aroclor-1232	16	U	50	16	ug/Kg		10/05/17 08:47	10/06/17 18:07	1
Aroclor-1242	20	U	50	20	ug/Kg		10/05/17 08:47	10/06/17 18:07	1
Aroclor-1248	17	U	50	17	ug/Kg		10/05/17 08:47	10/06/17 18:07	1
Aroclor-1254	14	U	50	14	ug/Kg		10/05/17 08:47	10/06/17 18:07	1
Aroclor-1260	18	U	50	18	ug/Kg		10/05/17 08:47	10/06/17 18:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*10/05/17 08:47*	*10/06/17 18:07*	*1*
DCB Decachlorobiphenyl	*102*		*10 - 132*	*10/05/17 08:47*	*10/06/17 18:07*	*1*

Lab Sample ID: LCS 240-297693/11-A
Matrix: Solid
Analysis Batch: 297980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	631		ug/Kg		63	47 - 120
Aroclor-1260	1000	735		ug/Kg		74	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*105*		*10 - 132*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-85941-2 MS — **Client Sample ID: WC-IS-100317**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 297980 — **Prep Batch: 297693**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	30	U	1270	663		ug/Kg	☼	52	31 - 120
Aroclor-1260	22	U	1270	769		ug/Kg	☼	60	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*14 - 128*
DCB Decachlorobiphenyl	*88*		*10 - 132*

Lab Sample ID: 240-85941-2 MSD — **Client Sample ID: WC-IS-100317**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 297980 — **Prep Batch: 297693**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	30	U	1250	630		ug/Kg	☼	50	31 - 120	12	30
Aroclor-1260	22	U	1250	747		ug/Kg	☼	60	21 - 122	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*68*		*14 - 128*
DCB Decachlorobiphenyl	*80*		*10 - 132*

Lab Sample ID: MB 240-297775/21-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298032 — **Prep Batch: 297775**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.050	U	0.10	0.050	ug/L		10/05/17 12:53	10/07/17 18:45	1
Aroclor-1221	0.090	U	0.10	0.090	ug/L		10/05/17 12:53	10/07/17 18:45	1
Aroclor-1232	0.070	U	0.10	0.070	ug/L		10/05/17 12:53	10/07/17 18:45	1
Aroclor-1242	0.060	U	0.10	0.060	ug/L		10/05/17 12:53	10/07/17 18:45	1
Aroclor-1248	0.050	U	0.10	0.050	ug/L		10/05/17 12:53	10/07/17 18:45	1
Aroclor-1254	0.030	U	0.10	0.030	ug/L		10/05/17 12:53	10/07/17 18:45	1
Aroclor-1260	0.040	U	0.10	0.040	ug/L		10/05/17 12:53	10/07/17 18:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*21 - 120*	*10/05/17 12:53*	*10/07/17 18:45*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 120*	*10/05/17 12:53*	*10/07/17 18:45*	*1*

Lab Sample ID: LCS 240-297775/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298032 — **Prep Batch: 297775**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	1.26		ug/L		50	32 - 120
Aroclor-1260	2.50	1.55		ug/L		62	36 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*60*		*21 - 120*
DCB Decachlorobiphenyl	*69*		*10 - 120*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-297935/2-A
Matrix: Water
Analysis Batch: 298256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 297935

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0033	U	0.050	0.0033	mg/L		10/06/17 14:00	10/09/17 14:35	1
Barium	0.0024	U	0.50	0.0024	mg/L		10/06/17 14:00	10/09/17 14:35	1
Cadmium	0.00029	U	0.050	0.00029	mg/L		10/06/17 14:00	10/09/17 14:35	1
Chromium	0.00055	U	0.050	0.00055	mg/L		10/06/17 14:00	10/09/17 14:35	1
Lead	0.0019	U	0.050	0.0019	mg/L		10/06/17 14:00	10/09/17 14:35	1
Selenium	0.0051	U	0.050	0.0051	mg/L		10/06/17 14:00	10/09/17 14:35	1
Silver	0.00092	U	0.050	0.00092	mg/L		10/06/17 14:00	10/09/17 14:35	1

Lab Sample ID: LCS 240-297935/3-A
Matrix: Water
Analysis Batch: 298256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297935

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.32		mg/L		116	50 - 150
Barium	2.00	2.14		mg/L		107	50 - 150
Cadmium	0.0500	0.0561		mg/L		112	50 - 150
Chromium	0.200	0.207		mg/L		103	50 - 150
Lead	0.500	0.479		mg/L		96	50 - 150
Selenium	2.00	2.38		mg/L		119	50 - 150
Silver	0.0500	0.0582		mg/L		116	50 - 150

Lab Sample ID: MB 240-298960/2-A
Matrix: Solid
Analysis Batch: 299318

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 298960

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0033	U	0.050	0.0033	mg/L		10/13/17 14:00	10/16/17 16:55	1
Barium	0.0024	U	0.50	0.0024	mg/L		10/13/17 14:00	10/16/17 16:55	1
Cadmium	0.00029	U	0.050	0.00029	mg/L		10/13/17 14:00	10/16/17 16:55	1
Chromium	0.00055	U	0.050	0.00055	mg/L		10/13/17 14:00	10/16/17 16:55	1
Lead	0.0019	U	0.050	0.0019	mg/L		10/13/17 14:00	10/16/17 16:55	1
Selenium	0.0051	U	0.050	0.0051	mg/L		10/13/17 14:00	10/16/17 16:55	1
Silver	0.00092	U	0.050	0.00092	mg/L		10/13/17 14:00	10/16/17 16:55	1

Lab Sample ID: LCS 240-298960/3-A
Matrix: Solid
Analysis Batch: 299318

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 298960

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.26		mg/L		113	50 - 150
Barium	2.00	1.98		mg/L		99	50 - 150
Cadmium	0.0500	0.0545		mg/L		109	50 - 150
Chromium	0.200	0.198		mg/L		99	50 - 150
Lead	0.500	0.479		mg/L		96	50 - 150
Selenium	2.00	2.32		mg/L		116	50 - 150
Silver	0.0500	0.0547		mg/L		109	50 - 150

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 240-297819/1-B
Matrix: Water
Analysis Batch: 298256

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 297935

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0033	U	0.050	0.0033	mg/L		10/06/17 14:00	10/09/17 14:30	1
Barium	0.100	J	0.50	0.0024	mg/L		10/06/17 14:00	10/09/17 14:30	1
Cadmium	0.00029	U	0.050	0.00029	mg/L		10/06/17 14:00	10/09/17 14:30	1
Chromium	0.00248	J	0.050	0.00055	mg/L		10/06/17 14:00	10/09/17 14:30	1
Lead	0.0019	U	0.050	0.0019	mg/L		10/06/17 14:00	10/09/17 14:30	1
Selenium	0.00819	J	0.050	0.0051	mg/L		10/06/17 14:00	10/09/17 14:30	1
Silver	0.00092	U	0.050	0.00092	mg/L		10/06/17 14:00	10/09/17 14:30	1

Lab Sample ID: LB 240-298849/1-B
Matrix: Solid
Analysis Batch: 299318

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 298960

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00471	J	0.050	0.0033	mg/L		10/13/17 14:00	10/16/17 16:50	1
Barium	0.0024	U	0.50	0.0024	mg/L		10/13/17 14:00	10/16/17 16:50	1
Cadmium	0.00029	U	0.050	0.00029	mg/L		10/13/17 14:00	10/16/17 16:50	1
Chromium	0.000691	J	0.050	0.00055	mg/L		10/13/17 14:00	10/16/17 16:50	1
Lead	0.0019	U	0.050	0.0019	mg/L		10/13/17 14:00	10/16/17 16:50	1
Selenium	0.00834	J	0.050	0.0051	mg/L		10/13/17 14:00	10/16/17 16:50	1
Silver	0.00092	U	0.050	0.00092	mg/L		10/13/17 14:00	10/16/17 16:50	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-297936/2-A
Matrix: Water
Analysis Batch: 298170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 297936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	U	0.0020	0.00013	mg/L		10/06/17 14:00	10/06/17 18:47	1

Lab Sample ID: LCS 240-297936/3-A
Matrix: Water
Analysis Batch: 298170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00488		mg/L		98	80 - 120

Lab Sample ID: MB 240-298961/2-A
Matrix: Solid
Analysis Batch: 299450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 298961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	U	0.0020	0.00013	mg/L		10/13/17 14:00	10/17/17 10:36	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-298961/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 299450 — **Prep Batch: 298961**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00495		mg/L		99	80 - 120

Lab Sample ID: LB 240-297819/1-C — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: TCLP**
Analysis Batch: 298170 — **Prep Batch: 297936**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	U	0.0020	0.00013	mg/L		10/06/17 14:00	10/06/17 18:45	1

Lab Sample ID: LB 240-298849/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 299450 — **Prep Batch: 298961**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	U	0.0020	0.00013	mg/L		10/13/17 14:00	10/17/17 10:29	1

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-297826/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 297826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	83.00		Degrees F		102	97 - 103

Lab Sample ID: LCS 240-298677/1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Method: Moisture - Percent Moisture

Lab Sample ID: 240-85941-2 DU — **Client Sample ID: WC-IS-100317**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 297685

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	77.4		81.6		%		5	20
Percent Moisture	22.6		18.4		%		20	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

GC/MS VOA

Analysis Batch: 298471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	Total/NA	Solid	8260C	298472
MB 240-298471/8	Method Blank	Total/NA	Solid	8260C	
LCS 240-298471/6	Lab Control Sample	Total/NA	Solid	8260C	
LCS 240-298471/7	Lab Control Sample	Total/NA	Solid	8260C	
240-85941-2 MS	WC-IS-100317	Total/NA	Solid	8260C	298472
240-85941-2 MSD	WC-IS-100317	Total/NA	Solid	8260C	298472

Prep Batch: 298472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	Total/NA	Solid	5030C	
240-85941-2 MS	WC-IS-100317	Total/NA	Solid	5030C	
240-85941-2 MSD	WC-IS-100317	Total/NA	Solid	5030C	

Analysis Batch: 298687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-1	TB-100317	Total/NA	Water	8260C	
240-85941-3	WC-IW-100317	Total/NA	Water	8260C	
MB 240-298687/7	Method Blank	Total/NA	Water	8260C	
LCS 240-298687/5	Lab Control Sample	Total/NA	Water	8260C	

GC Semi VOA

Prep Batch: 297693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	Total/NA	Solid	3540C	
MB 240-297693/10-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-297693/11-A	Lab Control Sample	Total/NA	Solid	3540C	
240-85941-2 MS	WC-IS-100317	Total/NA	Solid	3540C	
240-85941-2 MSD	WC-IS-100317	Total/NA	Solid	3540C	

Prep Batch: 297775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	Total/NA	Water	3520C	
MB 240-297775/21-A	Method Blank	Total/NA	Water	3520C	
LCS 240-297775/22-A	Lab Control Sample	Total/NA	Water	3520C	

Analysis Batch: 297980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	Total/NA	Solid	8082A	297693
MB 240-297693/10-A	Method Blank	Total/NA	Solid	8082A	297693
LCS 240-297693/11-A	Lab Control Sample	Total/NA	Solid	8082A	297693
240-85941-2 MS	WC-IS-100317	Total/NA	Solid	8082A	297693
240-85941-2 MSD	WC-IS-100317	Total/NA	Solid	8082A	297693

Analysis Batch: 298032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	Total/NA	Water	8082A	297775
MB 240-297775/21-A	Method Blank	Total/NA	Water	8082A	297775
LCS 240-297775/22-A	Lab Control Sample	Total/NA	Water	8082A	297775

Metals

Leach Batch: 297819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	TCLP	Water	1311	
LB 240-297819/1-B	Method Blank	TCLP	Water	1311	
LB 240-297819/1-C	Method Blank	TCLP	Water	1311	

Prep Batch: 297935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	TCLP	Water	3010A	297819
LB 240-297819/1-B	Method Blank	TCLP	Water	3010A	297819
MB 240-297935/2-A	Method Blank	Total/NA	Water	3010A	
LCS 240-297935/3-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 297936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	TCLP	Water	7470A	297819
LB 240-297819/1-C	Method Blank	TCLP	Water	7470A	297819
MB 240-297936/2-A	Method Blank	Total/NA	Water	7470A	
LCS 240-297936/3-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 298170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	TCLP	Water	7470A	297936
LB 240-297819/1-C	Method Blank	TCLP	Water	7470A	297936
MB 240-297936/2-A	Method Blank	Total/NA	Water	7470A	297936
LCS 240-297936/3-A	Lab Control Sample	Total/NA	Water	7470A	297936

Analysis Batch: 298256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	TCLP	Water	6010B	297935
LB 240-297819/1-B	Method Blank	TCLP	Water	6010B	297935
MB 240-297935/2-A	Method Blank	Total/NA	Water	6010B	297935
LCS 240-297935/3-A	Lab Control Sample	Total/NA	Water	6010B	297935

Leach Batch: 298849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	TCLP	Solid	1311	
LB 240-298849/1-B	Method Blank	TCLP	Solid	1311	
LB 240-298849/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 298960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	TCLP	Solid	3010A	298849
LB 240-298849/1-B	Method Blank	TCLP	Solid	3010A	298849
MB 240-298960/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 240-298960/3-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 298961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	TCLP	Solid	7470A	298849
LB 240-298849/1-C	Method Blank	TCLP	Solid	7470A	298849
MB 240-298961/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 240-298961/3-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 299318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	TCLP	Solid	6010B	298960
LB 240-298849/1-B	Method Blank	TCLP	Solid	6010B	298960
MB 240-298960/2-A	Method Blank	Total/NA	Solid	6010B	298960
LCS 240-298960/3-A	Lab Control Sample	Total/NA	Solid	6010B	298960

Analysis Batch: 299450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	TCLP	Solid	7470A	298961
LB 240-298849/1-C	Method Blank	TCLP	Solid	7470A	298961
MB 240-298961/2-A	Method Blank	Total/NA	Solid	7470A	298961
LCS 240-298961/3-A	Lab Control Sample	Total/NA	Solid	7470A	298961

General Chemistry

Analysis Batch: 297685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	Total/NA	Solid	Moisture	
240-85941-2 DU	WC-IS-100317	Total/NA	Solid	Moisture	

Analysis Batch: 297826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-2	WC-IS-100317	Total/NA	Solid	1010A	
LCS 240-297826/1	Lab Control Sample	Total/NA	Solid	1010A	

Analysis Batch: 298677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85941-3	WC-IW-100317	Total/NA	Water	1010A	
LCS 240-298677/1	Lab Control Sample	Total/NA	Water	1010A	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

Client Sample ID: TB-100317
Date Collected: 10/03/17 00:00
Date Received: 10/04/17 09:45

Lab Sample ID: 240-85941-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	298687	10/12/17 14:09	HMB	TAL CAN

Client Sample ID: WC-IS-100317
Date Collected: 10/03/17 08:25
Date Received: 10/04/17 09:45

Lab Sample ID: 240-85941-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			298849	10/12/17 17:35	DRJ	TAL CAN
TCLP	Prep	3010A			298960	10/13/17 14:00	AJC	TAL CAN
TCLP	Analysis	6010B		1	299318	10/17/17 00:21	KLC	TAL CAN
TCLP	Leach	1311			298849	10/12/17 17:35	DRJ	TAL CAN
TCLP	Prep	7470A			298961	10/13/17 14:00	AJC	TAL CAN
TCLP	Analysis	7470A		1	299450	10/17/17 10:48	DSH	TAL CAN
Total/NA	Analysis	1010A		1	297826	10/05/17 16:25	JWW	TAL CAN
Total/NA	Analysis	Moisture		1	297685	10/05/17 08:32	MBR	TAL CAN

Client Sample ID: WC-IS-100317
Date Collected: 10/03/17 08:25
Date Received: 10/04/17 09:45

Lab Sample ID: 240-85941-2
Matrix: Solid
Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			298472	10/11/17 01:40	TJL2	TAL CAN
Total/NA	Analysis	8260C		1	298471	10/11/17 08:28	TJL2	TAL CAN
Total/NA	Prep	3540C			297693	10/05/17 08:47	JT	TAL CAN
Total/NA	Analysis	8082A		1	297980	10/06/17 20:33	KMG	TAL CAN

Client Sample ID: WC-IW-100317
Date Collected: 10/03/17 08:00
Date Received: 10/04/17 09:45

Lab Sample ID: 240-85941-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	298687	10/12/17 14:32	HMB	TAL CAN
Total/NA	Prep	3520C			297775	10/05/17 12:53	CS	TAL CAN
Total/NA	Analysis	8082A		1	298032	10/07/17 19:56	LSH	TAL CAN
TCLP	Leach	1311			297819	10/05/17 15:30	DRJ	TAL CAN
TCLP	Prep	3010A			297935	10/06/17 14:00	AJC	TAL CAN
TCLP	Analysis	6010B		1	298256	10/09/17 22:05	AS1	TAL CAN
TCLP	Leach	1311			297819	10/05/17 15:30	DRJ	TAL CAN
TCLP	Prep	7470A			297936	10/06/17 14:00	AJC	TAL CAN
TCLP	Analysis	7470A		1	298170	10/06/17 19:19	DTN	TAL CAN
Total/NA	Analysis	1010A		1	298677	10/12/17 11:07	TPH	TAL CAN

Lab Chronicle

Client: Tetra Tech, Inc. TestAmerica Job ID: 240-85941-1
Project/Site: MRC Waste Characterization Block I

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 240-85941-1
Project/Site: MRC Waste Characterization Block I

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18
Connecticut	State Program	1	PH-0590	12-31-17 *
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17 *
Minnesota	NELAP	5	039-999-348	12-31-17 *
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-18 *
West Virginia DEP	State Program	3	210	12-31-17 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 240-85941-1
Project/Site: MRC Waste Characterization Block I

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Waste Characterization Block I

TestAmerica Job ID: 240-85941-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-85941-1	TB-100317	Water	10/03/17 00:00	10/04/17 09:45
240-85941-2	WC-IS-100317	Solid	10/03/17 08:25	10/04/17 09:45
240-85941-3	WC-IW-100317	Water	10/03/17 08:00	10/04/17 09:45

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 297285

Lab Sample ID: STD01 240-297285/5 IC Client Sample ID:

Date Analyzed: 10/03/17 14:50 Lab File ID: P12100305.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	4.90	Baseline Smoothing	hassl	10/04/17 05:58
PCB-1232 Peak 2	5.41	Baseline Smoothing	hassl	10/04/17 05:58
PCB-1232 Peak 3	6.04	Baseline Smoothing	hassl	10/04/17 05:58
PCB-1232 Peak 4	6.21	Baseline Smoothing	hassl	10/04/17 05:58
PCB-1232 Peak 5	6.75	Baseline Smoothing	hassl	10/04/17 05:58

Lab Sample ID: STD01 240-297285/11 IC Client Sample ID:

Date Analyzed: 10/03/17 16:36 Lab File ID: P12100311.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	4.89	Baseline Smoothing	hassl	10/04/17 06:08
PCB-1242 Peak 2	5.40	Baseline Smoothing	hassl	10/04/17 06:08
PCB-1242 Peak 3	6.04	Baseline Smoothing	hassl	10/04/17 06:08
PCB-1242 Peak 4	6.21	Baseline Smoothing	hassl	10/04/17 06:08
PCB-1242 Peak 5	6.75	Baseline Smoothing	hassl	10/04/17 06:08

Lab Sample ID: STD05 240-297285/19 IC Client Sample ID:

Date Analyzed: 10/03/17 18:57 Lab File ID: P12100319.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	5.40	Baseline Smoothing	hassl	10/04/17 06:20
PCB-1248 Peak 2	6.75	Baseline Smoothing	hassl	10/04/17 06:20
PCB-1248 Peak 3	7.28	Baseline Smoothing	hassl	10/04/17 06:20
PCB-1248 Peak 4	7.55	Baseline Smoothing	hassl	10/04/17 06:20
PCB-1248 Peak 5	8.03	Baseline Smoothing	hassl	10/04/17 06:20

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 297285

Lab Sample ID: STD05 240-297285/25 IC Client Sample ID:

Date Analyzed: 10/03/17 20:43 Lab File ID: P12100325.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1254 Peak 1	8.32	Baseline Smoothing	hassl	10/04/17 05:44
PCB-1254 Peak 2	8.56	Baseline Smoothing	hassl	10/04/17 05:44
PCB-1254 Peak 3	9.11	Baseline Smoothing	hassl	10/04/17 05:44
PCB-1254 Peak 4	9.38	Baseline Smoothing	hassl	10/04/17 05:44
PCB-1254 Peak 5	10.02	Baseline Smoothing	hassl	10/04/17 05:44

Lab Sample ID: STD15 240-297285/27 IC Client Sample ID:

Date Analyzed: 10/03/17 21:18 Lab File ID: P12100327.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1254 Peak 1	8.32	Baseline Smoothing	hassl	10/04/17 05:48
PCB-1254 Peak 2	8.56	Baseline Smoothing	hassl	10/04/17 05:48
PCB-1254 Peak 3	9.11	Baseline Smoothing	hassl	10/04/17 05:48
PCB-1254 Peak 4	9.38	Baseline Smoothing	hassl	10/04/17 05:48
PCB-1254 Peak 5	10.02	Baseline Smoothing	hassl	10/04/17 05:48

Lab Sample ID: STD01 240-297285/29 IC Client Sample ID:

Date Analyzed: 10/03/17 21:54 Lab File ID: P12100329.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	4.90	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 2	5.41	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 3	6.04	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 4	6.21	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 5	6.75	Baseline Smoothing	hassl	10/04/17 05:49

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 297285

Lab Sample ID: STD02 240-297285/30 IC Client Sample ID:

Date Analyzed: 10/03/17 22:11 Lab File ID: P12100330.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	4.89	Baseline Smoothing	hassl	10/04/17 06:22
PCB-1016 Peak 2	5.41	Baseline Smoothing	hassl	10/04/17 06:22
PCB-1016 Peak 3	6.04	Baseline Smoothing	hassl	10/04/17 06:22
PCB-1016 Peak 4	6.21	Baseline Smoothing	hassl	10/04/17 06:22
PCB-1016 Peak 5	6.75	Baseline Smoothing	hassl	10/04/17 06:22
PCB-1260 Peak 1	8.26	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 2	8.59	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 3	8.92	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 4	9.70	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 5	10.03	Baseline Smoothing	hassl	10/04/17 05:49

Lab Sample ID: STD05 240-297285/31 ICI Client Sample ID:

Date Analyzed: 10/03/17 22:29 Lab File ID: P12100331.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	5.82	Split Peak	hassl	10/04/17 06:38
PCB-1016 Peak 2	6.40	Split Peak	hassl	10/04/17 06:38
PCB-1016 Peak 3	7.01	Split Peak	hassl	10/04/17 06:38
PCB-1016 Peak 4	7.19	Split Peak	hassl	10/04/17 06:38
PCB-1016 Peak 5	7.56	Split Peak	hassl	10/04/17 06:38

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 297285

Lab Sample ID: STD1 240-297285/32 IC Client Sample ID:

Date Analyzed: 10/03/17 22:47 Lab File ID: P12100332.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	4.90	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 2	5.41	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 3	6.04	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 4	6.21	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1016 Peak 5	6.75	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 1	8.26	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 2	8.59	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 3	8.91	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 4	9.70	Baseline Smoothing	hassl	10/04/17 05:49
PCB-1260 Peak 5	10.03	Baseline Smoothing	hassl	10/04/17 05:49
DCB Decachlorobiphenyl	11.19	Baseline Smoothing	hassl	10/04/17 05:49

Lab Sample ID: STD151660 240-297285/33 Client Sample ID:

Date Analyzed: 10/03/17 23:04 Lab File ID: P12100333.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	4.90	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1016 Peak 2	5.40	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1016 Peak 3	6.04	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1016 Peak 4	6.21	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1016 Peak 5	6.75	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1260 Peak 1	8.26	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1260 Peak 2	8.59	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1260 Peak 3	8.91	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1260 Peak 4	9.70	Baseline Smoothing	hassl	10/04/17 05:50
PCB-1260 Peak 5	10.03	Baseline Smoothing	hassl	10/04/17 05:50

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 297285

Lab Sample ID: ICV 240-297285/37 Client Sample ID:

Date Analyzed: 10/04/17 00:15 Lab File ID: P12100337.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	6.40	Baseline Smoothing	hassl	10/04/17 06:27
PCB-1248 Peak 2	7.01	Baseline Smoothing	hassl	10/04/17 06:27
PCB-1248 Peak 3	7.79	Baseline Smoothing	hassl	10/04/17 06:27
PCB-1248 Peak 4	8.32	Baseline Smoothing	hassl	10/04/17 06:27
PCB-1248 Peak 5	9.11	Baseline Smoothing	hassl	10/04/17 06:27

Lab Sample ID: ICV 240-297285/39 Client Sample ID:

Date Analyzed: 10/04/17 00:50 Lab File ID: P12100339.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	8.26	Baseline Smoothing	hassl	10/04/17 06:40
PCB-1260 Peak 2	8.59	Baseline Smoothing	hassl	10/04/17 06:40
PCB-1260 Peak 3	8.92	Baseline Smoothing	hassl	10/04/17 06:40
PCB-1260 Peak 4	9.70	Baseline Smoothing	hassl	10/04/17 06:40
PCB-1260 Peak 5	10.03	Baseline Smoothing	hassl	10/04/17 06:40

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 298032

Lab Sample ID: CCV 240-298032/5 Client Sample ID:

Date Analyzed: 10/07/17 12:16 Lab File ID: P12100705.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	4.89	Incomplete Integration	coastc	10/07/17 12:47
PCB-1242 Peak 2	5.40	Incomplete Integration	coastc	10/07/17 12:47
PCB-1242 Peak 3	6.03	Incomplete Integration	coastc	10/07/17 12:47
PCB-1242 Peak 4	6.21	Incomplete Integration	coastc	10/07/17 12:47
PCB-1242 Peak 5	6.75	Incomplete Integration	coastc	10/07/17 12:47

Lab Sample ID: 240-85882-BB-1-A MS Client Sample ID:

Date Analyzed: 10/07/17 13:44 Lab File ID: P12100710.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	4.89	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 2	5.40	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 3	6.04	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 4	6.21	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 5	6.75	Baseline Smoothing	hassl	10/09/17 07:24

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Analysis Batch Number: 298032

Lab Sample ID: 240-85882-BB-1-A MS Client Sample ID:

Date Analyzed: 10/07/17 13:44 Lab File ID: P12100710.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	5.81	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 2	6.40	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 3	7.01	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 4	7.19	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1016 Peak 5	7.55	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1260 Peak 1	9.34	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1260 Peak 2	10.01	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1260 Peak 3	10.45	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1260 Peak 4	10.72	Baseline Smoothing	hassl	10/09/17 07:24
PCB-1260 Peak 5	11.09	Baseline Smoothing	hassl	10/09/17 07:24

Lab Sample ID: CCVIS 240-298032/29 Client Sample ID:

Date Analyzed: 10/07/17 19:20 Lab File ID: P12100729.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	4.90	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1016 Peak 2	5.40	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1016 Peak 3	6.04	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1016 Peak 4	6.21	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1016 Peak 5	6.75	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1260 Peak 1	8.25	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1260 Peak 2	8.59	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1260 Peak 3	8.91	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1260 Peak 4	9.70	Baseline Smoothing	hassl	10/09/17 07:35
PCB-1260 Peak 5	10.02	Baseline Smoothing	hassl	10/09/17 07:35

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Analysis Batch Number: 297169

Lab Sample ID: STD005 240-297169/4 IC Client Sample ID:

Date Analyzed: 10/02/17 13:35 Lab File ID: SIG10100204.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.75	Split Peak	hassl	10/03/17 06:01
PCB-1232 Peak 2	4.36	Split Peak	hassl	10/03/17 06:01
PCB-1232 Peak 3	5.10	Split Peak	hassl	10/03/17 06:01
PCB-1232 Peak 4	5.30	Split Peak	hassl	10/03/17 06:01
PCB-1232 Peak 5	5.68	Split Peak	hassl	10/03/17 06:01

Lab Sample ID: STD01 240-297169/11 IC Client Sample ID:

Date Analyzed: 10/02/17 15:44 Lab File ID: SIG10100211.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	3.75	Split Peak	hassl	10/03/17 06:05
PCB-1242 Peak 2	4.35	Split Peak	hassl	10/03/17 06:05
PCB-1242 Peak 3	5.10	Split Peak	hassl	10/03/17 06:05
PCB-1242 Peak 4	5.30	Split Peak	hassl	10/03/17 06:05
PCB-1242 Peak 5	5.68	Split Peak	hassl	10/03/17 06:05

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Analysis Batch Number: 297169

Lab Sample ID: STD151242 240-297169/15 Client Sample ID:

Date Analyzed: 10/02/17 16:57 Lab File ID: SIG10100215.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	3.75	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1242 Peak 2	4.35	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1242 Peak 3	5.10	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1242 Peak 4	5.30	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1242 Peak 5	5.68	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1268 Peak 1	8.89	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1268 Peak 2	8.92	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1268 Peak 3	9.09	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1268 Peak 4	9.38	Baseline Smoothing	hassl	10/03/17 06:06
PCB-1268 Peak 5	9.61	Baseline Smoothing	hassl	10/03/17 06:06

Lab Sample ID: STD01 240-297169/17 IC Client Sample ID:

Date Analyzed: 10/02/17 17:34 Lab File ID: SIG10100217.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	5.63	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 2	6.80	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 3	7.26	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 4	7.60	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 5	8.25	Baseline Smoothing	hassl	10/03/17 06:08

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Analysis Batch Number: 297169

Lab Sample ID: STD02 240-297169/18 IC Client Sample ID:

Date Analyzed: 10/02/17 17:52 Lab File ID: SIG10100218.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	5.63	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 2	6.80	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 3	7.26	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 4	7.60	Baseline Smoothing	hassl	10/03/17 06:08
PCB-1248 Peak 5	8.25	Baseline Smoothing	hassl	10/03/17 06:08

Lab Sample ID: STD005 240-297169/22 IC Client Sample ID:

Date Analyzed: 10/02/17 19:06 Lab File ID: SIG10100222.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1254 Peak 1	7.59	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 2	7.80	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 3	8.25	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 4	8.46	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 5	8.94	Baseline Smoothing	hassl	10/03/17 06:09

Lab Sample ID: STD01 240-297169/23 IC Client Sample ID:

Date Analyzed: 10/02/17 19:24 Lab File ID: SIG10100223.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1254 Peak 1	7.59	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 2	7.80	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 3	8.25	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 4	8.46	Baseline Smoothing	hassl	10/03/17 06:09
PCB-1254 Peak 5	8.94	Baseline Smoothing	hassl	10/03/17 06:09

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Analysis Batch Number: 297169

Lab Sample ID: STD02 240-297169/24 IC Client Sample ID:

Date Analyzed: 10/02/17 19:42 Lab File ID: SIG10100224.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1254 Peak 1	7.59	Baseline Smoothing	hassl	10/03/17 06:10
PCB-1254 Peak 2	7.80	Baseline Smoothing	hassl	10/03/17 06:10
PCB-1254 Peak 3	8.25	Baseline Smoothing	hassl	10/03/17 06:10
PCB-1254 Peak 4	8.46	Baseline Smoothing	hassl	10/03/17 06:10
PCB-1254 Peak 5	8.94	Baseline Smoothing	hassl	10/03/17 06:10

Lab Sample ID: STD05 240-297169/25 IC Client Sample ID:

Date Analyzed: 10/02/17 20:01 Lab File ID: SIG10100225.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1254 Peak 1	7.59	Baseline Smoothing	hassl	10/03/17 06:11
PCB-1254 Peak 2	7.80	Baseline Smoothing	hassl	10/03/17 06:11
PCB-1254 Peak 3	8.25	Baseline Smoothing	hassl	10/03/17 06:11
PCB-1254 Peak 4	8.46	Baseline Smoothing	hassl	10/03/17 06:11
PCB-1254 Peak 5	8.94	Baseline Smoothing	hassl	10/03/17 06:11

Lab Sample ID: STD02 240-297169/30 IC Client Sample ID:

Date Analyzed: 10/02/17 21:32 Lab File ID: SIG10100230.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	7.44	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 2	7.73	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 3	8.00	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 4	8.61	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 5	8.86	Baseline Smoothing	hassl	10/03/17 06:16

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Analysis Batch Number: 297169

Lab Sample ID: STD05 240-297169/31 ICI Client Sample ID:

Date Analyzed: 10/02/17 21:51 Lab File ID: SIG10100231.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	3.75	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1016 Peak 2	4.35	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1016 Peak 3	5.10	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1016 Peak 4	5.30	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1016 Peak 5	5.68	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 1	7.44	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 2	7.73	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 3	8.00	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 4	8.61	Baseline Smoothing	hassl	10/03/17 06:16
PCB-1260 Peak 5	8.86	Baseline Smoothing	hassl	10/03/17 06:16

Lab Sample ID: STD1 240-297169/32 IC Client Sample ID:

Date Analyzed: 10/02/17 22:09 Lab File ID: SIG10100232.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	3.75	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1016 Peak 2	4.35	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1016 Peak 3	5.10	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1016 Peak 4	5.30	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1016 Peak 5	5.68	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1260 Peak 1	7.44	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1260 Peak 2	7.73	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1260 Peak 3	8.00	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1260 Peak 4	8.61	Baseline Smoothing	hassl	10/03/17 06:17
PCB-1260 Peak 5	8.86	Baseline Smoothing	hassl	10/03/17 06:17

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Analysis Batch Number: 297169

Lab Sample ID: STD151660 240-297169/33 Client Sample ID:

Date Analyzed: 10/02/17 22:27 Lab File ID: SIG10100233.D GC Column: CLP-1 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	3.75	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1016 Peak 2	4.35	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1016 Peak 3	5.10	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1016 Peak 4	5.30	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1016 Peak 5	5.68	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1260 Peak 1	7.44	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1260 Peak 2	7.73	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1260 Peak 3	8.00	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1260 Peak 4	8.61	Baseline Smoothing	hassl	10/03/17 06:20
PCB-1260 Peak 5	8.86	Baseline Smoothing	hassl	10/03/17 06:20
DCB Decachlorobiphenyl	9.77	Baseline Smoothing	hassl	10/03/17 06:20

Lab Sample ID: ICV 240-297169/37 Client Sample ID:

Date Analyzed: 10/02/17 23:41 Lab File ID: SIG10100237.D GC Column: CLP-2 (0.53mm ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	5.63	Baseline Smoothing	hassl	10/03/17 06:24
PCB-1248 Peak 2	6.80	Baseline Smoothing	hassl	10/03/17 06:24
PCB-1248 Peak 3	7.26	Baseline Smoothing	hassl	10/03/17 06:24
PCB-1248 Peak 4	7.60	Baseline Smoothing	hassl	10/03/17 06:24
PCB-1248 Peak 5	8.25	Baseline Smoothing	hassl	10/03/17 06:24

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ex10PPMSPK_00028	02/18/18	08/18/17	MEOH, Lot 0000177891	1000 mL	ex1016/1260st_00007	10 mL	Aroclor-1016	10 ug/mL
							Aroclor-1260	10 ug/mL
.ex1016/1260st_00007	10/30/22		Restek, Lot A0120262		(Purchased Reagent)		Aroclor-1016	1000 ug/mL
							Aroclor-1260	1000 ug/mL
ex2/.2SURRW_00092	03/14/18	09/14/17	MEOH, Lot 0000177891	2000 mL	exPESTSURRstd_00006	2 mL	DCB Decachlorobiphenyl	0.2 ug/mL
							Tetrachloro-m-xylene	0.2 ug/mL
.exPESTSURRstd_00006	06/30/23		Restek, Lot A01215833		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
EXpH(0-14)_00020	08/14/22		Merck, Lot HC697954		(Purchased Reagent)		pH at time of analysis	1 No Unit
EXTCLPBUFF1_01291	10/05/17	10/04/17	DIWATER, Lot 10042017	48 L	EXTCLP5MNAOH_00037	751.49 g	Sodium Hydroxide	0.313121 %
					EXTCLPACETIC_00024	273.6 mL	Acetic acid	0.57 %
.EXTCLP5MNAOH_00037	08/04/19	08/14/17	DIWATER, Lot 08142017	3 L	EXTCLPNAOH_00029	600 g	Sodium Hydroxide	200 mol/L
..EXTCLPNAOH_00029	08/04/19		Macron, Lot 0000169691		(Purchased Reagent)		Sodium Hydroxide	1 g/g
.EXTCLPACETIC_00024	11/10/20		Macron, Lot 00000130626		(Purchased Reagent)		Acetic acid	1 g/g
EXTCLPBUFF1_01299	10/12/17	10/12/17	DIWATER, Lot 10122017	48 L	EXTCLP5MNAOH_00037	751.49 g	Sodium Hydroxide	0.313121 %
					EXTCLPACETIC_00024	273.6 mL	Acetic acid	0.57 %
.EXTCLP5MNAOH_00037	08/04/19	08/14/17	DIWATER, Lot 08142017	3 L	EXTCLPNAOH_00029	600 g	Sodium Hydroxide	200 mol/L
..EXTCLPNAOH_00029	08/04/19		Macron, Lot 0000169691		(Purchased Reagent)		Sodium Hydroxide	1 g/g
.EXTCLPACETIC_00024	11/10/20		Macron, Lot 00000130626		(Purchased Reagent)		Acetic acid	1 g/g
EXTCLPFILTERS_00033	05/26/22		Whatman, Lot 9769808		(Purchased Reagent)		Prep Analyte	100 Filter
EXTCLPHCLW_00056	06/28/19	07/18/17	DIWATER, Lot 07182017	2000 mL	MTTMHCL_00163	166 mL	Hydrogen Chloride	83 mol/L
.MTTMHCL_00163	06/28/19		JT Baker(Avantor), Lot 0000162118		(Purchased Reagent)		Hydrogen Chloride	100 %
K2S2O8_00072	08/31/19	08/31/17	DIWATER, Lot DIWATER	2.5 L	MTK2S208_00041	125 g	Potassium persulfate	0.05 g/g
.MTK2S208_00041	08/04/22		Macron, Lot 0000166617		(Purchased Reagent)		Potassium persulfate	1 g/g
K2S2O8_00074	10/09/19	10/09/17	DIWATER, Lot DIWATER	2.5 L	MTK2S208_00042	125 g	Potassium persulfate	0.05 g/g
.MTK2S208_00042	09/19/22		Macron, Lot 0000166617		(Purchased Reagent)		Potassium persulfate	1 g/g
MT1to1HCL_00073	02/28/18	08/31/17	DIWATER, Lot DIWATER	2500 mL	MTTMHCL_00168	1250 mL	Hydrogen Chloride	0.5 mL/mL
.MTTMHCL_00168	08/24/19		JT Baker(Avantor), Lot 0000162118		(Purchased Reagent)		Hydrogen Chloride	100 %
MT6500ICV_00039	02/24/18	08/24/17	DIWATER, Lot DIWATER	1000 mL	MTTRICV3_00008	6 mL	Barium	1500 ug/L
							Chromium	1500 ug/L
					MTTRICV5_00014	1.5 mL	Arsenic	375 ug/L
							Cadmium	375 ug/L
							Lead	375 ug/L
							Selenium	375 ug/L
					MTTRICVAG_00007	7.5 mL	Silver	750 ug/L
.MTTRICV3_00008	05/22/18		CPI, Lot 1099181		(Purchased Reagent)		Barium	250 mg/L
							Chromium	250 mg/L
.MTTRICV5_00014	05/21/18		CPI, Lot 1099109		(Purchased Reagent)		Arsenic	250 ug/mL
							Cadmium	250 ug/mL
							Lead	250 ug/mL
							Selenium	250 ug/mL
.MTTRICVAG_00007	02/26/18		CPI, Lot 1095561		(Purchased Reagent)		Silver	100 mg/L
MTAGSPIKEW_00077	03/26/18	09/26/17	DIWATER, Lot DIWATER	1000 mL	MTAG_00007	2.5 mL	Silver	2500 ug/L
					MTTMHNO3_00130	50 mL	Nitric acid	50000000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MTAG_00007	12/08/18	HIGH PURITY STANDARDS, Lot 1713128			(Purchased Reagent)		Silver	1000 ug/mL
.MTTMHNO3_00130	09/22/19	Macron/Avantor, Lot 0000166089			(Purchased Reagent)		Nitric acid	100 %
MTH2S04_00048	07/07/19	Macron, Lot 0000161554			(Purchased Reagent)		Sulfuric acid	100 %
MTH2S04_00049	09/29/19	Macron, Lot 0000161554			(Purchased Reagent)		Sulfuric acid	100 %
MTHGCALW_01633	10/05/17	10/05/17	DIWATER, Lot DIWATER	200 mL	MTHGCAL_00031	2 mL	Mercury	100 ug/L
					MTTMHNO3_00130	0.25 mL	Nitric acid	1250000 ug/L
.MTHGCAL_00031	04/18/18	High Purity, Lot 1706613			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00130	09/22/19	Macron/Avantor, Lot 0000166089			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_01634	10/06/17	10/06/17	DIWATER, Lot DIWATER	200 mL	MTHGCAL_00031	2 mL	Mercury	100 ug/L
					MTTMHNO3_00130	0.25 mL	Nitric acid	1250000 ug/L
.MTHGCAL_00031	04/18/18	High Purity, Lot 1706613			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00130	09/22/19	Macron/Avantor, Lot 0000166089			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_01641	10/13/17	10/13/17	DIWATER, Lot DIWATER	200 mL	MTHGCAL_00031	2 mL	Mercury	100 ug/L
					MTTMHNO3_00130	0.25 mL	Nitric acid	1250000 ug/L
.MTHGCAL_00031	04/18/18	High Purity, Lot 1706613			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00130	09/22/19	Macron/Avantor, Lot 0000166089			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_01642	10/16/17	10/16/17	DIWATER, Lot DIWATER	200 mL	MTHGCAL_00031	2 mL	Mercury	100 ug/L
					MTTMHNO3_00130	0.25 mL	Nitric acid	1250000 ug/L
.MTHGCAL_00031	04/18/18	High Purity, Lot 1706613			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00130	09/22/19	Macron/Avantor, Lot 0000166089			(Purchased Reagent)		Nitric acid	100 %
MTHgICV_00001_00237	10/05/17	10/05/17	DIWATER, Lot DIWATER	100 mL	LLHg-ICV_00005	1 mL	Mercury	0.1 ug/mL
					MTTMHNO3_00131	0.125 mL	Nitric acid	1250 ug/mL
.LLHg-ICV_00005	06/07/18	Elemental Scientific, Lot 1712311			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00131	09/29/19	Macron/Avantor, Lot 0000162025			(Purchased Reagent)		Nitric acid	100 %
MTHgICV_00001_00241	10/16/17	10/16/17	DIWATER, Lot DIWATER	100 mL	LLHg-ICV_00005	1 mL	Mercury	0.1 ug/mL
					MTTMHNO3_00131	0.125 mL	Nitric acid	1250 ug/mL
.LLHg-ICV_00005	06/07/18	Elemental Scientific, Lot 1712311			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00131	09/29/19	Macron/Avantor, Lot 0000162025			(Purchased Reagent)		Nitric acid	100 %
MTICP1_00068	03/13/18	09/13/17	DIWATER, Lot DI WATER	1000 mL	MTICPSPIKE1A_00012	50 mL	Al	100000 ug/L
							Arsenic	100000 ug/L
							B	50000 ug/L
							Barium	100000 ug/L
							Be	2500 ug/L
							Cadmium	2500 ug/L
							Chromium	10000 ug/L
							Co	25000 ug/L
							Cu	12500 ug/L
							Fe	50000 ug/L
							Lead	25000 ug/L
							Mn	25000 ug/L
							Ni	25000 ug/L
							Selenium	100000 ug/L
							Tl	100000 ug/L
							V	25000 ug/L
							Zn	25000 ug/L

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MTICPSPIKEB_00011	50 mL	Mo	50000 ug/L
							Sb	25000 ug/L
							Sn	100000 ug/L
							Ti	50000 ug/L
					MTICPSpikeOdd_00008	50 mL	Li	50000 ug/L
							Si	50000 ug/L
							SiO2	107000 ug/L
							Sr	50000 ug/L
					MTTMHNO3_00128	50 mL	Nitric acid	50000000 ug/L
.MTICPSPIKE1A_00012	06/01/18	High Purity Standards, Lot 1717742			(Purchased Reagent)		Al	2000 ug/mL
							Arsenic	2000 ug/mL
							B	1000 ug/mL
							Barium	2000 ug/mL
							Be	50 ug/mL
							Cadmium	50 ug/mL
							Chromium	200 ug/mL
							Co	500 ug/mL
							Cu	250 ug/mL
							Fe	1000 ug/mL
							Lead	500 ug/mL
							Mn	500 ug/mL
							Ni	500 ug/mL
							Selenium	2000 ug/mL
							Tl	2000 ug/mL
							V	500 ug/mL
							Zn	500 ug/mL
.MTICPSPIKEB_00011	06/01/18	High Purity Standards, Lot 1717806			(Purchased Reagent)		Mo	1000 ug/mL
							Sb	500 ug/mL
							Sn	2000 ug/mL
							Ti	1000 ug/mL
.MTICPSpikeOdd_00008	06/01/18	High Purity Standards, Lot 1717811			(Purchased Reagent)		Li	1000 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sr	1000 ug/mL
.MTTMHNO3_00128	08/29/19	Macron/Avantor, Lot 0000160739			(Purchased Reagent)		Nitric acid	100 %
MTICP2A_00075	03/01/18	08/29/17	DIWATER, Lot NONE	1000 mL	MTTMHNO3_00124	50 mL	Nitric acid	50000 mg/L
					MTTRCAL2_00017	250 mL	Ca	2500 mg/L
							K	2500 mg/L
							Mg	2500 mg/L
							Na	2500 mg/L
.MTTMHNO3_00124	07/11/19	Macron/Avantor, Lot 0000162025			(Purchased Reagent)		Nitric acid	100 %
.MTTRCAL2_00017	05/25/18	HIGH PURITY STANDARDS, Lot 1625030			(Purchased Reagent)		Ca	10000 ug/mL
							K	10000 ug/mL
							Mg	10000 ug/mL
							Na	10000 ug/mL
MTICP2A_00076	04/04/18	10/04/17	DIWATER, Lot NONE	1000 mL	MTTMHNO3_00131	50 mL	Nitric acid	50000 mg/L
					MTTRCAL2_00017	200 mL	Ca	2500 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							K	2500 mg/L
							Mg	2500 mg/L
							Na	2500 mg/L
					MTTRCAL2_00018	50 mL	Ca	2500 mg/L
							K	2500 mg/L
							Mg	2500 mg/L
							Na	2500 mg/L
.MTTMHNO3_00131	09/29/19	Macron/Avantor, Lot 0000162025			(Purchased Reagent)		Nitric acid	100 %
.MTTRCAL2_00017	05/25/18	HIGH PURITY STANDARDS, Lot 1625030			(Purchased Reagent)		Ca	10000 ug/mL
							K	10000 ug/mL
							Mg	10000 ug/mL
							Na	10000 ug/mL
.MTTRCAL2_00018	09/30/18	HIGH PURITY STANDARDS, Lot 1721533			(Purchased Reagent)		Ca	10000 ug/mL
							K	10000 ug/mL
							Mg	10000 ug/mL
							Na	10000 ug/mL
MTICPCCV_00110	03/27/18	09/27/17	DIWATER, Lot DIWATER	2000 mL	MTICPCCV1_00020	200 mL	Arsenic	500 ug/L
							Barium	2000 ug/L
							Cadmium	500 ug/L
							Chromium	2000 ug/L
							Lead	500 ug/L
							Selenium	500 ug/L
					MTICPCCV2_00020	200 mL	Silver	1000 ug/L
.MTICPCCV1_00020	09/12/18	INORGANIC VENTURES, Lot M2-MEB658053			(Purchased Reagent)		Arsenic	5000 ug/L
							Barium	20000 ug/L
							Cadmium	5000 ug/L
							Chromium	20000 ug/L
							Lead	5000 ug/L
							Selenium	5000 ug/L
.MTICPCCV2_00020	09/12/18	INORGANIC VENTURES, Lot M2-MEB658054			(Purchased Reagent)		Silver	10000 ug/L
MTICPCCV_00111	04/11/18	10/11/17	DIWATER, Lot DIWATER	2000 mL	MTICPCCV1_00020	200 mL	Arsenic	500 ug/L
							Barium	2000 ug/L
							Cadmium	500 ug/L
							Chromium	2000 ug/L
							Lead	500 ug/L
							Selenium	500 ug/L
					MTICPCCV2_00020	200 mL	Silver	1000 ug/L
.MTICPCCV1_00020	09/12/18	INORGANIC VENTURES, Lot M2-MEB658053			(Purchased Reagent)		Arsenic	5000 ug/L
							Barium	20000 ug/L
							Cadmium	5000 ug/L
							Chromium	20000 ug/L
							Lead	5000 ug/L
							Selenium	5000 ug/L
.MTICPCCV2_00020	09/12/18	INORGANIC VENTURES, Lot M2-MEB658054			(Purchased Reagent)		Silver	10000 ug/L
MTICPICSABW_00015	12/08/17	06/23/17	DIWATER, Lot DIWATER	1000 mL	MTICPICSAB1_00006	100 mL	Al	500000 ug/L
							Arsenic	1000 ug/L
							B	500 ug/L

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	500 ug/L
							Be	500 ug/L
							Ca	500000 ug/L
							Cadmium	1000 ug/L
							Chromium	500 ug/L
							Co	500 ug/L
							Cu	500 ug/L
							Fe	200000 ug/L
							K	10000 ug/L
							Lead	1000 ug/L
							Li	500 ug/L
							Mg	500000 ug/L
							Mn	500 ug/L
							Na	10000 ug/L
							Ni	1000 ug/L
							Selenium	1000 ug/L
							Sr	1500 ug/L
							Tl	1000 ug/L
							V	500 ug/L
							Zn	1000 ug/L
					MTICPICSAB2_00006	100 mL	Mo	1000 ug/L
							Sb	1000 ug/L
							Si	10000 ug/L
							Silver	1000 ug/L
							Sn	500 ug/L
							Ti	500 ug/L
.MTICPICSAB1_00006	12/08/17	INORGANIC VENTURES, Lot K2-MEB653538			(Purchased Reagent)		Al	5000000 ug/L
							Arsenic	10000 ug/L
							B	5000 ug/L
							Barium	5000 ug/L
							Be	5000 ug/L
							Ca	5000000 ug/L
							Cadmium	10000 ug/L
							Chromium	5000 ug/L
							Co	5000 ug/L
							Cu	5000 ug/L
							Fe	2000000 ug/L
							K	100000 ug/L
							Lead	10000 ug/L
							Li	5000 ug/L
							Mg	5000000 ug/L
							Mn	5000 ug/L
							Na	100000 ug/L
							Ni	10000 ug/L
							Selenium	10000 ug/L
							Sr	15000 ug/L
							Tl	10000 ug/L
							V	5000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zn	10000 ug/L
.MTICPICSAB2_00006	12/08/17	INORGANIC VENTURES, Lot K2-MEB653539			(Purchased Reagent)		Mo	10000 ug/L
							Sb	10000 ug/L
							Si	100000 ug/L
							Silver	10000 ug/L
							Sn	5000 ug/L
							Ti	5000 ug/L
MTKMN04W_00143	09/25/19	09/25/17	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00041	125 g	Potassium Permanganate	50000 mg/L
.MTKMN04_00041	09/19/22	Fisher, Lot 171263			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTKMN04W_00144	10/13/19	10/13/17	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00041	125 g	Potassium Permanganate	50000 mg/L
.MTKMN04_00041	09/19/22	Fisher, Lot 171263			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTNONRCRA+ODD_00009	08/31/18	High-Purity Standards, Lot 1722622			(Purchased Reagent)		Al	100 ug/mL
							B	50 ug/mL
							Be	2.5 ug/mL
							Co	25 ug/mL
							Cu	12.5 ug/mL
							Fe	50 ug/mL
							Li	50 ug/mL
							Mn	25 ug/mL
							Mo	50 ug/mL
							Ni	25 ug/mL
							Sb	25 ug/mL
							Si	50 ug/mL
							Sn	100 ug/mL
							Sr	50 ug/mL
							Ti	50 ug/mL
							Tl	100 ug/mL
							V	25 ug/mL
							Zn	25 ug/mL
MTRCRA_00012	10/28/17	High Purity Standards, Lot 1630101			(Purchased Reagent)		Arsenic	500 mg/L
							Barium	5000 mg/L
							Cadmium	100 mg/L
							Chromium	500 mg/L
							Lead	500 mg/L
							Selenium	100 mg/L
							Silver	100 mg/L
MTTMHNO3_00131	09/29/19	Macron/Avantor, Lot 0000162025			(Purchased Reagent)		Nitric acid	100 %
MTTMHNO3_00132	10/04/19	Macron/Avantor, Lot 0000160739			(Purchased Reagent)		Nitric acid	100 %
MTTRCRIC_00051	01/17/18	09/27/17	DIWATER, Lot DIWATER	1000 mL	MTTRCRI6010C_00015	50 mL	Arsenic	15 ug/L
							Barium	200 ug/L
							Cadmium	5 ug/L
							Chromium	10 ug/L
							Lead	10 ug/L
							Selenium	20 ug/L
							Silver	10 ug/L

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MTTRCRI6010C_00015	01/17/18	Inorganic Ventures, Lot K2-MEB653408			(Purchased Reagent)		Arsenic	300 ug/L
							Barium	4000 ug/L
							Cadmium	100 ug/L
							Chromium	200 ug/L
							Lead	200 ug/L
							Selenium	400 ug/L
							Silver	200 ug/L
MTTRICSAW_00035	12/23/17	06/23/17	DIWATER, Lot DIWATER	1000 mL	MTTRICSA_00015	100 mL	Al	500000 ug/L
							Ca	500000 ug/L
							Fe	200000 ug/L
							Mg	500000 ug/L
.MTTRICSA_00015	04/02/18	INORGANIC VENTURES, Lot J2-MEB572053			(Purchased Reagent)		Al	5000 ug/mL
							Ca	5000 ug/mL
							Fe	2000 ug/mL
							Mg	5000 ug/mL
SG1221ICV@1.0_00020	03/14/18	09/14/17	HEXANE, Lot 0000173156	10 mL	SG1221ICV@100_00005	0.1 mL	Aroclor-1221	1 ug/mL
.SG1221ICV@100_00005	03/27/18	03/27/17	HEXANE, Lot 0000132636	10 mL	SG 1221 ICV_00009	1 mL	Aroclor-1221	100 ug/mL
..SG 1221 ICV_00009	06/30/19	restek, Lot a094157			(Purchased Reagent)		Aroclor-1221	1000 ug/mL
SG1232ICV@1.0_00021	03/14/18	09/14/17	HEXANE, Lot 0000173156	10 mL	SG1232ICV@100_00006	0.1 mL	Aroclor-1232	1 ug/mL
.SG1232ICV@100_00006	08/17/18	08/17/17	HEXANE, Lot 0000173156	10 mL	SG 1232 ICV_00010	1 mL	Aroclor-1232	100 ug/mL
..SG 1232 ICV_00010	01/31/19	ULTRA SCIENTIFIC, Lot CG-4471			(Purchased Reagent)		Aroclor-1232	1000 ug/mL
SG1242ICV@1.0_00021	03/14/18	09/14/17	HEXANE, Lot 0000173156	10 mL	SG1242ICV@100_00005	0.1 mL	Aroclor-1242	1 ug/mL
.SG1242ICV@100_00005	09/08/18	09/08/17	HEXANE, Lot 0000173156	10 mL	SG 1242 ICV_00008	1 mL	Aroclor-1242	100 ug/mL
..SG 1242 ICV_00008	01/31/20	ULTRA SCIENTIFIC, Lot CH-4123			(Purchased Reagent)		Aroclor-1242	1000 ug/mL
SG1248@.05ppm_00023	03/28/18	09/28/17	HEXANE, Lot 0000160062	50 mL	SG1248@10ppm_00011	0.25 mL	PCB-1248 Peak 1	0.05 ug/mL
							PCB-1248 Peak 2	0.05 ug/mL
							PCB-1248 Peak 3	0.05 ug/mL
							PCB-1248 Peak 4	0.05 ug/mL
							PCB-1248 Peak 5	0.05 ug/mL
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG1248@10ppm_00011	09/06/18	09/06/17	Hexane, Lot 0000173156	100 mL	SG1248_00007	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00007	02/28/21	Restek, Lot A0110957			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20	Restek, Lot A0124315			(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248@0.1PPM_00025	03/28/18	09/28/17	HEXANE, Lot 0000175756	50 mL	SG1248@10ppm_00011	0.5 mL	PCB-1248 Peak 1	0.1 ug/mL
							PCB-1248 Peak 2	0.1 ug/mL
							PCB-1248 Peak 3	0.1 ug/mL
							PCB-1248 Peak 4	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1248 Peak 5	0.1 ug/mL
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG1248@10ppm_00011	09/06/18	09/06/17	Hexane, Lot 0000173156	100 mL	SG1248_00007	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00007	02/28/21		Restek, Lot A0110957		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248@0.2ppm_00021	03/28/18	09/28/17	HEXANE, Lot 0000175756	50 mL	SG1248@10ppm_00011	1 mL	PCB-1248 Peak 1	0.2 ug/mL
							PCB-1248 Peak 2	0.2 ug/mL
							PCB-1248 Peak 3	0.2 ug/mL
							PCB-1248 Peak 4	0.2 ug/mL
							PCB-1248 Peak 5	0.2 ug/mL
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG1248@10ppm_00011	09/06/18	09/06/17	Hexane, Lot 0000173156	100 mL	SG1248_00007	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00007	02/28/21		Restek, Lot A0110957		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248@0.5ppm_00030	11/29/17	07/10/17	HEXANE, Lot 0000173156	100 mL	SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248@0.5ppm_00030	11/29/17	07/10/17	HEXANE, Lot 0000173156	100 mL	SG1248@10ppm_00010	5 mL	Aroclor-1248	0.5 ug/mL
							PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
.SG1248@10ppm_00010	11/29/17	11/29/16	Hexane, Lot 0000146278	100 mL	SG1248_00007	1 mL	Aroclor-1248	10 ug/mL
							PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SG1248_00007	02/28/21		Restek, Lot A0110957		(Purchased Reagent)		Aroclor-1248	1000 ug/mL
							PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248@0.5ppm_00031	03/28/18	09/28/17	HEXANE, Lot 0000175756	100 mL	SG1248@10ppm_00011	5 mL	PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
					SGPCBIS STOCk_00009	0.5 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG1248@10ppm_00011	09/06/18	09/06/17	Hexane, Lot 0000173156	100 mL	SG1248_00007	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00007	02/28/21		Restek, Lot A0110957		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248@1.0ppm_00021	03/28/18	09/28/17	HEXANE, Lot 0000175756	50 mL	SG1248@10ppm_00011	5 mL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG1248@10ppm_00011	09/06/18	09/06/17	Hexane, Lot 0000173156	100 mL	SG1248_00007	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00007	02/28/21		Restek, Lot A0110957		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248@1.5ppm_00002	03/28/18	09/28/17	HEXANE, Lot 0000175756	50 mL	SG1248@10ppm_00011	7.5 mL	PCB-1248 Peak 1	1.5 ug/mL
							PCB-1248 Peak 2	1.5 ug/mL
							PCB-1248 Peak 3	1.5 ug/mL
							PCB-1248 Peak 4	1.5 ug/mL
							PCB-1248 Peak 5	1.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG1248@10ppm_00011	09/06/18	09/06/17	Hexane, Lot 0000173156	100 mL	SG1248_00007	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00007	02/28/21		Restek, Lot A0110957		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1248ICV@1.0_00021	03/14/18	09/14/17	HEXANE, Lot 0000173156	10 mL	SG1248ICV@100_00006	0.1 mL	Aroclor-1248	1 ug/mL
.SG1248ICV@100_00006	05/05/18	05/05/17	HEXANE, Lot 0000160062	10 mL	SG 1248 ICV_00010	1 mL	Aroclor-1248	100 ug/mL
..SG 1248 ICV_00010	04/30/23		restek, Lot a0107321		(Purchased Reagent)		Aroclor-1248	1000 ug/mL
SG1254ICV@1.0_00020	03/14/18	09/14/17	HEXANE, Lot 0000173156	10 mL	SG1254ICV@100_00006	0.1 mL	Aroclor-1254	1 ug/mL
.SG1254ICV@100_00006	08/17/18	08/17/17	HEXANE, Lot 0000173156	10 mL	SGPCB1254_00010	1 mL	Aroclor-1254	100 ug/mL
..SGPCB1254_00010	10/31/21		ULTRA SCIENTIFIC, Lot CK-3221		(Purchased Reagent)		Aroclor-1254	1000 ug/mL
SG1660@.05PPM_00020	11/03/17	05/03/17	HEXANE, Lot 0000160062	100 mL	SG1016/1260_00022	0.5 mL	PCB-1016 Peak 1	0.05 ug/mL
							PCB-1016 Peak 2	0.05 ug/mL
							PCB-1016 Peak 3	0.05 ug/mL
							PCB-1016 Peak 4	0.05 ug/mL
							PCB-1016 Peak 5	0.05 ug/mL
							PCB-1260 Peak 1	0.05 ug/mL
							PCB-1260 Peak 2	0.05 ug/mL
							PCB-1260 Peak 3	0.05 ug/mL
							PCB-1260 Peak 4	0.05 ug/mL
							PCB-1260 Peak 5	0.05 ug/mL
					SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
					SGPCGSURRSTK_00008	0.125 mL	DCB Decachlorobiphenyl	0.0025 ug/mL
							Tetrachloro-m-xylene	0.0025 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@0.2ppm_00022	11/03/17	05/03/17	HEXANE, Lot 00000160062	50 mL	SG1016/1260_00022	1 mL	PCB-1016 Peak 1	0.2 ug/mL
							PCB-1016 Peak 2	0.2 ug/mL
							PCB-1016 Peak 3	0.2 ug/mL
							PCB-1016 Peak 4	0.2 ug/mL
							PCB-1016 Peak 5	0.2 ug/mL
							PCB-1260 Peak 1	0.2 ug/mL
							PCB-1260 Peak 2	0.2 ug/mL
							PCB-1260 Peak 3	0.2 ug/mL
							PCB-1260 Peak 4	0.2 ug/mL
							PCB-1260 Peak 5	0.2 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
					SGPCGSURRSTK_00008	0.25 mL	DCB Decachlorobiphenyl	0.01 ug/mL
							Tetrachloro-m-xylene	0.01 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@0.5PPM_00072	11/03/17	05/03/17	HEXANE, Lot 0000160062	100 mL	SG1016/1260_00022	5 mL	PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
					SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
					SGPCGSURRSTK_00008	1.25 mL	DCB Decachlorobiphenyl	0.025 ug/mL
							Tetrachloro-m-xylene	0.025 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@0.5PPM_00074	12/08/17	08/09/17	HEXANE, Lot 0000173156	100 mL	SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG1660@0.5PPM_00074	12/08/17	08/09/17	HEXANE, Lot 0000173156	100 mL	SG1016/1260_00022	5 mL	1260 Res 1	0.5 ug/mL
							1260 Res 2	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1260 Res 3	0.5 ug/mL
							Aroclor-1016	0.5 ug/mL
							Aroclor-1260	0.5 ug/mL
							PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
					SGPCGSURRSTK_00008	1.25 mL	DCB Decachlorobiphenyl	0.025 ug/mL
							Tetrachloro-m-xylene	0.025 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	1260 Res 1	10 ug/mL
							1260 Res 2	10 ug/mL
							1260 Res 3	10 ug/mL
							Aroclor-1016	10 ug/mL
							Aroclor-1260	10 ug/mL
							PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		1260 Res 1	1000 ug/mL
							1260 Res 2	1000 ug/mL
							1260 Res 3	1000 ug/mL
							Aroclor-1016	1000 ug/mL
							Aroclor-1260	1000 ug/mL
							PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloro-m-xylene	200 ug/mL
SG1660@1.0PPM_00023	11/03/17	05/03/17	HEXANE, Lot 0000160062	50 mL	SG1016/1260_00022	5 mL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
							PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
					SGPCGSURRSTK_00008	1.25 mL	DCB Decachlorobiphenyl	0.05 ug/mL
							Tetrachloro-m-xylene	0.05 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@1.5PPM_00001	11/03/17	05/03/17	HEXANE, Lot 0000160062	50 mL	SG1016/1260_00022	7.5 mL	PCB-1016 Peak 1	1.5 ug/mL
							PCB-1016 Peak 2	1.5 ug/mL
							PCB-1016 Peak 3	1.5 ug/mL
							PCB-1016 Peak 4	1.5 ug/mL
							PCB-1016 Peak 5	1.5 ug/mL
							PCB-1260 Peak 1	1.5 ug/mL
							PCB-1260 Peak 2	1.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 3	1.5 ug/mL
							PCB-1260 Peak 4	1.5 ug/mL
							PCB-1260 Peak 5	1.5 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
					SGPCGSURRSTK_00008	2.5 mL	DCB Decachlorobiphenyl	0.1 ug/mL
							Tetrachloro-m-xylene	0.1 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660ICV@1.0_00028	12/08/17	09/14/17	HEXANE, Lot 0000173156	10 mL	SG1660ICV@100_00010	0.1 mL	Aroclor-1016	1 ug/mL
							Aroclor-1260	1 ug/mL
					SGPCGSURRSTK_00008	0.25 mL	DCB Decachlorobiphenyl	0.05 ug/mL
							Tetrachloro-m-xylene	0.05 ug/mL
.SG1660ICV@100_00010	03/07/18	03/08/17	HEXANE, Lot 0000132636	10 mL	SG 1660 ICV_00014	1 mL	Aroclor-1016	100 ug/mL
							Aroclor-1260	100 ug/mL
..SG 1660 ICV_00014	01/31/22		restek, Lot a0114674		(Purchased Reagent)		Aroclor-1016	1000 ug/mL
							Aroclor-1260	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660STD@0.1_00020	11/03/17	05/03/17	HEXANE, Lot 0000160062	50 mL	SG1016/1260_00022	0.5 mL	PCB-1016 Peak 1	0.1 ug/mL
							PCB-1016 Peak 2	0.1 ug/mL
							PCB-1016 Peak 3	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 4	0.1 ug/mL
							PCB-1016 Peak 5	0.1 ug/mL
							PCB-1260 Peak 1	0.1 ug/mL
							PCB-1260 Peak 2	0.1 ug/mL
							PCB-1260 Peak 3	0.1 ug/mL
							PCB-1260 Peak 4	0.1 ug/mL
							PCB-1260 Peak 5	0.1 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
					SGPCGSURRSTK_00008	0.125 mL	DCB Decachlorobiphenyl	0.005 ug/mL
							Tetrachloro-m-xylene	0.005 ug/mL
.SG1016/1260_00022	04/24/18	04/24/17	HEXANE, Lot 0000159594	100 mL	SG1016/1260MX_00011	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00011	06/30/21		Restek, Lot A0109664		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
.SGPCGSURRSTK_00008	12/08/17	12/08/16	HEXANE, Lot 0000132636	100 mL	SGPESTSURR_00010	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPESTSURR_00010	06/22/22		Restek, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG2154@0.05PP_00016	11/02/17	05/02/17	HEXANE, Lot 0000160062	50 mL	SG2154@10ppm_00011	0.25 mL	PCB-1221 Peak 1	0.05 ug/mL
							PCB-1221 Peak 2	0.05 ug/mL
							PCB-1221 Peak 3	0.05 ug/mL
							PCB-1254 Peak 1	0.05 ug/mL
							PCB-1254 Peak 2	0.05 ug/mL
							PCB-1254 Peak 3	0.05 ug/mL
							PCB-1254 Peak 4	0.05 ug/mL
							PCB-1254 Peak 5	0.05 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1221 Peak 3	10 ug/mL
							PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG2154@0.2PPM_00017	11/02/17	05/02/17	HEXANE, Lot 0000160062	50 mL	SG2154@10ppm_00011	1 mL	PCB-1221 Peak 1	0.2 ug/mL
							PCB-1221 Peak 2	0.2 ug/mL
							PCB-1221 Peak 3	0.2 ug/mL
							PCB-1254 Peak 1	0.2 ug/mL
							PCB-1254 Peak 2	0.2 ug/mL
							PCB-1254 Peak 3	0.2 ug/mL
							PCB-1254 Peak 4	0.2 ug/mL
							PCB-1254 Peak 5	0.2 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
							PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG2154@0.5PPM_00033	12/06/17	07/10/17	HEXANE, Lot 0000173156	100 mL	SG2154@10ppm_00011	5 mL	PCB-1221 Peak 1	0.5 ug/mL
							PCB-1221 Peak 2	0.5 ug/mL
							PCB-1221 Peak 3	0.5 ug/mL
							PCB-1254 Peak 1	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1254 Peak 2	0.5 ug/mL
							PCB-1254 Peak 3	0.5 ug/mL
							PCB-1254 Peak 4	0.5 ug/mL
							PCB-1254 Peak 5	0.5 ug/mL
					SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
							PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG2154@0.5PPM_00033	12/06/17	07/10/17	HEXANE, Lot 0000173156	100 mL	SG2154@10ppm_00011	5 mL	Aroclor-1221	0.5 ug/mL
							Aroclor-1254	0.5 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	Aroclor-1221	10 ug/mL
							Aroclor-1254	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		Aroclor-1221	1000 ug/mL
							Aroclor-1254	1000 ug/mL
SG2154@1.0PPM_00021	11/02/17	05/02/17	HEXANE, Lot 0000160026	50 mL	SG2154@10ppm_00011	5 mL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
							PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
							PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG2154@1.5PPM_00001	11/02/17	05/02/17	HEXANE, Lot 0000160062	50 mL	SG2154@10ppm_00011	7.5 mL	PCB-1221 Peak 1	1.5 ug/mL
							PCB-1221 Peak 2	1.5 ug/mL
							PCB-1221 Peak 3	1.5 ug/mL
							PCB-1254 Peak 1	1.5 ug/mL
							PCB-1254 Peak 2	1.5 ug/mL
							PCB-1254 Peak 3	1.5 ug/mL
							PCB-1254 Peak 4	1.5 ug/mL
							PCB-1254 Peak 5	1.5 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
							PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG2154@O.1PPM_00018	11/02/17	05/02/17	HEXANE, Lot 0000160062	50 mL	SG2154@10ppm_00011	0.5 mL	PCB-1221 Peak 1	0.1 ug/mL
							PCB-1221 Peak 2	0.1 ug/mL
							PCB-1221 Peak 3	0.1 ug/mL
							PCB-1254 Peak 1	0.1 ug/mL
							PCB-1254 Peak 2	0.1 ug/mL
							PCB-1254 Peak 3	0.1 ug/mL
							PCB-1254 Peak 4	0.1 ug/mL
							PCB-1254 Peak 5	0.1 ug/mL
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	0.05 ug/mL
.SG2154@10ppm_00011	12/06/17	12/06/16	HEXANE, Lot 0000132636	100 mL	SG1221/1254_00003	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1221 Peak 3	10 ug/mL
							PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SG1221/1254_00003	07/31/21		restek, Lot a0110124		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@.05PPM_00009	10/26/17	04/26/17	HEXANE, Lot 0000160062	50 mL	SG32/6210PPM_00006	0.25 mL	PCB-1232 Peak 1	50 ug/L
							PCB-1232 Peak 2	50 ug/L
							PCB-1232 Peak 3	50 ug/L
							PCB-1232 Peak 4	50 ug/L
							PCB-1232 Peak 5	50 ug/L
							PCB-1262 Peak 1	50 ug/L
							PCB-1262 Peak 2	50 ug/L
							PCB-1262 Peak 3	50 ug/L
							PCB-1262 Peak 4	50 ug/L
							PCB-1262 Peak 5	50 ug/L
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	PCB-1232 Peak 1	10 ug/mL
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21		Restelk, Lot A0112323		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20	Restek, Lot A0124315			(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@.2PPM_00012	10/26/17	04/26/17	HEXANE, Lot 0000160062	50 mL	SG32/6210PPM_00006	1 mL	PCB-1232 Peak 1	200 ug/L
							PCB-1232 Peak 2	200 ug/L
							PCB-1232 Peak 3	200 ug/L
							PCB-1232 Peak 4	200 ug/L
							PCB-1232 Peak 5	200 ug/L
							PCB-1262 Peak 1	200 ug/L
							PCB-1262 Peak 2	200 ug/L
							PCB-1262 Peak 3	200 ug/L
							PCB-1262 Peak 4	200 ug/L
							PCB-1262 Peak 5	200 ug/L
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	PCB-1232 Peak 1	10 ug/mL
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21	Restelk, Lot A0112323			(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20	Restek, Lot A0124315			(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@0.1PPM_00010	10/26/17	04/26/17	HEXANE, Lot 0000160062	50 mL	SG32/6210PPM_00006	0.5 mL	PCB-1232 Peak 1	100 ug/L
							PCB-1232 Peak 2	100 ug/L
							PCB-1232 Peak 3	100 ug/L
							PCB-1232 Peak 4	100 ug/L
							PCB-1232 Peak 5	100 ug/L
							PCB-1262 Peak 1	100 ug/L
							PCB-1262 Peak 2	100 ug/L
							PCB-1262 Peak 3	100 ug/L
							PCB-1262 Peak 4	100 ug/L
							PCB-1262 Peak 5	100 ug/L
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	PCB-1232 Peak 1	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21		Restelk, Lot A0112323		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@0.5PPM_00019	10/25/17	04/26/17	HEXANE, Lot 0000160062	100 mL	SG32/6210PPM_00006	5 mL	PCB-1232 Peak 1	500 ug/L
							PCB-1232 Peak 2	500 ug/L
							PCB-1232 Peak 3	500 ug/L
							PCB-1232 Peak 4	500 ug/L
							PCB-1232 Peak 5	500 ug/L
							PCB-1262 Peak 1	500 ug/L
							PCB-1262 Peak 2	500 ug/L
							PCB-1262 Peak 3	500 ug/L
							PCB-1262 Peak 4	500 ug/L
							PCB-1262 Peak 5	500 ug/L
					SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	PCB-1232 Peak 1	10 ug/mL
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21		Restelk, Lot A0112323		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@0.5PPM_00021	11/29/17	07/10/17	HEXANE, Lot 0000173156	100 mL	SGPCBIS STOCk_00008	0.5 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@0.5PPM_00021	11/29/17	07/10/17	HEXANE, Lot 0000173156	100 mL	SG32/6210PPM_00006	5 mL	Aroclor-1232	500 ug/L
							PCB-1232 Peak 1	500 ug/L
							PCB-1232 Peak 2	500 ug/L
							PCB-1232 Peak 3	500 ug/L
							PCB-1232 Peak 4	500 ug/L
							PCB-1232 Peak 5	500 ug/L
							PCB-1262	500 ug/L
							PCB-1262 Peak 1	500 ug/L
							PCB-1262 Peak 2	500 ug/L
							PCB-1262 Peak 3	500 ug/L
							PCB-1262 Peak 4	500 ug/L
							PCB-1262 Peak 5	500 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	Aroclor-1232	10 ug/mL
							PCB-1232 Peak 1	10 ug/mL
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21		Restelk, Lot A0112323		(Purchased Reagent)		Aroclor-1232	1000 ug/mL
							PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG3262@1.0PPM_00012	10/26/17	04/26/17	HEXANE, Lot 0000160062	50 mL	SG32/6210PPM_00006	5 mL	PCB-1232 Peak 1	1000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1232 Peak 2	1000 ug/L
							PCB-1232 Peak 3	1000 ug/L
							PCB-1232 Peak 4	1000 ug/L
							PCB-1232 Peak 5	1000 ug/L
							PCB-1262 Peak 1	1000 ug/L
							PCB-1262 Peak 2	1000 ug/L
							PCB-1262 Peak 3	1000 ug/L
							PCB-1262 Peak 4	1000 ug/L
							PCB-1262 Peak 5	1000 ug/L
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	PCB-1232 Peak 1	10 ug/mL
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21		Restelk, Lot A0112323		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG3262@1.5PPM_00001	10/26/17	04/26/17	HEXANE, Lot 0000160062	50 mL	SG32/6210PPM_00006	7.5 mL	PCB-1232 Peak 1	1500 ug/L
							PCB-1232 Peak 2	1500 ug/L
							PCB-1232 Peak 3	1500 ug/L
							PCB-1232 Peak 4	1500 ug/L
							PCB-1232 Peak 5	1500 ug/L
							PCB-1262 Peak 1	1500 ug/L
							PCB-1262 Peak 2	1500 ug/L
							PCB-1262 Peak 3	1500 ug/L
							PCB-1262 Peak 4	1500 ug/L
							PCB-1262 Peak 5	1500 ug/L
					SGPCBIS STOCk_00008	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG32/6210PPM_00006	11/29/17	11/29/16	HEXANE, Lot 0000146278	100 mL	SG32/62 STK_00002	1 mL	PCB-1232 Peak 1	10 ug/mL
							PCB-1232 Peak 2	10 ug/mL
							PCB-1232 Peak 3	10 ug/mL
							PCB-1232 Peak 4	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1232 Peak 5	10 ug/mL
							PCB-1262 Peak 1	10 ug/mL
							PCB-1262 Peak 2	10 ug/mL
							PCB-1262 Peak 3	10 ug/mL
							PCB-1262 Peak 4	10 ug/mL
							PCB-1262 Peak 5	10 ug/mL
..SG32/62 STK_00002	10/31/21		Restelk, Lot A0112323		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG42/68@1.0PP_00018	03/20/18	09/20/17	HEXANE, Lot 0000175756	50 mL	SG42/6810PPM_00007	5 mL	PCB-1242 Peak 1	1000 ug/L
							PCB-1242 Peak 2	1000 ug/L
							PCB-1242 Peak 3	1000 ug/L
							PCB-1242 Peak 4	1000 ug/L
							PCB-1242 Peak 5	1000 ug/L
							PCB-1268 Peak 1	1000 ug/L
							PCB-1268 Peak 2	1000 ug/L
							PCB-1268 Peak 3	1000 ug/L
							PCB-1268 Peak 4	1000 ug/L
							PCB-1268 Peak 5	1000 ug/L
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
							PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG4268@.05PPM_00011	03/20/18	09/20/17	HEXANE, Lot 0000175756	50 mL	SG42/6810PPM_00007	0.25 mL	PCB-1242 Peak 1	50 ug/L
							PCB-1242 Peak 2	50 ug/L
							PCB-1242 Peak 3	50 ug/L
							PCB-1242 Peak 4	50 ug/L
							PCB-1242 Peak 5	50 ug/L
							PCB-1268 Peak 1	50 ug/L
							PCB-1268 Peak 2	50 ug/L
							PCB-1268 Peak 3	50 ug/L
							PCB-1268 Peak 4	50 ug/L
							PCB-1268 Peak 5	50 ug/L
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
							PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG4268@.1PPM_00012	03/20/18	09/20/17	HEXANE, Lot 0000175756	50 mL	SG42/6810PPM_00007	0.5 mL	PCB-1242 Peak 1	100 ug/L
							PCB-1242 Peak 2	100 ug/L
							PCB-1242 Peak 3	100 ug/L
							PCB-1242 Peak 4	100 ug/L
							PCB-1242 Peak 5	100 ug/L
							PCB-1268 Peak 1	100 ug/L
							PCB-1268 Peak 2	100 ug/L
							PCB-1268 Peak 3	100 ug/L
							PCB-1268 Peak 4	100 ug/L
							PCB-1268 Peak 5	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
							PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG4268@.2PPM_00012	03/20/18	09/20/17	HEXANE, Lot 0000175756	50 mL	SG42/6810PPM_00007	1 mL	PCB-1242 Peak 1	200 ug/L
							PCB-1242 Peak 2	200 ug/L
							PCB-1242 Peak 3	200 ug/L
							PCB-1242 Peak 4	200 ug/L
							PCB-1242 Peak 5	200 ug/L
							PCB-1268 Peak 1	200 ug/L
							PCB-1268 Peak 2	200 ug/L
							PCB-1268 Peak 3	200 ug/L
							PCB-1268 Peak 4	200 ug/L
							PCB-1268 Peak 5	200 ug/L
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
							PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG4268@0.5PPM_00025	03/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG42/6810PPM_00007	5 mL	PCB-1242 Peak 1	500 ug/L
							PCB-1242 Peak 2	500 ug/L
							PCB-1242 Peak 3	500 ug/L
							PCB-1242 Peak 4	500 ug/L
							PCB-1242 Peak 5	500 ug/L
							PCB-1268 Peak 1	500 ug/L
							PCB-1268 Peak 2	500 ug/L
							PCB-1268 Peak 3	500 ug/L
							PCB-1268 Peak 4	500 ug/L
							PCB-1268 Peak 5	500 ug/L
					SGPCBIS STOCk_00009	0.5 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
							PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SG4268@0.5PPM_00025	03/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG42/6810PPM_00007	5 mL	Aroclor-1242	500 ug/L
							PCB-1268	500 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	Aroclor-1242	10000 ug/L
							PCB-1268	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		Aroclor-1242	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1268	1000 ug/mL
SG4268@1.5PPM_00003	03/20/18	09/20/17	HEXANE, Lot 0000175756	50 mL	SG42/6810PPM_00007	7.5 mL	PCB-1242 Peak 1	1500 ug/L
							PCB-1242 Peak 2	1500 ug/L
							PCB-1242 Peak 3	1500 ug/L
							PCB-1242 Peak 4	1500 ug/L
							PCB-1242 Peak 5	1500 ug/L
							PCB-1268 Peak 1	1500 ug/L
							PCB-1268 Peak 2	1500 ug/L
							PCB-1268 Peak 3	1500 ug/L
							PCB-1268 Peak 4	1500 ug/L
							PCB-1268 Peak 5	1500 ug/L
					SGPCBIS STOCk_00009	0.25 mL	1-Bromo-2-nitrobenzene	50 ug/L
.SG42/6810PPM_00007	09/20/18	09/20/17	HEXANE, Lot 0000175756	100 mL	SG 42/68 STK_00002	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
							PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG 42/68 STK_00002	04/30/22		RESTEK, Lot A0116616		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
.SGPCBIS STOCk_00009	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SGPCBISTD_00012	01/25/18	07/25/17	HEXANE, Lot 0000173156	100 mL	SGPCBIS STOCk_00008	10 mL	1-Bromo-2-nitrobenzene	1 ug/mL
.SGPCBIS STOCk_00008	04/24/18	04/24/17	HEXANE, Lot 0000159594	50 mL	ISTD_00004	0.5 mL	1-Bromo-2-nitrobenzene	10 ug/mL
..ISTD_00004	04/30/20		Restek, Lot A0124315		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
vm100is_stk_00036	03/24/18	09/24/17	MEOH, Lot 177891	20 mL	VM568718_00008	8 mL	1,4-Dichlorobenzene-d4	100 ug/mL
							Chlorobenzene-d5	100 ug/mL
							Fluorobenzene	100 ug/mL
.VM568718_00008	03/31/21		restek, Lot A0118105		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm100ss_stk_00027	03/24/18	09/24/17	MEOH, Lot 177891	100 mL	VM567650_00027	4 mL	1,2-Dichloroethane-d4 (Surr)	100 ug/mL
							4-Bromofluorobenzene (Surr)	100 ug/mL
							Dibromofluoromethane (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene-d8 (Surr)	100 ug/mL
.VM567650_00027	07/31/21		Restek, Lot A0120212		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm250-IS_00037	10/07/17	04/07/17	MEOH, Lot +173000000127999JM	100 mL	vmcus8126_00009	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
.vmcus8126_00009	01/31/18		Ultra Scientific, Lot CM-6298		(Purchased Reagent)		1,4-Dichlorobenzene-d4	25000 ug/mL
							Chlorobenzene-d5	25000 ug/mL
							Fluorobenzene	25000 ug/mL
VM250-IS_00038	01/21/18	07/21/17	MEOH, Lot 0000147462	100 mL	vmcus8126_00009	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
.vmcus8126_00009	01/31/18		Ultra Scientific, Lot CM-6298		(Purchased Reagent)		1,4-Dichlorobenzene-d4	25000 ug/mL
							Chlorobenzene-d5	25000 ug/mL
							Fluorobenzene	25000 ug/mL
vm50ss_00294	08/23/17	08/16/17	MEOH, Lot na	4 mL	vm50ss_stk_00074	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00074	12/15/17	06/15/17	MEOH, Lot 0000136118	200 mL	VM567650_00024	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00024	07/31/20		Restek, Lot A0112455		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00299	10/10/17	10/03/17	MEOH, Lot na	4 mL	vm50ss_stk_00075	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00075	03/08/18	09/08/17	MEOH, Lot 0000136118	200 mL	VM567650_00024	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00024	07/31/20		Restek, Lot A0112455		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00211	08/24/17	08/17/17	MEOH, Lot na	4 mL	VMACROLSTD_00052	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00052	09/01/17	08/01/17	MEOH, Lot 0000147462	20 mL	VM568720_00021	250 uL	Acrolein	250 ug/mL
..VM568720_00021	09/30/17		restek, Lot A0125560		(Purchased Reagent)		Acrolein	20000 ug/mL
vmarolistdw_00217	10/08/17	10/01/17	MEOH, Lot na	4 mL	VMACROLSTD_00054	4 mL	Acrolein	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMACROLSTD_00054	11/01/17	10/01/17	MEOH, Lot 0000177891	20 mL	VM568720_00023	250 uL	Acrolein	250 ug/mL
..VM568720_00023	11/30/17		restek, Lot A0127476		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00018							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00001	1.25 mL	BFB	50 ug/mL
.vm30026_00001	03/31/20		restek, Lot A0109427		(Purchased Reagent)		BFB	2000 ug/mL
VMFASA9W_00159	10/12/17	10/05/17	MEOH, Lot NA	4 mL	VMFASA9_00010	4 mL	1,2,3-Trimethylbenzene	50 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMFASA9_00010	10/31/17	07/01/17	MEOH, Lot 0000147462	100 mL	VM570808S_00003	2 mL	1,2,3-Trimethylbenzene	50 ug/mL
					VM571993S_00002	2 mL	Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..VM570808S_00003	10/31/17		Restek, Lot A0118725		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
..VM571993S_00002	12/31/18		restek, Lot A0123771		(Purchased Reagent)		Diisopropyl ether	2500 ug/mL
							Ethyl t-butyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
VMFASGW_00222	08/25/17	08/18/17	MEOH, Lot NA	4 mL	VMFASG_00062	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00062	09/02/17	08/02/17	MEOH, Lot 0000147462	100 mL	vm569722S_00003	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00003	08/31/18		Restek, Lot A0113063		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00227	10/03/17	09/27/17	MEOH, Lot NA	4 mL	VMFASG_00063	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00063	10/03/17	09/03/17	MEOH, Lot 0000177891	100 mL	vm569722S_00003	2 mL	Bromomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00003	08/31/18		Restek, Lot A0113063		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00228	10/11/17	10/04/17	MEOH, Lot NA	4 mL	VMFASG_00064	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00064	11/04/17	10/04/17	MEOH, Lot 0000177891	100 mL	vm569722S_00003	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00003	08/31/18		Restek, Lot A0113063		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00229	10/19/17	10/12/17	MEOH, Lot NA	4 mL	VMFASG_00064	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00064	11/04/17	10/04/17	MEOH, Lot 0000177891	100 mL	vm569722S_00003	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00003	08/31/18		Restek, Lot A0113063		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMFASPW_00215	08/23/17	08/16/17	MEOH, Lot n/a	4 mL	VMRFASP_00040	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00040	09/30/17	07/25/17	MEOH, Lot 0000147462	100 mL	VM569721S_00001	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00005	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00013	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00001	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00001	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00005	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00013	09/30/17		Restek, Lot A0126061		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00001	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00221	10/08/17	10/01/17	MEOH, Lot n/a	4 mL	VMRFASP_00042	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00042	11/30/17	10/01/17	MEOH, Lot 0000177891	100 mL	VM569721S_00001	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00005	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00014	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00001	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00001	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00005	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00014	11/30/17		Restek, Lot A0127537		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00001	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00222	10/16/17	10/09/17	MEOH, Lot n/a	4 mL	VMRFASP_00042	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00042	11/30/17	10/01/17	MEOH, Lot 0000177891	100 mL	VM569721S_00001	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00005	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00014	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00001	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00001	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00005	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00014	11/30/17		Restek, Lot A0127537		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00001	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMRA9W_00211	07/08/17	07/01/17	MEOH, Lot NA	1 mL	VMRA9_00020	1 mL	Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMRA9_00020	12/30/17	06/30/17	MEOH, Lot 00000147462	50 mL	VM569727_00001	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00001	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00001	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00003	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00003	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
					VM571993_00001	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..VM569727_00001	04/30/18		RESTEK, Lot A0110092		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00001	12/31/17		Restek, Lot A0116076		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00001	12/31/17		Restek, Lot A0116084		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00003	06/30/18		Restek, Lot A0123685		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00003	01/31/18		Restek, Lot A0120639		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butyl acetate	2500 ug/mL
..VM571993_00001	12/31/18		restek, Lot A0123796		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl t-butyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
vmra9w_00222	10/04/17	09/27/17	MEOH, Lot NA	1 mL	VMRA9_00020	1 mL	Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMRA9_00020	12/30/17	06/30/17	MEOH, Lot 00000147462	50 mL	VM569727_00001	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00001	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00001	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00003	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00003	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
					VM571993_00001	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..VM569727_00001	04/30/18		RESTEK, Lot A0110092		(Purchased Reagent)		Cyclohexanone	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..vm570806_00001	12/31/17		Restek, Lot A0116076		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00001	12/31/17		Restek, Lot A0116084		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00003	06/30/18		Restek, Lot A0123685		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00003	01/31/18		Restek, Lot A0120639		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..VM571993_00001	12/31/18		restek, Lot A0123796		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl t-butyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
VMRA9W_00223	10/12/17	10/05/17	MEOH, Lot NA	1 mL	VMRA9_00020	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMRA9_00020	12/30/17	06/30/17	MEOH, Lot 00000147462	50 mL	VM570808_00003	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
					VM571993_00001	1 mL	Diisopropyl ether	50 ug/mL
							Ethyl t-butyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..VM570808_00003	06/30/18		Restek, Lot A0123685		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
..VM571993_00001	12/31/18		restek, Lot A0123796		(Purchased Reagent)		Diisopropyl ether	2500 ug/mL
							Ethyl t-butyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
VMRGAS_00212	08/25/17	08/18/17	MEOH, Lot 0000147462	10 mL	vm569722_00008	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00008	04/30/19		Restek, Lot A0118719		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vmrgas_00217	10/04/17	09/27/17	MEOH, Lot 0000177891	10 mL	vm569722_00008	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00008	04/30/19		Restek, Lot A0118719		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00218	10/12/17	10/05/17	MEOH, Lot 0000177891	10 mL	vm569722_00008	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00008	04/30/19		Restek, Lot A0118719		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRPRIMW_00248	08/24/17	08/17/17	MEOH, Lot NA	4 mL	VMRPRIM_00023	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00023	09/30/17	06/30/17	MEOH, Lot 0000147462	50 mL	VM569721_00001	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00002	1 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569723_00003	1 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00010	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00001	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00002	03/31/18		restek, Lot A0109994		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569723_00003	07/31/18		restek, Lot A0112895		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569724_00010	09/30/17		Restek, Lot A0125716		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
vmrprimw_00254	10/10/17	10/03/17	MEOH, Lot NA	4 mL	VMRPRIM_00024	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00024	12/31/17	09/14/17	MEOH, Lot 0000177891	50 mL	VM569721_00001	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00003	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00011	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00001	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00003	07/31/18		restek, Lot A0112895		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00011	12/31/17		Restek, Lot A0128793		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00254	10/10/17	10/03/17	MEOH, Lot NA	4 mL	VMRPRIM_00024	4 mL	Xylenes, Total	100 ug/mL
.VMRPRIM_00024	12/31/17	09/14/17	MEOH, Lot 0000177891	50 mL	VM571992_00001	1 mL	Xylenes, Total	100 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
VMRPRIMW_00255	10/18/17	10/11/17	MEOH, Lot NA	4 mL	VMRPRIM_00024	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00024	12/31/17	09/14/17	MEOH, Lot 0000177891	50 mL	VM569721_00001	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00003	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00011	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721_00001	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00003	07/31/18		restek, Lot A0112895		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00011	12/31/17		Restek, Lot A0128793		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMUX8SS_00026	09/14/17	03/14/17	MEOH, Lot 0000127999	100 mL	VMCUS8125_00010	866 uL	1,2-Dichloroethane-d4 (Surr)	216.5 ug/mL
							4-Bromofluorobenzene (Surr)	216.5 ug/mL
							Dibromofluoromethane (Surr)	216.5 ug/mL
							Toluene-d8 (Surr)	216.5 ug/mL
.VMCUS8125_00010	11/30/17	Ultra Scientific, Lot CM-5527			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	25000 ug/mL
							4-Bromofluorobenzene (Surr)	25000 ug/mL
							Dibromofluoromethane (Surr)	25000 ug/mL
							Toluene-d8 (Surr)	25000 ug/mL
VMUX8SS_00027	11/30/17	09/15/17	MEOH, Lot 0000177891	100 mL	VMCUS8125_00010	866 uL	1,2-Dichloroethane-d4 (Surr)	216.5 ug/mL
							4-Bromofluorobenzene (Surr)	216.5 ug/mL
							Dibromofluoromethane (Surr)	216.5 ug/mL
							Toluene-d8 (Surr)	216.5 ug/mL
.VMCUS8125_00010	11/30/17	Ultra Scientific, Lot CM-5527			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	25000 ug/mL
							4-Bromofluorobenzene (Surr)	25000 ug/mL
							Dibromofluoromethane (Surr)	25000 ug/mL
							Toluene-d8 (Surr)	25000 ug/mL
WCP-XYLENE_00020	02/20/19	JT Baker, Lot 156626			(Purchased Reagent)		Flashpoint	81 Degrees F

Reagent

---

ex2/.2SURRW_00092

LABORATORY STANDARDS DOCUMENTATION FORM
FOR TESTAMERICA LABORATORIES, INC.

Standard No. 3239447
ID: ex2/ 2SURRW_00092
Exp: 03/14/18 Prpd: BMB Crt: 09/14/17

Standard Name Pest/PCB Surrogates

Date Created 9/14/17

Extractionist Initials BB

Extractionist Comments Please confirm the 2/2 surrogate

♦ **Please return copy of chromatogram and recovery results** ♦

Date Analyzed 9/15/17

Passed? Yes ☑
No ☐

Returned copy of chromatogram and recovery page to Extractions? Yes ☑
No ☐

Analyst Initials KMG

Analyst Comments

WI-NC-020A_101207

Report Date: 15-Sep-2017 12:32:06 Chrom Revision: 2.2 16-Aug-2017 16:24:46

Preliminary Report

TestAmerica Canton

Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A2HP11\20170915-68724.b\P11091513.D				
Lims ID:	surrogate test				
Client ID:					
Sample Type:	Client				
Inject. Date:	15-Sep-2017 12:14:23	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	240-0068724-013				
Operator ID:		Instrument ID:	A2HP11		
Method:	\\ChromNA\Canton\ChromData\A2HP11\20170915-68724.b\PCB11 IS.m				
Limit Group:	GC 8082 IS				
Last Update:	15-Sep-2017 12:31:59	Calib Date:	04-Jun-2017 20:29:06		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A2HP11\20170602-65583.b\P11060433.D				
Column 1 :			Det: GC ECD1A		
Column 2 :			Det: GC ecd2b		
Process Host:	XAWRK024				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0191	95.51
$ 12 DCB Decachlorobiphenyl	0.0200	0.0200	99.84

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0177	88.75
$ 12 DCB Decachlorobiphenyl	0.0200	0.0193	96.30

Reagent

exPESTSURRstd_00006

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0125833

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene	201.5 µg/mL	+/- 1.1742	µg/mL	Gravimetric
	CAS # 877-09-8 (Lot 0052481)		+/- 6.3844	µg/mL	Unstressed
	Purity 98%		+/- 8.3410	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)	201.9 µg/mL	+/- 1.1766	µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot ER071509-01)		+/- 6.3975	µg/mL	Unstressed
	Purity 99%		+/- 8.3581	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

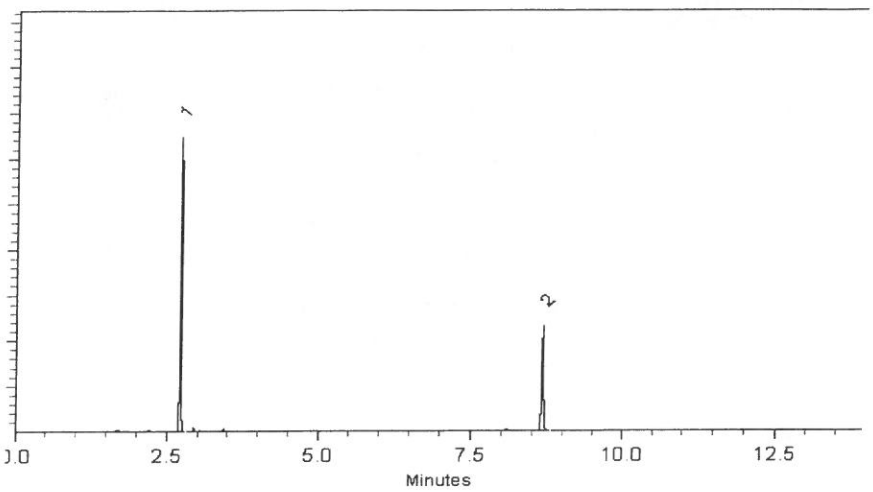
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 15-Mar-2017 **Balance:** B345965662

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 17-Mar-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

ISTD_00004

RCVD 3/8/17

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0124315

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2020 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 577-19-5 (Lot 643872/1)		+/- 56.4187	µg/mL	Unstressed
	Purity 99%		+/- 57.7382	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

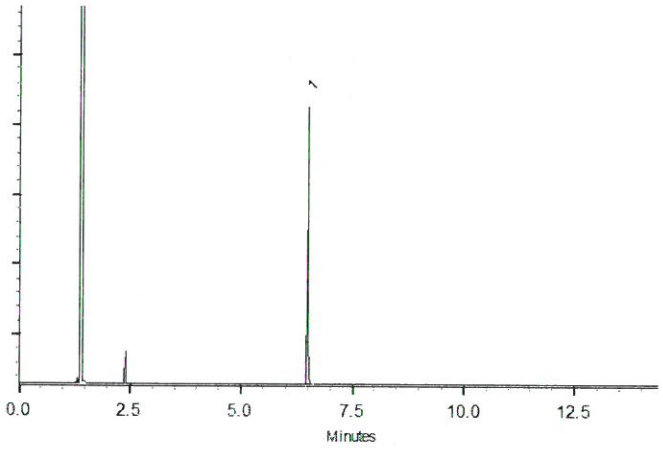
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 18-Jan-2017 **Balance:** B251644995

Justine Albertson - Operations Tech-ARM QC

Date Passed: 20-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

LLHg-ICV_00005

Certificate of Analysis

Product Description:

Mercury

Product Number:	**S1-Hg-10xVol**
Lot Number:	**1712311**
Matrix:	5% (v/v) HNO_3

Certified Value:

Element	(µg/mL)	SRM ID	SRM Lot#
Mercury	10.0 ± 0.2	3133	061204

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **June 2017**
Expiration Date: **June 2018**
Certificate Issue Date: **May 9, 2017**

Robert Howard, Product Manager-Standard Solutions

7277 World Communications Dr. | Omaha, NE 68122 USA | Phone: +1.402.991.7800 | Fax: +1.402.991.7799
Email: esi@icpms.com | Web: www.icpms.com

Preparation Information:

This standard is prepared using **99.9998%** pure **mercury metal** which was purchased from a qualified vendor per ISO 9001:2008 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not availabe, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

Accreditation:

This product has been manufactured by an ISO 9001:2008 registered and ISO/IEC 17025:2005 and ISO Guide 34:2009 accredited laboratory.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High-Purity Standards.

Section 1. Product and Company Identification

Product Identification:	10 µg/mL Mercury in 5% HNO_3
SDS Number:	S1-Hg-10xVol
Recommended Use:	For Laboratory Use.
Company Identification:	High-Purity Standards P.O. Box 41727 Charleston, SC 29423 Telephone: (843) 767-7900 FAX: (843) 767-7906

In case of emergency call INFOTRAC: 800-535-5053

Section 2. Hazard Identification

Classification:
Skin Corrosion/Irritation, Category 1B
Serious Eye Damage/ Eye Irritation, Category 1
Labeling:



Symbol:
Signal Word: Danger.
Hazard Statement: Causes severe skin burns and eye damage. Causes serious eye damage.
Precautionary Statement: Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling.

Section 3. Composition

Component	CAS/EINECS Registry #	Percent Concentration
Mercury	7439-97-6/231-106-7	0.001
Nitric Acid	7697-37-2/ 231-714-2	5
Water, deionized	7732-18-5/ 231-791-2	Balance

Section 4. First Aid Measures

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Call a physician if irritation develops.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

IF exposed or concerned: Get medical attention/advice.

Target Organs: Eyes, skin, respiratory system. Increases risk of lung, liver, kidney, and bladder cancer with prolonged exposure.

Section 5. Fire Fighting Measures

Fire & Explosion hazards: While nitric acid is not combustible, it is a strong oxidizing agent that can react with combustible materials; however, it is present in limited quantities in this solution. NO_x compounds can be released in case of fire.

Extinguishing Media: Use any extinguishing media that is suitable for the surrounding area. Use a water spray to dilute nitric acid and to absorb liberated nitrogen oxides.

Specific Methods: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Do not allow to enter drainage systems or water ways. Dike area and dilute spill with water and neutralize with soda ash, limestone, etc. Place the neutralized material into containers suitable for eventual disposal, reclamation, or destruction. Always dispose of in accordance with local regulations.

Section 7. Handling and Storage

Store in a cool, dry, ventilated storage area with acid resistant floors and good drainage. Keep out of direct sunlight and away from heat, water, and incompatible materials. When diluting, the acid should always be added slowly to water and in small amounts. Refer to Section 8 for personal handling instructions.

Section 8. Exposure Controls and Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep any buildup of airborne contaminants below their respective threshold limit value. Ensure the availability of eyewash stations and safety showers.

Respiratory Protection: Provide approved respiratory apparatus for non-routine or emergency use. Use an approved vapor respirator when the vapor or mist concentrations are high. If necessary, refer to the NIOSH document Guide to the Selection and Use of Particulate Respirators Certified under 42 CFR 84 for selection and use of respirators certified by NIOSH.

Personal Protection: Wear proper gloves, safety glasses with side shields, lab coat/apron.

Exposure Limits:

Component	ACGIH TLV	OSHA PEL
Mercury	0.05 mg/m^3	0.025 mg/m^3
Nitric Acid	2 mg/kg	5 mg/m^3

Section 9. Physical and Chemical Properties

Physical State: Liquid
Color: Clear, colorless liquid
Odor: Odorless to a faint pungent odor
Odor threshold: None
pH: <2
Melting point: N/A
Freezing Point: N/A
Boiling Point: Approximately 100°C
Flash point: N/A

Evaporation rate: N/A
Flammability: N/A
Explosion limits: N/A
Vapor Pressure (mm): N/A
Vapor Density (air+1): N/A
Relative density: (H_2O = 1): Approximately 1.0
Solubility in H_2O: Complete
Auto ignition temperature: N/A
Decomposition temperature: N/A
Molecular Weight: 200.59 (Hg)

Section 10. Stability and Reactivity

Stability Indicator: YES
Conditions to Avoid: Metals, chlorine, organic materials, strong alkali, cyanides, heat.
Incompatibles: Strong reducing agents.
Hazardous Decomposition Products: NO_x compounds including nitric oxide (NO), nitrogen dioxide (NO_2), nitrous oxide (N_2O) and nitric acid mist or vapor.
Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

May affect skin, mucous membranes and eyes. Swallowing may lead to a negative effect on mouth and throat and to the risk of perforation or the corrosion of esophagus and stomach. Mercury is investigated as a tumorigen, mutagen, reproductive effector.
RTECS#
HNO_3; QU5775000
Hg; OV4550000

LD_{LO} Oral, Human: (Nitric Acid) 430 mg/kg.
TC_{LO} Inhalation, Rat: (Mercury) 1 mg/m^3/24hrs/5wks continuous.

Section 12. Ecological Information

Ecotoxicological information: Do not allow material to reach ground water, water bodies, or sewage system. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13. Disposal Considerations

General: Follow Federal, state and local regulations for waste.

Section 14. Transport Information

D.O.T. Classification: Hazardous by IATA and 49CFR regulations (based on concentration of acid).
D.O.T. Shipping Name: Corrosive liquid, Acidic, Inorganic, n.o.s. (Nitric Acid Solution)
D.O.T. Hazard Class: 8
U.N./N.A. Number: 3264
Packing Group: II
D.O.T. Label: Corrosive (8)

Section 15. Regulations (Not meant to be all inclusive-selected regulation listed)

TSCA Status: Components of this solution are listed on the TSCA Inventory.
RCRA Status: Yes (Mercury–U151)
SARA: Subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372
Risk Phrases: R20/21/22 Harmful by inhalation, skin contact, or if swallowed.
Safety Phrases: S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
WHMIS Information (Canada): E: Corrosive

Section 16. Other Information

HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel only. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The SDS was prepared carefully and represents the best data currently available to us; however, HPS does not certify the data on the SDS. Certified values for this material are given only on the Certificate of Analysis.

Theodore C. Rains, Ph.D.

Reagent

MTAG_00007

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Rec'd 6-12-17 KW

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

Product Description:

Silver

Product Number: **100051-1**
Lot Number: **1713128**
Matrix: 2% (v/v) HNO_3

Certified Value:

Element	(µg/mL)	SRM ID	SRM Lot#
Silver	1000 ± 3	3151	160729

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Uncertified Values:

Density: 1.010 g/mL ± 0.002 g/mL @ 21.2°C

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

Ag		M	Cu	<	0.02	Li	<	0.5	Rb	<	0.02	Th	<	0.02
Al	<	0.05	Dy	<	0.02	Lu	<	0.02	Re	<	0.02	Ti	<	0.02
As	<	0.05	Er	<	0.02	Mg	<	0.1	Rh	<	0.02	Tl	<	0.02
Au	<	0.02	Eu	<	0.02	Mn	<	0.05	Ru	<	0.1	Tm	<	0.02
B	<	1	Fe	<	1	Mo	<	0.02	Sb	<	0.02	U	<	0.05
Ba	<	0.02	Ga	<	0.02	Na	<	3	Sc	<	0.02	V	<	0.05
Be	<	0.02	Gd	<	0.02	Nb	<	0.02	Se	<	0.5	W	<	0.02
Bi	<	0.02	Ge	<	0.1	Nd	<	0.02	Si		45	Y	<	0.02
Ca	<	1	Hf	<	0.02	Ni	<	0.02	Sm	<	0.02	Yb	<	0.02
Cd	<	0.02	Ho	<	0.02	Os	<	0.02	Sn	<	0.5	Zn	<	0.02
Ce	<	0.02	In	<	0.02	Pb	<	0.05	Sr	<	0.02	Zr	<	0.02
Co	<	0.05	Ir	<	0.02	Pd	<	0.02	Ta	<	0.02			
Cr	<	0.05	K	<	1	Pr	<	0.02	Tb	<	0.02			
Cs		4	La	<	0.02	Pt	<	0.02	Te	<	0.02			

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **6/8/2017**
Expire Date: **December 08, 2018**
Certificate Issue Date: **May 11, 2017**

Moven Mututuvari

Moven Mututuvari, Ph. D, Laboratory Manager

Preparation Information:

This standard is prepared using **99.992%** pure **silver metal** which was purchased from a qualified vendor per ISO 9001:2008 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not availabe, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High-Purity Standards.

Reagent

MTHGCAL_00031

RECD 4-20-17 KW

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

Product Description: Mercury

Product Number: **10 33-1**
Lot Number: **1706613**
Matrix: 5% (v/v) HNO_3

Certified Value:

Element	(µg/mL)	SRM ID	SRM Lot#
Mercury	10.0 ± 0.2	3133	061204

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information. Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: **March 7, 2017**
Shipped Date: **4/18/2017**
Expire Date: **April 18, 2018**
Certificate Issue Date: **March 16, 2017**

Moven Mututuvari

Moven Mututuvari, Ph. D, Laboratory Manager

Preparation Information:

This standard is prepared using **99.9998%** pure **mercury metal** which was purchased from a qualified vendor per ISO 9001:2008 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.
Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not availabe, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High-Purity Standards.

Reagent

MTICPCCV1_00020

RECD 8-16-17 VD

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-CCV1
Lot Number:	M2-MEB658053
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	500 000 µg/L ea: Calcium, Potassium, Magnesium, Sodium, 250 000 µg/L ea: Aluminum, Iron, 50 000 µg/L ea: Strontium, Boron, Lithium, 20 000 µg/L ea: Manganese, Nickel, Barium, Beryllium, Cobalt, Chromium, Copper, Vanadium, Zinc, 10 000 µg/L ea: Thallium, 5 000 µg/L ea: Cadmium, Arsenic, Lead, Selenium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250 000.00 ± 1 100.00 µg/L	Arsenic, As	5 000 ± 34 µg/L
Barium, Ba	20 000.0 ± 80.0 µg/L	Beryllium, Be	20 000.0 ± 90.0 µg/L
Boron, B	50 010.0 ± 300.0 µg/L	Cadmium, Cd	5 001 ± 29 µg/L
Calcium, Ca	500 000.00 ± 1 900.00 µg/L	Chromium, Cr	20 000.0 ± 120.0 µg/L
Cobalt, Co	20 000.0 ± 90.0 µg/L	Copper, Cu	20 000.0 ± 80.0 µg/L
Iron, Fe	250 000.00 ± 1 000.00 µg/L	Lead, Pb	5 001 ± 25 µg/L
Lithium, Li	50 000.0 ± 170.0 µg/L	Magnesium, Mg	500 000.00 ± 2 000.00 µg/L
Manganese, Mn	20 010.0 ± 80.0 µg/L	Nickel, Ni	20 010.0 ± 90.0 µg/L
Potassium, K	500 000.00 ± 1 800.00 µg/L	Selenium, Se	5 000 ± 25 µg/L
Sodium, Na	500 000.00 ± 1 800.00 µg/L	Strontium, Sr	50 010.0 ± 200.0 µg/L
Thallium, Tl	10 000.0 ± 50.0 µg/L	Vanadium, V	20 000.0 ± 80.0 µg/L
Zinc, Zn	20 000.0 ± 80.0 µg/L		

Certified Density: 1.032 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	030730Cr3
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Tl	ICP Assay	3158	993012
Tl	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 05, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 05, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 9-12-17 ICP

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MTICPCCV2_00020

REC'D 8-16-17 ICD

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-CCV2
Lot Number:	M2-MEB658054
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	50 000 µg/L ea: Silicon, Tin, Titanium, 20 000 µg/L ea: Molybdenum, 10 000 µg/L ea: Silver, 5 000 µg/L ea: Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	5 000 ± 34 µg/L	Molybdenum, Mo	20 000.0 ± 90.0 µg/L
Silicon, Si	50 000.0 ± 310.0 µg/L	Silver, Ag	10 010.0 ± 40.0 µg/L
Tin, Sn	50 000.0 ± 240.0 µg/L	Titanium, Ti	50 010.0 ± 260.0 µg/L

Certified Density: 1.022 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	061229 Sb
Sb	Calculated		See Sec. 4.2
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 05, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- May 05, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 9-12-17

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MTICPICSAB1_00006

RECD 12-8-16

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICSAB1
Lot Number:	K2-MEB653538
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 000 µg/L ea:

Aluminum,	Calcium,	Magnesium,
2 000 000 µg/L ea:		
Iron,		
100 000 µg/L ea:		
Potassium,	Sodium,	
15 000 µg/L ea:		
Strontium,		
10 000 µg/L ea:		
Arsenic,	Cadmium,	Nickel,
Lead,	Selenium,	Thallium,
Zinc,		
5 000 µg/L ea:		
Boron,	Barium,	Beryllium,
Cobalt,	Chromium+3,	Copper,
Lithium,	Manganese,	Vanadium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 000.000 ± 23 000.000 µg/L	Arsenic, As	10 000.0 ± 70.0 µg/L
Barium, Ba	5 000 ± 25 µg/L	Beryllium, Be	5 001 ± 25 µg/L
Boron, B	5 000 ± 34 µg/L	Cadmium, Cd	10 000.0 ± 60.0 µg/L
Calcium, Ca	5 000 000.000 ± 19 000.000 µg/L	Chromium+3, Cr3	5 000 ± 25 µg/L
Cobalt, Co	5 001 ± 22 µg/L	Copper, Cu	5 000 ± 29 µg/L
Iron, Fe	2 000 000.000 ± 8 000.000 µg/L	Lead, Pb	10 000.0 ± 50.0 µg/L
Lithium, Li	5 000 ± 18 µg/L	Magnesium, Mg	5 000 000.000 ± 20 000.000 µg/L
Manganese, Mn	4 999 ± 25 µg/L	Nickel, Ni	10 000.0 ± 60.0 µg/L
Potassium, K	100 000.00 ± 400.00 µg/L	Selenium, Se	10 000.0 ± 70.0 µg/L
Sodium, Na	100 000.00 ± 400.00 µg/L	Strontium, Sr	15 000.0 ± 90.0 µg/L
Thallium, Tl	10 000.0 ± 70.0 µg/L	Vanadium, V	5 000 ± 29 µg/L
Zinc, Zn	10 000.0 ± 60.0 µg/L		

Certified Density: 1.100 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	110830
B	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730Cr3
Cr3	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Tl	ICP Assay	3158	993012
Tl	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2019**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 12/8/16

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

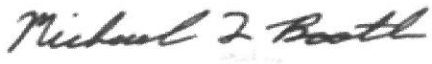
Certificate Prepared By:

Maurice Harris
Product Documentation Technician



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MTICPICSAB2_00006

Recd 12-8-16 KD

INORGANIC VENTURES
300 Technology Drive
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inorganicventures.com

CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICSAB2
Lot Number:	K2-MEB653539
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	100 000 µg/L ea: Silicon, 10 000 µg/L ea: Silver, Molybdenum, Antimony, 5 000 µg/L ea: Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10 000.0 ± 70.0 µg/L	Molybdenum, Mo	10 000.0 ± 60.0 µg/L
Silicon, Si	100 000.00 ± 600.00 µg/L	Silver, Ag	10 000.0 ± 70.0 µg/L
Tin, Sn	5 000 ± 38 µg/L	Titanium, Ti	5 000 ± 29 µg/L

Certified Density: 1.025 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	061229 Sb
Sb	Calculated		See Sec. 4.2
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	130925
Ti	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2019**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 12/8/16

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

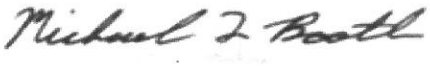
Certificate Prepared By:

Maurice Harris
Product Documentation Technician



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MTICPSPIKE1A_00012

REC'D 6-30-17 ICD

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

Product Description:

Name:	ICP Spike 1
Part Number:	**SM-606-101 Solution A**
Lot Number:	**1717742**
Matrix:	5% HNO_3
Purity:	99.5% - 99.9999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Al	2000 ± 20	3101a	140903	Fe	1000 ± 6	3126a	140812
As	2000 ± 20	3103a	100818	Pb	500 ± 5	3128	101026
Ba	2000 ± 12	3104a	140909	Mn	500 ± 8	3132	050429
Be	50.0 ± 0.5	3105a	090514	Ni	500 ± 3	3136	120619
B	1000 ± 10	3107	110830	Se	2000 ± 20	3149	100901
Cd	50.0 ± 0.3	3108	130116	Tl	2000 ± 10	*	
Cr	200 ± 1	3112a	030730	V	500 ± 3	*	
Co	500 ± 3	3113	000630	Zn	500 ± 3	3168a	120629
Cu	250.0 ± 1.5	3114	121207				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **June 2017**
Expiration Date: **June 2018**
Certificate Issue Date: June 27, 2017

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPSPIKEB_00011

REC'D 6-30-17 KD

HIGH-PURITY STANDARDS
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Charleston, SC 29423
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Fax (843) 767-7906

Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Name:	ICP Spike 1
Part Number:	**SM-606-101** Solution B
Lot Number:	**1717806**
Matrix:	5% HNO_3 + 0.5% HF
Purity:	99.98% - 99.9999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	500 ± 5	3102a	140911	Sn	2000 ± 20	3161a	140914
Mo	1000 ± 10	3134	130418	Ti	1000 ± 10	3162a	130925

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **June 2017**
Expiration Date: **June 2018**
Certificate Issue Date: June 27, 2017

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPSpikeOdd_00008

REC'D 6-30-17 ICD

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Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

Product Description:

Name:	ICP Spike Odds
Part Number:	**SM-606-121**
Lot Number:	**1717811**
Matrix:	2% HNO_3
Purity:	99.999% - 99.9999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Li	1000 ± 6	3129a	100714	Sr	1000 ± 5	*	
Si	1000 ± 10	3150	130912				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **June 2017**
Expiration Date: **June 2018**
Certificate Issue Date: June 27, 2017

Moven Mututuvari
Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

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Reagent

MTNONRCRA+ODD_00009

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Rec'd 8-21-17 KW

Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

Product Description:

Part Number:	**SM-606-135**
Lot Number:	**1722622**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.98% - 99.9999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Al	100.0 ± 0.6	3101a	140903	Mo	50.0 ± 0.5	3134	130418
Sb	25.0 ± 0.3	3102a	140911	Ni	25.0 ± 0.2	3136	120619
Be	2.50 ± 0.03	3105a	090514	Si	50.0 ± 0.5	3150	130912
B	50.0 ± 0.5	3107	110830	Sr	50.0 ± 0.3	*	
Co	25.0 ± 0.2	3113	000630	Tl	100 ± 1	*	
Cu	12.5 ± 0.1	3114	121207	Sn	100 ± 1	3161a	140917
Fe	50.0 ± 0.3	3126a	140812	Ti	50.0 ± 0.5	3162a	130925
Li	50.0 ± 0.5	3129a	100714	V	25.0 ± 0.3	*	
Mn	25.0 ± 0.4	3132	050429	Zn	25.0 ± 0.2	3168a	120629

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date:	**August 2017**
Expiration Date:	**August 2018**
Certificate Issue Date:	August 15, 2017

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
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The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

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Reagent

MTRCRA_00012

Rec'd 11-8-16 ICD

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Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Part Number:	**SM-606-080**
Lot Number:	**1630101**
Matrix:	2% HNO_3
Purity:	99.998% - 99.9999%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
As	500 ± 5	3103a	100818	Pb	500 ± 3	3128	101026
Ba	5000 ± 30	3104a	140909	Se	100 ± 1	3149	100901
Cd	100.0 ± 0.5	3108	130116	Ag	100.0 ± 0.5	3151	992212
Cr	500 ± 2.5	3112a	030730				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	October 27, 2016
Shipped Date:	**October 28, 2016**
Expiration Date:	**October 28, 2017**
Certificate Issue Date:	October 27, 2016

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

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The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

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Reagent

MTTRCAL2_00017

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Recd 5-30-17 ku

Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

Product Description:

Name:	ICP Analytical Mixture 15
Part Number:	**ICP-AM-15**
Lot Number:	**1625030**
Matrix:	5% HNO_3
Purity:	99.98% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Ca	10000 ± 60	3109a	130213	K	10000 ± 100	3141a	140813
Mg	10000 ± 60	3131a	140110	Na	10000 ± 60	3152a	120715

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Uncertified Values:

Density: 1.132 g/mL ± 0.002 g/mL @ 23.6°C

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	September 26, 2016
Shipped Date:	**5/25/2017**
Expire Date:	**May 25, 2018**
Certificate Issue Date:	October 3, 2016

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

Preparation Information:

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

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The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

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Reagent

MTTRCAL2_00018

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Certificate of Analysis

RECD 9/15/17 DSH

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Name:	ICP Analytical Mixture 15
Part Number:	**ICP-AM-15**
Lot Number:	**1721533**
Matrix:	5% HNO_3
Purity:	99.997% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Ca	10000 ± 60	3109a	130213	K	10000 ± 100	3141a	140813
Mg	10000 ± 60	3131a	140110	Na	10000 ± 60	3152a	120715

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Uncertified Values:

Density: 1.129 g/mL ± 0.002 g/mL @ 20.0°C

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **9/13/2017**
Expiration Date: **September 2018**
Certificate Issue Date: August 4, 2017

Moven Mututuvari
Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

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Homogeneity:

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Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

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The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
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c. **Thermometer**
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d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

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Reagent

MTTRCRI6010C_00015

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 12-8-16 ku

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CRIC-REV2
Lot Number:	K2-MEB653408
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	100 000 µg/L ea: Calcium, Potassium, Magnesium, Sodium, 10 000 µg/L ea: Silicon, 4 000 µg/L ea: Aluminum, Barium, Iron, 2 000 µg/L ea: Boron, Tin, 1 000 µg/L ea: Lithium, Strontium, Titanium, Zinc, 800 µg/L ea: Molybdenum, Nickel, 400 µg/L ea: Copper, Antimony, Selenium, Thallium, 300 µg/L ea: Arsenic, Manganese, 200 µg/L ea: Silver, Cobalt, Chromium+3, Lead, Vanadium, 100 µg/L ea: Beryllium, Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	3 999 ± 24 µg/L	Antimony, Sb	400.0 ± 3.1 µg/L
Arsenic, As	299.9 ± 2.7 µg/L	Barium, Ba	4 000 ± 20 µg/L
Beryllium, Be	100.0 ± 0.7 µg/L	Boron, B	2 000 ± 13 µg/L
Cadmium, Cd	100.0 ± 0.9 µg/L	Calcium, Ca	100 000.00 ± 400.00 µg/L
Chromium+3, Cr3	200.0 ± 1.2 µg/L	Cobalt, Co	200.0 ± 1.1 µg/L
Copper, Cu	400.0 ± 1.7 µg/L	Iron, Fe	4 000 ± 20 µg/L
Lead, Pb	199.9 ± 1.0 µg/L	Lithium, Li	1 000 ± 6 µg/L
Magnesium, Mg	100 000.00 ± 400.00 µg/L	Manganese, Mn	300.0 ± 1.4 µg/L
Molybdenum, Mo	800 ± 5 µg/L	Nickel, Ni	799 ± 4 µg/L
Potassium, K	100 000.00 ± 400.00 µg/L	Selenium, Se	400.1 ± 3.6 µg/L
Silicon, Si	10 000.0 ± 70.0 µg/L	Silver, Ag	200.1 ± 1.6 µg/L
Sodium, Na	100 000.00 ± 400.00 µg/L	Strontium, Sr	1 001 ± 6 µg/L
Thallium, Tl	400.0 ± 3.4 µg/L	Tin, Sn	2 000 ± 15 µg/L
Titanium, Ti	1 000 ± 7 µg/L	Vanadium, V	200.0 ± 1.1 µg/L
Zinc, Zn	1 000 ± 6 µg/L		

Certified Density: 1.027 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	110830
B	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730Cr3
Cr3	Calculated		See Sec. 4.2
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
Li	ICP Assay	3129a	000505
Li	Calculated		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sb	ICP Assay	3102A	061229
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Si	ICP Assay	3150	130912
Si	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Ti	ICP Assay	3162a	060808
Ti	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629

Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 16, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 16, 2019**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MTTRICSA_00015

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

Rec'd 1-6-16 KW

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-ICS-A
Lot Number:	J2-MEB572053
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Al, Ca, Mg, 2 000 µg/mL ea: Fe

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 25 µg/mL	Calcium, Ca	5 000 ± 23 µg/mL
Iron, Fe	2 000 ± 9 µg/mL	Magnesium, Mg	5 000 ± 23 µg/mL

Certified Density: 1.085 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean; x_i = individual results; n = number of measurements

Uncertainty (±) = $2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor. $[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-FIlter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000870	M	Eu	<	0.000108	O	Na		0.040145	M	Se	<	0.003263	M	Zn		0.024800
s	Al	<		s	Fe	<		M	Nb	<	0.000435	O	Si		0.108500	M	Zr	<	0.001522
M	As	<	0.003915	M	Ga	<	0.000108	M	Nd	<	0.001087	M	Sm	<	0.000108				
M	Au	<	0.000108	M	Gd	<	0.000108	O	Ni	<	0.010850	M	Sn	<	0.000217				
O	B	<	0.021700	O	Ge	<	0.032550	M	Os	<	0.000108	O	Sr		0.024955				
M	Ba	<	0.001305	M	Hf	<	0.000217	O	P	<	0.108500	M	Ta	<	0.000108				
M	Be	<	0.000326	M	Hg	<	0.000651	M	Pb		0.002936	M	Tb	<	0.000108				
M	Bi	<	0.000217	M	Ho	<	0.000108	M	Pd	<	0.000217	M	Te	<	0.001305				
s	Ca	<		M	In	<	0.000435	M	Pr	<	0.000435	M	Th	<	0.000108				
M	Cd	<	0.000217	M	Ir	<	0.000108	M	Pt	<	0.000108	O	Ti	<	0.001627				
M	Ce	<	0.001740	O	K		0.014105	M	Rb	<	0.001522	M	Tl	<	0.000108				
O	Co	<	0.010850	M	La	<	0.001305	M	Re	<	0.000435	M	Tm	<	0.000108				
M	Cr		0.022842	O	Li		0.005533	M	Rh	<	0.000652	M	U	<	0.000108				
M	Cs	<	0.001305	M	Lu	<	0.000435	M	Ru	<	0.000108	M	V	<	0.001087				
O	Cu	<	0.006835	s	Mg	<		O	S		0.455700	M	W	<	0.000108				
M	Dy	<	0.000108	M	Mn		0.009898	M	Sb	<	0.000435	M	Y	<	0.000108				
M	Er	<	0.000108	M	Mo	<	0.003915	O	Sc	<	0.000868	M	Yb	<	0.000108				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 02, 2018**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

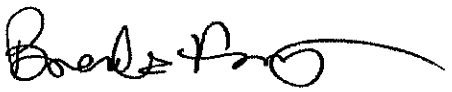
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

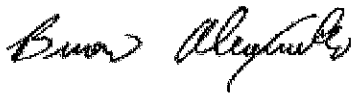
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTTRICV3_00008

CPI INTERNATIONAL

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The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
G34-4400-090825JC03	1099181	22-May-2018	2% HNO3 + Tr HF	ISO Guide 34 - Z-G34-4400-090825JC03, 100 mL mg/L in 2% HNO_3 + Tr HF

Additional Information:

Date Received: 12/5/16 KD

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Barium	Ba	7440-39-3	3104	070222	7004.29.3P	99.997	250	0.87
Beryllium	Be	7440-41-7	3105	892707	7005.409.1P	99.996	250	0.87
Chromium	Cr	7440-47-3	3112	030730	7009.409.2P	99.99	250	0.87
Cobalt	Co	7440-48-4	3113	000630	7008.409.1P	99.999	250	0.87
Copper	Cu	7440-50-8	3114	011017	7011.409.1P	99.9999	250	0.87
Manganese	Mn	7439-96-5	3132	050429	7017.46.5P	99.95	250	0.87
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	250	0.87
Nickel	Ni	7440-02-0	3136	000612	7021.409.1P	99.995	250	0.87
Vanadium	V	7440-62-2	3165	992706	7036.409.2P	99.999	250	0.87
Zinc	Zn	7440-66-6	3168	080123	7037.409.1P	99.9998	250	0.87

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
G34-4400-090825JC03	1099181	22-May-2018	2% HNO3 + Tr HF	ISO Guide 34 - Z-G34-4400-090825JC03, 100 mL mg/L in 2% HNO_3 + Tr HF

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

CPI INTERNATIONAL

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Europe

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
G34-4400-090825JC03	1099181	22-May-2018	2% HNO3 + Tr HF	ISO Guide 34 - Z-G34-4400-090825JC03, 100 mL mg/L in 2% HNO_3 + Tr HF

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Chelsea Breen
Chemist
Manufacture Date: 11/18/2016

Certified By:

Christy Lane
Chemist
Certified Date: 11/18/2016

Released By:

Mark Filla
Chemist
Original Issue Date: 11/18/2016

Reagent

MTTRICV5_00014

CPI INTERNATIONAL

USA

5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
G34-4400-090825JC05	1099109	21-May-2018	2% HNO_3 + Tr HF	ISO Guide 34 - Z-G34-4400-090825JC05, 100 mL mg/L in 2% HNO_3 + Tr HF

Additional Information:

Date Received: 12/5/16 ICD

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Thallium	Tl	7440-28-0	3158	993012	7034.29.4P	99.99	500	1.73
Arsenic	As	7440-38-2	3103	010713	7002.409.1P	99.9999	300	1.04
Cadmium	Cd	7440-43-9	3108	060531	7007.409.3P	99.9999	200	0.69
Lead	Pb	7439-92-1	3128	030721	7023.29.3P	99.999	300	1.04
Antimony	Sb	7440-36-0	3102	061229	7026.409.1P	99.9999	300	1.04
Selenium	Se	7782-49-2	3149	992106	7027.409.1P	99.9998	200	0.89

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Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
G34-4400-090825JC05	1099109	21-May-2018	2% HNO_3 + Tr HF	ISO Guide 34 - Z-G34-4400-090825JC05, 100 mL mg/L in 2% HNO_3 + Tr HF

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

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The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
G34-4400-090825JC05	1099109	21-May-2018	2% HNO_3 + Tr HF	ISO Guide 34 - Z-G34-4400-090825JC05, 100 mL mg/L in 2% HNO_3 + Tr HF

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Kayla Dennin
Chemist
Manufacture Date: 11/17/2016

Certified By:

Christy Lane
Chemist
Certified Date: 11/17/2016

Released By:

Chemist
Original Issue Date: 11/17/2016

Reagent

MTTRICVAG_00007

CPI INTERNATIONAL

USA

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-060047-03-01	1095561	26-Feb-2018	2% HNO_3	ISO Guide 34 - Silver, 100 mL 100 mg/L in 2% HNO_3 (Ag Metal)

Additional Information:

Date Received: 9-7-16 KW

Container: 4 oz (125 mL) Narrow Mouth, HDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Silver	Ag	7440-22-4	3151	992212	7000.29.2P	99.999	100	0.35

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-060047-03-01	1095561	26-Feb-2018	2% HNO_3	ISO Guide 34 - Silver, 100 mL 100 mg/L in 2% HNO_3 (Ag Metal)

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

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F: 707.545.7901

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-060047-03-01	1095561	26-Feb-2018	2% HNO_3	ISO Guide 34 - Silver, 100 mL 100 mg/L in 2% HNO_3 (Ag Metal)

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c=\sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Chelsea Smith

Manufacture Date: 8/25/2016

Certified By:

Christy Lane

Certified Date:8/25/2016

Released By:

Mark Filla

Original Issue Date: 8/26/2016

Reagent

SG 1221 ICV_00009

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Reference Material Producer
Certificate #3222.01

ilac-MRA

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32007.sec **Lot No.:** A094157

Description : Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 2019 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11104-28-2.SEC		+/- 20.8959	µg/mL	Unstressed
	Purity -----%		+/- 34.3792	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

RECEIVED 12/7/15
LSH

2322675
ID: SG 1221 ICV_00009
Exp: 06/30/19 Prpd: LSH
Aroclor 1221 ICV @1000ppm

Reagent

SG 1232 ICV_00010

Certificate of Analysis

Aroclor 1232 Solution

Product Number: EPA-1302 **Page:** 1 of 1

Lot Number: CG-4471 **Lot Issue Date:** 07-Jan-2011 **Expiration Date:** 31-Jan-2019

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01019	1003 ± 5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (18-25° C)

Received
12/6/16
CGH

2830202
ID: SG 1232 ICV_00010
Exp: 01/31/19 Prpd: LSH
Aroclor 1232 ICV @ 1000pp

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ISO 17025:2005 Accredited A2LA Cert. No. 0851-01

ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 295-2330
www.ultrasci.com

William J Leahy
Quality Assurance Manager

Reagent

SG 1242 ICV_00008

Certificate of Analysis

Aroclor 1242 Solution

Product Number: EPA-1312 **Page:** 1 of 1

Lot Number: CH-4123 **Lot Issue Date:** 19-Jan-2012 **Expiration Date:** 31-Jan-2020

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1242	053469-21-9	NT01020-00	1004 ± 5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (18-25° C)

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ACCREDITED
ISO 17025:2005 Accredited A2LA Cert. No. 0851-01

ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 295-2330
wwww.ultrasci.com

William J. Leary
Quality Assurance Manager

Reagent

SG 1248 ICV_00010

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010.SEC **Lot No.:** A0124143

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1248	1,008.0 µg/mL	+/- 5.9872	µg/mL	Gravimetric
	CAS # 12672-29-6.SEC (Lot 106-248)		+/- 31.9609	µg/mL	Unstressed
	Purity ----%		+/- 41.7443	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

3027754
ID: SG 1248 ICV_00010
Exp: 04/30/23 Prpd: LSH
Aroclor 1248 ICV @ 1000pp

Received 5/1/17

Reagent

SG 1660 ICV_00014

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039.SEC **Lot No.:** A0114674

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016		1,000.7 µg/mL	+/- 5.9437	µg/mL	Gravimetric
	CAS # 12674-11-2.SEC	(Lot 129)		+/- 31.7284	µg/mL	Unstressed
	Purity ----%			+/- 41.4406	µg/mL	Stressed
2	Aroclor 1260		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11096-82-5.SEC	(Lot NTO1023)		+/- 31.7072	µg/mL	Unstressed
	Purity ----%			+/- 41.4130	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

RECEIVED 9/8/16 LSH

Reagent

SG 42/68 STK_00002

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Recd 6/21/16 (Y)

Catalog No. : 569747 **Lot No.:** A0116616

Description : PCB-1242/1268 Standard

PCB-1242/1268 Standard 1000 µg/ml, Hexane, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1242		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 53469-21-9	(Lot 01141-A)		+/- 31.7072	µg/mL	Unstressed
	Purity ----%			+/- 41.4130	µg/mL	Stressed
2	Aroclor 1268		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 11100-14-4	(Lot 2743900)		+/- 31.7706	µg/mL	Unstressed
	Purity ----%			+/- 41.4958	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SG1016/1260MX_00011

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO Guide 34 Accredited Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Rec'd 11.17.15 HB

Catalog No. : 32039 **Lot No.:** A0109664

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

2298489
ID: SG1016/1260MX_00011
Exp: 06/30/21 Prpd: HMB
Aroclor1016/1260 Stock Mi

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016		1,007.4 µg/mL	+/- 5.8705	µg/mL	Gravimetric
	CAS # 12674-11-2	(Lot W-125-01)		+/- 31.3443	µg/mL	Unstressed
	Purity ----%			+/- 41.6988	µg/mL	Stressed
2	Aroclor 1260		1,009.8 µg/mL	+/- 5.8846	µg/mL	Gravimetric
	CAS # 11096-82-5	(Lot W-129-06)		+/- 31.4196	µg/mL	Unstressed
	Purity ----%			+/- 41.7990	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

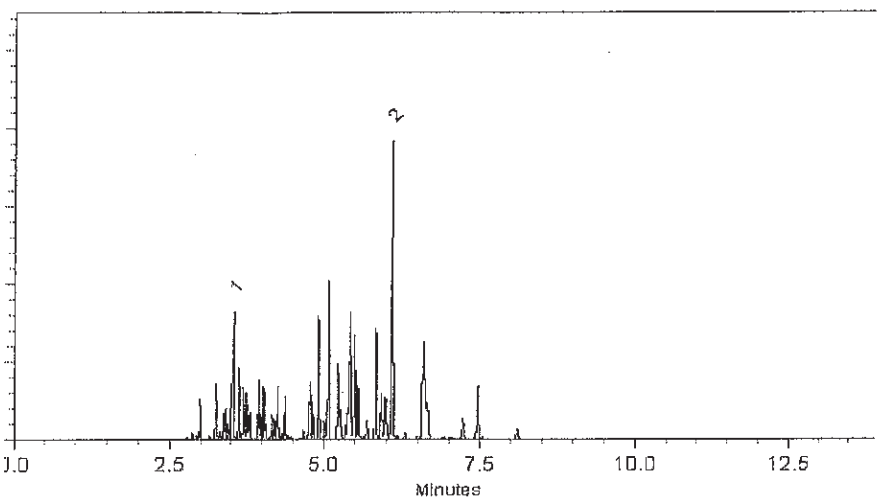
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 14-Mar-2015 **Balance:** B442140311

Diane Shaffer - QA Analyst

Date Passed: 16-Mar-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

SG1221/1254_00003

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569745 **Lot No.:** A0110124

Description : PCB-1221/1254 Standard

PCB-1221/1254 Standard 1000 µg/ml, Hexane, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221		1,008.0 µg/mL	+/- 10.1543	µg/mL	Gravimetric
	CAS # 11104-28-2	(Lot 1240100)		+/- 32.4388	µg/mL	Unstressed
	Purity ----%			+/- 42.5387	µg/mL	Stressed
2	Aroclor 1254		1,008.0 µg/mL	+/- 10.1543	µg/mL	Gravimetric
	CAS # 11097-69-1	(Lot 124-191-B)		+/- 32.4388	µg/mL	Unstressed
	Purity ----%			+/- 42.5387	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Rec'd 1/22/16 (V)

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

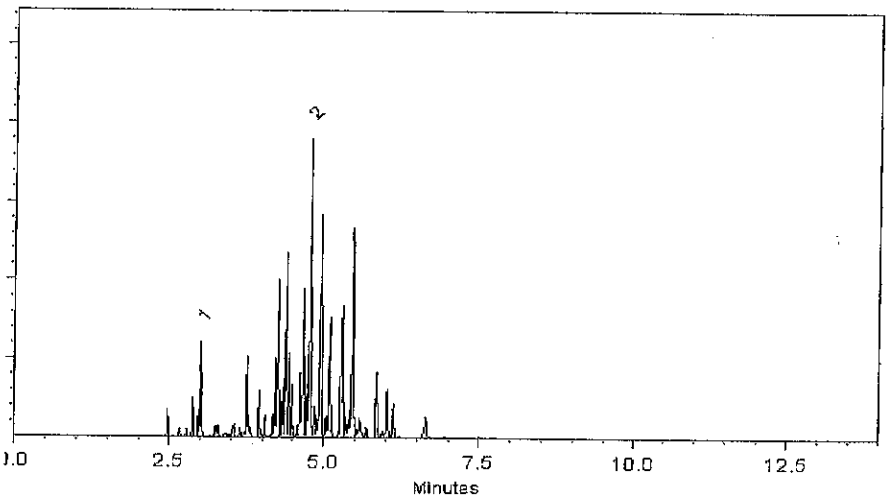
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham

Cheryl Graham - Mix Technician

Date Mixed: 06-Apr-2015 **Balance:** 1125113331

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 07-Apr-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SG1248_00007

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Certificate of Analysis

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010 **Lot No.:** A0110957

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2021 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1248	1,003.2 µg/mL	+/- 5.8873	µg/mL	Gravimetric
	CAS # 12672-29-6 (Lot W-108-07)		+/- 31.2219	µg/mL	Unstressed
	Purity ----%		+/- 41.5316	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Rec'd 1/21/16

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

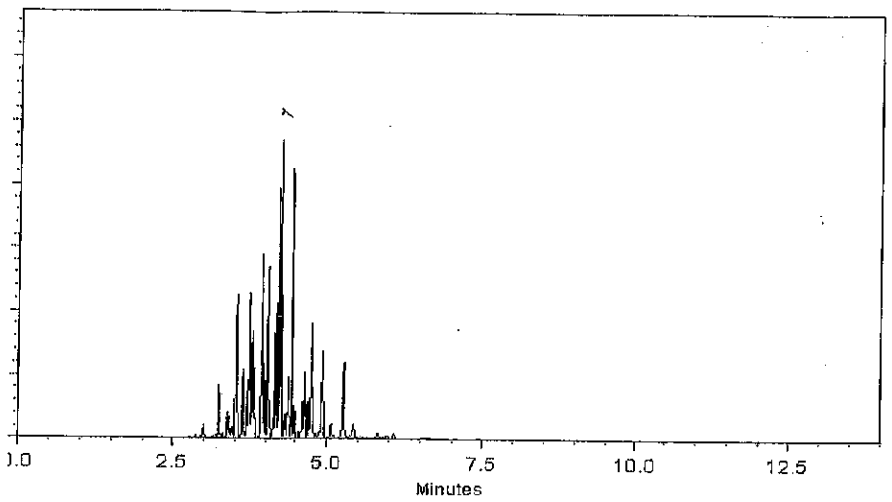
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 07-May-2015 **Balance:** B251644995

Amanda Miller - QC Analyst

Date Passed: 11-May-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SG32/62 STK_00002

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Certificate of Analysis

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Rec'd 1/14/16

Catalog No. : 569746 **Lot No.:** A0112323

Description : PCB-1232/1262 Standard

PCB-1232/1262 Standard 1000 µg/ml, Hexane, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2021 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1232		1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 11141-16-5	(Lot W-107-05)		+/- 32.1814	µg/mL	Unstressed
	Purity ----%			+/- 42.2011	µg/mL	Stressed
2	Aroclor 1262		1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 37324-23-5	(Lot 3067100)		+/- 32.1814	µg/mL	Unstressed
	Purity ----%			+/- 42.2011	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

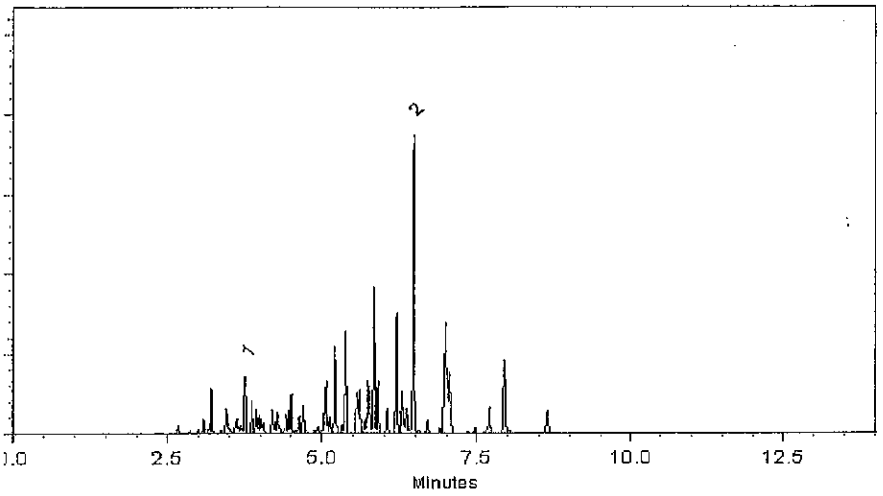
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mfg Technician

Date Mixed: 06-Jul-2015 **Balance:** B251644995

Amanda Miller - QC Analyst

Date Passed: 08-Jul-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGPCB1254_00010

Certificate of Analysis

Aroclor 1254 Solution

Product Number: EPA-1352 **Page:** 1 of 1

Lot Number: CK-3221 **Lot Issue Date:** 26-Sep-2013 **Expiration Date:** 31-Oct-2021

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	1002 ± 5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15-30°C)

Rec 9/24/14 @

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

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wwww.ultrasci.com

William J. Leary
Quality Assurance Manager

Reagent

SGPESTSURR_00010

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0117947

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene **CAS #** 877-09-8 (Lot 0052481) **Purity** 98%	200.4 µg/mL	+/- 1.1679 +/- 6.3503 +/- 8.2964	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Decachlorobiphenyl (BZ# 209) **CAS #** 2051-24-3 (Lot ER071509-01) **Purity** 99%	200.4 µg/mL	+/- 1.1678 +/- 6.3500 +/- 8.2960	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

R Farver

10/10/16

2750767
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Exp: 06/22/22 Prpd: CSC
PESTICIDE SURROGATE Reste

Reagent

vm30026_00001

Rec: 8/20/25

VM30026-00001

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0109427

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB) (Lot 20401KOV) **CAS #** 460-00-4 **Purity** 99%	2,009.0 µg/mL	+/- 11.7899 +/- 22.7110 +/- 26.1178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00024

VM567650_00024

Rec: 9/16/15

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0112455

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,509.6 µg/mL	+/- 14.5910	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 022012)		+/- 28.2993	µg/mL	Unstressed
	Purity 99%			+/- 32.5644	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,507.5 µg/mL	+/- 14.5788	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot 14C-191)		+/- 28.2757	µg/mL	Unstressed
	Purity 99%			+/- 32.5371	µg/mL	Stressed
3	Toluene-d8		2,509.0 µg/mL	+/- 14.5875	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-26282)		+/- 28.2926	µg/mL	Unstressed
	Purity 99%			+/- 32.5566	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,506.0 µg/mL	+/- 14.5701	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 28.2587	µg/mL	Unstressed
	Purity 99%			+/- 32.5176	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00027

VM567650-00027 Rec: 4/10/17 (39)

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0120212

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane	2,521.3 µg/mL	+/- 14.6591 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 032015)		+/- 141.3668 µg/mL	Unstressed
	Purity 99%		+/- 144.6746 µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,523.7 µg/mL	+/- 14.6730 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 14C-191)		+/- 141.5014 µg/mL	Unstressed
	Purity 99%		+/- 144.8123 µg/mL	Stressed
3	Toluene-d8	2,523.6 µg/mL	+/- 14.6724 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/- 141.4957 µg/mL	Unstressed
	Purity 99%		+/- 144.8066 µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,510.9 µg/mL	+/- 14.5986 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 140.7837 µg/mL	Unstressed
	Purity 99%		+/- 144.0778 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00008

VM568718_0000 8 Rec: 7/12/16

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0118105

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 **Purity** 99%	(Lot I201P6)	5,023.8 µg/mL	+/- 29.2073 µg/mL +/- 107.5597 µg/mL +/- 110.6867 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 **Purity** 99%	(Lot M276)	1,251.1 µg/mL	+/- 7.2740 µg/mL +/- 26.7862 µg/mL +/- 27.5649 µg/mL		Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 **Purity** 99%	(Lot BCBK8171V)	250.2 µg/mL	+/- 1.4578 µg/mL +/- 5.3567 µg/mL +/- 5.5123 µg/mL		Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 99%	(Lot I-19239)	5,005.7 µg/mL	+/- 29.1020 µg/mL +/- 107.1722 µg/mL +/- 110.2879 µg/mL		Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99%	(Lot PR-23926)	250.1 µg/mL	+/- 1.4575 µg/mL +/- 5.3556 µg/mL +/- 5.5112 µg/mL		Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99%	(Lot PR-18488)	250.0 µg/mL	+/- 1.4566 µg/mL +/- 5.3524 µg/mL +/- 5.5079 µg/mL		Gravimetric Unstressed Stressed

Reagent

VM568720_00021

VM568720-00021 Rcc: 4/15/17

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Catalog No. : 568720 **Lot No.:** A0125560

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,779.0 µg/mL	+/- 115.8104 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 170123JLM)		+/- 634.1769 µg/mL	Unstressed
	Purity 99%		+/- 737.1613 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00023

VM548720_00023 Rec: 9/7/17

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Catalog No. : 568720 **Lot No.:** A0127476

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,755.0 µg/mL		+/- 115.6699 µg/mL		Gravimetric
	CAS # 107-02-8	(Lot 170123JLM)			+/- 633.4074 µg/mL		Unstressed
	Purity 99%				+/- 736.2668 µg/mL		Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00001

VM569721_0000 Rec: 9/16/15

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Catalog No. : 569721 **Lot No.:** A0110400

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Acetone **CAS #** 67-64-1 (Lot 07196AK) **Purity** 99%	12,506.8 µg/mL	+/- 73.2301 µg/mL +/- 665.6407 µg/mL +/- 666.3747 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,504.8 µg/mL	+/- 73.2184 µg/mL +/- 665.5343 µg/mL +/- 666.2681 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF5332V) **Purity** 99%	12,509.2 µg/mL	+/- 73.2441 µg/mL +/- 665.7684 µg/mL +/- 666.5025 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBN7380V) **Purity** 99%	12,501.6 µg/mL	+/- 73.1996 µg/mL +/- 665.3640 µg/mL +/- 666.0976 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00001

Rec: 3/30/15
VM569721S_00001

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0108157

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot 0902033) **Purity** 99%	12,504.0 µg/mL	+/- 73.2137 µg/mL +/- 665.4917 µg/mL +/- 666.2255 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot VEGGI) **Purity** 99%	12,506.0 µg/mL	+/- 73.2254 µg/mL +/- 665.5981 µg/mL +/- 666.3320 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,537.3 µg/mL	+/- 73.4088 µg/mL +/- 667.2658 µg/mL +/- 668.0015 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot ZSVCD-FF) **Purity** 99%	12,508.7 µg/mL	+/- 73.2410 µg/mL +/- 665.7401 µg/mL +/- 666.4741 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00008

VM 569722 - 00008

Rec: 9/9/16

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Catalog No. : 569722 **Lot No.:** A0118719

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)		2,504.2	µg/mL	+/-	18.7109	µg/mL	Gravimetric
	CAS # 75-71-8	(Lot Q167-08)			+/-	140.8995	µg/mL	Unstressed
	Purity 99%				+/-	144.1737	µg/mL	Stressed
2	Chloromethane (methyl chloride)		2,500.6	µg/mL	+/-	18.9897	µg/mL	Gravimetric
	CAS # 74-87-3	(Lot SHBG1480V)			+/-	140.7385	µg/mL	Unstressed
	Purity 99%				+/-	144.0070	µg/mL	Stressed
3	Vinyl chloride		2,499.8	µg/mL	+/-	20.8058	µg/mL	Gravimetric
	CAS # 75-01-4	(Lot 25LPST)			+/-	140.9486	µg/mL	Unstressed
	Purity 99%				+/-	144.2103	µg/mL	Stressed
4	1,3-Butadiene		2,500.6	µg/mL	+/-	21.2874	µg/mL	Gravimetric
	CAS # 106-99-0	(Lot SHBF3387V)			+/-	141.0663	µg/mL	Unstressed
	Purity 99%				+/-	144.3274	µg/mL	Stressed
5	Bromomethane (methyl bromide)		2,500.1	µg/mL	+/-	22.8576	µg/mL	Gravimetric
	CAS # 74-83-9	(Lot 101604)			+/-	141.2859	µg/mL	Unstressed
	Purity 99%				+/-	144.5409	µg/mL	Stressed
6	Chloroethane (ethyl chloride)		2,500.3	µg/mL	+/-	19.5969	µg/mL	Gravimetric
	CAS # 75-00-3	(Lot SHBD1717V)			+/-	140.8062	µg/mL	Unstressed
	Purity 99%				+/-	144.0725	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)		2,504.7	µg/mL	+/-	19.5937	µg/mL	Gravimetric
	CAS # 75-43-4	(Lot Q9B-58)			+/-	141.0449	µg/mL	Unstressed
	Purity 99%				+/-	144.3170	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,497.3	µg/mL	+/-	18.0543	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBF6387V)			+/-	140.4322	µg/mL	Unstressed
	Purity 99%				+/-	143.6992	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

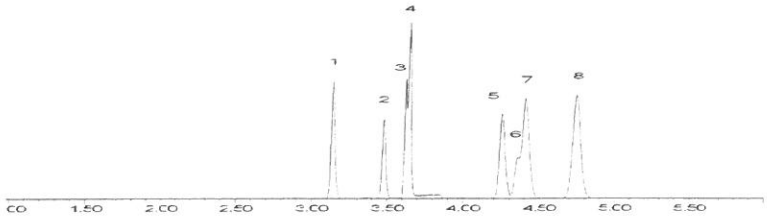
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 13-Apr-2016 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 19-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

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VM569722S-00003 Rec: 11/12/15

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Catalog No. : 569722.SEC **Lot No.:** A0113063

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 21773) **Purity** 99%	2,500.3 µg/mL	+/- 18.8969 µg/mL +/- 30.6711 µg/mL +/- 34.6178 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,502.2 µg/mL	+/- 22.3652 µg/mL +/- 32.9346 µg/mL +/- 36.6435 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,507.8 µg/mL	+/- 20.2660 µg/mL +/- 31.5880 µg/mL +/- 35.4543 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 18349) **Purity** 99%	2,524.8 µg/mL	+/- 19.2677 µg/mL +/- 31.0859 µg/mL +/- 35.0581 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,510.7 µg/mL	+/- 24.3913 µg/mL +/- 34.4006 µg/mL +/- 37.9896 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,499.3 µg/mL	+/- 20.7673 µg/mL +/- 31.8496 µg/mL +/- 35.6630 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,511.4 µg/mL	+/- 18.9807 µg/mL +/- 30.8071 µg/mL +/- 34.7713 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,525.9 µg/mL	+/-	18.1086	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)		+/-	30.3895	µg/mL	Unstressed
	Purity 99%			+/-	34.4453	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

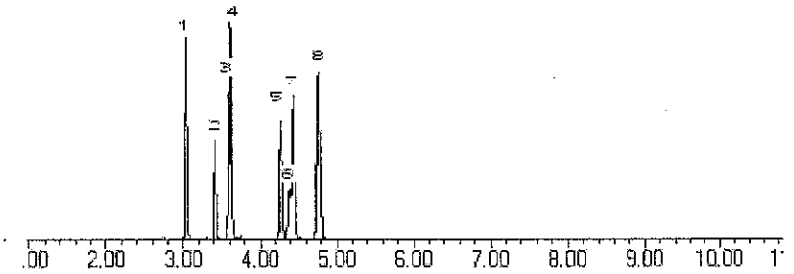
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 05-Aug-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 13-Aug-2015

Manufactured under Restek's ISO 9001:2008
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Certificate #FM 80397

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Rec: 4/6/15

VM569723_00002

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Catalog No. : 569723 **Lot No.:** A0109994

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,506.0 µg/mL	+/- 14.7066	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.1833	µg/mL	Unstressed
	Purity 99%		+/- 53.4189	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

5

Reagent

VM569723_00003

VM 569723-00003 Rec'd 11/12/15

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Catalog No. : 569723 **Lot No.:** A0112895

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,503.2 µg/mL	+/- 14.6902	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.1239	µg/mL	Unstressed
	Purity 99%		+/- 53.3593	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723S_00005

VM569723s-00005 Rec: 1/8/16
VS

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Catalog No. : 569723.sec **Lot No.:** A0115500

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,501.5 µg/mL	+/- 14.5439 µg/mL	Gravimetric
	CAS # 110-75-8.SEC (Lot BQZ2K-QD)		+/- 53.5574 µg/mL	Unstressed
	Purity 99%		+/- 55.1144 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00010

Rec! 5/24/17 (10)

VM569724_00010

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Catalog No. : 569724 **Lot No.:** A0125716

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate	5,013.5 µg/mL	+/- 29.3551 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.5066 µg/mL	Unstressed
	Purity 99%		+/- 303.2247 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00011

vm569724_00011 Rec: 9/7/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0128793

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,003.0 µg/mL	+/- 29.2937	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 301.8731	µg/mL	Unstressed
	Purity 99%		+/- 302.5897	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724S_00013

Rec: 5/4/17 (10)

VM569724S-00013

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Catalog No. : 569724.sec **Lot No.:** A0126061

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,006.5 µg/mL	+/- 29.3142	µg/mL	Gravimetric
	CAS # 108-05-4.SEC (Lot F3Z5C)		+/- 302.0842	µg/mL	Unstressed
	Purity 99%		+/- 302.8013	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724S_00014

VM569724S-00014 Rcc: 9/7/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724.sec **Lot No.:** A0127537

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,010.0 µg/mL	+/- 29.4015	µg/mL	Gravimetric
	CAS # 108-05-4.SEC (Lot F3Z5C)		+/- 302.3019	µg/mL	Unstressed
	Purity 99%		+/- 303.0195	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569727_00001

VM569727_00001 RC1 1/11/16

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569727 **Lot No.:** A0110092

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Cyclohexanone	25,017.3 µg/mL	+/- 146.4820 µg/mL	Gravimetric
	CAS # 108-94-1 (Lot MKBH7635V)		+/- 1,331.4801 µg/mL	Unstressed
	Purity 99%		+/- 1,332.9482 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

vm570806_00001

VM570806-00001 Rec: 4/13/16 (10)

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Catalog No. : 570806 **Lot No.:** A0116076

Description : 8260 List 2 / Std #4 Pentachloroethane

8260 List 2 / Std #4 Pentachloroethane 2500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	2,501.2 µg/mL	+/- 14.6784 µg/mL	Gravimetric
	CAS # 76-01-7 (Lot L7GVM)		+/- 140.2540 µg/mL	Unstressed
	Purity 99%		+/- 143.5351 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm570807_00001

VM570807-00001 Rec: 4/13/16

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Catalog No. : 570807 **Lot No.:** A0116084

Description : 8260 List 2 / Std #5 Methylnaphthalenes

8260 List 2 / Std #5 Methylnaphthalenes 2500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 95%	(Lot STBF0201V)	2,499.6 µg/mL	+/- 14.6693 +/- 140.1665 +/- 143.4456	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1-Methylnaphthalene **CAS #** 90-12-0 **Purity** 99%	(Lot 525000-10)	2,498.0 µg/mL	+/- 14.6597 +/- 140.0746 +/- 143.3515	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM570808_00003

Rec 4/11/17 (10)

VM570808_00003

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Catalog No. : 570808 **Lot No.:** A0123685

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0 (Lot SHBG8138V) **Purity** 99%	25,022.0 µg/mL	+/- 145.4725 µg/mL +/- 1,237.7836 µg/mL +/- 1,268.5622 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 (Lot 161201JLM) **Purity** 99%	2,515.5 µg/mL	+/- 14.6253 µg/mL +/- 124.4364 µg/mL +/- 127.5306 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 (Lot 1012014) **Purity** 99%	25,000.0 µg/mL	+/- 145.3446 µg/mL +/- 1,236.6953 µg/mL +/- 1,267.4469 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (isooctane) **CAS #** 540-84-1 (Lot SHBD2922V) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 µg/mL +/- 124.0654 µg/mL +/- 127.1504 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3 (Lot SHBF9309V) **Purity** 99%	62,715.5 µg/mL	+/- 364.6143 µg/mL +/- 3,102.3986 µg/mL +/- 3,179.5425 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9 (Lot BCBL0537V) **Purity** 98%	5,007.8 µg/mL	+/- 29.1158 µg/mL +/- 247.7251 µg/mL +/- 253.8850 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5 (Lot 05107LK) **Purity** 98%	2,501.5 µg/mL	+/- 14.5436 µg/mL +/- 123.7413 µg/mL +/- 126.8183 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene		2,516.2 µg/mL	+/-	14.6291	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-15)		+/-	124.4685	µg/mL	Unstressed
	Purity 98%			+/-	127.5635	µg/mL	Stressed
9	Benzyl chloride		2,508.3 µg/mL	+/-	14.5832	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBB7346V)		+/-	124.0777	µg/mL	Unstressed
	Purity 99%			+/-	127.1630	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,508.0 µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)		+/-	124.0654	µg/mL	Unstressed
	Purity 99%			+/-	127.1504	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

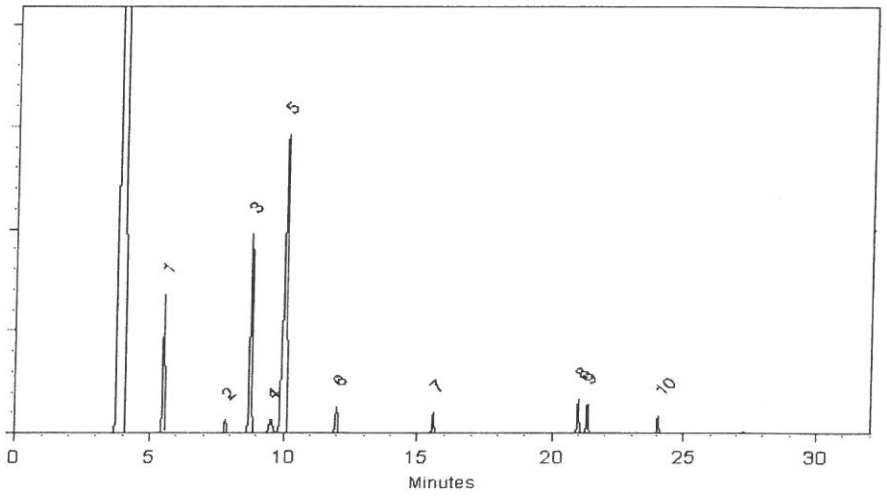
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Date Mixed: 21-Dec-2016 **Balance:** 1125113331

Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM570808S_00003

VM570808s-00003 RCE 4/11/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808.sec **Lot No.:** A0118725

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0.SEC (Lot NWVYK) **Purity** 98%	25,116.6 µg/mL	+/- 147.0633 µg/mL +/- 1,242.5868 µg/mL +/- 1,273.4788 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene **CAS #** 126-99-8.A * (Lot 160219JLM) **Purity** 99%	2,512.0 µg/mL	+/- 14.7418 µg/mL +/- 124.2794 µg/mL +/- 127.3689 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 * (Lot 1012014) **Purity** 99%	25,084.0 µg/mL	+/- 146.8723 µg/mL +/- 1,240.9732 µg/mL +/- 1,271.8251 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (Isooctane) **CAS #** 540-84-1.SEC (Lot 4597900) **Purity** 99%	2,510.0 µg/mL	+/- 14.7301 µg/mL +/- 124.1804 µg/mL +/- 127.2675 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3.SEC (Lot QBO2D) **Purity** 99%	62,537.2 µg/mL	+/- 366.1502 µg/mL +/- 3,093.8819 µg/mL +/- 3,170.7991 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9.SEC (Lot KW38H-RN) **Purity** 98%	5,029.8 µg/mL	+/- 29.4503 µg/mL +/- 248.8354 µg/mL +/- 255.0217 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5.SEC (Lot 3890000) **Purity** 98%	2,504.1 µg/mL	+/- 14.6954 µg/mL +/- 123.8883 µg/mL +/- 126.9681 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene **CAS #** 526-73-8.SEC **Purity** 97%	(Lot 3884300)	2,506.5 µg/mL	+/- 14.7094 +/- 124.0063 +/- 127.0890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride **CAS #** 100-44-7.SEC **Purity** 99%	(Lot H29N03)	2,514.0 µg/mL	+/- 14.7536 +/- 124.3783 +/- 127.4703	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene **CAS #** 108-70-3.SEC **Purity** 99%	(Lot I28U021)	2,508.0 µg/mL	+/- 14.7183 +/- 124.0815 +/- 127.1661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

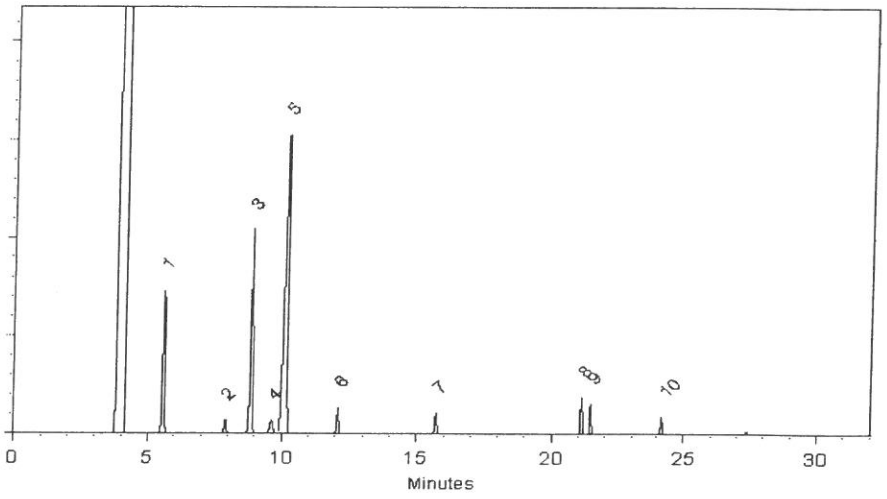
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 13-Apr-2016 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 18-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM570809_00003

VM570809_00003 Rec: 4/11/17 (10)

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Catalog No. : 570809 **Lot No.:** A0120639

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2500-5000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethyl acetate **CAS #** 141-78-6 (Lot SHBG6401V) **Purity** 99%	5,018.5 µg/mL	+/- 29.3844 µg/mL +/- 302.8083 µg/mL +/- 303.5271 µg/mL	Gravimetric Unstressed Stressed
2	Ethyl acrylate **CAS #** 140-88-5 (Lot 10129902) **Purity** 99%	2,506.5 µg/mL	+/- 14.7095 µg/mL +/- 151.2415 µg/mL +/- 151.6005 µg/mL	Gravimetric Unstressed Stressed
3	Methyl methacrylate **CAS #** 80-62-6 (Lot MKBN8882V) **Purity** 99%	5,005.5 µg/mL	+/- 29.3083 µg/mL +/- 302.0239 µg/mL +/- 302.7409 µg/mL	Gravimetric Unstressed Stressed
4	Butyl acetate **CAS #** 123-86-4 (Lot SHBC9340V) **Purity** 99%	2,501.0 µg/mL	+/- 14.6773 µg/mL +/- 150.9096 µg/mL +/- 151.2678 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM571992_00001

VM571992_00001 Rec'd 1-25-17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,500.2 µg/mL	+/-	14.5365	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBW3597V)		+/-	150.8497	µg/mL	Unstressed
	Purity 98%			+/-	151.2078	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
42	Chlorobenzene		2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)		+/-	150.8436	µg/mL	Unstressed
	Purity 99%			+/-	151.2017	µg/mL	Stressed
43	m-Xylene		1,250.3 µg/mL	+/-	7.2691	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBG4347V)		+/-	75.4331	µg/mL	Unstressed
	Purity 99%			+/-	75.6122	µg/mL	Stressed
44	p-Xylene		1,251.3 µg/mL	+/-	7.2749	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBG3928V)		+/-	75.4935	µg/mL	Unstressed
	Purity 99%			+/-	75.6727	µg/mL	Stressed
45	Ethylbenzene		2,503.3 µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)		+/-	151.0322	µg/mL	Unstressed
	Purity 99%			+/-	151.3907	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.3 µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)		+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
47	o-Xylene		2,504.9 µg/mL	+/-	14.5636	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH3432V)		+/-	151.1302	µg/mL	Unstressed
	Purity 99%			+/-	151.4890	µg/mL	Stressed
48	Styrene		2,506.3 µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)		+/-	151.2132	µg/mL	Unstressed
	Purity 99%			+/-	151.5722	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)		+/-	150.9341	µg/mL	Unstressed
	Purity 99%			+/-	151.2925	µg/mL	Stressed
50	bromoform		2,502.9 µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBD8459V)		+/-	151.0095	µg/mL	Unstressed
	Purity 99%			+/-	151.3681	µg/mL	Stressed
51	bromodichloromethane		2,506.8 µg/mL	+/-	14.5750	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKBW5506V)		+/-	151.2490	µg/mL	Unstressed
	Purity 97%			+/-	151.6081	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,508.5 µg/mL	+/-	14.5846	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)		+/-	151.3489	µg/mL	Unstressed
	Purity 99%			+/-	151.7082	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.8 µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)		+/-	150.8817	µg/mL	Unstressed
	Purity 95%			+/-	151.2399	µg/mL	Stressed
55	n-Propylbenzene		2,501.9 µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)		+/-	150.9492	µg/mL	Unstressed
	Purity 99%			+/-	151.3076	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBQ2165V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.6 µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ6229V)	2,500.8 µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,505.4 µg/mL	+/- 14.5665 +/- 151.1604 +/- 151.5193	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBS2604V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	2,503.9 µg/mL	+/- 14.5577 +/- 151.0699 +/- 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	2,509.9 µg/mL	+/- 14.5926 +/- 151.4319 +/- 151.7914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBC5541V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,506.5 µg/mL	+/- 14.5728 +/- 151.2266 +/- 151.5856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)			+/-	151.5073	µg/mL	Unstressed
	Purity 99%				+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

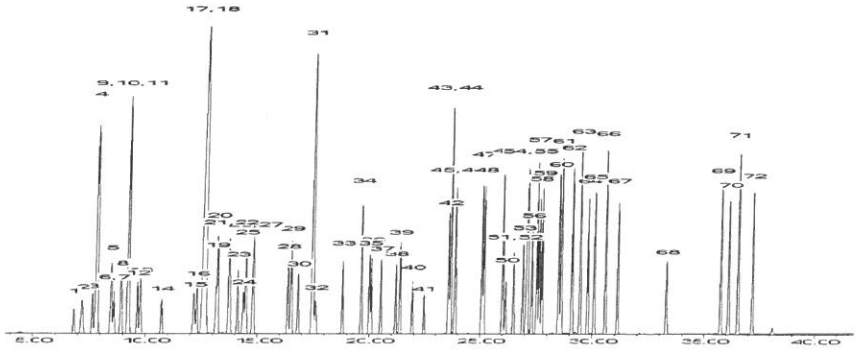
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00001

Rec: 1-25-17
VMS71992S-00001

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%		2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%		25,000.9	µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZAQTA-MS) **Purity** 99%		2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%		2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot 10188491) **Purity** 99%		2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%		2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%		2,500.1	µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%		2,500.2	µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot 83NHH) **Purity** 99%		62,506.9	µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%		2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%		2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot K3V7J-SJ) **Purity** 99%		5,002.3	µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot CS160712) **Purity** 98%		2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%		2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%		2,501.3	µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
25	n-Heptane (C7)		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
26	1,2-Dichloroethane		2,500.1	µg/mL	+/- 14.5359	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/- 150.8436	µg/mL	Unstressed
	Purity 99%				+/- 151.2017	µg/mL	Stressed
27	Benzene		2,501.5	µg/mL	+/- 14.5439	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/- 150.9266	µg/mL	Unstressed
	Purity 99%				+/- 151.2849	µg/mL	Stressed
28	Trichloroethene		2,501.0	µg/mL	+/- 14.5410	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/- 150.8964	µg/mL	Unstressed
	Purity 99%				+/- 151.2547	µg/mL	Stressed
29	Methylcyclohexane		2,500.9	µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/- 150.8889	µg/mL	Unstressed
	Purity 99%				+/- 151.2471	µg/mL	Stressed
30	1,2-Dichloropropane		2,501.1	µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/- 150.9040	µg/mL	Unstressed
	Purity 99%				+/- 151.2622	µg/mL	Stressed
31	1,4-Dioxane		50,007.1	µg/mL	+/- 290.7305	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot MUFZH)			+/- 3,017.1500	µg/mL	Unstressed
	Purity 99%				+/- 3,024.3132	µg/mL	Stressed
32	Dibromomethane		2,501.6	µg/mL	+/- 14.5447	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/- 150.9341	µg/mL	Unstressed
	Purity 99%				+/- 151.2925	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.1	µg/mL	+/- 14.5359	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/- 150.8436	µg/mL	Unstressed
	Purity 99%				+/- 151.2017	µg/mL	Stressed
34	Toluene		2,500.0	µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/- 150.8361	µg/mL	Unstressed
	Purity 99%				+/- 151.1942	µg/mL	Stressed
35	Ethyl methacrylate		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.8	µg/mL	+/- 14.5401	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 5034600)			+/- 150.8866	µg/mL	Unstressed
	Purity 98%				+/- 151.2448	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
39	Tetrachloroethene		2,501.3	µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/- 150.9115	µg/mL	Unstressed
	Purity 99%				+/- 151.2698	µg/mL	Stressed

40	Dibromochloromethane		2,500.4 µg/mL	+/- 14.5376	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)		+/- 150.8613	µg/mL	Unstressed
	Purity 97%			+/- 151.2194	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
42	Chlorobenzene		2,501.0 µg/mL	+/- 14.5410	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)		+/- 150.8964	µg/mL	Unstressed
	Purity 99%			+/- 151.2547	µg/mL	Stressed
43	m-Xylene		1,250.9 µg/mL	+/- 7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)		+/- 75.4708	µg/mL	Unstressed
	Purity 99%			+/- 75.6500	µg/mL	Stressed
44	p-Xylene		1,250.5 µg/mL	+/- 7.2705	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)		+/- 75.4482	µg/mL	Unstressed
	Purity 99%			+/- 75.6273	µg/mL	Stressed
45	Ethylbenzene		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%			+/- 151.2622	µg/mL	Stressed
47	o-Xylene		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed
48	Styrene		2,500.4 µg/mL	+/- 14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)		+/- 150.8587	µg/mL	Unstressed
	Purity 99%			+/- 151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
50	Bromoform		2,502.3 µg/mL	+/- 14.5483	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)		+/- 150.9718	µg/mL	Unstressed
	Purity 99%			+/- 151.3303	µg/mL	Stressed
51	Bromodichloromethane		2,500.1 µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)		+/- 150.8423	µg/mL	Unstressed
	Purity 98%			+/- 151.2004	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3 µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)		+/- 150.9115	µg/mL	Unstressed
	Purity 99%			+/- 151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.1 µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)		+/- 150.8423	µg/mL	Unstressed
	Purity 98%			+/- 151.2004	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,501.0 µg/mL	+/- 14.5408	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)		+/- 150.8940	µg/mL	Unstressed
	Purity 98%			+/- 151.2522	µg/mL	Stressed
55	n-Propylbenzene		2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)		+/- 150.8361	µg/mL	Unstressed
	Purity 99%			+/- 151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

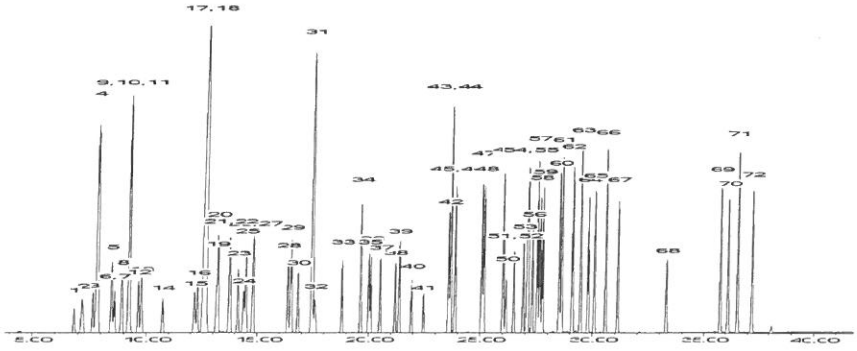
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571993_00001

VM571993-00001 Rec: 2-1-17

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993 **Lot No.:** A0123796

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2500-25,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile **CAS #** 75-05-8 **Purity** 98%	(Lot SHBB3177V)	25,004.5 µg/mL	+/- 145.3705 µg/mL +/- 1,236.9157 µg/mL +/- 1,267.6727 µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) **CAS #** 108-20-3 **Purity** 99%	(Lot SHBC0391V)	2,505.0 µg/mL	+/- 14.5643 µg/mL +/- 123.9170 µg/mL +/- 126.9983 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) **CAS #** 637-92-3 **Purity** 99%	(Lot MKBT8400V)	2,501.5 µg/mL	+/- 14.5439 µg/mL +/- 123.7438 µg/mL +/- 126.8208 µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile **CAS #** 107-12-0 **Purity** 99%	(Lot BCBM6569V)	25,003.8 µg/mL	+/- 145.3664 µg/mL +/- 1,236.8808 µg/mL +/- 1,267.6370 µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol **CAS #** 75-85-4 **Purity** 99%	(Lot STBB1898V)	25,006.0 µg/mL	+/- 145.3794 µg/mL +/- 1,236.9921 µg/mL +/- 1,267.7510 µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) **CAS #** 994-05-8 **Purity** 98%	(Lot HMBD8698V)	2,505.4 µg/mL	+/- 14.5664 µg/mL +/- 123.9353 µg/mL +/- 127.0170 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571993S_00002

Rec: 2-1-17

VM571993S - 00002

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993.sec **Lot No.:** A0123771

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2500-25,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile **CAS #** 75-05-8.SEC (Lot 7KGDA) **Purity** 99%	25,091.5 µg/mL	+/- 146.9162 µg/mL +/- 1,241.3442 µg/mL +/- 1,272.2054 µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) **CAS #** 108-20-3.SEC (Lot LL7TN-SH) **Purity** 98%	2,525.0 µg/mL	+/- 14.8179 µg/mL +/- 124.9211 µg/mL +/- 128.0265 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) **CAS #** 637-92-3.SEC (Lot MHBJG-QK) **Purity** 99%	2,509.0 µg/mL	+/- 14.7242 µg/mL +/- 124.1310 µg/mL +/- 127.2168 µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile **CAS #** 107-12-0.SEC (Lot RTXQL) **Purity** 99%	25,125.5 µg/mL	+/- 147.1153 µg/mL +/- 1,243.0263 µg/mL +/- 1,273.9293 µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol **CAS #** 75-85-4.SEC (Lot MMGO1) **Purity** 99%	25,056.0 µg/mL	+/- 146.7084 µg/mL +/- 1,239.5880 µg/mL +/- 1,270.4054 µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) **CAS #** 994-05-8.SEC (Lot 5614600) **Purity** 99%	2,517.5 µg/mL	+/- 14.7741 µg/mL +/- 124.5515 µg/mL +/- 127.6478 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMCUS8125_00010

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

Rec: 10/27/15

VMC45 8125_00010

Custom Standard

Product Number: CUS-8125 **Page:** 1 of 1

Lot Number: CM-5527 **Lot Issue Date:** 23-Oct-2015 **Expiration Date:** 30-Nov-2017

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
4-bromofluorobenzene	000460-00-4	RM05291	25121 ± 126 µg/mL
dibromofluoromethane	001868-53-7	RM04871	25077 ± 125 µg/mL
1,2-dichloroethane-d4	017060-07-0	RM09732	25089 ± 125 µg/mL
toluene-d8	002037-26-5	RM06738	25123 ± 126 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
TUV USA, Inc.

William J. Leary
Quality Assurance Manager

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Reagent

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vmcus8126_00009

Rec 12/18/15

Certificate of Analysis

VMCUS8126_00009

Custom Standard

Product Number: CUS-8126 **Page:** 1 of 1

Lot Number: CM-6298 **Lot Issue Date:** 15-Dec-2015 **Expiration Date:** 31-Jan-2018

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
chlorobenzene-d5	003114-55-4	RM09450	25118 ± 126 µg/mL
1,4-dichlorobenzene-d4	003855-82-1	RM10751	25118 ± 126 µg/mL
fluorobenzene	000462-06-6	RM07272	25095 ± 125 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ISO 9001
Registered
TUV USA, Inc.

William J. Leary
Quality Assurance Manager

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Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
WC-IS-100317	240-85941-2	86	84	94	95
	MB 240-298471/8	90	87	94	99
	LCS 240-298471/6	93	88	98	106
	LCS 240-298471/7	89	84	95	99
WC-IS-100317 MS	240-85941-2 MS	87	81	96	98
WC-IS-100317 MSD	240-85941-2 MSD	91	85	96	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	43-131
DCA = 1,2-Dichloroethane-d4 (Surr)	61-127
TOL = Toluene-d8 (Surr)	66-125
BFB = 4-Bromofluorobenzene (Surr)	61-132

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-100317	240-85941-1	108	103	94	103
WC-IW-100317	240-85941-3	104	102	93	99
	MB 240-298687/7	105	101	91	99
	LCS 240-298687/5	94	103	101	101
	240-86263-B-4 MS	102	97	95	99
	240-86263-B-4 MSD	102	95	99	103

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	69-124
DCA = 1,2-Dichloroethane-d4 (Surr)	61-138
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	69-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX83144.D

Lab ID: LCS 240-298471/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	53.7	107	64-130	
1,1,1-Trichloroethane	50.0	50.9	102	60-136	
1,1,2,2-Tetrachloroethane	50.0	53.7	107	78-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.9	102	64-125	
1,1-Dichloroethane	50.0	49.1	98	72-120	
1,1-Dichloroethene	50.0	51.8	104	58-130	
1,1-Dichloropropene	50.0	53.4	107	70-126	
1,2,3-Trichlorobenzene	50.0	47.2	94	59-121	
1,2,3-Trichloropropane	50.0	51.0	102	79-120	
1,2,4-Trichlorobenzene	50.0	50.4	101	60-124	
1,2,4-Trimethylbenzene	50.0	52.8	106	78-122	
1,2-Dibromo-3-Chloropropane	50.0	57.0	114	40-133	
1,2-Dichlorobenzene	50.0	48.8	98	75-120	
1,2-Dichloroethane	50.0	46.3	93	71-120	
1,2-Dichloropropane	50.0	52.9	106	78-122	
1,3-Dichlorobenzene	50.0	48.9	98	72-120	
1,3-Dichloropropane	50.0	52.3	105	78-120	
1,4-Dichlorobenzene	50.0	47.0	94	71-120	
2,2-Dichloropropane	50.0	47.6	95	40-150	
2-Butanone (MEK)	100	98.7	99	51-120	
2-Chloroethyl vinyl ether	50.0	61.7	123	61-143	
2-Chlorotoluene	50.0	52.3	105	78-120	
2-Hexanone	100	117	117	52-129	
4-Chlorotoluene	50.0	51.8	104	75-120	
p-Isopropyltoluene	50.0	54.9	110	76-126	
4-Methyl-2-pentanone (MIBK)	100	117	117	65-131	
Acetone	100	101	101	24-125	
Benzene	50.0	50.3	101	77-120	
Bromobenzene	50.0	51.2	102	75-120	
Bromoform	50.0	55.8	112	40-140	
Bromomethane	50.0	52.5	105	10-153	
Carbon disulfide	50.0	51.9	104	17-163	
Carbon tetrachloride	50.0	52.4	105	43-144	
Chlorobenzene	50.0	49.3	99	76-120	
Dibromochloromethane	50.0	58.9	118	46-125	
Chloroethane	50.0	39.1	78	10-166	
Chloroform	50.0	47.5	95	74-120	
Chloromethane	50.0	44.7	89	41-124	
cis-1,2-Dichloroethene	50.0	49.6	99	78-120	
cis-1,3-Dichloropropene	50.0	53.4	107	66-126	
Dibromomethane	50.0	48.9	98	76-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX83144.D

Lab ID: LCS 240-298471/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Bromochloromethane	50.0	50.1	100	76-120	
Dichlorodifluoromethane	50.0	50.5	101	15-127	
Bromodichloromethane	50.0	54.6	109	61-132	
tert-Butyl alcohol (TBA)	500	583	117	39-141	
Ethylbenzene	50.0	52.8	106	76-120	
Hexachlorobutadiene	50.0	48.3	97	62-133	
Isopropylbenzene	50.0	54.6	109	76-124	
Methyl tert-butyl ether	50.0	52.1	104	68-129	
Methylene Chloride	50.0	45.8	92	64-126	
m-Xylene & p-Xylene	50.0	54.9	110	78-120	
Naphthalene	50.0	54.9	110	68-123	
n-Butylbenzene	50.0	53.0	106	72-130	
N-Propylbenzene	50.0	54.4	109	77-126	
o-Xylene	50.0	52.4	105	77-120	
sec-Butylbenzene	50.0	53.1	106	78-125	
Styrene	50.0	54.3	109	80-120	
Tetrachloroethene	50.0	51.2	102	68-122	
Toluene	50.0	51.8	104	74-120	
trans-1,2-Dichloroethene	50.0	52.6	105	74-124	
trans-1,3-Dichloropropene	50.0	51.9	104	55-121	
Trichloroethene	50.0	51.1	102	73-123	
Trichlorofluoromethane	50.0	44.9	90	28-152	
Vinyl acetate	50.0	55.6	111	36-132	
Vinyl chloride	50.0	43.0	86	49-131	
Xylenes, Total	100	107	107	78-120	
tert-Butylbenzene	50.0	50.9	102	75-125	
1,2-Dibromoethane	50.0	55.6	111	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6685.D

Lab ID: LCS 240-298687/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	18.4	92	73-136	
1,1,1-Trichloroethane	20.0	17.8	89	64-147	
1,1,2,2-Tetrachloroethane	20.0	21.5	107	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.1	91	65-144	
1,1-Dichloroethane	20.0	17.9	90	74-120	
1,1-Dichloroethene	20.0	17.7	89	65-127	
1,1-Dichloropropene	20.0	19.4	97	80-122	
1,2,3-Trichlorobenzene	20.0	18.1	90	31-144	
1,2,3-Trichloropropane	20.0	21.3	106	53-134	
1,2,4-Trichlorobenzene	20.0	17.6	88	34-141	
1,2,4-Trimethylbenzene	20.0	18.2	91	80-120	
1,2-Dibromo-3-Chloropropane	20.0	22.3	112	50-130	
1,2-Dichlorobenzene	20.0	17.6	88	80-120	
1,2-Dichloroethane	20.0	20.4	102	68-133	
1,2-Dichloropropane	20.0	20.6	103	78-127	
1,3-Dichlorobenzene	20.0	18.0	90	80-120	
1,3-Dichloropropane	20.0	22.0	110	71-124	
1,4-Dichlorobenzene	20.0	17.8	89	80-120	
2,2-Dichloropropane	20.0	17.2	86	32-178	
2-Butanone (MEK)	40.0	45.0	113	43-149	
2-Chloroethyl vinyl ether	20.0	24.6	123	58-123	
2-Chlorotoluene	20.0	18.0	90	80-120	
2-Hexanone	40.0	48.5	121	28-169	
4-Chlorotoluene	20.0	18.2	91	79-120	
p-Isopropyltoluene	20.0	18.0	90	78-125	
4-Methyl-2-pentanone (MIBK)	40.0	47.3	118	53-144	
Acetone	40.0	40.0	100	35-131	
Benzene	20.0	19.1	95	79-120	
Bromobenzene	20.0	19.7	98	73-120	
Bromoform	20.0	20.0	100	55-145	
Bromomethane	20.0	18.0	90	17-158	
Carbon disulfide	20.0	14.9	75	49-141	
Carbon tetrachloride	20.0	16.7	84	55-171	
Chlorobenzene	20.0	19.6	98	80-120	
Dibromochloromethane	20.0	20.9	105	64-129	
Chloroethane	20.0	17.7	89	10-149	
Chloroform	20.0	18.5	92	80-120	
Chloromethane	20.0	19.6	98	59-124	
cis-1,2-Dichloroethene	20.0	18.1	91	77-120	
cis-1,3-Dichloropropene	20.0	23.0	115	75-120	
Dibromomethane	20.0	20.2	101	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6685.D

Lab ID: LCS 240-298687/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromochloromethane	20.0	17.4	87	78-120	
Dichlorodifluoromethane	20.0	24.1	121	42-141	
Bromodichloromethane	20.0	19.3	96	79-125	
tert-Butyl alcohol (TBA)	200	251	125	52-136	
Ethylbenzene	20.0	19.4	97	80-120	
Hexachlorobutadiene	20.0	14.7	73	36-146	
Isopropylbenzene	20.0	18.3	92	80-128	
Methyl tert-butyl ether	20.0	19.2	96	73-120	
Methylene Chloride	20.0	17.1	85	64-140	
m-Xylene & p-Xylene	20.0	19.6	98	80-120	
Naphthalene	20.0	21.3	106	31-127	
n-Butylbenzene	20.0	15.9	80	60-137	
N-Propylbenzene	20.0	18.3	92	76-120	
o-Xylene	20.0	18.4	92	80-120	
sec-Butylbenzene	20.0	17.6	88	76-124	
Styrene	20.0	20.0	100	80-121	
Tetrachloroethene	20.0	18.2	91	80-122	
Toluene	20.0	19.7	99	78-120	
trans-1,2-Dichloroethene	20.0	18.7	94	74-124	
trans-1,3-Dichloropropene	20.0	20.5	102	67-120	
Trichloroethene	20.0	19.9	99	76-124	
Trichlorofluoromethane	20.0	17.3	86	27-176	
Vinyl acetate	20.0	21.4	107	42-141	
Vinyl chloride	20.0	19.9	99	65-124	
Xylenes, Total	40.0	38.0	95	80-120	
tert-Butylbenzene	20.0	17.0	85	79-120	
1,2-Dibromoethane	20.0	22.1	111	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX83165.D

Lab ID: 240-85941-2 MS Client ID: WC-IS-100317 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	30.7	0.44 U	24.4	80	11-129	
1,1,1-Trichloroethane	30.7	0.28 U	24.4	79	33-130	
1,1,2,2-Tetrachloroethane	30.7	0.32 U	28.7	93	16-157	
1,1,2-Trichloro-1,2,2-trifluoroethane	30.7	0.60 U	22.6	74	26-130	
1,1-Dichloroethane	30.7	0.41 U	24.3	79	41-122	
1,1-Dichloroethene	30.7	0.67 U	24.7	81	30-139	
1,1-Dichloropropene	30.7	0.23 U	25.1	82	33-120	
1,2,3-Trichlorobenzene	30.7	0.43 U	15.1	49	10-128	
1,2,3-Trichloropropane	30.7	0.48 U	26.1	85	10-178	
1,2,4-Trichlorobenzene	30.7	0.30 U	16.2	53	10-120	
1,2,4-Trimethylbenzene	30.7	0.31 U	24.2	79	10-146	
1,2-Dibromo-3-Chloropropane	30.7	0.84 U	25.3	83	10-128	
1,2-Dichlorobenzene	30.7	0.27 U	21.4	70	10-120	
1,2-Dichloroethane	30.7	0.36 U	23.3	76	35-122	
1,2-Dichloropropane	30.7	0.38 U	26.1	85	38-130	
1,3-Dichlorobenzene	30.7	0.36 U	21.9	71	10-120	
1,3-Dichloropropane	30.7	0.28 U	25.3	82	34-121	
1,4-Dichlorobenzene	30.7	0.43 U	21.3	69	10-120	
2,2-Dichloropropane	30.7	0.37 U	20.7	68	27-131	
2-Butanone (MEK)	61.4	1.7 J	48.9	77	29-127	
2-Chloroethyl vinyl ether	30.7	3.5 U	24.2 J	79	10-134	
2-Chlorotoluene	30.7	0.46 U	25.1	82	10-142	
2-Hexanone	61.4	0.72 U	54.7	89	21-136	
4-Chlorotoluene	30.7	0.30 U	23.8	77	10-135	
p-Isopropyltoluene	30.7	0.22 U	23.8	78	10-129	
4-Methyl-2-pentanone (MIBK)	61.4	1.1 U	55.5	90	16-164	
Acetone	61.4	12 J	70.5	95	15-127	
Benzene	30.7	0.39 U	24.9	81	33-127	
Bromobenzene	30.7	0.33 U	25.4	83	10-141	
Bromoform	30.7	0.49 U	22.9	75	10-120	
Bromomethane	30.7	0.73 U	24.1	78	13-138	
Carbon disulfide	30.7	0.28 J	22.9	74	15-131	
Carbon tetrachloride	30.7	0.31 U	22.9	75	17-127	
Chlorobenzene	30.7	0.41 U	23.6	77	15-122	
Dibromochloromethane	30.7	0.37 U	25.5	83	19-120	
Chloroethane	30.7	0.47 U	19.7	64	15-148	
Chloroform	30.7	0.28 U	23.5	77	41-121	
Chloromethane	30.7	0.47 U	22.4	73	33-122	
cis-1,2-Dichloroethene	30.7	0.35 U	24.6	80	46-120	
cis-1,3-Dichloropropene	30.7	0.32 U	23.9	78	13-127	
Dibromomethane	30.7	0.47 U	23.6	77	24-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX83165.D

Lab ID: 240-85941-2 MS Client ID: WC-IS-100317 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Bromochloromethane	30.7	0.44 U	24.9	81	37-123	
Dichlorodifluoromethane	30.7	0.43 U	19.6	64	10-126	
Bromodichloromethane	30.7	0.41 U	25.4	83	22-127	
tert-Butyl alcohol (TBA)	307	2.9 U	275	89	59-128	
Ethylbenzene	30.7	0.33 U	25.4	83	18-126	
Hexachlorobutadiene	30.7	0.54 U	16.4	54	10-120	
Isopropylbenzene	30.7	0.25 U	24.2	79	10-128	
Methyl tert-butyl ether	30.7	0.33 U	24.6	80	49-134	
Methylene Chloride	30.7	0.30 U	20.0	65	34-134	
m-Xylene & p-Xylene	30.7	0.49 U	24.8	81	10-136	
Naphthalene	30.7	0.41 U	19.2	62	10-153	
n-Butylbenzene	30.7	0.31 U	21.1	69	10-120	
N-Propylbenzene	30.7	0.35 U	25.4	83	10-146	
o-Xylene	30.7	0.27 U	25.0	82	17-128	
sec-Butylbenzene	30.7	0.23 U	24.3	79	10-132	
Styrene	30.7	0.33 U	22.9	75	10-128	
Tetrachloroethene	30.7	0.46 U	26.2	85	17-126	
Toluene	30.7	0.42 U	25.0	82	29-127	
trans-1,2-Dichloroethene	30.7	0.47 U	24.9	81	32-134	
trans-1,3-Dichloropropene	30.7	0.26 U	21.8	71	11-120	
Trichloroethene	30.7	0.51 U	24.1	78	10-160	
Trichlorofluoromethane	30.7	0.30 U	20.7	67	24-137	
Vinyl acetate	30.7	1.1 U	1.1 U	0	10-120	F1
Vinyl chloride	30.7	0.35 U	21.1	69	31-134	
Xylenes, Total	61.4	0.49 U	49.8	81	10-137	
tert-Butylbenzene	30.7	0.26 U	33.9	110	10-143	
1,2-Dibromoethane	30.7	0.43 U	25.6	83	25-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6696.D

Lab ID: 240-86263-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	200	3.4 J	232	114	57-156	
1,1-Dichloroethene	200	2.7 U	218	109	62-127	
Chloroform	200	3.1 U	216	108	74-125	
cis-1,2-Dichloroethene	200	4.2 J	229	113	69-127	
Tetrachloroethene	200	3.0 U	181	90	69-126	
Trichloroethene	200	320	523	101	68-129	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX83166.D

Lab ID: 240-85941-2 MSD Client ID: WC-IS-100317 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	32.2	24.9	78	2	40	11-129	
1,1,1-Trichloroethane	32.2	25.9	80	6	40	33-130	
1,1,2,2-Tetrachloroethane	32.2	27.5	86	4	40	16-157	
1,1,2-Trichloro-1,2,2-trifluoroethane	32.2	26.2	81	15	40	26-130	
1,1-Dichloroethane	32.2	26.1	81	7	40	41-122	
1,1-Dichloroethene	32.2	27.1	84	9	40	30-139	
1,1-Dichloropropene	32.2	26.7	83	6	40	33-120	
1,2,3-Trichlorobenzene	32.2	12.5	39	19	40	10-128	
1,2,3-Trichloropropane	32.2	26.2	81	0	40	10-178	
1,2,4-Trichlorobenzene	32.2	14.1	44	13	40	10-120	
1,2,4-Trimethylbenzene	32.2	23.3	72	4	40	10-146	
1,2-Dibromo-3-Chloropropane	32.2	27.8	86	9	40	10-128	
1,2-Dichlorobenzene	32.2	19.8	62	8	40	10-120	
1,2-Dichloroethane	32.2	23.7	74	2	40	35-122	
1,2-Dichloropropane	32.2	27.3	85	5	40	38-130	
1,3-Dichlorobenzene	32.2	20.2	63	8	40	10-120	
1,3-Dichloropropane	32.2	26.5	83	5	40	34-121	
1,4-Dichlorobenzene	32.2	19.6	61	8	40	10-120	
2,2-Dichloropropane	32.2	22.5	70	8	40	27-131	
2-Butanone (MEK)	64.3	58.1	88	17	40	29-127	
2-Chloroethyl vinyl ether	32.2	26.8 J	83	10	40	10-134	
2-Chlorotoluene	32.2	23.9	74	5	40	10-142	
2-Hexanone	64.3	59.9	93	9	40	21-136	
4-Chlorotoluene	32.2	22.1	69	7	40	10-135	
p-Isopropyltoluene	32.2	22.5	70	6	40	10-129	
4-Methyl-2-pentanone (MIBK)	64.3	60.5	94	8	40	16-164	
Acetone	64.3	79.6	104	12	40	15-127	
Benzene	32.2	26.5	82	6	40	33-127	
Bromobenzene	32.2	24.5	76	4	40	10-141	
Bromoform	32.2	23.0	71	0	40	10-120	
Bromomethane	32.2	27.6	86	14	40	13-138	
Carbon disulfide	32.2	23.7	73	3	40	15-131	
Carbon tetrachloride	32.2	24.1	75	5	40	17-127	
Chlorobenzene	32.2	23.5	73	0	40	15-122	
Dibromochloromethane	32.2	25.1	78	1	40	19-120	
Chloroethane	32.2	22.2	69	12	40	15-148	
Chloroform	32.2	24.9	77	6	40	41-121	
Chloromethane	32.2	24.2	75	8	40	33-122	
cis-1,2-Dichloroethene	32.2	26.3	82	6	40	46-120	
cis-1,3-Dichloropropene	32.2	24.3	75	2	40	13-127	
Dibromomethane	32.2	24.6	77	4	40	24-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX83166.D

Lab ID: 240-85941-2 MSD Client ID: WC-IS-100317 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromochloromethane	32.2	25.8	80	3	40	37-123	
Dichlorodifluoromethane	32.2	24.0	75	20	40	10-126	
Bromodichloromethane	32.2	25.4	79	0	40	22-127	
tert-Butyl alcohol (TBA)	322	318	99	15	39	59-128	
Ethylbenzene	32.2	24.9	77	2	40	18-126	
Hexachlorobutadiene	32.2	16.6	51	1	40	10-120	
Isopropylbenzene	32.2	24.0	75	1	40	10-128	
Methyl tert-butyl ether	32.2	26.2	81	6	40	49-134	
Methylene Chloride	32.2	20.4	63	2	40	34-134	
m-Xylene & p-Xylene	32.2	25.1	78	1	40	10-136	
Naphthalene	32.2	16.9	52	13	40	10-153	
n-Butylbenzene	32.2	19.9	62	6	40	10-120	
N-Propylbenzene	32.2	24.3	76	4	40	10-146	
o-Xylene	32.2	24.2	75	3	40	17-128	
sec-Butylbenzene	32.2	23.4	73	4	40	10-132	
Styrene	32.2	22.6	70	1	40	10-128	
Tetrachloroethene	32.2	27.4	85	5	40	17-126	
Toluene	32.2	25.5	79	2	40	29-127	
trans-1,2-Dichloroethene	32.2	26.8	83	7	40	32-134	
trans-1,3-Dichloropropene	32.2	22.1	69	1	40	11-120	
Trichloroethene	32.2	26.2	81	8	40	10-160	
Trichlorofluoromethane	32.2	22.7	71	10	40	24-137	
Vinyl acetate	32.2	1.1 U	0	NC	40	10-120	F1
Vinyl chloride	32.2	23.3	72	10	40	31-134	
Xylenes, Total	64.3	49.3	77	1	40	10-137	
tert-Butylbenzene	32.2	32.8	102	3	40	10-143	
1,2-Dibromoethane	32.2	26.4	82	3	40	25-137	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6697.D

Lab ID: 240-86263-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	200	229	113	1	13	57-156	
1,1-Dichloroethene	200	223	112	3	14	62-127	
Chloroform	200	217	108	0	11	74-125	
cis-1,2-Dichloroethene	200	231	113	1	11	69-127	
Tetrachloroethene	200	190	95	5	18	69-126	
Trichloroethene	200	509	94	3	12	68-129	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: UX83146.D Lab Sample ID: MB 240-298471/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 10/11/2017 01:56

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-298471/6	UX83144.D	10/11/2017 01:12
	LCS 240-298471/7	UX83145.D	10/11/2017 01:35
WC-IS-100317	240-85941-2	UX83164.D	10/11/2017 08:28
WC-IS-100317 MS	240-85941-2 MS	UX83165.D	10/11/2017 08:51
WC-IS-100317 MSD	240-85941-2 MSD	UX83166.D	10/11/2017 09:14

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: UXM6687.D Lab Sample ID: MB 240-298687/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 10/12/2017 09:34

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-298687/5	UXM6685.D	10/12/2017 08:47
	240-86263-B-4 MS	UXM6696.D	10/12/2017 13:01
	240-86263-B-4 MSD	UXM6697.D	10/12/2017 13:23
TB-100317	240-85941-1	UXM6699.D	10/12/2017 14:09
WC-IW-100317	240-85941-3	UXM6700.D	10/12/2017 14:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: BFB5411.D BFB Injection Date: 10/03/2017

Instrument ID: A3UX16 BFB Injection Time: 15:09

Analysis Batch No.: 297419

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.8
75	30.0 - 60.0 % of mass 95	50.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	80.9
175	5.0 - 9.0 % of mass 174	5.5 (6.8) 1
176	95.0 - 101.0 % of mass 174	81.2 (100.3) 1
177	5.0 - 9.0 % of mass 176	5.1 (6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-297419/9	UXM6334.D	10/03/2017	16:10
	STD8260 240-297419/10	UXM6335.D	10/03/2017	16:33
	STD8260 240-297419/11	UXM6336.D	10/03/2017	16:56
	STD8260 240-297419/12	UXM6337.D	10/03/2017	17:19
	ICIS 240-297419/13	UXM6338.D	10/03/2017	17:42
	STD8260 240-297419/14	UXM6339.D	10/03/2017	18:06
	STD8260L7 240-297419/15	UXM6340.D	10/03/2017	18:29
	ICV 240-297419/16	UXM6341.D	10/03/2017	18:52
	STDA9 240-297419/19	UXM6344.D	10/03/2017	20:03
	STDA9 240-297419/20	UXM6345.D	10/03/2017	20:26
	STDA9 240-297419/21	UXM6346.D	10/03/2017	20:49
	STDA9 240-297419/22	UXM6347.D	10/03/2017	21:12
	STDA9 240-297419/23	UXM6348.D	10/03/2017	21:35
	STDA9 240-297419/24	UXM6349.D	10/03/2017	21:59

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: BFB5423.D BFB Injection Date: 10/12/2017

Instrument ID: A3UX16 BFB Injection Time: 07:34

Analysis Batch No.: 298687

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.4	
75	30.0 - 60.0 % of mass 95	50.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	79.7	
175	5.0 - 9.0 % of mass 174	6.4	(8.0) 1
176	95.0 - 101.0 % of mass 174	76.3	(95.8) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-298687/3	UXM6683.D	10/12/2017	07:59
	CCV 240-298687/4	UXM6684.D	10/12/2017	08:24
	LCS 240-298687/5	UXM6685.D	10/12/2017	08:47
	MB 240-298687/7	UXM6687.D	10/12/2017	09:34
	240-86263-B-4 MS	UXM6696.D	10/12/2017	13:01
	240-86263-B-4 MSD	UXM6697.D	10/12/2017	13:23
TB-100317	240-85941-1	UXM6699.D	10/12/2017	14:09
WC-IW-100317	240-85941-3	UXM6700.D	10/12/2017	14:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: BFB8386.D BFB Injection Date: 07/02/2017

Instrument ID: A3UX8 BFB Injection Time: 04:39

Analysis Batch No.: 285694

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.0	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	74.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.5) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.0) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-285694/11	UX80991.D	07/02/2017	08:14
	STDA9 240-285694/12	UX80992.D	07/02/2017	08:36
	STDA9 240-285694/13	UX80993.D	07/02/2017	08:58
	STDA9 240-285694/14	UX80994.D	07/02/2017	09:19
	STDA9 240-285694/15	UX80995.D	07/02/2017	09:41
	STDA9 240-285694/16	UX80996.D	07/02/2017	10:03
	STDA9 240-285694/17	UX80997.D	07/02/2017	10:26
	STDA9 240-285694/18	UX80998.D	07/02/2017	10:48

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: BFB8425.D BFB Injection Date: 08/20/2017

Instrument ID: A3UX8 BFB Injection Time: 00:19

Analysis Batch No.: 291805

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.1	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	82.9	
175	5.0 - 9.0 % of mass 174	6.2	(7.5) 1
176	95.0 - 101.0 % of mass 174	80.0	(96.5) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-291805/3	UX81902.D	08/20/2017	00:54
	STD8260 240-291805/4	UX81903.D	08/20/2017	01:17
	STD8260 240-291805/5	UX81904.D	08/20/2017	01:38
	ICIS 240-291805/6	UX81905.D	08/20/2017	02:00
	STD8260 240-291805/7	UX81906.D	08/20/2017	02:21
	STD8260 240-291805/8	UX81907.D	08/20/2017	02:42
	STD8260 240-291805/9	UX81908.D	08/20/2017	03:03
	STD8260 240-291805/10	UX81909.D	08/20/2017	03:24
	ICV 240-291805/12	UX81911.D	08/20/2017	04:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab File ID: BFB8465.D BFB Injection Date: 10/10/2017

Instrument ID: A3UX8 BFB Injection Time: 23:54

Analysis Batch No.: 298471

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.3	
75	30.0 - 60.0 % of mass 95	49.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.8	
175	5.0 - 9.0 % of mass 174	6.0	(7.2) 1
176	95.0 - 101.0 % of mass 174	81.5	(97.3) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-298471/4	UX83142.D	10/11/2017	00:27
	CCV 240-298471/5	UX83143.D	10/11/2017	00:49
	LCS 240-298471/6	UX83144.D	10/11/2017	01:12
	LCS 240-298471/7	UX83145.D	10/11/2017	01:35
	MB 240-298471/8	UX83146.D	10/11/2017	01:56
WC-IS-100317	240-85941-2	UX83164.D	10/11/2017	08:28
WC-IS-100317 MS	240-85941-2 MS	UX83165.D	10/11/2017	08:51
WC-IS-100317 MSD	240-85941-2 MSD	UX83166.D	10/11/2017	09:14

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: ICIS 240-297419/13 Date Analyzed: 10/03/2017 17:42

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6338.D Heated Purge: (Y/N) N

Calibration ID: 41708

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1085046	5.82	726412	8.51	474078	10.75
UPPER LIMIT		2170092	6.32	1452824	9.01	948156	11.25
LOWER LIMIT		542523	5.32	363206	8.01	237039	10.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297419/16		1187854	5.82	799475	8.51	529764	10.75
CCVIS 240-298687/3		1012699	5.82	710806	8.51	491716	10.75

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: CCVIS 240-298687/3 Date Analyzed: 10/12/2017 07:59

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6683.D Heated Purge: (Y/N) N

Calibration ID: 41742

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1012699	5.82	710806	8.51	491716	10.75
UPPER LIMIT		2025398	6.32	1421612	9.01	983432	11.25
LOWER LIMIT		506350	5.32	355403	8.01	245858	10.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-298687/4		1128967	5.82	783832	8.51	473410	10.75
LCS 240-298687/5		1199719	5.82	837063	8.51	542725	10.75
MB 240-298687/7		910447	5.82	670318	8.51	450380	10.75
240-86263-B-4 MS		926875	5.82	707916	8.51	486512	10.75
240-86263-B-4 MSD		924787	5.82	671740	8.51	482636	10.75
240-85941-1	TB-100317	813478	5.82	599931	8.51	407980	10.75
240-85941-3	WC-IW-100317	797090	5.82	594022	8.51	419694	10.75

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: ICIS 240-291805/6 Date Analyzed: 08/20/2017 02:00

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX81905.D Heated Purge: (Y/N) Y

Calibration ID: 41245

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1858152	5.16	1297679	7.68	699487	9.88
UPPER LIMIT		3716304	5.66	2595358	8.18	1398974	10.38
LOWER LIMIT		929076	4.66	648840	7.18	349744	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-291805/12		1793726	5.16	1306084	7.69	706618	9.88
CCVIS 240-298471/4		1609721	5.16	1173160	7.69	637373	9.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: CCVIS 240-298471/4 Date Analyzed: 10/11/2017 00:27

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX83142.D Heated Purge: (Y/N) Y

Calibration ID: 41245

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1609721	5.16	1173160	7.69	637373	9.88
UPPER LIMIT		3219442	5.66	2346320	8.19	1274746	10.38
LOWER LIMIT		804861	4.66	586580	7.19	318687	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-298471/5		1634108	5.16	1194862	7.69	629158	9.88
LCS 240-298471/6		1655846	5.16	1194629	7.69	662434	9.88
LCS 240-298471/7		1649419	5.16	1210218	7.69	614910	9.88
MB 240-298471/8		1623334	5.16	1188727	7.69	616506	9.88
240-85941-2	WC-IS-100317	1605417	5.16	1174231	7.69	594619	9.88
240-85941-2 MS	WC-IS-100317 MS	1655078	5.16	1181902	7.69	604713	9.88
240-85941-2 MSD	WC-IS-100317 MSD	1547427	5.16	1120827	7.69	581243	9.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: TB-100317 | Lab Sample ID: 240-85941-1

Matrix: Water | Lab File ID: UXM6699.D

Analysis Method: 8260C | Date Collected: 10/03/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 14:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.46	U	1.0	0.46
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
563-58-6	1,1-Dichloropropene	0.28	U	1.0	0.28
87-61-6	1,2,3-Trichlorobenzene	0.35	U	1.0	0.35
96-18-4	1,2,3-Trichloropropane	0.54	U	1.0	0.54
526-73-8	1,2,3-Trimethylbenzene	0.22	U	5.0	0.22
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
95-63-6	1,2,4-Trimethylbenzene	0.24	U	1.0	0.24
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
142-28-9	1,3-Dichloropropane	0.29	U	1.0	0.29
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
594-20-7	2,2-Dichloropropane	0.34	U	1.0	0.34
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
110-75-8	2-Chloroethyl vinyl ether	0.65	U	10	0.65
95-49-8	2-Chlorotoluene	0.28	U	1.0	0.28
591-78-6	2-Hexanone	1.2	U	10	1.2
106-43-4	4-Chlorotoluene	0.23	U	1.0	0.23
99-87-6	p-Isopropyltoluene	0.29	U	1.0	0.29
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	2.3	J	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
108-86-1	Bromobenzene	0.31	U	1.0	0.31
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: TB-100317 | Lab Sample ID: 240-85941-1

Matrix: Water | Lab File ID: UXM6699.D

Analysis Method: 8260C | Date Collected: 10/03/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 14:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.25	U	1.0	0.25
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
74-95-3	Dibromomethane	0.46	U	1.0	0.46
74-97-5	Bromochloromethane	0.47	U	1.0	0.47
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
75-27-4	Bromodichloromethane	0.30	U	1.0	0.30
75-65-0	tert-Butyl alcohol (TBA)	4.6	U	50	4.6
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
87-68-3	Hexachlorobutadiene	0.78	J B	1.0	0.36
108-20-3	Diisopropyl ether	0.44	U	10	0.44
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
179601-23-1	m-Xylene & p-Xylene	0.24	U	2.0	0.24
91-20-3	Naphthalene	0.25	U	1.0	0.25
104-51-8	n-Butylbenzene	0.21	U	1.0	0.21
103-65-1	N-Propylbenzene	0.45	U	1.0	0.45
95-47-6	o-Xylene	0.28	U	1.0	0.28
135-98-8	sec-Butylbenzene	0.27	U	1.0	0.27
100-42-5	Styrene	0.23	U	1.0	0.23
994-05-8	Tert-amyl methyl ether	0.29	U	5.0	0.29
637-92-3	Ethyl t-butyl ether	0.35	U	5.0	0.35
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
108-05-4	Vinyl acetate	0.28	U	2.0	0.28
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24
98-06-6	tert-Butylbenzene	0.26	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: TB-100317 | Lab Sample ID: 240-85941-1

Matrix: Water | Lab File ID: UXM6699.D

Analysis Method: 8260C | Date Collected: 10/03/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 14:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.23	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		69-124
460-00-4	4-Bromofluorobenzene (Surr)	103		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		61-138

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6699.D
Lims ID: 240-85941-B-1
Client ID: TB-100317
Sample Type: Client
Inject. Date: 12-Oct-2017 14:09:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-019
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 19:27:22 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: laveyt Date: 12-Oct-2017 19:28:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	813478	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	86	599931	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	96	407980	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	223222	21.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	98	242683	20.5	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	736701	18.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	91	279774	20.6	
9 Dichlorodifluoromethane	85		1.773				ND	
10 Chloromethane	50		1.927				ND	
11 Vinyl chloride	62		2.058				ND	
13 Bromomethane	94		2.402				ND	
14 Chloroethane	64		2.508				ND	
16 Trichlorofluoromethane	101		2.781				ND	
19 1,1-Dichloroethene	96		3.255				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.291				ND	
21 Acetone	43	3.315	3.303	0.012	94	12080	2.25	
24 Carbon disulfide	76		3.469				ND	
28 Methylene Chloride	84		3.706				ND	
29 2-Methyl-2-propanol	59		3.801				ND	
31 Methyl tert-butyl ether	73		3.955				ND	
32 trans-1,2-Dichloroethene	96		3.955				ND	
34 1,1-Dichloroethane	63		4.323				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
35 Vinyl acetate	43		4.358				ND	
36 Isopropyl ether	87		4.382				ND	
38 Tert-butyl ethyl ether	59		4.690				ND	
39 cis-1,2-Dichloroethene	96		4.821				ND	
41 2,2-Dichloropropane	97		4.832				ND	
40 2-Butanone (MEK)	43		4.832				ND	
45 Chlorobromomethane	128		5.034				ND	
47 Chloroform	83		5.093				ND	
48 1,1,1-Trichloroethane	97		5.271				ND	
50 1,1-Dichloropropene	75		5.402				ND	
51 Carbon tetrachloride	117		5.414				ND	
54 Benzene	78		5.580				ND	
53 1,2-Dichloroethane	62		5.591				ND	
55 Tert-amyl methyl ether	73		5.663				ND	
58 Trichloroethene	130		6.125				ND	
61 1,2-Dichloropropane	63		6.327				ND	
63 Dibromomethane	93		6.422				ND	
65 Dichlorobromomethane	83		6.552				ND	
67 2-Chloroethyl vinyl ether	63		6.801				ND	
68 cis-1,3-Dichloropropene	75		6.943				ND	
69 4-Methyl-2-pentanone (MIBK	43		7.074				ND	
70 Toluene	91		7.252				ND	
71 trans-1,3-Dichloropropene	75		7.430				ND	
75 Tetrachloroethene	164		7.750				ND	
74 1,3-Dichloropropane	76		7.750				ND	
76 2-Hexanone	43		7.809				ND	
78 Chlorodibromomethane	129		7.963				ND	
80 Ethylene Dibromide	107		8.082				ND	
82 Chlorobenzene	112		8.532				ND	
83 1,1,1,2-Tetrachloroethane	131		8.604				ND	
84 Ethylbenzene	106		8.627				ND	
85 m-Xylene & p-Xylene	106		8.734				ND	
86 o-Xylene	106		9.113				ND	
87 Styrene	104		9.125				ND	
88 Bromoform	173		9.315				ND	
89 Isopropylbenzene	105		9.469				ND	
92 1,1,2,2-Tetrachloroethane	83		9.742				ND	
93 Bromobenzene	156		9.777				ND	
95 1,2,3-Trichloropropane	110		9.789				ND	
96 N-Propylbenzene	120		9.861				ND	
97 2-Chlorotoluene	126		9.955				ND	
100 4-Chlorotoluene	126		10.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
102 tert-Butylbenzene	119		10.359				ND	
104 1,2,4-Trimethylbenzene	105		10.406				ND	
105 sec-Butylbenzene	105		10.572				ND	
106 1,3-Dichlorobenzene	146		10.691				ND	
107 4-Isopropyltoluene	119		10.714				ND	
108 1,4-Dichlorobenzene	146		10.774				ND	
109 1,2,3-Trimethylbenzene	105		10.821				ND	
111 n-Butylbenzene	91		11.118				ND	
112 1,2-Dichlorobenzene	146		11.153				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.924				ND	
115 1,2,4-Trichlorobenzene	180		12.754				ND	
116 Hexachlorobutadiene	225	12.920	12.932	-0.012	87	5033	0.7844	
117 Naphthalene	128		13.015				ND	
118 1,2,3-Trichlorobenzene	180		13.288				ND	
S 133 Xylenes, Total	106		16.950				ND	

Reagents:

vm100ss_stk_00027	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

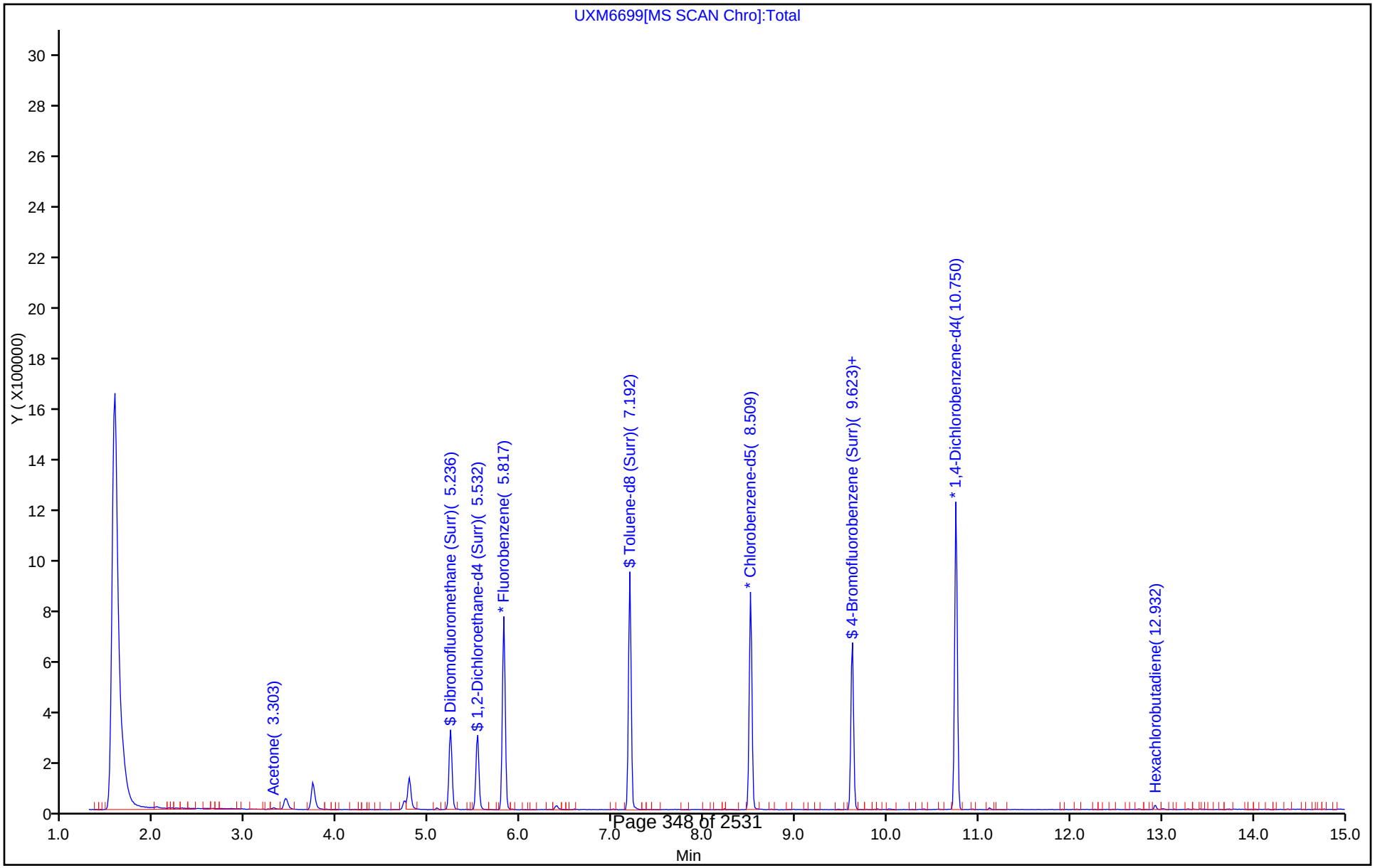
Report Date: 12-Oct-2017 19:28:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6699.D

Injection Date:	12-Oct-2017 14:09:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	240-85941-B-1	Lab Sample ID:	240-85941-1	Worklist Smp#:	19
Client ID:	TB-100317				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6699.D
Lims ID: 240-85941-B-1
Client ID: TB-100317
Sample Type: Client
Inject. Date: 12-Oct-2017 14:09:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-019
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 19:27:22 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: laveyt Date: 12-Oct-2017 19:28:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.6	107.79
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.5	102.55
$ 6 Toluene-d8 (Surr)	20.0	18.9	94.36
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.6	103.19

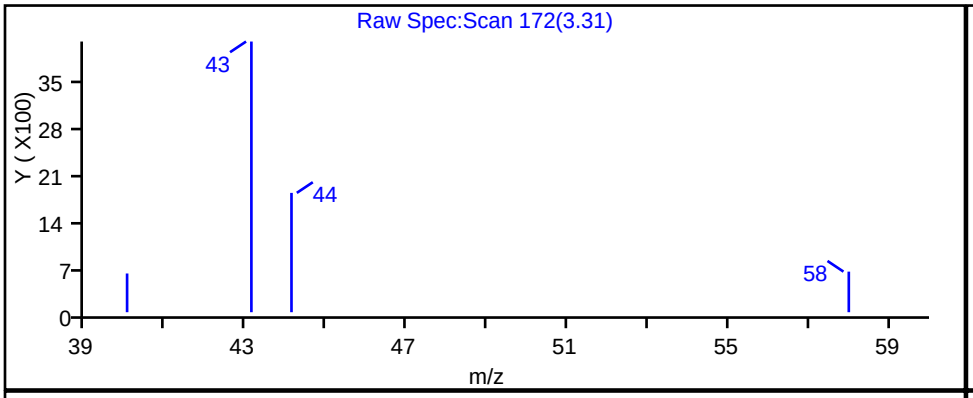
Report Date: 12-Oct-2017 19:28:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

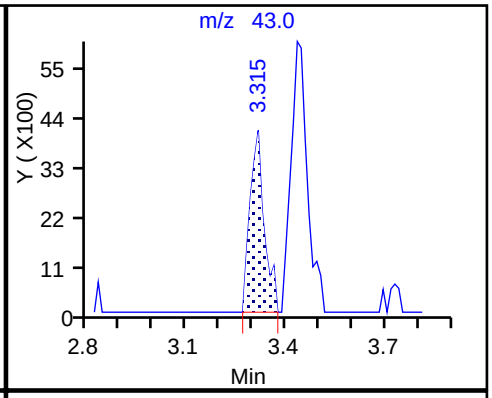
TestAmerica Canton

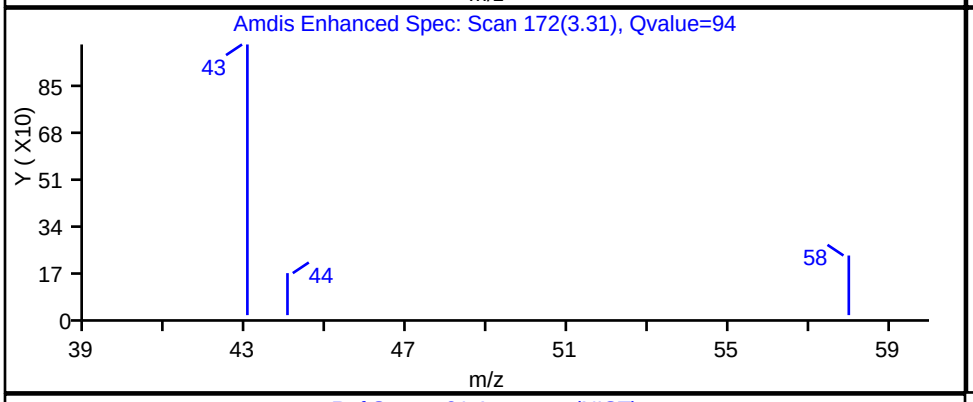
Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6699.D

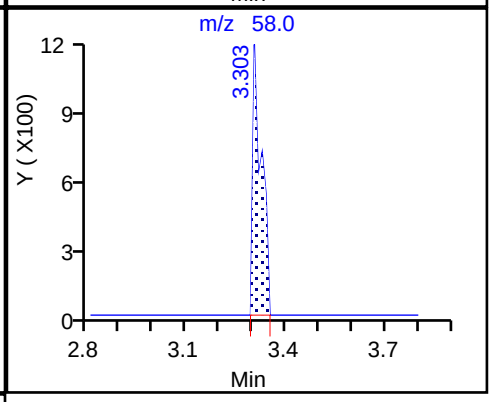
Injection Date:	12-Oct-2017 14:09:30	Instrument ID:	A3UX16		
Lims ID:	240-85941-B-1	Lab Sample ID:	240-85941-1		
Client ID:	TB-100317				
Operator ID:	001765	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_16	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

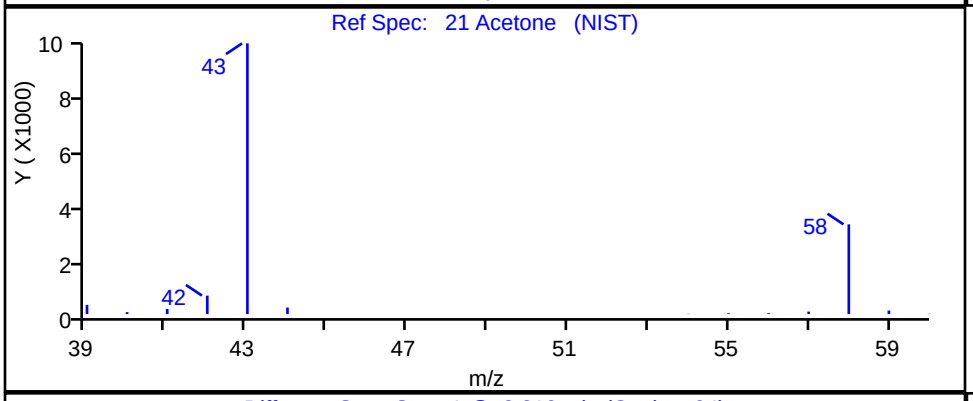
21 Acetone, CAS: 67-64-1

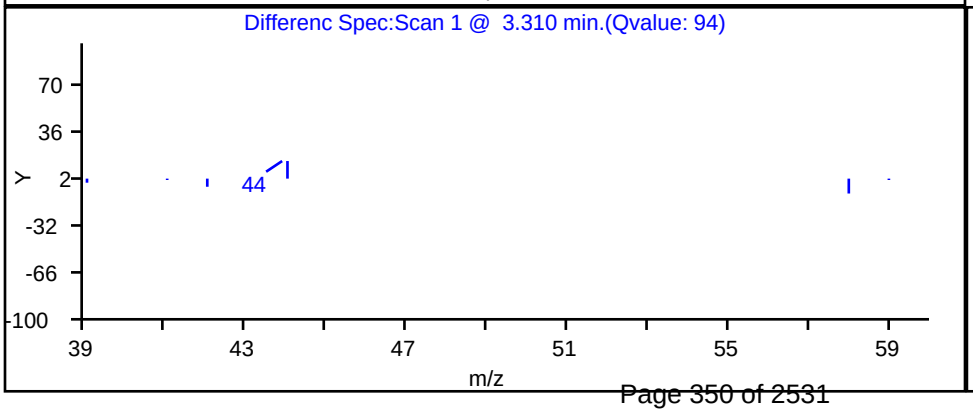


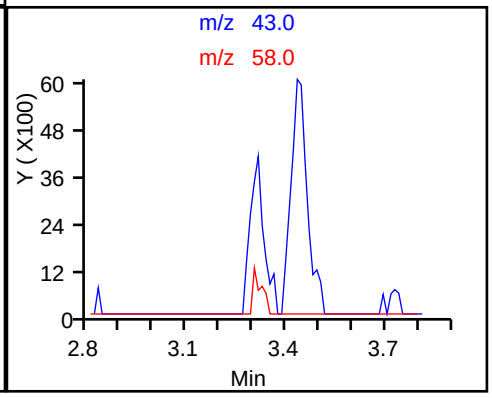












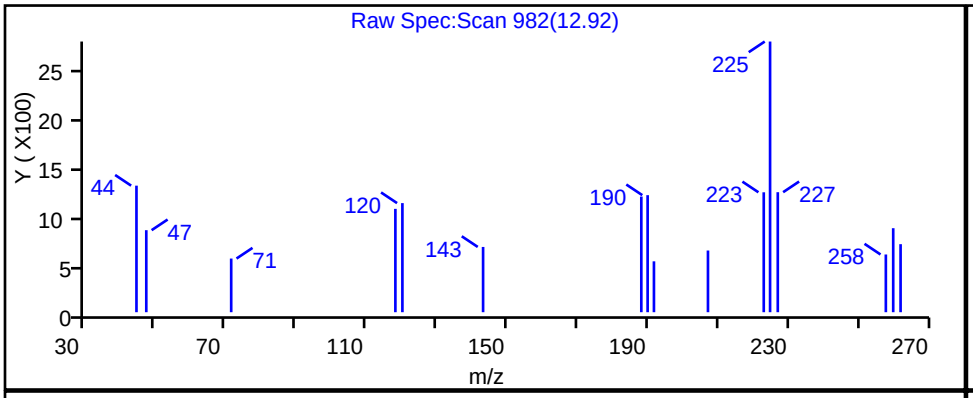
Report Date: 12-Oct-2017 19:28:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

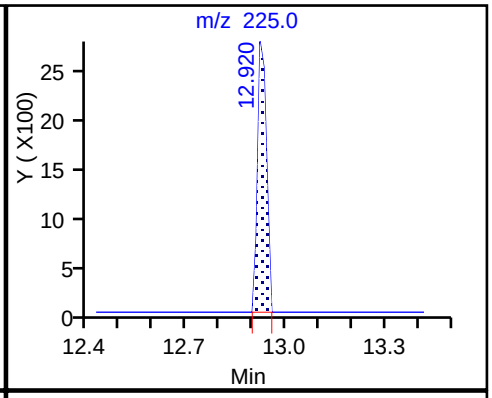
TestAmerica Canton

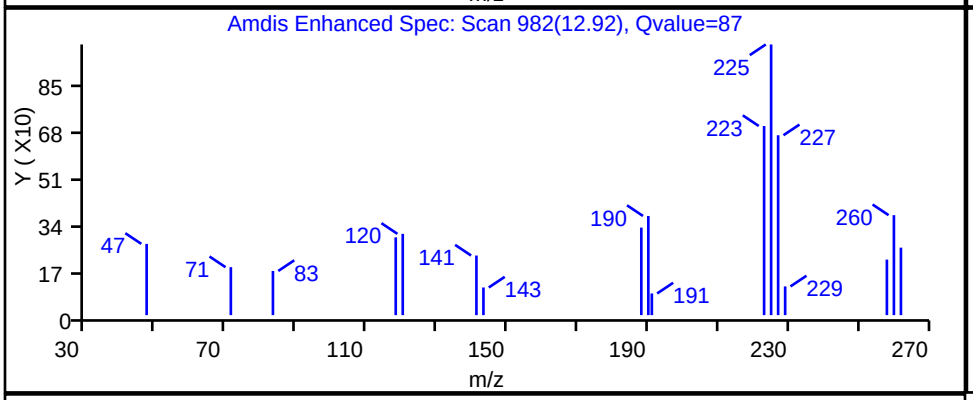
Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6699.D

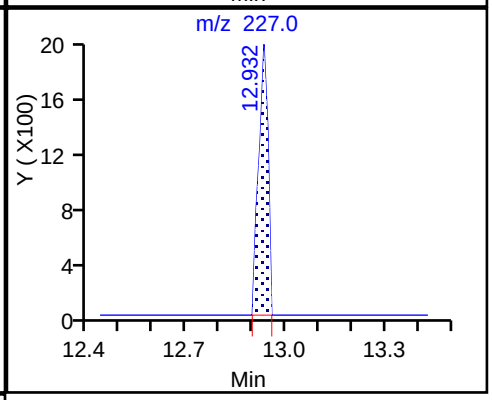
Injection Date:	12-Oct-2017 14:09:30	Instrument ID:	A3UX16		
Lims ID:	240-85941-B-1	Lab Sample ID:	240-85941-1		
Client ID:	TB-100317				
Operator ID:	001765	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_16	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

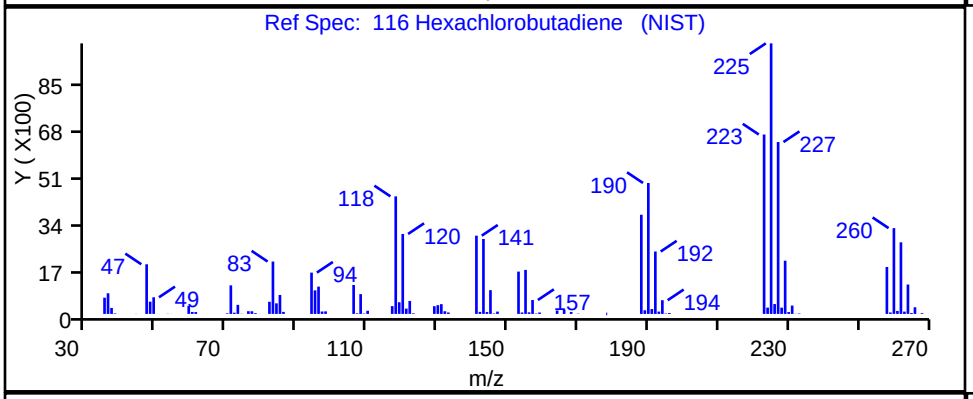
116 Hexachlorobutadiene, CAS: 87-68-3

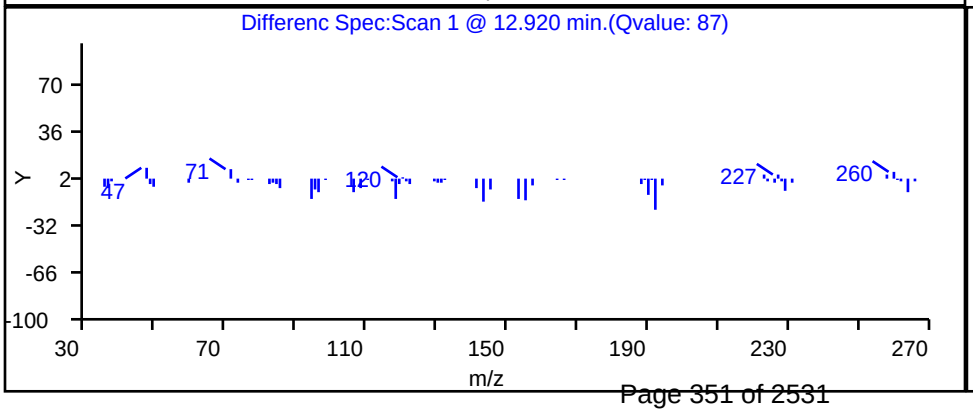


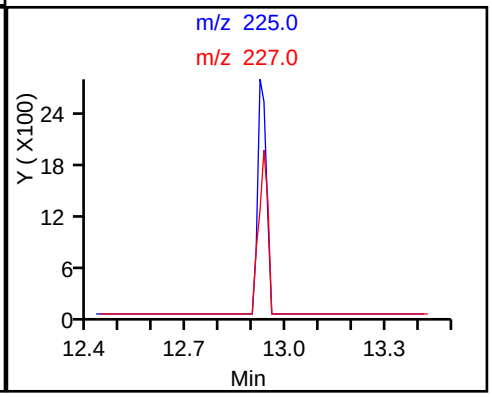












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 | Lab Sample ID: 240-85941-2

Matrix: Solid | Lab File ID: UX83164.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.24(g) | Date Analyzed: 10/11/2017 08:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.44	U	6.2	0.44
71-55-6	1,1,1-Trichloroethane	0.28	U	6.2	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	6.2	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	U	6.2	0.60
75-34-3	1,1-Dichloroethane	0.41	U	6.2	0.41
75-35-4	1,1-Dichloroethene	0.67	U	6.2	0.67
563-58-6	1,1-Dichloropropene	0.23	U	6.2	0.23
87-61-6	1,2,3-Trichlorobenzene	0.43	U	6.2	0.43
96-18-4	1,2,3-Trichloropropane	0.48	U	6.2	0.48
526-73-8	1,2,3-Trimethylbenzene	0.12	U	6.2	0.12
120-82-1	1,2,4-Trichlorobenzene	0.30	U	6.2	0.30
95-63-6	1,2,4-Trimethylbenzene	0.31	U	6.2	0.31
96-12-8	1,2-Dibromo-3-Chloropropane	0.84	U	12	0.84
95-50-1	1,2-Dichlorobenzene	0.27	U	6.2	0.27
107-06-2	1,2-Dichloroethane	0.36	U	6.2	0.36
78-87-5	1,2-Dichloropropane	0.38	U	6.2	0.38
541-73-1	1,3-Dichlorobenzene	0.36	U	6.2	0.36
142-28-9	1,3-Dichloropropane	0.28	U	6.2	0.28
106-46-7	1,4-Dichlorobenzene	0.43	U	6.2	0.43
594-20-7	2,2-Dichloropropane	0.37	U	6.2	0.37
78-93-3	2-Butanone (MEK)	1.7	J	25	1.6
110-75-8	2-Chloroethyl vinyl ether	3.5	U	62	3.5
95-49-8	2-Chlorotoluene	0.46	U	6.2	0.46
591-78-6	2-Hexanone	0.72	U	25	0.72
106-43-4	4-Chlorotoluene	0.30	U	6.2	0.30
99-87-6	p-Isopropyltoluene	0.22	U	6.2	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	1.1	U	25	1.1
67-64-1	Acetone	12	J	25	3.8
71-43-2	Benzene	0.39	U	6.2	0.39
108-86-1	Bromobenzene	0.33	U	6.2	0.33
75-25-2	Bromoform	0.49	U	6.2	0.49
74-83-9	Bromomethane	0.73	U	6.2	0.73
75-15-0	Carbon disulfide	0.28	J B	6.2	0.26
56-23-5	Carbon tetrachloride	0.31	U	6.2	0.31
108-90-7	Chlorobenzene	0.41	U	6.2	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 | Lab Sample ID: 240-85941-2

Matrix: Solid | Lab File ID: UX83164.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.24(g) | Date Analyzed: 10/11/2017 08:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.37	U	6.2	0.37
75-00-3	Chloroethane	0.47	U	6.2	0.47
67-66-3	Chloroform	0.28	U	6.2	0.28
74-87-3	Chloromethane	0.47	U	6.2	0.47
156-59-2	cis-1,2-Dichloroethene	0.35	U	6.2	0.35
10061-01-5	cis-1,3-Dichloropropene	0.32	U	6.2	0.32
74-95-3	Dibromomethane	0.47	U	6.2	0.47
74-97-5	Bromochloromethane	0.44	U	6.2	0.44
75-71-8	Dichlorodifluoromethane	0.43	U	6.2	0.43
75-27-4	Bromodichloromethane	0.41	U	6.2	0.41
75-65-0	tert-Butyl alcohol (TBA)	2.9	U	250	2.9
100-41-4	Ethylbenzene	0.33	U	6.2	0.33
87-68-3	Hexachlorobutadiene	0.54	U	6.2	0.54
108-20-3	Diisopropyl ether	0.30	U	12	0.30
98-82-8	Isopropylbenzene	0.25	U	6.2	0.25
1634-04-4	Methyl tert-butyl ether	0.33	U	6.2	0.33
75-09-2	Methylene Chloride	0.30	U	6.2	0.30
179601-23-1	m-Xylene & p-Xylene	0.49	U	12	0.49
91-20-3	Naphthalene	0.41	U	6.2	0.41
104-51-8	n-Butylbenzene	0.31	U	6.2	0.31
103-65-1	N-Propylbenzene	0.35	U	6.2	0.35
95-47-6	o-Xylene	0.27	U	6.2	0.27
135-98-8	sec-Butylbenzene	0.23	U	6.2	0.23
100-42-5	Styrene	0.33	U	6.2	0.33
994-05-8	Tert-amyl methyl ether	0.26	U	6.2	0.26
637-92-3	Ethyl t-butyl ether	0.16	U	6.2	0.16
127-18-4	Tetrachloroethene	0.46	U	6.2	0.46
108-88-3	Toluene	0.42	U	6.2	0.42
156-60-5	trans-1,2-Dichloroethene	0.47	U	6.2	0.47
10061-02-6	trans-1,3-Dichloropropene	0.26	U	6.2	0.26
79-01-6	Trichloroethene	0.51	U	6.2	0.51
75-69-4	Trichlorofluoromethane	0.30	U	6.2	0.30
108-05-4	Vinyl acetate	1.1	U F1	12	1.1
75-01-4	Vinyl chloride	0.35	U	6.2	0.35
1330-20-7	Xylenes, Total	0.49	U	12	0.49
98-06-6	tert-Butylbenzene	0.26	U	6.2	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 | Lab Sample ID: 240-85941-2

Matrix: Solid | Lab File ID: UX83164.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.24(g) | Date Analyzed: 10/11/2017 08:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.43	U	6.2	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	94		66-125
1868-53-7	Dibromofluoromethane (Surr)	86		43-131
460-00-4	4-Bromofluorobenzene (Surr)	95		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		61-127

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83164.D
Lims ID: 240-85941-B-2-A
Client ID: WC-IS-100317
Sample Type: Client
Inject. Date: 11-Oct-2017 08:28:30 ALS Bottle#: 24 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-026
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: macenczaks Date: 11-Oct-2017 09:16:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.157	0.000	98	1605417	50.0	
* 2 Chlorobenzene-d5	117	7.690	7.689	0.001	98	1174231	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.878	0.001	97	594619	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.637	4.627	0.010	94	329799	43.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.887	0.010	93	481301	42.1	
$ 6 Toluene-d8 (Surr)	98	6.435	6.425	0.010	95	1383285	47.1	
$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	88	512054	47.5	
9 Dichlorodifluoromethane	85		1.586				ND	
10 Chloromethane	50		1.751				ND	
11 Vinyl chloride	62		1.870				ND	
13 Bromomethane	94		2.189				ND	
14 Chloroethane	64		2.284				ND	
16 Trichlorofluoromethane	101		2.509				ND	
19 1,1-Dichloroethene	96		2.923				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.946				ND	
21 Acetone	43	2.968	2.958	0.010	96	80305	10.0	
24 Carbon disulfide	76	3.110	3.112	-0.002	98	3928	0.2236	
28 Methylene Chloride	84		3.301				ND	
29 2-Methyl-2-propanol	59		3.384				ND	
31 trans-1,2-Dichloroethene	96		3.526				ND	
32 Methyl tert-butyl ether	73		3.526				ND	
34 1,1-Dichloroethane	63		3.834				ND	
35 Vinyl acetate	43		3.857				ND	
36 Isopropyl ether	87		3.891				ND	
38 Tert-butyl ethyl ether	59		4.163				ND	
40 2-Butanone (MEK)	43	4.282	4.272	0.010	94	10502	1.41	
39 cis-1,2-Dichloroethene	96		4.272				ND	
41 2,2-Dichloropropane	77		4.283				ND	
45 Chlorobromomethane	128		4.461				ND	
47 Chloroform	83		4.508				ND	
48 1,1,1-Trichloroethane	97		4.674				ND	
50 1,1-Dichloropropene	75		4.792				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 Carbon tetrachloride	117		4.804				ND	
53 1,2-Dichloroethane	62		4.946				ND	
54 Benzene	78		4.958				ND	
55 Tert-amyl methyl ether	73		5.027				ND	
58 Trichloroethene	130		5.443				ND	
61 1,2-Dichloropropane	63		5.621				ND	
63 Dibromomethane	93		5.715				ND	
65 Dichlorobromomethane	83		5.834				ND	
67 2-Chloroethyl vinyl ether	63		6.058				ND	
68 cis-1,3-Dichloropropene	75		6.189				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.307				ND	
70 Toluene	91		6.484				ND	
71 trans-1,3-Dichloropropene	75		6.650				ND	
74 1,3-Dichloropropane	76		6.958				ND	
75 Tetrachloroethene	164		6.969				ND	
76 2-Hexanone	43		7.005				ND	
78 Chlorodibromomethane	129		7.159				ND	
80 Ethylene Dibromide	107		7.277				ND	
82 Chlorobenzene	112		7.715				ND	
83 1,1,1,2-Tetrachloroethane	131		7.774				ND	
84 Ethylbenzene	106		7.798				ND	
85 m-Xylene & p-Xylene	106		7.904				ND	
86 o-Xylene	106		8.271				ND	
87 Styrene	104		8.283				ND	
88 Bromoform	173		8.460				ND	
89 Isopropylbenzene	105		8.614				ND	
92 1,1,2,2-Tetrachloroethane	83		8.875				ND	
93 Bromobenzene	156		8.922				ND	
94 1,2,3-Trichloropropane	110		8.934				ND	
96 N-Propylbenzene	120		9.005				ND	
97 2-Chlorotoluene	126		9.099				ND	
99 4-Chlorotoluene	126		9.194				ND	
100 tert-Butylbenzene	119		9.490				ND	
102 1,2,4-Trimethylbenzene	105		9.537				ND	
103 sec-Butylbenzene	105		9.703				ND	
104 1,3-Dichlorobenzene	146		9.821				ND	
105 4-Isopropyltoluene	119		9.845				ND	
106 1,4-Dichlorobenzene	146		9.904				ND	
107 1,2,3-Trimethylbenzene	105		9.949				ND	
109 n-Butylbenzene	91		10.247				ND	
110 1,2-Dichlorobenzene	146		10.271				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.028				ND	
113 1,2,4-Trichlorobenzene	180		11.856				ND	
114 Hexachlorobutadiene	225		12.034				ND	
115 Naphthalene	128		12.105				ND	
116 1,2,3-Trichlorobenzene	180		12.365				ND	
S 128 Xylenes, Total	106		16.530				ND	

Reagents:

VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

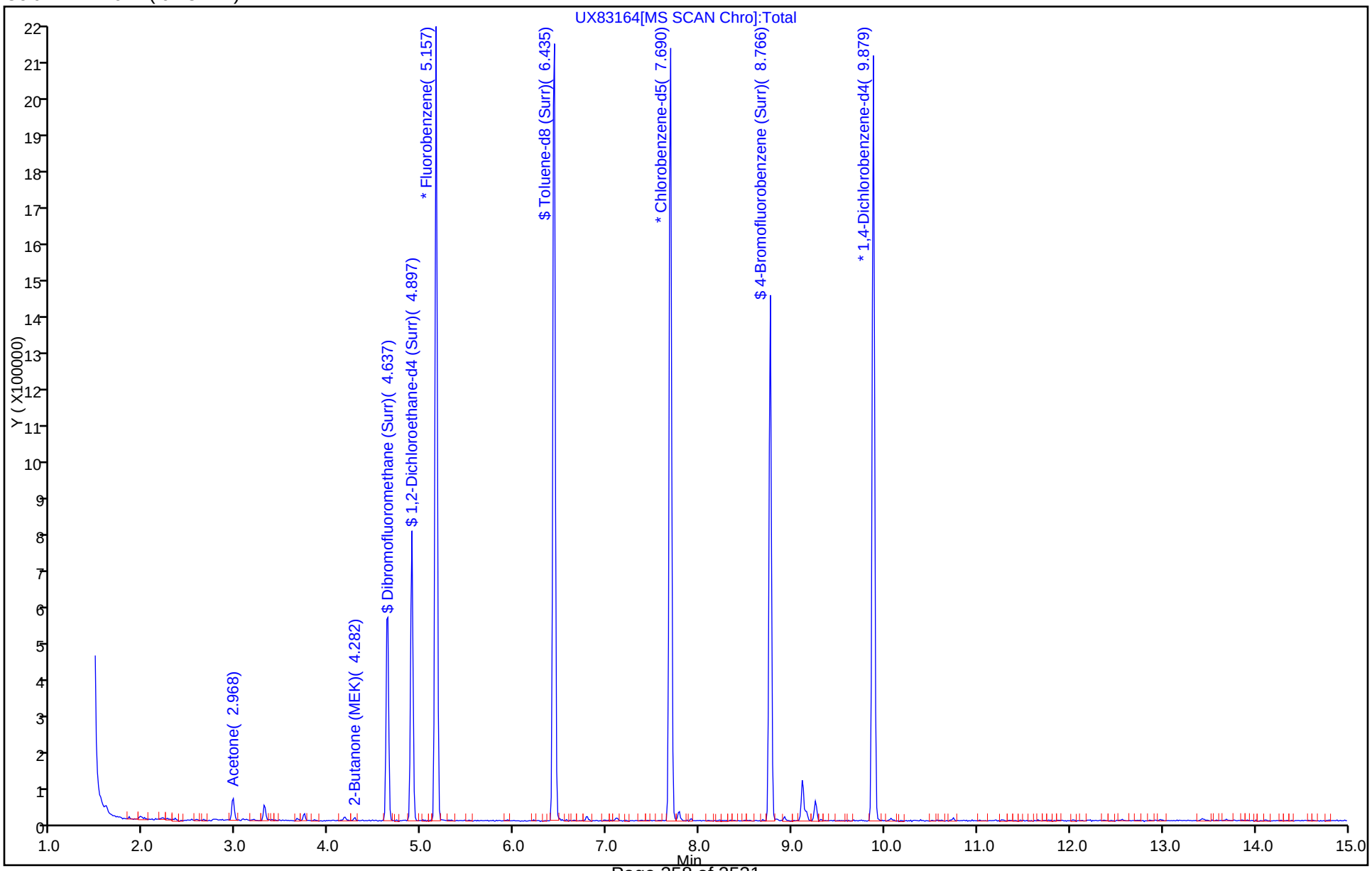
Report Date: 12-Oct-2017 01:07:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83164.D

Injection Date:	11-Oct-2017 08:28:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	240-85941-B-2-A	Lab Sample ID:	240-85941-2	Worklist Smp#:	26
Client ID:	WC-IS-100317				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File:	\\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83164.D				
Lims ID:	240-85941-B-2-A				
Client ID:	WC-IS-100317				
Sample Type:	Client				
Inject. Date:	11-Oct-2017 08:28:30	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0069531-026				
Operator ID:	402279	Instrument ID:	A3UX8		
Method:	\\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	12-Oct-2017 01:07:09	Calib Date:	20-Aug-2017 03:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK028				

First Level Reviewer: macenczaks Date: 11-Oct-2017 09:16:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	43.1	86.17
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	42.1	84.17
$ 6 Toluene-d8 (Surr)	50.0	47.1	94.28
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.5	95.04

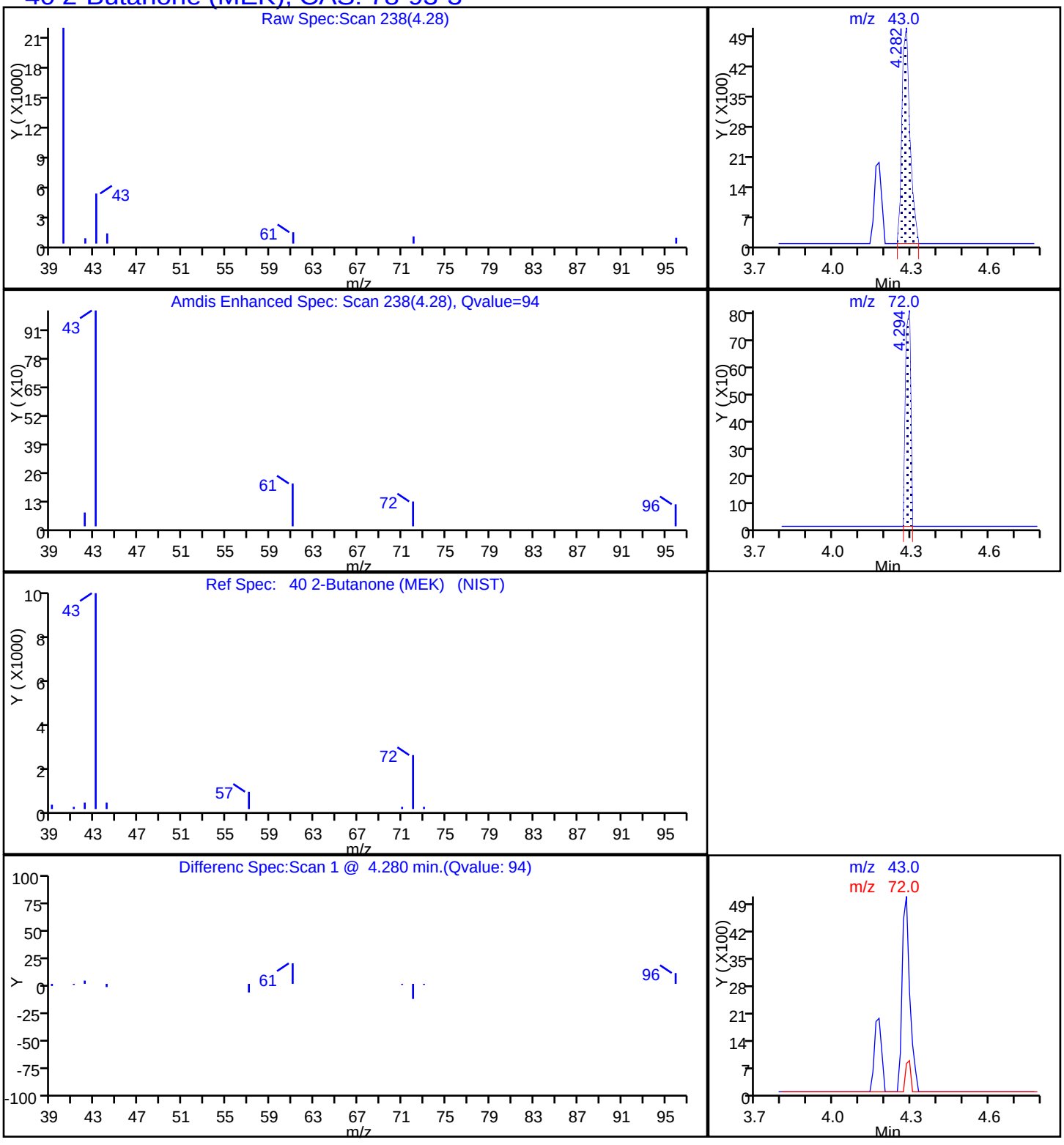
Report Date: 12-Oct-2017 01:07:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83164.D

Injection Date:	11-Oct-2017 08:28:30	Instrument ID:	A3UX8		
Lims ID:	240-85941-B-2-A	Lab Sample ID:	240-85941-2		
Client ID:	WC-IS-100317				
Operator ID:	402279	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_8	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

40 2-Butanone (MEK), CAS: 78-93-3



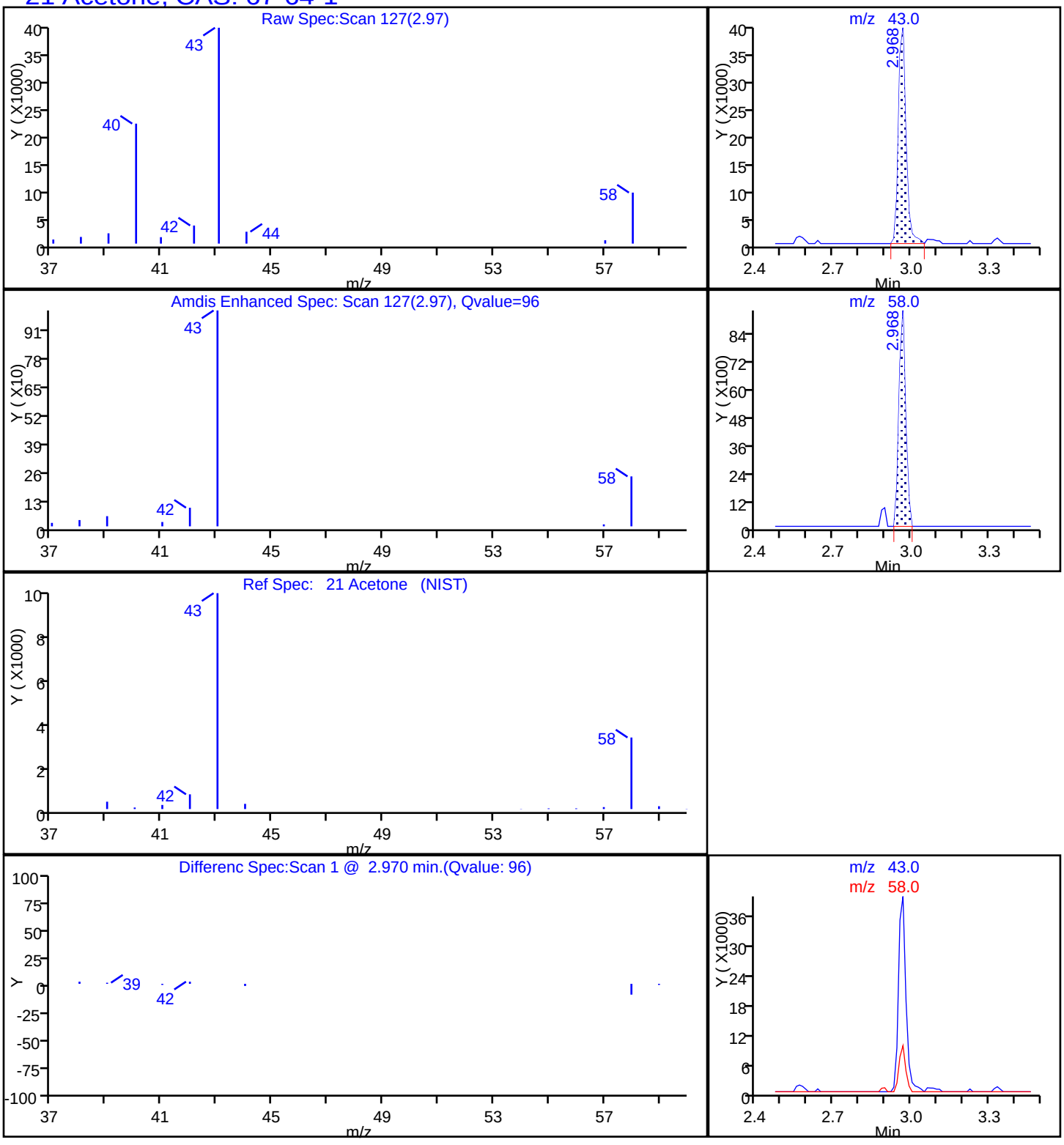
Report Date: 12-Oct-2017 01:07:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83164.D

Injection Date:	11-Oct-2017 08:28:30	Instrument ID:	A3UX8		
Lims ID:	240-85941-B-2-A	Lab Sample ID:	240-85941-2		
Client ID:	WC-IS-100317				
Operator ID:	402279	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_8	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

21 Acetone, CAS: 67-64-1



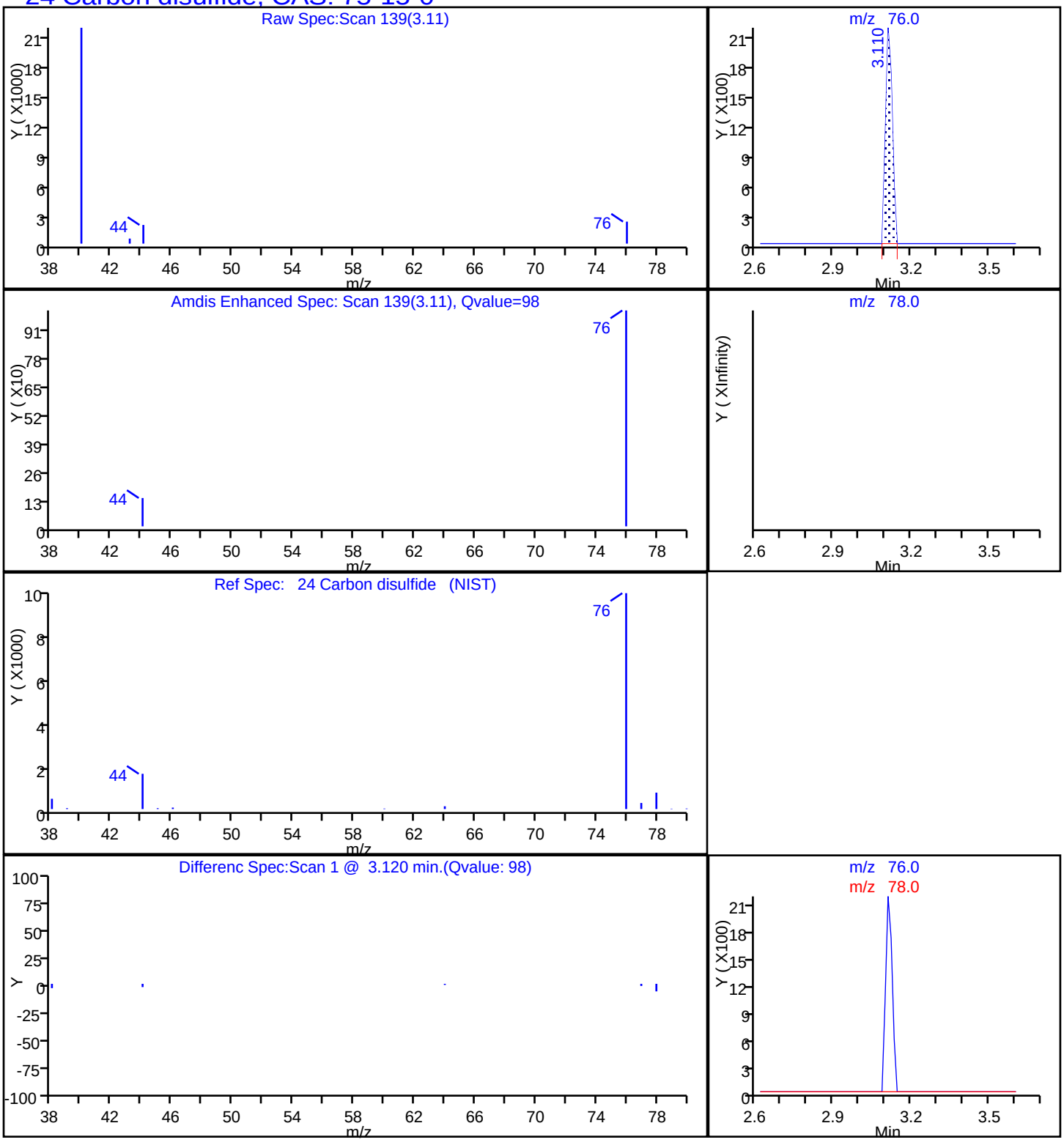
Report Date: 12-Oct-2017 01:07:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83164.D

Injection Date:	11-Oct-2017 08:28:30	Instrument ID:	A3UX8		
Lims ID:	240-85941-B-2-A	Lab Sample ID:	240-85941-2		
Client ID:	WC-IS-100317				
Operator ID:	402279	ALS Bottle#:	24	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_8	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IW-100317 | Lab Sample ID: 240-85941-3

Matrix: Water | Lab File ID: UXM6700.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.46	U	1.0	0.46
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
563-58-6	1,1-Dichloropropene	0.28	U	1.0	0.28
87-61-6	1,2,3-Trichlorobenzene	0.35	U	1.0	0.35
96-18-4	1,2,3-Trichloropropane	0.54	U	1.0	0.54
526-73-8	1,2,3-Trimethylbenzene	0.22	U	5.0	0.22
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
95-63-6	1,2,4-Trimethylbenzene	0.24	U	1.0	0.24
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
142-28-9	1,3-Dichloropropane	0.29	U	1.0	0.29
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
594-20-7	2,2-Dichloropropane	0.34	U	1.0	0.34
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
110-75-8	2-Chloroethyl vinyl ether	0.65	U	10	0.65
95-49-8	2-Chlorotoluene	0.28	U	1.0	0.28
591-78-6	2-Hexanone	1.2	U	10	1.2
106-43-4	4-Chlorotoluene	0.23	U	1.0	0.23
99-87-6	p-Isopropyltoluene	0.29	U	1.0	0.29
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	21		10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
108-86-1	Bromobenzene	0.31	U	1.0	0.31
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IW-100317 | Lab Sample ID: 240-85941-3

Matrix: Water | Lab File ID: UXM6700.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.25	U	1.0	0.25
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
74-95-3	Dibromomethane	0.46	U	1.0	0.46
74-97-5	Bromochloromethane	0.47	U	1.0	0.47
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
75-27-4	Bromodichloromethane	0.30	U	1.0	0.30
75-65-0	tert-Butyl alcohol (TBA)	4.6	U	50	4.6
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
87-68-3	Hexachlorobutadiene	0.36	U	1.0	0.36
108-20-3	Diisopropyl ether	0.44	U	10	0.44
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
179601-23-1	m-Xylene & p-Xylene	0.24	U	2.0	0.24
91-20-3	Naphthalene	0.25	U	1.0	0.25
104-51-8	n-Butylbenzene	0.21	U	1.0	0.21
103-65-1	N-Propylbenzene	0.45	U	1.0	0.45
95-47-6	o-Xylene	0.28	U	1.0	0.28
135-98-8	sec-Butylbenzene	0.27	U	1.0	0.27
100-42-5	Styrene	0.23	U	1.0	0.23
994-05-8	Tert-amyl methyl ether	0.29	U	5.0	0.29
637-92-3	Ethyl t-butyl ether	0.35	U	5.0	0.35
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
108-05-4	Vinyl acetate	0.28	U	2.0	0.28
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24
98-06-6	tert-Butylbenzene	0.26	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IW-100317 | Lab Sample ID: 240-85941-3

Matrix: Water | Lab File ID: UXM6700.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.23	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	93		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		69-124
460-00-4	4-Bromofluorobenzene (Surr)	99		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		61-138

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6700.D
Lims ID: 240-85941-B-3
Client ID: WC-IW-100317
Sample Type: Client
Inject. Date: 12-Oct-2017 14:32:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-020
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 19:28:44 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: laveyt Date: 12-Oct-2017 19:28:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	797090	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	-0.001	86	594022	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	96	419694	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	92	211636	20.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	98	237443	20.5	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	94	715806	18.5	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	92	265019	19.7	
9 Dichlorodifluoromethane	85		1.773				ND	
10 Chloromethane	50		1.927				ND	
11 Vinyl chloride	62		2.058				ND	
13 Bromomethane	94		2.402				ND	
14 Chloroethane	64		2.508				ND	
16 Trichlorofluoromethane	101		2.781				ND	
19 1,1-Dichloroethene	96		3.255				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.291				ND	
21 Acetone	43	3.303	3.303	0.000	100	58471	21.0	
24 Carbon disulfide	76		3.469				ND	
28 Methylene Chloride	84		3.706				ND	
29 2-Methyl-2-propanol	59	3.813	3.801	0.012	2	1192	1.81	
31 Methyl tert-butyl ether	73		3.955				ND	
32 trans-1,2-Dichloroethene	96		3.955				ND	
34 1,1-Dichloroethane	63		4.323				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
35 Vinyl acetate	43		4.358				ND	
36 Isopropyl ether	87		4.382				ND	
38 Tert-butyl ethyl ether	59		4.690				ND	
39 cis-1,2-Dichloroethene	96		4.821				ND	
41 2,2-Dichloropropane	97		4.832				ND	
40 2-Butanone (MEK)	43		4.832				ND	
45 Chlorobromomethane	128		5.034				ND	
47 Chloroform	83		5.093				ND	
48 1,1,1-Trichloroethane	97		5.271				ND	
50 1,1-Dichloropropene	75		5.402				ND	
51 Carbon tetrachloride	117		5.414				ND	
54 Benzene	78		5.580				ND	
53 1,2-Dichloroethane	62		5.591				ND	
55 Tert-amyl methyl ether	73		5.663				ND	
58 Trichloroethene	130		6.125				ND	
61 1,2-Dichloropropane	63		6.327				ND	
63 Dibromomethane	93		6.422				ND	
65 Dichlorobromomethane	83		6.552				ND	
67 2-Chloroethyl vinyl ether	63		6.801				ND	
68 cis-1,3-Dichloropropene	75		6.943				ND	
69 4-Methyl-2-pentanone (MIBK	43		7.074				ND	
70 Toluene	91		7.252				ND	
71 trans-1,3-Dichloropropene	75		7.430				ND	
75 Tetrachloroethene	164		7.750				ND	
74 1,3-Dichloropropane	76		7.750				ND	
76 2-Hexanone	43		7.809				ND	
78 Chlorodibromomethane	129		7.963				ND	
80 Ethylene Dibromide	107		8.082				ND	
82 Chlorobenzene	112		8.532				ND	
83 1,1,1,2-Tetrachloroethane	131		8.604				ND	
84 Ethylbenzene	106		8.627				ND	
85 m-Xylene & p-Xylene	106		8.734				ND	
86 o-Xylene	106		9.113				ND	
87 Styrene	104		9.125				ND	
88 Bromoform	173		9.315				ND	
89 Isopropylbenzene	105		9.469				ND	
92 1,1,2,2-Tetrachloroethane	83		9.742				ND	
93 Bromobenzene	156		9.777				ND	
95 1,2,3-Trichloropropane	110		9.789				ND	
96 N-Propylbenzene	120		9.861				ND	
97 2-Chlorotoluene	126		9.955				ND	
100 4-Chlorotoluene	126		10.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
102 tert-Butylbenzene	119		10.359				ND	
104 1,2,4-Trimethylbenzene	105		10.406				ND	
105 sec-Butylbenzene	105		10.572				ND	
106 1,3-Dichlorobenzene	146		10.691				ND	
107 4-Isopropyltoluene	119		10.714				ND	
108 1,4-Dichlorobenzene	146		10.774				ND	
109 1,2,3-Trimethylbenzene	105		10.821				ND	
111 n-Butylbenzene	91		11.118				ND	
112 1,2-Dichlorobenzene	146		11.153				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.924				ND	
115 1,2,4-Trichlorobenzene	180		12.754				ND	
116 Hexachlorobutadiene	225		12.932				ND	
117 Naphthalene	128		13.015				ND	
118 1,2,3-Trichlorobenzene	180		13.288				ND	
S 133 Xylenes, Total	106		16.950				ND	

Reagents:

vm100ss_stk_00027	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added: 1.00	Units: uL	Run Reagent

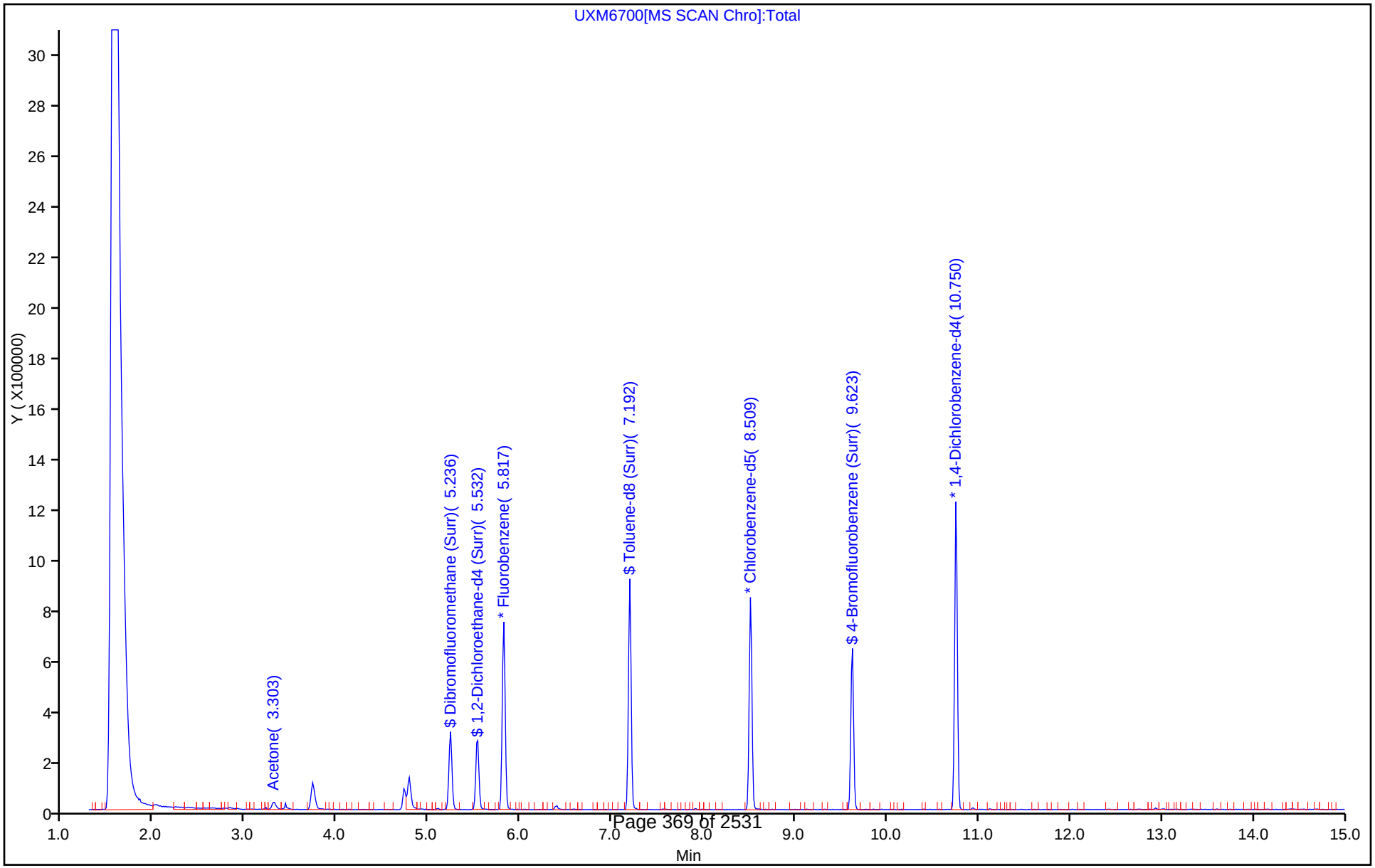
Report Date: 12-Oct-2017 19:28:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6700.D

Injection Date:	12-Oct-2017 14:32:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	240-85941-B-3	Lab Sample ID:	240-85941-3	Worklist Smp#:	20
Client ID:	WC-IW-100317				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6700.D
Lims ID: 240-85941-B-3
Client ID: WC-IW-100317
Sample Type: Client
Inject. Date: 12-Oct-2017 14:32:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-020
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 19:28:44 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: laveyt Date: 12-Oct-2017 19:28:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.30
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.5	102.39
$ 6 Toluene-d8 (Surr)	20.0	18.5	92.59
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.7	98.72

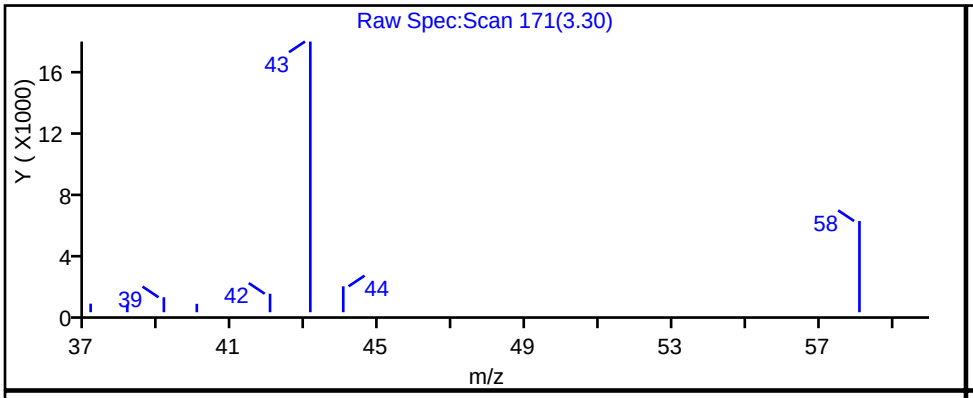
Report Date: 12-Oct-2017 19:28:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

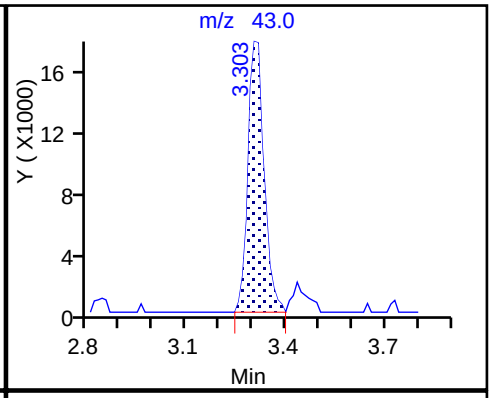
TestAmerica Canton

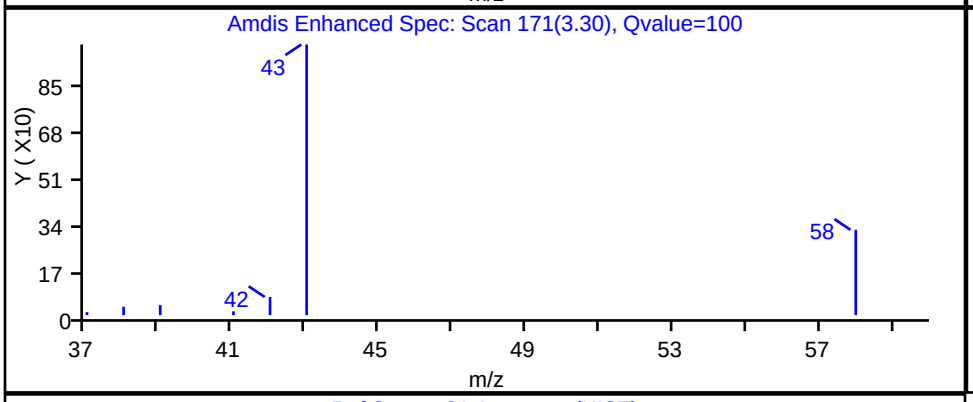
Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6700.D

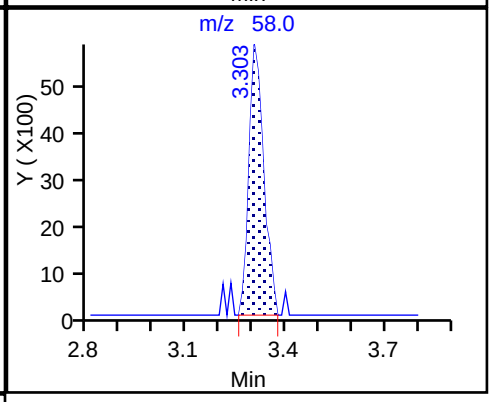
Injection Date:	12-Oct-2017 14:32:30	Instrument ID:	A3UX16		
Lims ID:	240-85941-B-3	Lab Sample ID:	240-85941-3		
Client ID:	WC-IW-100317				
Operator ID:	001765	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_16	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

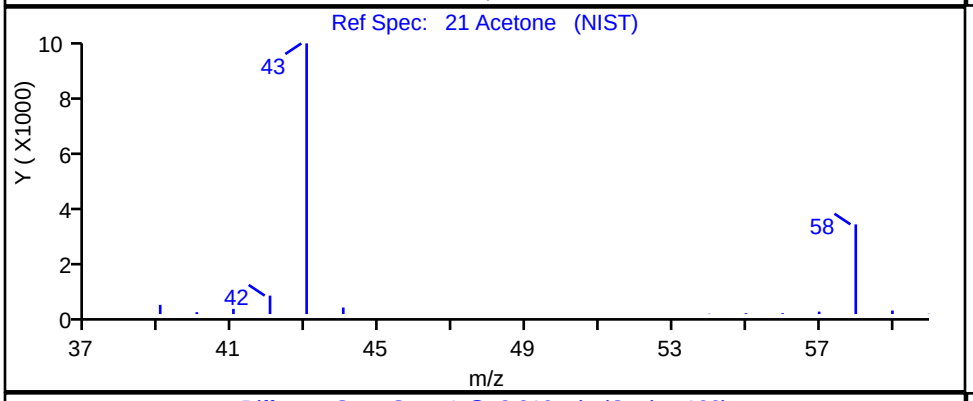
21 Acetone, CAS: 67-64-1

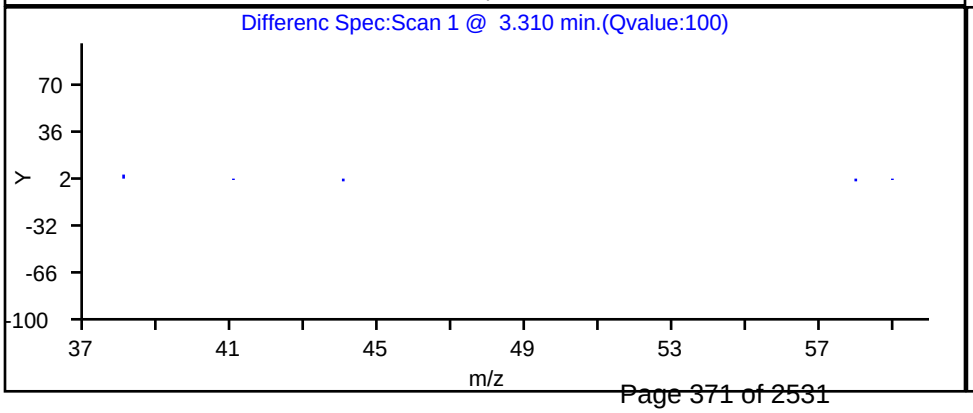


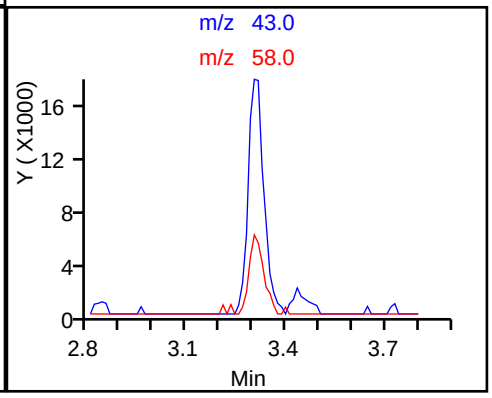












FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-297419/9	UXM6334.D
Level 2	STD8260 240-297419/10	UXM6335.D
Level 3	STD8260 240-297419/11	UXM6336.D
Level 4	STD8260 240-297419/12	UXM6337.D
Level 5	ICIS 240-297419/13	UXM6338.D
Level 6	STD8260 240-297419/14	UXM6339.D
Level 7	STD8260L7 240-297419/15	UXM6340.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2459 0.2583	0.2368 0.2448	0.3070	0.2869	0.2609	Ave		0.2629			0.1000	9.6		20.0			
Chloromethane	0.3145 0.2514	0.3081 0.2708	0.3483	0.2772	0.3021	Ave		0.2961			0.1000	10.9		20.0			
Vinyl chloride	0.3397 0.2924	0.3076 0.2947	0.3783	0.3317	0.3350	Ave		0.3256			0.1000	9.3		20.0			
Butadiene	0.3303 0.2976	0.3589 0.2914	0.3785	0.3387	0.3252	Ave		0.3315				9.4		20.0			
Bromomethane	0.2334 0.1947	0.2210 0.2119	0.2519	0.2101	0.2340	Ave		0.2224			0.0500	8.5		20.0			
Chloroethane	0.2523 0.1925	0.2181 0.2057	0.2464	0.2092	0.2173	Ave		0.2202			0.0500	9.9		20.0			
Dichlorofluoromethane	0.5030 0.4428	0.5680 0.4722	0.5940	0.5152	0.5397	Ave		0.5193				10.2		20.0			
Trichlorofluoromethane	0.3268 0.3453	0.3604 0.3396	0.4397	0.3931	0.3866	Ave		0.3702			0.1000	10.6		20.0			
Ethyl ether	0.2806 0.2195	0.2731 0.2304	0.2439	0.2265	0.2396	Ave		0.2448				9.6		20.0			
Acrolein	0.0484 0.0390	0.0495 0.0396	0.0457	0.0375	0.0421	Ave		0.0431				11.1		20.0			
1,1-Dichloroethene	0.3208 0.2792	0.3335 0.2796	0.2959	0.2954	0.2984	Ave		0.3004			0.1000	6.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2437 0.2201	0.2604 0.1950	0.2496	0.2212	0.2132	Ave		0.2290			0.0500	10.0		20.0			
Acetone	+++++ 0.0637	0.1438 0.0637	0.0926	0.0651	0.0701	Lin1	0.1566	0.0624			0.0100	5.8			0.9990		0.9900
Iodomethane	0.5416 0.4448	0.5186 0.4764	0.4958	0.4659	0.5067	Ave		0.4928				6.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.9690 0.9136	1.0655 0.9489	0.9496	0.9521	0.9843	Ave		0.9690			0.1000	4.9		20.0			
3-Chloro-1-propene	0.2440 0.1717	0.1943 0.1884	0.1793	0.1689	0.1927	Ave		0.1913				13.2		20.0			
Methyl acetate	0.1742 0.1519	0.1992 0.1566	0.1478	0.1569	0.1644	Ave		0.1644			0.1000	10.7		20.0			
Methylene Chloride	+++++ 0.2947	0.6881 0.3153	0.4543	0.3368	0.3324	Lin1	0.3854	0.3013			0.1000	3.6			0.9980		0.9900
tert-Butyl alcohol (TBA)	0.0163 0.0160	0.0181 0.0175	0.0150	0.0157	0.0169	Ave		0.0165				6.5		20.0			
Acrylonitrile	0.0815 0.0817	0.0838 0.0855	0.0819	0.0792	0.0844	Ave		0.0826				2.6		20.0			
Methyl tert-butyl ether	0.7638 0.7660	0.8713 0.8283	0.7609	0.7279	0.8121	Ave		0.7901			0.1000	6.2		20.0			
trans-1,2-Dichloroethene	0.3446 0.3042	0.3018 0.3264	0.3040	0.2893	0.3234	Ave		0.3134			0.1000	6.0		20.0			
Hexane	0.3277 0.2857	0.2446 0.2465	0.2959	0.2809	0.2469	Ave		0.2754				11.4		20.0			
1,1-Dichloroethane	0.4973 0.4777	0.5460 0.5154	0.4921	0.4784	0.5186	Ave		0.5036			0.2000	4.9		20.0			
Vinyl acetate	0.3880 0.3806	0.3892 0.4137	0.3550	0.3595	0.3881	Ave		0.3820				5.2		20.0			
cis-1,2-Dichloroethene	0.3513 0.3278	0.3525 0.3511	0.3417	0.3319	0.3564	Ave		0.3447			0.1000	3.2		20.0			
2,2-Dichloropropane	0.0568 0.0764	0.0739 0.0806	0.0781	0.0794	0.0786	Ave		0.0748				11.0		20.0			
2-Butanone (MEK)	0.1142 0.0822	0.0953 0.0855	0.0960	0.0796	0.0872	Ave		0.0914			0.0100	12.9		20.0			
Bromochloromethane	0.1555 0.1435	0.1762 0.1559	0.1547	0.1453	0.1582	Ave		0.1556				6.9		20.0			
Tetrahydrofuran	+++++ 0.0525	0.0697 0.0551	0.0556	0.0535	0.0529	Ave		0.0565				11.6		20.0			
Chloroform	0.4954 0.4727	0.5458 0.5183	0.5032	0.4783	0.5226	Ave		0.5052			0.2000	5.1		20.0			
1,1,1-Trichloroethane	0.3898 0.4107	0.4303 0.4229	0.4216	0.4177	0.4397	Ave		0.4189			0.1000	3.8		20.0			
Cyclohexane	0.4857 0.4471	0.4095 0.4022	0.4553	0.4546	0.4319	Ave		0.4409			0.1000	6.5		20.0			
1,1-Dichloropropene	0.3907 0.3664	0.3653 0.3752	0.3467	0.3782	0.3831	Ave		0.3722				3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.4098 0.3502	0.3512 0.3495	0.3768	0.3462	0.3718	Ave		0.3651			0.1000	6.3		20.0			
Isobutyl alcohol	0.0043 0.0052	0.0053 0.0055	0.0049	0.0054	0.0054	Ave		0.0052				8.1		20.0			
Benzene	1.1616 1.0898	1.1692 1.2051	1.1021	1.1147	1.1883	Ave		1.1473			0.5000	3.9		20.0			
1,2-Dichloroethane	0.3378 0.3351	0.3657 0.3630	0.3439	0.3376	0.3592	Ave		0.3489			0.1000	3.8		20.0			
n-Heptane	+++++ 0.1373	0.7992 +++++	0.3631	0.1739	0.1330	Lin1	0.6620	0.1128				16.7			0.9900		0.9900
Trichloroethene	0.2827 0.2697	0.2768 0.2930	0.2937	0.2786	0.2977	Ave		0.2846			0.1500	3.7		20.0			
Methylcyclohexane	0.4059 0.4090	0.4240 0.3604	0.4155	0.4118	0.3696	Ave		0.3995			0.1000	6.1		20.0			
1,2-Dichloropropane	0.2235 0.2299	0.2276 0.2485	0.2264	0.2298	0.2434	Ave		0.2327			0.1000	4.0		20.0			
Dibromomethane	0.1396 0.1422	0.1821 0.1519	0.1457	0.1427	0.1512	Ave		0.1508				9.7		20.0			
1,4-Dioxane	+++++ 0.0021	0.0028 0.0022	0.0022	0.0019	0.0022	Ave		0.0022				12.6		20.0			
Bromodichloromethane	0.3636 0.3226	0.3196 0.3575	0.3248	0.3183	0.3542	Ave		0.3372			0.1500	6.0		20.0			
2-Chloroethyl vinyl ether	+++++ 0.0985	0.0965 0.1094	0.0831	0.0929	0.1046	Ave		0.0975				9.4		20.0			
cis-1,3-Dichloropropene	0.2691 0.3292	0.2826 0.3726	0.2914	0.3126	0.3463	Ave		0.3148			0.1500	11.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.1539 0.1624	0.1542 0.1739	0.1483	0.1596	0.1682	Ave		0.1601			0.0500	5.5		20.0			
Toluene	1.5309 1.5062	1.5266 1.6706	1.4947	1.5486	1.6547	Ave		1.5617			0.4000	4.6		20.0			
trans-1,3-Dichloropropene	0.4136 0.4007	0.3971 0.4415	0.3756	0.3858	0.4197	Ave		0.4048			0.1000	5.5		20.0			
Ethyl methacrylate	0.3261 0.3223	0.3139 0.3566	0.2810	0.3138	0.3430	Ave		0.3224				7.5		20.0			
1,1,2-Trichloroethane	0.2543 0.2542	0.2917 0.2744	0.2525	0.2625	0.2687	Ave		0.2655			0.1000	5.3		20.0			
Tetrachloroethene	0.3586 0.2699	0.2864 0.2838	0.2715	0.2845	0.2981	Ave		0.2933			0.1500	10.4		20.0			
1,3-Dichloropropane	0.4275 0.4299	0.4285 0.4724	0.4262	0.4420	0.4728	Ave		0.4428				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.1204 0.1306	0.1459 0.1376	0.1202	0.1355	0.1418	Ave		0.1332			0.0500	7.5		20.0			
Dibromochloromethane	0.2848 0.2976	0.2711 0.3228	0.2718	0.2872	0.3156	Ave		0.2930				6.9		20.0			
1,2-Dibromoethane	0.2408 0.2487	0.2558 0.2690	0.2530	0.2395	0.2687	Ave		0.2537				4.7		20.0			
Chlorobenzene	1.0584 0.9045	0.9096 1.0051	0.9120	0.9351	1.0024	Ave		0.9610			0.3000	6.3		20.0			
1,1,1,2-Tetrachloroethane	0.3892 0.3698	0.3878 0.4053	0.3327	0.3757	0.4060	Ave		0.3809				6.6		20.0			
Ethylbenzene	0.4688 0.5060	0.4859 0.5583	0.4617	0.5112	0.5577	Ave		0.5071				7.7		20.0			
m-Xylene & p-Xylene	0.6018 0.6240	0.5689 0.6923	0.5928	0.6286	0.6977	Ave		0.6295				7.8		20.0			
o-Xylene	0.7570 0.6929	0.6550 0.7588	0.6145	0.6956	0.7628	Ave		0.7052				8.2		20.0			
Styrene	0.9001 1.0678	0.9753 1.1915	1.0063	1.0653	1.1583	Ave		1.0521			0.3000	9.7		20.0			
Bromoform	0.1961 0.1858	0.1948 0.2025	0.1757	0.1856	0.1963	Ave		0.1910			0.1000	4.7		20.0			
Isopropylbenzene	1.7361 1.7088	1.6138 1.8575	1.5686	1.7297	1.8865	Ave		1.7287			0.1000	6.7		20.0			
1,1,2,2-Tetrachloroethane	0.5988 0.5767	0.5417 0.6107	0.5710	0.5747	0.6113	Ave		0.5836			0.3000	4.3		20.0			
Bromobenzene	0.6349 0.6235	0.6073 0.6885	0.6520	0.6164	0.6936	Ave		0.6452				5.3		20.0			
1,2,3-Trichloropropane	0.2499 0.1788	0.1712 0.1899	0.1861	0.1693	0.1787	Ave		0.1891				14.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1309	0.0880 0.1449	0.1180	0.1327	0.1428	Ave		0.1262				16.7		20.0			
N-Propylbenzene	0.7783 0.6730	0.5989 0.7191	0.6399	0.6583	0.7239	Ave		0.6845				8.8		20.0			
2-Chlorotoluene	0.6194 0.6277	0.6307 0.6941	0.6351	0.6259	0.6839	Ave		0.6453				4.7		20.0			
1,3,5-Trimethylbenzene	1.9610 2.2274	1.9011 2.4387	1.9426	2.1636	2.4582	Ave		2.1561				10.8		20.0			
4-Chlorotoluene	0.7381 0.6292	0.6667 0.6906	0.6065	0.6213	0.6820	Ave		0.6621				7.0		20.0			
tert-Butylbenzene	1.8332 1.9431	1.8843 2.2793	1.8522	1.8574	2.2762	Ave		1.9894				10.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.1843 2.3707	2.1358 2.6286	2.1658	2.3127	2.5973	Ave		2.3422				8.7		20.0			
sec-Butylbenzene	2.2114 2.4973	2.1601 2.6704	2.2317	2.4053	2.7215	Ave		2.4140				9.4		20.0			
1,3-Dichlorobenzene	1.2597 1.3172	1.3986 1.4380	1.2844	1.3397	1.4586	Ave		1.3566			0.6000	5.6		20.0			
p-Isopropyltoluene	1.8476 2.2063	1.8283 2.3974	1.9085	2.1681	2.4122	Ave		2.1098				11.9		20.0			
1,4-Dichlorobenzene	1.3937 1.3681	1.5405 1.4780	1.3548	1.3925	1.5085	Ave		1.4337			0.5000	5.2		20.0			
n-Butylbenzene	2.0548 1.8809	1.8464 2.0111	1.6273	1.8214	2.0640	Ave		1.9009				8.2		20.0			
1,2-Dichlorobenzene	1.5240 1.3386	1.4461 1.4364	1.3243	1.3317	1.4954	Ave		1.4138			0.4000	5.8		20.0			
1,2-Dibromo-3-Chloropropane	0.1180 0.1232	0.1301 0.1331	0.1168	0.1149	0.1288	Ave		0.1236			0.0500	5.8		20.0			
1,2,4-Trichlorobenzene	0.7101 0.7291	0.7473 0.7797	0.6590	0.6958	0.8054	Ave		0.7323			0.2000	6.8		20.0			
Hexachlorobutadiene	0.3644 0.2886	0.3606 0.3018	0.2870	0.2873	0.3120	Ave		0.3145				10.8		20.0			
Naphthalene	1.6880 2.0616	1.7593 2.2025	1.7282	1.8680	2.1906	Ave		1.9283				11.4		20.0			
1,2,3-Trichlorobenzene	0.6737 0.6663	0.7123 0.7145	0.6469	0.6565	0.7339	Ave		0.6863				4.9		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2401	0.2724 0.2650	0.2498	0.2375	0.2626	Ave		0.2546				5.6		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2767	0.2878 0.2930	0.2976	0.2832	0.3073	Ave		0.2909				3.7		20.0			
Toluene-d8 (Surr)	+++++ 1.2641	1.2721 1.3862	1.2678	1.2713	1.3471	Ave		1.3014				4.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4325	0.4596 0.4818	0.4358	0.4325	0.4694	Ave		0.4519				4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-297419/9	UXM6334.D
Level 2	STD8260 240-297419/10	UXM6335.D
Level 3	STD8260 240-297419/11	UXM6336.D
Level 4	STD8260 240-297419/12	UXM6337.D
Level 5	ICIS 240-297419/13	UXM6338.D
Level 6	STD8260 240-297419/14	UXM6339.D
Level 7	STD8260L7 240-297419/15	UXM6340.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	6268 616054	11277 914424	38299	161656	283048	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Chloromethane	FB	Ave	8015 599771	14671 1011349	43459	156195	327751	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Vinyl chloride	FB	Ave	8657 697568	14646 1100805	47205	186868	363465	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Butadiene	FB	Ave	8419 709853	17091 1088421	47229	190809	352907	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromomethane	FB	Ave	5949 464416	10522 791580	31434	118362	253928	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Chloroethane	FB	Ave	6431 459127	10386 768287	30742	117870	235799	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dichlorofluoromethane	FB	Ave	12819 1056232	27048 1763650	74107	290263	585560	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Trichlorofluoromethane	FB	Ave	8328 823572	17162 1268274	54861	221473	419512	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethyl ether	FB	Ave	7151 523674	13006 860521	30427	127625	260018	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Acrolein	FB	Ave	6171 464717	11782 738920	28528	105619	228484	2.50 200	5.00 300	12.5	50.0	100
1,1-Dichloroethene	FB	Ave	8176 665929	15882 1044326	36924	166443	323777	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	6212 524977	12400 728181	31142	124614	231332	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Acetone	FB	Lin1	+++++ 303800	13693 476147	23117	73342	152020	+++++ 80.0	2.00 120	5.00	20.0	40.0
Iodomethane	FB	Ave	13803 1061136	24695 1779244	61866	262510	549782	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Carbon disulfide	FB	Ave	24696 2179210	50737 3544018	118478	536438	1068006	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	6219 409680	9253 703617	22368	95156	209066	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Methyl acetate	FB	Ave	8878 724563	18968 1169526	36885	176755	356834	1.00 80.0	2.00 120	5.00	20.0	40.0
Methylene Chloride	FB	Lin1	+++++ 702925	32763 1177453	56680	189742	360684	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
tert-Butyl alcohol (TBA)	FB	Ave	4154 380717	8626 652608	18725	88606	183108	5.00 400	10.0 600	25.0	100	200
Acrylonitrile	FB	Ave	20781 1948102	39915 3194780	102228	446160	916261	5.00 400	10.0 600	25.0	100	200
Methyl tert-butyl ether	FB	Ave	19467 1827292	41490 3093794	94936	410125	881161	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	8782 725614	14369 1219098	37931	162990	350890	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Hexane	FB	Ave	8351 681428	11645 920727	36915	158253	267879	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1-Dichloroethane	FB	Ave	12675 1139385	25997 1924857	61396	269539	562663	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Vinyl acetate	FB	Ave	9890 907808	18534 1545224	44288	202525	421145	0.500 40.0	1.00 60.0	2.50	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	8953 781957	16783 1311332	42638	186988	386718	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2,2-Dichloropropane	FB	Ave	1448 182345	3521 300897	9739	44721	85252	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Butanone (MEK)	FB	Ave	5819 391987	9080 638516	23953	89667	189216	1.00 80.0	2.00 120	5.00	20.0	40.0
Bromochloromethane	FB	Ave	3964 342195	8390 582225	19307	81839	171676	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Tetrahydrofuran	FB	Ave	+++++ 250295	6636 411284	13869	60338	114789	+++++ 80.0	2.00 120	5.00	20.0	40.0
Chloroform	FB	Ave	12627 1127570	25988 1935632	62788	269493	567018	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	9934 979648	20491 1579323	52606	235331	477044	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Cyclohexane	FB	Ave	12378 1066535	19500 1502258	56810	256158	468668	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1-Dichloropropene	FB	Ave	9958 873939	17394 1401323	43254	213099	415632	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Carbon tetrachloride	FB	Ave	10445 835412	16721 1305500	47014	195087	403435	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Isobutyl alcohol	FB	Ave	2758 312736	6311 517266	15423	76538	147411	12.5 1000	25.0 1500	62.5	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	29606 2599520	55672 4501045	137508	628048	1289361	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloroethane	FB	Ave	8609 799309	17411 1355792	42908	190212	389711	0.500 40.0	1.00 60.0	2.50	10.0	20.0
n-Heptane	FB	Lin1	+++++ 327622	38057 +++++	45301	97964	144337	+++++ 40.0	1.00 +++++	2.50	10.0	20.0
Trichloroethene	FB	Ave	7205 643234	13180 1094413	36639	156978	322997	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Methylcyclohexane	FB	Ave	10346 975623	20189 1346127	51842	232012	401062	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloropropane	FB	Ave	5696 548338	10838 928017	28242	129487	264140	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dibromomethane	FB	Ave	3557 339278	8670 567344	18179	80425	164089	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 98866	2630 167553	5498	21786	47482	+++++ 800	20.0 1200	50.0	200	400
Bromodichloromethane	FB	Ave	9267 769508	15219 1335138	40528	179326	384298	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 470128	9190 817202	20727	104703	226914	+++++ 80.0	2.00 120	5.00	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	6858 785344	13457 1391546	36358	176104	375717	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	7844 774602	14688 1298638	37005	179839	365077	1.00 80.0	2.00 120	5.00	20.0	40.0
Toluene	CBNZ d5	Ave	25814 2448121	49083 4286732	123707	577721	1201971	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	6974 651236	12766 1133000	31088	143929	304845	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	5499 523868	10093 915063	23254	117073	249186	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4288 413182	9379 704092	20898	97942	195208	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	6047 438707	9208 728263	22468	106153	216509	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	7209 698784	13777 1212196	35271	164897	343443	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Hexanone	CBNZ d5	Ave	4061 424490	9384 706416	19899	101105	205966	1.00 80.0	2.00 120	5.00	20.0	40.0
Dibromochloromethane	CBNZ d5	Ave	4803 483684	8715 828348	22497	107126	229246	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dibromoethane	CBNZ d5	Ave	4061 404247	8225 690356	20940	89356	195157	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	17846 1470111	29244 2579177	75481	348866	728151	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6563 600981	12468 1039927	27532	140147	294891	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	7905 822404	15623 1432648	38214	190693	405096	0.500 40.0	1.00 60.0	2.50	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	10148 1014271	18292 1776387	49061	234509	506846	0.500 40.0	1.00 60.0	2.50	10.0	20.0
o-Xylene	CBNZ d5	Ave	12764 1126222	21059 1947229	50860	259496	554141	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Styrene	CBNZ d5	Ave	15178 1735500	31359 3057449	83285	397413	841378	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromoform	CBNZ d5	Ave	3306 301966	6263 519496	14542	69249	142569	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	29273 2777456	51888 4766445	129830	645268	1370345	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6686 605298	11696 999793	31897	142410	289805	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromobenzene	DCBd 4	Ave	7089 654493	13112 1127151	36423	152746	328830	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	2790 187633	3697 310884	10396	41957	84715	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 137383	1901 237173	6591	32881	67708	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	8690 706431	12930 1177191	35748	163108	343193	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	6916 658897	13617 1136325	35478	155092	324232	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	21895 2338051	41045 3992428	108514	536117	1165401	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	8241 660416	14395 1130515	33878	153952	323327	0.500 40.0	1.00 60.0	2.50	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	20468 2039648	40683 3731481	103465	460244	1079083	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	24388 2488419	46113 4303202	120986	573053	1231327	0.500 40.0	1.00 60.0	2.50	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	24690 2621371	46638 4371654	124666	595996	1290217	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	14065 1382584	30197 2354096	71749	331966	691502	0.500 40.0	1.00 60.0	2.50	10.0	20.0
p-Isopropyltoluene	DCBd 4	Ave	20629 2315891	39473 3924747	106610	537217	1143583	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	15561 1436062	33260 2419583	75678	345045	715160	0.500 40.0	1.00 60.0	2.50	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	22942 1974321	39865 3292320	90904	451311	978511	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	17015 1405056	31222 2351535	73978	329972	708936	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1318 129331	2809 217923	6527	28469	61077	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	7928 765368	16135 1276372	36814	172402	381829	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	4068 302932	7786 494054	16033	71186	147931	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Naphthalene	DCBd 4	Ave	18847 2164004	37983 3605700	96540	462853	1038493	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7522 699374	15379 1169690	36134	162664	347922	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 572684	12970 989819	31163	133831	284975	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 660113	13702 1094461	37128	159543	333400	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 2054651	40899 3557024	104927	474272	978529	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 703005	14778 1236409	36070	161352	340966	+++++ 40.0	1.00 60.0	2.50	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6334.D
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 16:10:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-009
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 18:58:01 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 16:58:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1019467	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.508	0.001	86	674470	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	446600	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113		5.236				ND	ND	
$ 5 1,2-Dichloroethane-d4 (Sur	65		5.520				ND	ND	
$ 6 Toluene-d8 (Surr)	98		7.192				ND	ND	
$ 7 4-Bromofluorobenzene (Surr	95		9.611				ND	ND	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	93	6268	0.5000	0.4677	
10 Chloromethane	50	1.915	1.927	-0.012	95	8015	0.5000	0.5311	
11 Vinyl chloride	62	2.058	2.057	0.001	95	8657	0.5000	0.5216	
12 Butadiene	54	2.093	2.093	0.000	94	8419	0.5000	0.4982	
13 Bromomethane	94	2.401	2.401	0.000	78	5949	0.5000	0.5247	
14 Chloroethane	64	2.520	2.508	0.012	42	6431	0.5000	0.5729	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	93	12819	0.5000	0.4843	
16 Trichlorofluoromethane	101	2.793	2.781	0.012	76	8328	0.5000	0.4413	
17 Ethyl ether	59	3.042	3.042	0.000	91	7151	0.5000	0.5731	
18 Acrolein	56	3.160	3.160	0.000	95	6171	2.50	2.81	
19 1,1-Dichloroethene	96	3.267	3.255	0.012	96	8176	0.5000	0.5339	
20 1,1,2-Trichloro-1,2,2-trif	151	3.291	3.291	0.000	90	6212	0.5000	0.5321	
21 Acetone	43		3.303				ND	ND	
23 Iodomethane	142	3.398	3.397	0.001	92	13803	0.5000	0.5494	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	99	24696	0.5000	0.5000	
26 3-Chloro-1-propene	76	3.575	3.587	-0.012	84	6219	0.5000	0.6377	
27 Methyl acetate	43	3.611	3.611	0.000	92	8878	1.00	1.06	
28 Methylene Chloride	84		3.706				ND	ND	
29 2-Methyl-2-propanol	59	3.813	3.801	0.012	2	4154	5.00	4.94	
30 Acrylonitrile	53	3.931	3.919	0.012	96	20781	5.00	4.94	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	80	8782	0.5000	0.5498	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	96	19467	0.5000	0.4834	
33 Hexane	57	4.204	4.192	0.012	91	8351	0.5000	0.5948	
34 1,1-Dichloroethane	63	4.311	4.322	-0.011	90	12675	0.5000	0.4937	
35 Vinyl acetate	43	4.370	4.358	0.012	93	9890	0.5000	0.5079	
39 cis-1,2-Dichloroethene	96	4.821	4.832	-0.011	78	8953	0.5000	0.5096	
40 2-Butanone (MEK)	43	4.844	4.832	0.012	46	5819	1.00	1.25	
41 2,2-Dichloropropane	97	4.844	4.832	0.012	39	1448	0.5000	0.3797	
45 Chlorobromomethane	128	5.034	5.034	0.000	90	3964	0.5000	0.4997	
46 Tetrahydrofuran	42		5.081				ND	ND	
47 Chloroform	83	5.093	5.093	0.000	91	12627	0.5000	0.4904	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	93	9934	0.5000	0.4652	
49 Cyclohexane	56	5.330	5.330	0.000	85	12378	0.5000	0.5507	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	92	9958	0.5000	0.5248	
51 Carbon tetrachloride	117	5.413	5.413	0.000	83	10445	0.5000	0.5613	
52 Isobutyl alcohol	41	5.461	5.473	-0.012	50	2758	12.5	10.5	
53 1,2-Dichloroethane	62	5.580	5.591	-0.011	56	8609	0.5000	0.4841	
54 Benzene	78	5.580	5.591	-0.011	95	29606	0.5000	0.5063	
56 n-Heptane	57		5.793				ND	ND	
58 Trichloroethene	130	6.125	6.125	0.000	83	7205	0.5000	0.4967	
60 Methylcyclohexane	83	6.315	6.315	0.000	90	10346	0.5000	0.5081	
61 1,2-Dichloropropane	63	6.327	6.327	0.000	57	5696	0.5000	0.4802	
63 Dibromomethane	93	6.433	6.433	0.000	92	3557	0.5000	0.4628	
64 1,4-Dioxane	88		6.433				ND	ND	
65 Dichlorobromomethane	83	6.540	6.552	-0.012	94	9267	0.5000	0.5391	
67 2-Chloroethyl vinyl ether	63		6.801				ND	ND	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	83	6858	0.5000	0.4274	
69 4-Methyl-2-pentanone (MIBK	43	7.062	7.074	-0.012	93	7844	1.00	0.9614	
70 Toluene	91	7.252	7.251	0.001	97	25814	0.5000	0.4901	
71 trans-1,3-Dichloropropene	75	7.418	7.429	-0.011	89	6974	0.5000	0.5108	
72 Ethyl methacrylate	69	7.489	7.489	0.000	82	5499	0.5000	0.5058	
73 1,1,2-Trichloroethane	97	7.595	7.595	0.000	83	4288	0.5000	0.4789	
74 1,3-Dichloropropane	76	7.761	7.750	0.011	79	7209	0.5000	0.4828	
75 Tetrachloroethene	164	7.750	7.750	0.000	95	6047	0.5000	0.6114	
76 2-Hexanone	43	7.809	7.809	0.000	90	4061	1.00	0.9044	
78 Chlorodibromomethane	129	7.975	7.963	0.012	93	4803	0.5000	0.4861	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	91	4061	0.5000	0.4747	
82 Chlorobenzene	112	8.544	8.532	0.012	94	17846	0.5000	0.5507	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.603	0.000	88	6563	0.5000	0.5109	
84 Ethylbenzene	106	8.639	8.627	0.012	98	7905	0.5000	0.4623	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	10148	0.5000	0.4781	
86 o-Xylene	106	9.113	9.113	0.000	92	12764	0.5000	0.5367	
87 Styrene	104	9.125	9.125	0.000	83	15178	0.5000	0.4278	
88 Bromoform	173	9.315	9.315	0.000	91	3306	0.5000	0.5134	
89 Isopropylbenzene	105	9.469	9.469	0.000	93	29273	0.5000	0.5021	
92 1,1,2,2-Tetrachloroethane	83	9.730	9.742	-0.012	87	6686	0.5000	0.5131	
93 Bromobenzene	156	9.777	9.777	0.000	91	7089	0.5000	0.4920	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	54	2790	0.5000	0.6606	
94 trans-1,4-Dichloro-2-buten	53		9.789				ND	ND	
96 N-Propylbenzene	120	9.860	9.860	0.000	97	8690	0.5000	0.5685	
97 2-Chlorotoluene	126	9.955	9.955	0.000	93	6916	0.5000	0.4800	
99 1,3,5-Trimethylbenzene	105	10.026	10.026	0.000	94	21895	0.5000	0.4548	
100 4-Chlorotoluene	126	10.062	10.062	0.000	95	8241	0.5000	0.5574	
102 tert-Butylbenzene	119	10.358	10.358	0.000	88	20468	0.5000	0.4607	
104 1,2,4-Trimethylbenzene	105	10.406	10.394	0.012	91	24388	0.5000	0.4663	
105 sec-Butylbenzene	105	10.572	10.572	0.000	93	24690	0.5000	0.4580	
106 1,3-Dichlorobenzene	146	10.691	10.690	0.001	88	14065	0.5000	0.4643	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	94	20629	0.5000	0.4379	
108 1,4-Dichlorobenzene	146	10.774	10.773	0.001	93	15561	0.5000	0.4860	
111 n-Butylbenzene	91	11.117	11.117	0.000	96	22942	0.5000	0.5405	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	96	17015	0.5000	0.5390	
113 1,2-Dibromo-3-Chloropropan	157	11.936	11.924	0.012	1	1318	0.5000	0.4776	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	91	7928	0.5000	0.4848	
116 Hexachlorobutadiene	225	12.920	12.932	-0.012	83	4068	0.5000	0.5792	
117 Naphthalene	128	13.015	13.015	0.000	96	18847	0.5000	0.4377	
118 1,2,3-Trichlorobenzene	180	13.288	13.287	0.001	91	7522	0.5000	0.4908	
S 158 Total BTEX	1				0		2.50	2.47	
S 134 Trihalomethanes, Total	1				0		2.00	2.03	
S 131 1,2-Dichloroethene, Total	96				0			1.06	
S 132 1,3-Dichloropropene, Total	75				0			0.9382	
S 133 Xylenes, Total	106				0		1.00	1.01	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	0.40	Units: uL
vmarolistdw_00217	Amount Added:	0.40	Units: uL
vmrprimw_00254	Amount Added:	0.40	Units: uL
vm50ss_00299	Amount Added:	0.40	Units: uL

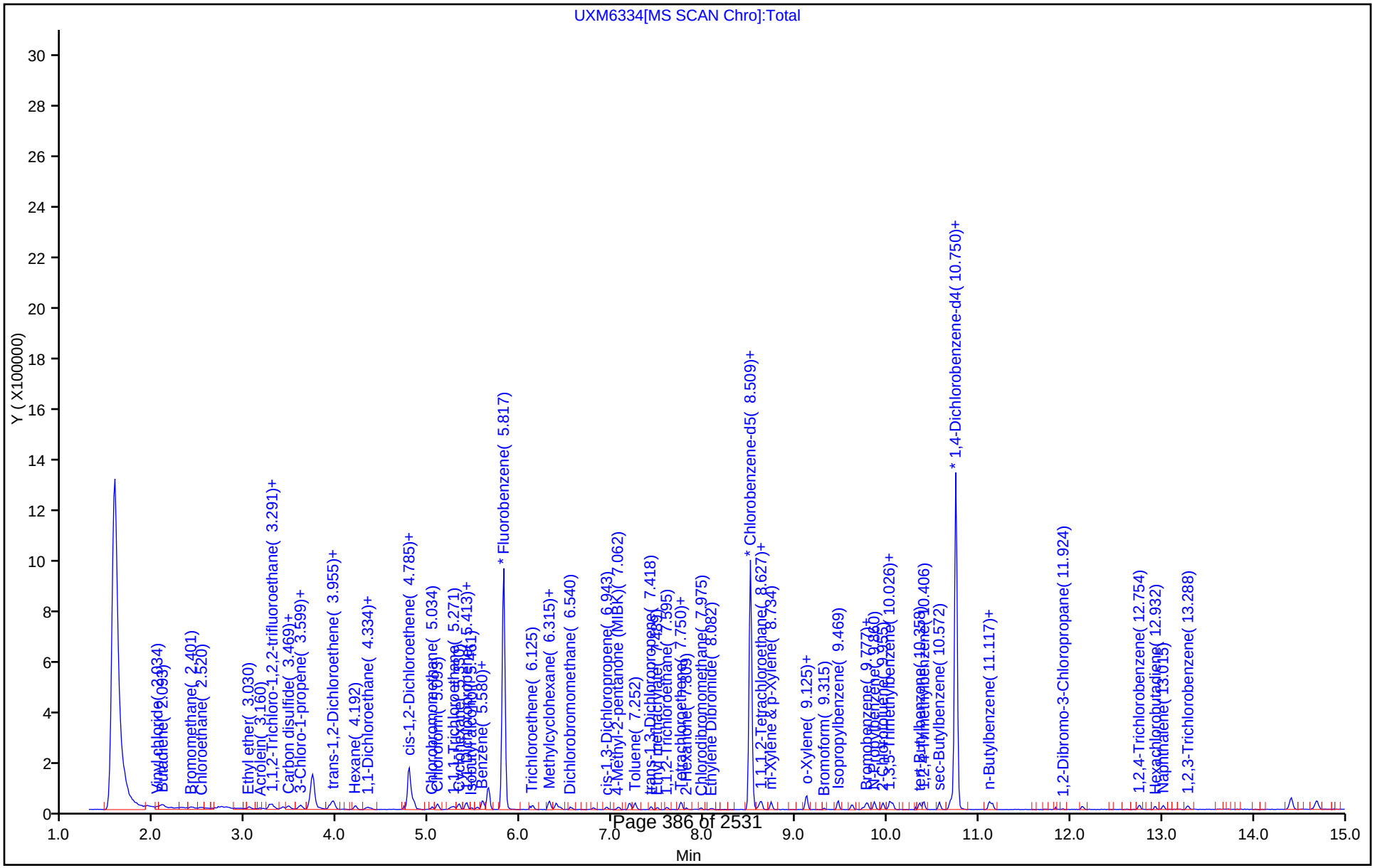
Report Date: 03-Oct-2017 18:58:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6334.D

Injection Date:	03-Oct-2017 16:10:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	std8260 L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6335.D
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 16:33:30 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-010
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 18:58:05 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 17:11:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	952328	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.508	0.001	86	643039	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	431808	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	91	12970	1.00	1.07	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	94	13702	1.00	0.9891	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	40899	1.00	0.9774	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	87	14778	1.00	1.02	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	93	11277	1.00	0.9007	
10 Chloromethane	50	1.927	1.927	0.000	92	14671	1.00	1.04	
11 Vinyl chloride	62	2.046	2.057	-0.011	94	14646	1.00	0.9446	
12 Butadiene	54	2.105	2.093	0.012	93	17091	1.00	1.08	
13 Bromomethane	94	2.413	2.401	0.012	82	10522	1.00	0.99	
14 Chloroethane	64	2.508	2.508	0.000	92	10386	1.00	0.99	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	96	27048	1.00	1.09	
16 Trichlorofluoromethane	101	2.769	2.781	-0.012	94	17162	1.00	0.9736	
17 Ethyl ether	59	3.042	3.042	0.000	83	13006	1.00	1.12	
18 Acrolein	56	3.160	3.160	0.000	91	11782	5.00	5.74	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	96	15882	1.00	1.11	
20 1,1,2-Trichloro-1,2,2-trif	151	3.279	3.291	-0.012	87	12400	1.00	1.14	
21 Acetone	43	3.315	3.303	0.012	69	13693	2.00	2.10	
23 Iodomethane	142	3.410	3.397	0.013	99	24695	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	100	50737	1.00	1.10	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	87	9253	1.00	1.02	
27 Methyl acetate	43	3.599	3.611	-0.012	94	18968	2.00	2.42	
28 Methylene Chloride	84	3.706	3.706	0.000	87	32763	1.00	1.00	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	94	8626	10.0	11.0	
30 Acrylonitrile	53	3.919	3.919	0.000	95	39915	10.0	10.1	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	93	41490	1.00	1.10	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	66	14369	1.00	0.9630	
33 Hexane	57	4.204	4.192	0.012	91	11645	1.00	0.8879	
34 1,1-Dichloroethane	63	4.323	4.322	0.001	95	25997	1.00	1.08	
35 Vinyl acetate	43	4.358	4.358	0.000	97	18534	1.00	1.02	
40 2-Butanone (MEK)	43	4.833	4.832	0.001	55	9080	2.00	2.09	
39 cis-1,2-Dichloroethene	96	4.833	4.832	0.001	79	16783	1.00	1.02	
41 2,2-Dichloropropane	97	4.833	4.832	0.001	62	3521	1.00	0.9883	
45 Chlorobromomethane	128	5.034	5.034	0.000	89	8390	1.00	1.13	
46 Tetrahydrofuran	42	5.082	5.081	0.001	57	6636	2.00	2.46	
47 Chloroform	83	5.093	5.093	0.000	92	25988	1.00	1.08	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	20491	1.00	1.03	
49 Cyclohexane	56	5.319	5.330	-0.011	84	19500	1.00	0.9288	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	88	17394	1.00	0.9814	
51 Carbon tetrachloride	117	5.414	5.413	0.001	88	16721	1.00	0.9619	
52 Isobutyl alcohol	41	5.473	5.473	0.000	91	6311	25.0	25.6	
54 Benzene	78	5.580	5.591	-0.011	95	55672	1.00	1.02	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	57	17411	1.00	1.05	
56 n-Heptane	57	5.817	5.793	0.024	36	38057	1.00	1.22	
58 Trichloroethene	130	6.137	6.125	0.012	94	13180	1.00	0.9726	
60 Methylcyclohexane	83	6.315	6.315	0.000	88	20189	1.00	1.06	
61 1,2-Dichloropropane	63	6.327	6.327	0.000	92	10838	1.00	0.9780	
64 1,4-Dioxane	88	6.422	6.433	-0.011	35	2630	20.0	24.7	
63 Dibromomethane	93	6.422	6.433	-0.011	91	8670	1.00	1.21	
65 Dichlorobromomethane	83	6.552	6.552	0.000	95	15219	1.00	0.9478	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	87	9190	2.00	1.98	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	90	13457	1.00	0.8977	
69 4-Methyl-2-pentanone (MIBK	43	7.074	7.074	0.000	96	14688	2.00	1.93	
70 Toluene	91	7.252	7.251	0.001	98	49083	1.00	0.9775	
71 trans-1,3-Dichloropropene	75	7.418	7.429	-0.011	95	12766	1.00	0.9807	
72 Ethyl methacrylate	69	7.489	7.489	0.000	84	10093	1.00	0.9737	
73 1,1,2-Trichloroethane	97	7.596	7.595	0.001	78	9379	1.00	1.10	
75 Tetrachloroethene	164	7.750	7.750	0.000	93	9208	1.00	0.9766	
74 1,3-Dichloropropane	76	7.762	7.750	0.012	92	13777	1.00	0.9678	
76 2-Hexanone	43	7.809	7.809	0.000	96	9384	2.00	2.19	
78 Chlorodibromomethane	129	7.963	7.963	0.000	90	8715	1.00	0.9252	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	96	8225	1.00	1.01	
82 Chlorobenzene	112	8.532	8.532	0.000	94	29244	1.00	0.9465	
83 1,1,1,2-Tetrachloroethane	131	8.604	8.603	0.001	90	12468	1.00	1.02	
84 Ethylbenzene	106	8.627	8.627	0.000	98	15623	1.00	0.9583	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	95	18292	1.00	0.9038	
86 o-Xylene	106	9.113	9.113	0.000	90	21059	1.00	0.9287	
87 Styrene	104	9.125	9.125	0.000	82	31359	1.00	0.9271	
88 Bromoform	173	9.315	9.315	0.000	90	6263	1.00	1.02	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	51888	1.00	0.9335	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	89	11696	1.00	0.9283	
93 Bromobenzene	156	9.778	9.777	0.001	96	13112	1.00	0.9413	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	64	1901	1.00	0.6976	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	82	3697	1.00	0.9054	
96 N-Propylbenzene	120	9.861	9.860	0.001	99	12930	1.00	0.8749	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	13617	1.00	0.9774	
99 1,3,5-Trimethylbenzene	105	10.027	10.026	0.001	94	41045	1.00	0.8817	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	14395	1.00	1.01	
102 tert-Butylbenzene	119	10.359	10.358	0.001	92	40683	1.00	0.9472	
104 1,2,4-Trimethylbenzene	105	10.394	10.394	0.000	96	46113	1.00	0.9119	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	46638	1.00	0.8948	
106 1,3-Dichlorobenzene	146	10.691	10.690	0.001	95	30197	1.00	1.03	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	94	39473	1.00	0.8666	
108 1,4-Dichlorobenzene	146	10.774	10.773	0.001	94	33260	1.00	1.07	
111 n-Butylbenzene	91	11.118	11.117	0.001	98	39865	1.00	0.9714	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	97	31222	1.00	1.02	
113 1,2-Dibromo-3-Chloropropan	157	11.912	11.924	-0.012	1	2809	1.00	1.05	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	88	16135	1.00	1.02	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	88	7786	1.00	1.15	
117 Naphthalene	128	13.015	13.015	0.000	96	37983	1.00	0.9123	
118 1,2,3-Trichlorobenzene	180	13.276	13.287	-0.011	93	15379	1.00	1.04	
S 134 Trihalomethanes, Total	1				0		4.00	3.97	
S 158 Total BTEX	1				0		5.00	4.79	
S 131 1,2-Dichloroethene, Total	96				0			1.99	
S 132 1,3-Dichloropropene, Total	75				0			1.88	
S 133 Xylenes, Total	106				0		2.00	1.83	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	0.80	Units: uL
vmarolistdw_00217	Amount Added:	0.80	Units: uL
vmrprimw_00254	Amount Added:	0.80	Units: uL
vm50ss_00299	Amount Added:	0.80	Units: uL

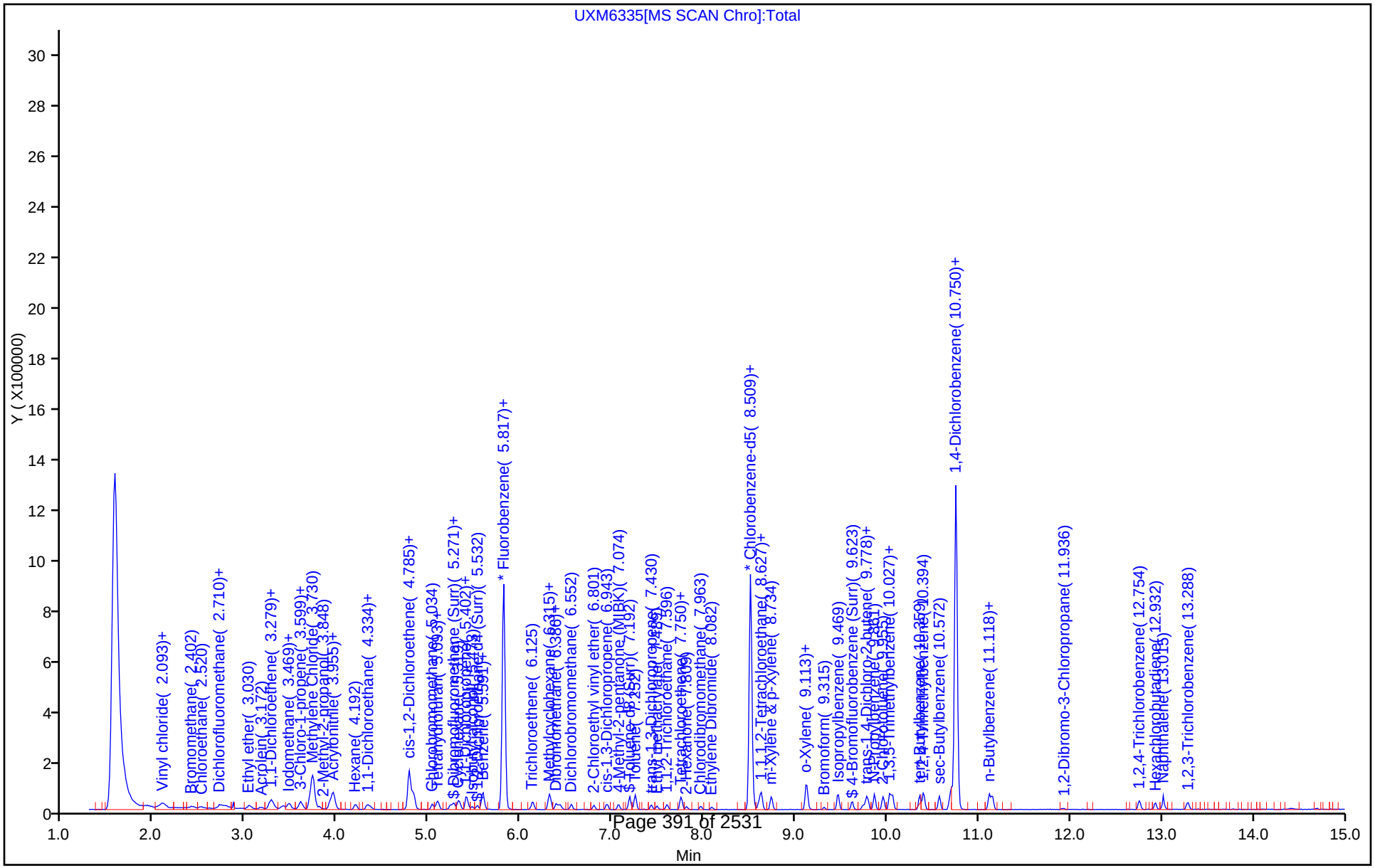
Report Date: 03-Oct-2017 18:58:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6335.D

Injection Date:	03-Oct-2017 16:33:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	std8260 L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6336.D
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 16:56:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-011
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 18:58:07 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 17:25:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	998141	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.508	0.001	86	662125	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	446887	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	31163	2.50	2.45	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	98	37128	2.50	2.56	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	94	104927	2.50	2.44	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	93	36070	2.50	2.41	
9 Dichlorodifluoromethane	85	1.797	1.785	0.012	98	38299	2.50	2.92	
10 Chloromethane	50	1.927	1.927	0.000	99	43459	2.50	2.94	
11 Vinyl chloride	62	2.058	2.057	0.001	98	47205	2.50	2.90	
12 Butadiene	54	2.093	2.093	0.000	94	47229	2.50	2.85	
13 Bromomethane	94	2.413	2.401	0.012	87	31434	2.50	2.83	
14 Chloroethane	64	2.508	2.508	0.000	98	30742	2.50	2.80	
15 Dichlorofluoromethane	67	2.722	2.710	0.012	98	74107	2.50	2.86	
16 Trichlorofluoromethane	101	2.793	2.781	0.012	62	54861	2.50	2.97	
17 Ethyl ether	59	3.042	3.042	0.000	87	30427	2.50	2.49	
18 Acrolein	56	3.172	3.160	0.012	98	28528	12.5	13.3	
19 1,1-Dichloroethene	96	3.267	3.255	0.012	97	36924	2.50	2.46	
20 1,1,2-Trichloro-1,2,2-trif	151	3.291	3.291	0.000	91	31142	2.50	2.72	
21 Acetone	43	3.303	3.303	0.000	86	23117	5.00	4.91	
23 Iodomethane	142	3.409	3.397	0.012	98	61866	2.50	2.52	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	99	118478	2.50	2.45	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	86	22368	2.50	2.34	
27 Methyl acetate	43	3.611	3.611	0.000	83	36885	5.00	4.50	
28 Methylene Chloride	84	3.706	3.706	0.000	93	56680	2.50	2.49	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	97	18725	25.0	22.7	
30 Acrylonitrile	53	3.919	3.919	0.000	99	102228	25.0	24.8	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	68	37931	2.50	2.43	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	94936	2.50	2.41	
33 Hexane	57	4.204	4.192	0.012	89	36915	2.50	2.69	
34 1,1-Dichloroethane	63	4.334	4.322	0.012	96	61396	2.50	2.44	
35 Vinyl acetate	43	4.358	4.358	0.000	97	44288	2.50	2.32	
39 cis-1,2-Dichloroethene	96	4.833	4.832	0.000	79	42638	2.50	2.48	
40 2-Butanone (MEK)	43	4.833	4.832	0.000	53	23953	5.00	5.25	
41 2,2-Dichloropropane	97	4.833	4.832	0.000	73	9739	2.50	2.61	
45 Chlorobromomethane	128	5.046	5.034	0.012	88	19307	2.50	2.49	
46 Tetrahydrofuran	42	5.093	5.081	0.012	47	13869	5.00	4.92	
47 Chloroform	83	5.093	5.093	0.000	92	62788	2.50	2.49	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	52606	2.50	2.52	
49 Cyclohexane	56	5.331	5.330	0.001	90	56810	2.50	2.58	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	93	43254	2.50	2.33	
51 Carbon tetrachloride	117	5.414	5.413	0.001	95	47014	2.50	2.58	
52 Isobutyl alcohol	41	5.473	5.473	0.000	95	15423	62.5	59.7	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	55	42908	2.50	2.46	
54 Benzene	78	5.591	5.591	0.000	94	137508	2.50	2.40	
56 n-Heptane	57	5.805	5.793	0.012	87	45301	2.50	2.18	
58 Trichloroethene	130	6.137	6.125	0.012	95	36639	2.50	2.58	
60 Methylcyclohexane	83	6.303	6.315	-0.012	89	51842	2.50	2.60	
61 1,2-Dichloropropane	63	6.327	6.327	0.000	88	28242	2.50	2.43	
63 Dibromomethane	93	6.433	6.433	0.000	96	18179	2.50	2.42	
64 1,4-Dioxane	88	6.445	6.433	0.012	38	5498	50.0	49.3	
65 Dichlorobromomethane	83	6.552	6.552	0.000	97	40528	2.50	2.41	
67 2-Chloroethyl vinyl ether	63	6.789	6.801	-0.012	94	20727	5.00	4.26	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	93	36358	2.50	2.31	
69 4-Methyl-2-pentanone (MIBK	43	7.074	7.074	0.000	95	37005	5.00	4.63	
70 Toluene	91	7.252	7.251	0.001	97	123707	2.50	2.39	
71 trans-1,3-Dichloropropene	75	7.430	7.429	0.001	92	31088	2.50	2.32	
72 Ethyl methacrylate	69	7.489	7.489	0.000	88	23254	2.50	2.18	
73 1,1,2-Trichloroethane	97	7.596	7.595	0.001	90	20898	2.50	2.38	
74 1,3-Dichloropropane	76	7.750	7.750	0.000	89	35271	2.50	2.41	
75 Tetrachloroethene	164	7.750	7.750	0.000	94	22468	2.50	2.31	
76 2-Hexanone	43	7.809	7.809	0.000	97	19899	5.00	4.51	
78 Chlorodibromomethane	129	7.963	7.963	0.000	91	22497	2.50	2.32	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	97	20940	2.50	2.49	
82 Chlorobenzene	112	8.532	8.532	0.000	94	75481	2.50	2.37	
83 1,1,1,2-Tetrachloroethane	131	8.604	8.603	0.001	93	27532	2.50	2.18	
84 Ethylbenzene	106	8.627	8.627	0.000	99	38214	2.50	2.28	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	49061	2.50	2.35	
86 o-Xylene	106	9.113	9.113	0.000	96	50860	2.50	2.18	
87 Styrene	104	9.125	9.125	0.000	91	83285	2.50	2.39	
88 Bromoform	173	9.315	9.315	0.000	94	14542	2.50	2.30	
89 Isopropylbenzene	105	9.469	9.469	0.000	96	129830	2.50	2.27	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	93	31897	2.50	2.45	
93 Bromobenzene	156	9.778	9.777	0.001	96	36423	2.50	2.53	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	83	10396	2.50	2.46	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	68	6591	2.50	2.34	
96 N-Propylbenzene	120	9.861	9.860	0.000	99	35748	2.50	2.34	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	35478	2.50	2.46	
99 1,3,5-Trimethylbenzene	105	10.027	10.026	0.001	95	108514	2.50	2.25	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	33878	2.50	2.29	
102 tert-Butylbenzene	119	10.359	10.358	0.001	91	103465	2.50	2.33	
104 1,2,4-Trimethylbenzene	105	10.406	10.394	0.012	95	120986	2.50	2.31	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	124666	2.50	2.31	
106 1,3-Dichlorobenzene	146	10.691	10.690	0.001	96	71749	2.50	2.37	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	96	106610	2.50	2.26	
108 1,4-Dichlorobenzene	146	10.774	10.773	0.001	95	75678	2.50	2.36	
111 n-Butylbenzene	91	11.118	11.117	0.001	96	90904	2.50	2.14	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	97	73978	2.50	2.34	
113 1,2-Dibromo-3-Chloropropan	157	11.936	11.924	0.012	78	6527	2.50	2.36	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	93	36814	2.50	2.25	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	94	16033	2.50	2.28	
117 Naphthalene	128	13.015	13.015	0.000	97	96540	2.50	2.24	
118 1,2,3-Trichlorobenzene	180	13.276	13.287	-0.011	94	36134	2.50	2.36	
S 158 Total BTEX	1				0		12.5	11.6	
S 134 Trihalomethanes, Total	1				0		10.0	9.52	
S 131 1,2-Dichloroethene, Total	96				0			4.90	
S 132 1,3-Dichloropropene, Total	75				0			4.63	
S 133 Xylenes, Total	106				0		5.00	4.53	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	2.00	Units: uL
vmarolistdw_00217	Amount Added:	2.00	Units: uL
vmrprimw_00254	Amount Added:	2.00	Units: uL
vm50ss_00299	Amount Added:	2.00	Units: uL

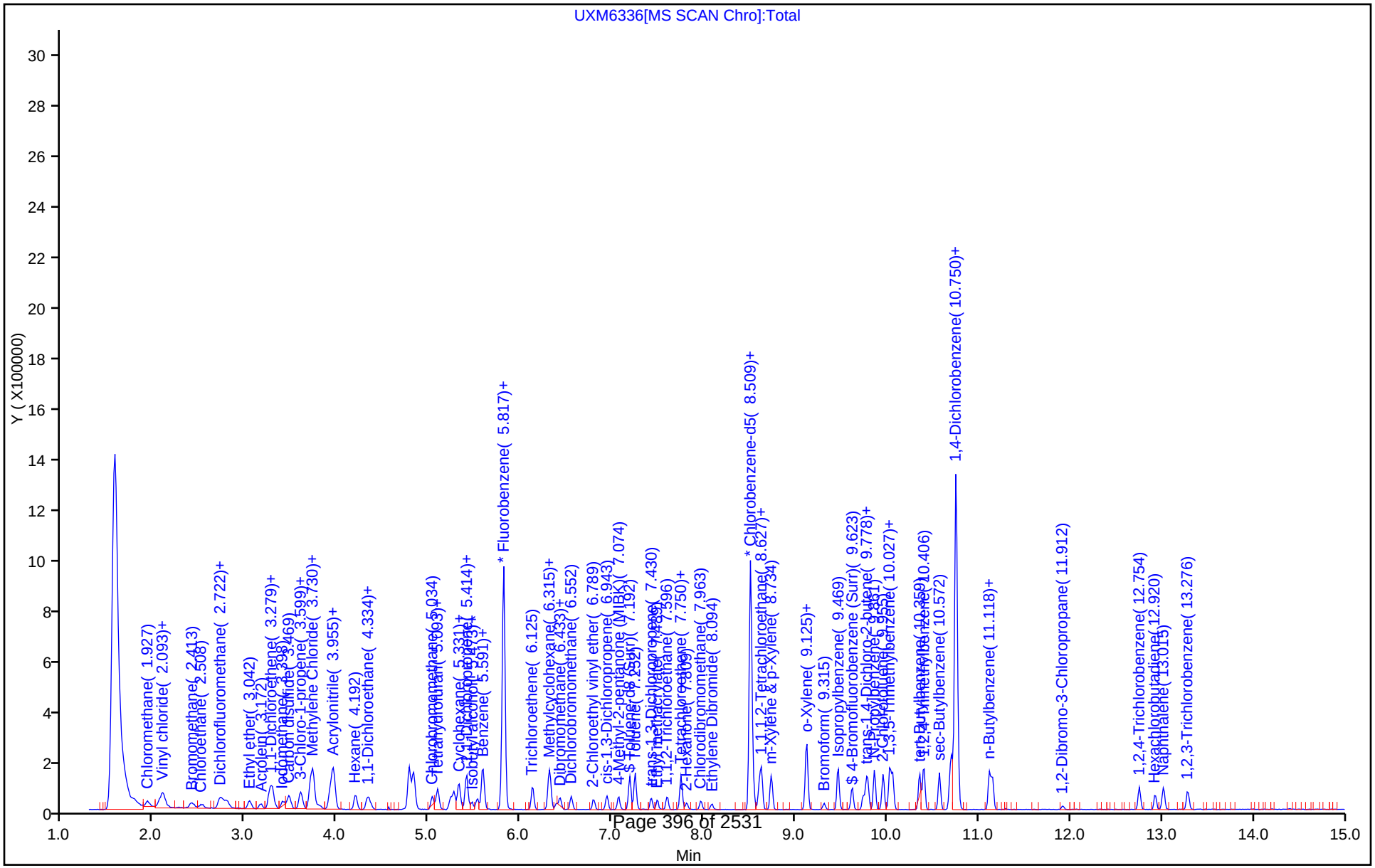
Report Date: 03-Oct-2017 18:58:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6336.D

Injection Date:	03-Oct-2017 16:56:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	std8260 L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 18:58:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6337.D
Lims ID: std8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 17:19:30 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-012
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 18:58:09 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 17:45:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1126859	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.508	0.000	86	746119	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	94	495569	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	133831	10.0	9.33	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	97	159543	10.0	9.73	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	474272	10.0	9.77	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	93	161352	10.0	9.57	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	99	161656	10.0	10.9	
10 Chloromethane	50	1.927	1.927	0.000	97	156195	10.0	9.36	
11 Vinyl chloride	62	2.057	2.057	0.000	99	186868	10.0	10.2	
12 Butadiene	54	2.093	2.093	0.000	96	190809	10.0	10.2	
13 Bromomethane	94	2.413	2.401	0.012	90	118362	10.0	9.44	
14 Chloroethane	64	2.508	2.508	0.000	99	117870	10.0	9.50	
15 Dichlorofluoromethane	67	2.722	2.710	0.012	97	290263	10.0	9.92	
16 Trichlorofluoromethane	101	2.781	2.781	0.000	94	221473	10.0	10.6	
17 Ethyl ether	59	3.042	3.042	0.000	87	127625	10.0	9.25	
18 Acrolein	56	3.160	3.160	0.000	97	105619	50.0	43.5	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	97	166443	10.0	9.83	
20 1,1,2-Trichloro-1,2,2-trif	151	3.279	3.291	-0.012	94	124614	10.0	9.66	
21 Acetone	43	3.303	3.303	0.000	100	73342	20.0	18.4	
23 Iodomethane	142	3.397	3.397	0.000	98	262510	10.0	9.45	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	100	536438	10.0	9.83	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	89	95156	10.0	8.83	
27 Methyl acetate	43	3.611	3.611	0.000	97	176755	20.0	19.1	
28 Methylene Chloride	84	3.706	3.706	0.000	90	189742	10.0	9.90	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	99	88606	100.0	95.3	
30 Acrylonitrile	53	3.919	3.919	0.000	100	446160	100.0	95.9	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	410125	10.0	9.21	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	96	162990	10.0	9.23	
33 Hexane	57	4.192	4.192	0.000	91	158253	10.0	10.2	
34 1,1-Dichloroethane	63	4.322	4.322	0.000	98	269539	10.0	9.50	
35 Vinyl acetate	43	4.358	4.358	0.000	97	202525	10.0	9.41	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	57	89667	20.0	17.4	
39 cis-1,2-Dichloroethene	96	4.832	4.832	0.000	83	186988	10.0	9.63	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	89	44721	10.0	10.6	
45 Chlorobromomethane	128	5.034	5.034	0.000	95	81839	10.0	9.33	
46 Tetrahydrofuran	42	5.081	5.081	0.000	89	60338	20.0	18.9	
47 Chloroform	83	5.093	5.093	0.000	95	269493	10.0	9.47	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	235331	10.0	9.97	
49 Cyclohexane	56	5.330	5.330	0.000	88	256158	10.0	10.3	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	96	213099	10.0	10.2	
51 Carbon tetrachloride	117	5.413	5.413	0.000	97	195087	10.0	9.48	
52 Isobutyl alcohol	41	5.461	5.473	-0.012	92	76538	250.0	262.5	
54 Benzene	78	5.579	5.591	-0.012	95	628048	10.0	9.72	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	93	190212	10.0	9.68	
56 n-Heptane	57	5.793	5.793	0.000	87	97964	10.0	9.55	
58 Trichloroethene	130	6.125	6.125	0.000	97	156978	10.0	9.79	
60 Methylcyclohexane	83	6.315	6.315	0.000	89	232012	10.0	10.3	
61 1,2-Dichloropropane	63	6.327	6.327	-0.001	95	129487	10.0	9.88	
64 1,4-Dioxane	88	6.433	6.433	0.000	42	21786	200.0	173.1	
63 Dibromomethane	93	6.421	6.433	-0.012	96	80425	10.0	9.47	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	179326	10.0	9.44	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	93	104703	20.0	19.1	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	176104	10.0	9.93	
69 4-Methyl-2-pentanone (MIBK	43	7.074	7.074	0.000	96	179839	20.0	19.9	
70 Toluene	91	7.251	7.251	0.000	97	577721	10.0	9.92	
71 trans-1,3-Dichloropropene	75	7.429	7.429	0.000	94	143929	10.0	9.53	
72 Ethyl methacrylate	69	7.489	7.489	0.000	88	117073	10.0	9.73	
73 1,1,2-Trichloroethane	97	7.595	7.595	0.000	89	97942	10.0	9.89	
75 Tetrachloroethene	164	7.750	7.750	0.000	94	106153	10.0	9.70	
74 1,3-Dichloropropane	76	7.761	7.750	0.011	90	164897	10.0	9.98	
76 2-Hexanone	43	7.809	7.809	0.000	97	101105	20.0	20.4	
78 Chlorodibromomethane	129	7.963	7.963	0.000	90	107126	10.0	9.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.093	8.082	0.011	98	89356	10.0	9.44	
82 Chlorobenzene	112	8.532	8.532	0.000	94	348866	10.0	9.73	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.603	0.000	94	140147	10.0	9.86	
84 Ethylbenzene	106	8.627	8.627	0.000	98	190693	10.0	10.1	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	234509	10.0	9.99	
86 o-Xylene	106	9.113	9.113	0.000	95	259496	10.0	9.86	
87 Styrene	104	9.125	9.125	0.000	92	397413	10.0	10.1	
88 Bromoform	173	9.315	9.315	0.000	94	69249	10.0	9.72	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	645268	10.0	10.0	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	93	142410	10.0	9.85	
93 Bromobenzene	156	9.777	9.777	0.000	95	152746	10.0	9.55	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	69	32881	10.0	10.5	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	83	41957	10.0	8.95	
96 N-Propylbenzene	120	9.860	9.860	0.000	99	163108	10.0	9.62	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	155092	10.0	9.70	
99 1,3,5-Trimethylbenzene	105	10.026	10.026	0.000	94	536117	10.0	10.0	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	153952	10.0	9.38	
102 tert-Butylbenzene	119	10.358	10.358	0.000	91	460244	10.0	9.34	
104 1,2,4-Trimethylbenzene	105	10.406	10.394	0.012	96	573053	10.0	9.87	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	595996	10.0	9.96	
106 1,3-Dichlorobenzene	146	10.690	10.690	0.000	97	331966	10.0	9.88	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	537217	10.0	10.3	
108 1,4-Dichlorobenzene	146	10.773	10.773	0.000	96	345045	10.0	9.71	
111 n-Butylbenzene	91	11.117	11.117	0.000	98	451311	10.0	9.58	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	98	329972	10.0	9.42	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	85	28469	10.0	9.30	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	93	172402	10.0	9.50	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	94	71186	10.0	9.13	
117 Naphthalene	128	13.015	13.015	0.000	97	462853	10.0	9.69	
118 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	96	162664	10.0	9.57	
S 134 Trihalomethanes, Total	1				0		40.0	38.4	
S 158 Total BTEX	1				0		50.0	49.6	
S 131 1,2-Dichloroethene, Total	96				0			18.9	
S 132 1,3-Dichloropropene, Total	75				0			19.5	
S 133 Xylenes, Total	106				0		20.0	19.8	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	8.00	Units: uL
vmarolistdw_00217	Amount Added:	8.00	Units: uL
vmrprimw_00254	Amount Added:	8.00	Units: uL
vm50ss_00299	Amount Added:	8.00	Units: uL

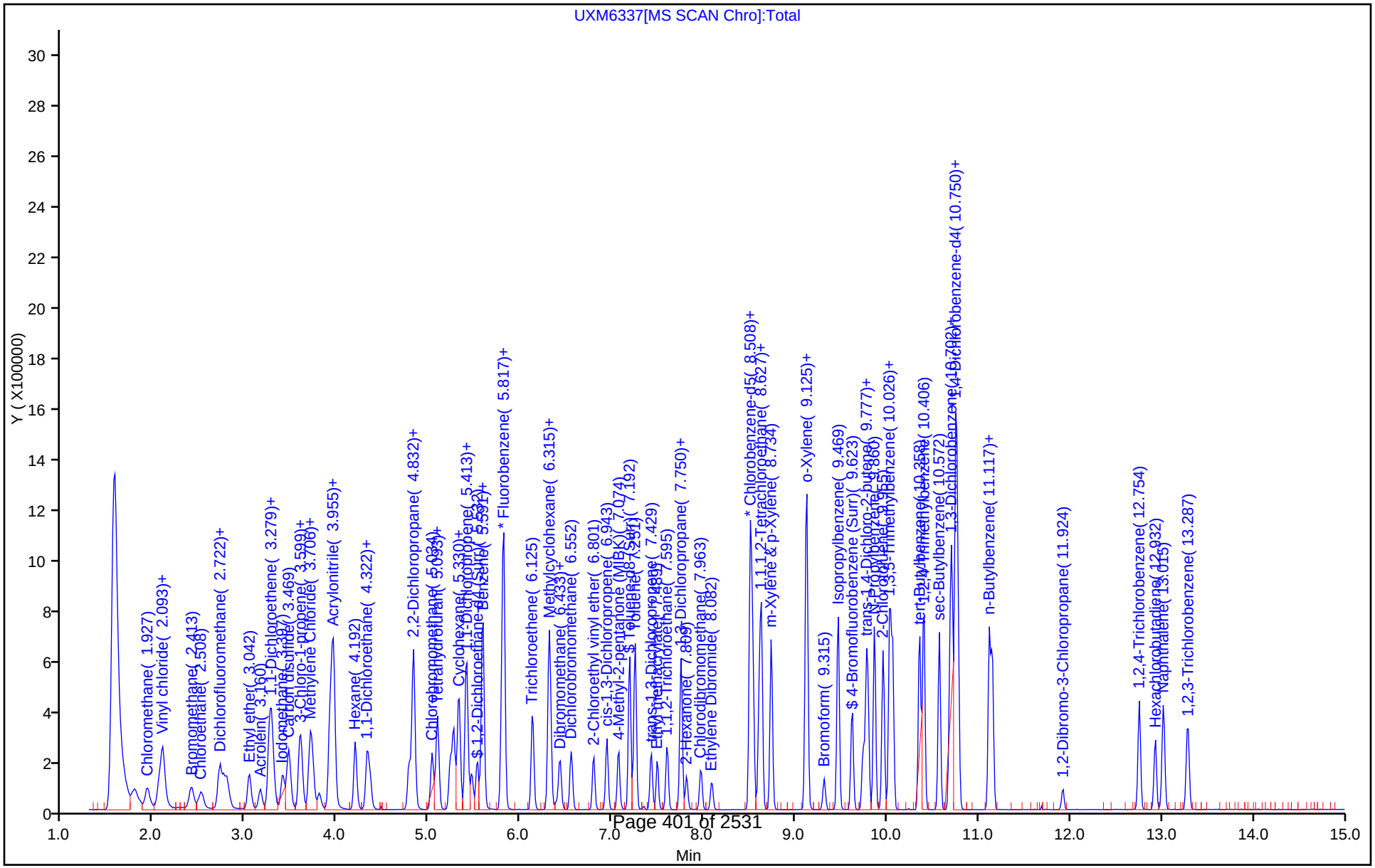
Report Date: 03-Oct-2017 18:58:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6337.D

Injection Date:	03-Oct-2017 17:19:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	std8260 L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6338.D
Lims ID: ICIS L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 03-Oct-2017 17:42:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-013
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 18:58:11 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 18:23:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1085046	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.508	0.000	85	726412	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	94	474078	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	94	284975	20.0	20.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	99	333400	20.0	21.1	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	978529	20.0	20.7	
$ 7 4-Bromofluorobenzene (Surr	95	9.611	9.611	0.000	90	340966	20.0	20.8	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	99	283048	20.0	19.8	
10 Chloromethane	50	1.927	1.927	0.000	99	327751	20.0	20.4	
11 Vinyl chloride	62	2.057	2.057	0.000	98	363465	20.0	20.6	
12 Butadiene	54	2.093	2.093	0.000	96	352907	20.0	19.6	
13 Bromomethane	94	2.401	2.401	0.000	90	253928	20.0	21.0	
14 Chloroethane	64	2.508	2.508	0.000	99	235799	20.0	19.7	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	98	585560	20.0	20.8	
16 Trichlorofluoromethane	101	2.781	2.781	0.000	99	419512	20.0	20.9	
17 Ethyl ether	59	3.042	3.042	0.000	88	260018	20.0	19.6	
18 Acrolein	56	3.160	3.160	0.000	99	228484	100.0	97.7	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	98	323777	20.0	19.9	
20 1,1,2-Trichloro-1,2,2-trif	151	3.291	3.291	0.000	94	231332	20.0	18.6	
21 Acetone	43	3.303	3.303	0.000	100	152020	40.0	42.4	
23 Iodomethane	142	3.397	3.397	0.000	97	549782	20.0	20.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	99	1068006	20.0	20.3	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	88	209066	20.0	20.1	
27 Methyl acetate	43	3.611	3.611	0.000	97	356834	40.0	40.0	
28 Methylene Chloride	84	3.706	3.706	0.000	89	360684	20.0	20.8	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	99	183108	200.0	204.6	
30 Acrylonitrile	53	3.919	3.919	0.000	99	916261	200.0	204.5	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	98	350890	20.0	20.6	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	881161	20.0	20.6	
33 Hexane	57	4.192	4.192	0.000	92	267879	20.0	17.9	
34 1,1-Dichloroethane	63	4.322	4.322	0.000	97	562663	20.0	20.6	
35 Vinyl acetate	43	4.358	4.358	0.000	97	421145	20.0	20.3	
39 cis-1,2-Dichloroethene	96	4.832	4.832	0.000	81	386718	20.0	20.7	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	58	189216	40.0	38.2	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	89	85252	20.0	21.0	
45 Chlorobromomethane	128	5.034	5.034	0.000	95	171676	20.0	20.3	
46 Tetrahydrofuran	42	5.081	5.081	0.000	84	114789	40.0	37.4	
47 Chloroform	83	5.093	5.093	0.000	96	567018	20.0	20.7	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	477044	20.0	21.0	
49 Cyclohexane	56	5.330	5.330	0.000	88	468668	20.0	19.6	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	95	415632	20.0	20.6	
51 Carbon tetrachloride	117	5.413	5.413	0.000	97	403435	20.0	20.4	
52 Isobutyl alcohol	41	5.473	5.473	0.000	93	147411	500.0	525.0	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	96	389711	20.0	20.6	
54 Benzene	78	5.591	5.591	0.000	95	1289361	20.0	20.7	
56 n-Heptane	57	5.793	5.793	0.000	85	144337	20.0	17.7	
58 Trichloroethene	130	6.125	6.125	0.000	98	322997	20.0	20.9	
60 Methylcyclohexane	83	6.315	6.315	0.000	90	401062	20.0	18.5	
61 1,2-Dichloropropane	63	6.327	6.327	0.000	94	264140	20.0	20.9	
63 Dibromomethane	93	6.433	6.433	0.000	94	164089	20.0	20.1	
64 1,4-Dioxane	88	6.433	6.433	0.000	43	47482	400.0	391.8	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	384298	20.0	21.0	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	93	226914	40.0	42.9	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	375717	20.0	22.0	
69 4-Methyl-2-pentanone (MIBK	43	7.074	7.074	0.000	96	365077	40.0	42.0	
70 Toluene	91	7.251	7.251	0.000	99	1201971	20.0	21.2	
71 trans-1,3-Dichloropropene	75	7.429	7.429	0.000	95	304845	20.0	20.7	
72 Ethyl methacrylate	69	7.489	7.489	0.000	87	249186	20.0	21.3	
73 1,1,2-Trichloroethane	97	7.595	7.595	0.000	93	195208	20.0	20.2	
74 1,3-Dichloropropane	76	7.750	7.750	0.000	90	343443	20.0	21.4	
75 Tetrachloroethene	164	7.750	7.750	0.000	95	216509	20.0	20.3	
76 2-Hexanone	43	7.809	7.809	0.000	96	205966	40.0	42.6	
78 Chlorodibromomethane	129	7.963	7.963	0.000	91	229246	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	100	195157	20.0	21.2	
82 Chlorobenzene	112	8.532	8.532	0.000	95	728151	20.0	20.9	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.603	0.000	95	294891	20.0	21.3	
84 Ethylbenzene	106	8.627	8.627	0.000	98	405096	20.0	22.0	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	506846	20.0	22.2	
86 o-Xylene	106	9.113	9.113	0.000	94	554141	20.0	21.6	
87 Styrene	104	9.125	9.125	0.000	93	841378	20.0	22.0	
88 Bromoform	173	9.315	9.315	0.000	96	142569	20.0	20.6	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	1370345	20.0	21.8	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	94	289805	20.0	21.0	
93 Bromobenzene	156	9.777	9.777	0.000	95	328830	20.0	21.5	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	82	84715	20.0	18.9	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	70	67708	20.0	22.6	
96 N-Propylbenzene	120	9.860	9.860	0.000	99	343193	20.0	21.2	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	324232	20.0	21.2	
99 1,3,5-Trimethylbenzene	105	10.026	10.026	0.000	94	1165401	20.0	22.8	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	323327	20.0	20.6	
102 tert-Butylbenzene	119	10.358	10.358	0.000	91	1079083	20.0	22.9	
104 1,2,4-Trimethylbenzene	105	10.394	10.394	0.000	98	1231327	20.0	22.2	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	1290217	20.0	22.5	
106 1,3-Dichlorobenzene	146	10.690	10.690	0.000	97	691502	20.0	21.5	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	1143583	20.0	22.9	
108 1,4-Dichlorobenzene	146	10.773	10.773	0.000	94	715160	20.0	21.0	
111 n-Butylbenzene	91	11.117	11.117	0.000	97	978511	20.0	21.7	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	98	708936	20.0	21.2	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	83	61077	20.0	20.9	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	94	381829	20.0	22.0	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	97	147931	20.0	19.8	
117 Naphthalene	128	13.015	13.015	0.000	96	1038493	20.0	22.7	
118 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	95	347922	20.0	21.4	
S 158 Total BTEX	1				0		100.0	107.7	
S 134 Trihalomethanes, Total	1				0		80.0	83.8	
S 133 Xylenes, Total	106				0		40.0	43.8	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	16.00	Units: uL
vmarolistdw_00217	Amount Added:	16.00	Units: uL
vmrprimw_00254	Amount Added:	16.00	Units: uL
vm50ss_00299	Amount Added:	16.00	Units: uL

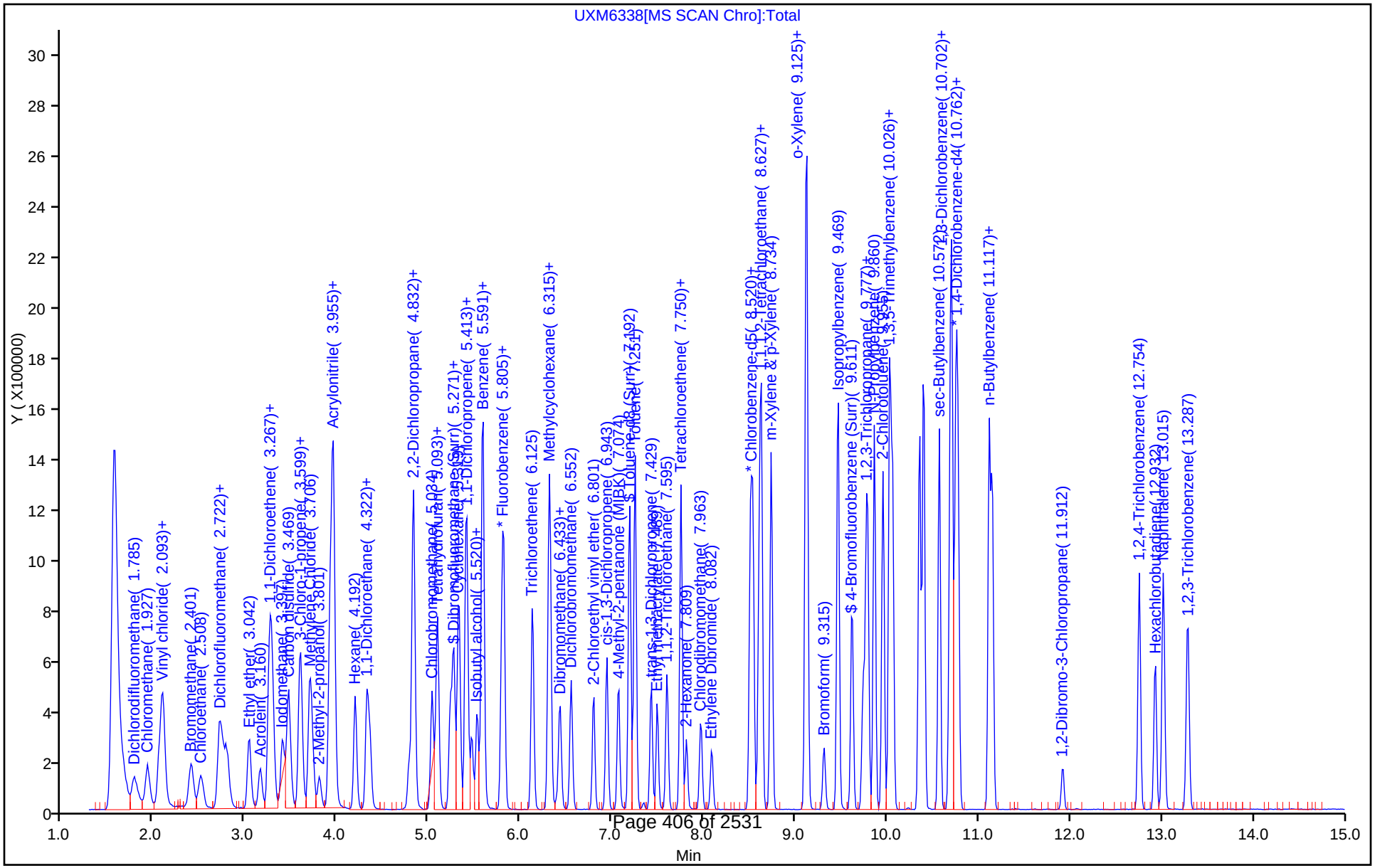
Report Date: 03-Oct-2017 18:58:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6338.D

Injection Date:	03-Oct-2017 17:42:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	ICIS L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6339.D
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 18:06:30 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-014
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 19:37:29 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 18:58:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1192692	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.508	0.000	84	812680	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	93	524836	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	572684	40.0	37.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	99	660113	40.0	38.0	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	2054651	40.0	38.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.611	9.611	0.000	91	703005	40.0	38.3	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	99	616054	40.0	39.3	
10 Chloromethane	50	1.927	1.927	0.000	99	599771	40.0	34.0	
11 Vinyl chloride	62	2.057	2.057	0.000	98	697568	40.0	35.9	
12 Butadiene	54	2.093	2.093	0.000	96	709853	40.0	35.9	
13 Bromomethane	94	2.401	2.401	0.000	91	464416	40.0	35.0	
14 Chloroethane	64	2.508	2.508	0.000	99	459127	40.0	35.0	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	97	1056232	40.0	34.1	
16 Trichlorofluoromethane	101	2.769	2.781	-0.012	99	823572	40.0	37.3	
17 Ethyl ether	59	3.030	3.042	-0.012	89	523674	40.0	35.9	
18 Acrolein	56	3.160	3.160	0.000	99	464717	200.0	180.8	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	99	665929	40.0	37.2	
20 1,1,2-Trichloro-1,2,2-trif	151	3.291	3.291	0.000	95	524977	40.0	38.4	
21 Acetone	43	3.303	3.303	0.000	99	303800	80.0	79.1	
23 Iodomethane	142	3.397	3.397	0.000	97	1061136	40.0	36.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	99	2179210	40.0	37.7	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	89	409680	40.0	35.9	
27 Methyl acetate	43	3.611	3.611	0.000	97	724563	80.0	73.9	
28 Methylene Chloride	84	3.694	3.706	-0.012	90	702925	40.0	37.8	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	99	380717	400.0	387.1	
30 Acrylonitrile	53	3.919	3.919	0.000	99	1948102	400.0	395.5	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	1827292	40.0	38.8	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	97	725614	40.0	38.8	
33 Hexane	57	4.192	4.192	0.000	91	681428	40.0	41.5	
34 1,1-Dichloroethane	63	4.322	4.322	0.000	96	1139385	40.0	37.9	
35 Vinyl acetate	43	4.358	4.358	0.000	97	907808	40.0	39.8	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	61	391987	80.0	71.9	
39 cis-1,2-Dichloroethene	96	4.820	4.832	-0.012	84	781957	40.0	38.0	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	89	182345	40.0	40.9	
45 Chlorobromomethane	128	5.034	5.034	0.000	94	342195	40.0	36.9	
46 Tetrahydrofuran	42	5.081	5.081	0.000	86	250295	80.0	74.2	
47 Chloroform	83	5.093	5.093	0.000	94	1127570	40.0	37.4	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	979648	40.0	39.2	
49 Cyclohexane	56	5.319	5.330	-0.012	88	1066535	40.0	40.6	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	95	873939	40.0	39.4	
51 Carbon tetrachloride	117	5.413	5.413	0.000	99	835412	40.0	38.4	
52 Isobutyl alcohol	41	5.461	5.473	-0.012	94	312736	1000.0	1013.3	
54 Benzene	78	5.579	5.591	-0.012	95	2599520	40.0	38.0	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	98	799309	40.0	38.4	
56 n-Heptane	57	5.793	5.793	0.000	88	327622	40.0	42.8	
58 Trichloroethene	130	6.125	6.125	0.000	98	643234	40.0	37.9	
60 Methylcyclohexane	83	6.303	6.315	-0.012	91	975623	40.0	41.0	
61 1,2-Dichloropropane	63	6.326	6.327	-0.001	93	548338	40.0	39.5	
63 Dibromomethane	93	6.421	6.433	-0.012	95	339278	40.0	37.7	
64 1,4-Dioxane	88	6.433	6.433	0.000	93	98866	800.0	742.2	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	769508	40.0	38.3	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	93	470128	80.0	80.9	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	785344	40.0	41.8	
69 4-Methyl-2-pentanone (MIBK	43	7.062	7.074	-0.012	95	774602	80.0	81.1	
70 Toluene	91	7.251	7.251	0.000	98	2448121	40.0	38.6	
71 trans-1,3-Dichloropropene	75	7.429	7.429	0.000	94	651236	40.0	39.6	
72 Ethyl methacrylate	69	7.489	7.489	0.000	88	523868	40.0	40.0	
73 1,1,2-Trichloroethane	97	7.595	7.595	0.000	92	413182	40.0	38.3	
75 Tetrachloroethene	164	7.750	7.750	0.000	94	438707	40.0	36.8	
74 1,3-Dichloropropane	76	7.750	7.750	0.000	90	698784	40.0	38.8	
76 2-Hexanone	43	7.809	7.809	0.000	96	424490	80.0	78.5	
78 Chlorodibromomethane	129	7.963	7.963	0.000	91	483684	40.0	40.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	99	404247	40.0	39.2	
82 Chlorobenzene	112	8.532	8.532	0.000	95	1470111	40.0	37.6	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.603	0.000	96	600981	40.0	38.8	
84 Ethylbenzene	106	8.627	8.627	0.000	98	822404	40.0	39.9	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	1014271	40.0	39.7	
86 o-Xylene	106	9.113	9.113	0.000	93	1126222	40.0	39.3	
87 Styrene	104	9.125	9.125	0.000	92	1735500	40.0	40.6	
88 Bromoform	173	9.315	9.315	0.000	97	301966	40.0	38.9	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	2777456	40.0	39.5	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	94	605298	40.0	39.5	
93 Bromobenzene	156	9.777	9.777	0.000	95	654493	40.0	38.7	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	86	187633	40.0	37.8	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	78	137383	40.0	41.5	
96 N-Propylbenzene	120	9.860	9.860	0.000	99	706431	40.0	39.3	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	658897	40.0	38.9	
99 1,3,5-Trimethylbenzene	105	10.026	10.026	0.000	94	2338051	40.0	41.3	
100 4-Chlorotoluene	126	10.062	10.062	0.000	98	660416	40.0	38.0	
102 tert-Butylbenzene	119	10.358	10.358	0.000	91	2039648	40.0	39.1	
104 1,2,4-Trimethylbenzene	105	10.406	10.394	0.012	95	2488419	40.0	40.5	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	2621371	40.0	41.4	
106 1,3-Dichlorobenzene	146	10.690	10.690	0.000	98	1382584	40.0	38.8	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	2315891	40.0	41.8	
108 1,4-Dichlorobenzene	146	10.773	10.773	0.000	95	1436062	40.0	38.2	
111 n-Butylbenzene	91	11.117	11.117	0.000	98	1974321	40.0	39.6	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	98	1405056	40.0	37.9	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	85	129331	40.0	39.9	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	94	765368	40.0	39.8	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	97	302932	40.0	36.7	
117 Naphthalene	128	13.015	13.015	0.000	97	2164004	40.0	42.8	
118 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	96	699374	40.0	38.8	
S 158 Total BTEX	1				0		200.0	195.4	
S 134 Trihalomethanes, Total	1				0		160.0	155.2	
S 131 1,2-Dichloroethene, Total	96				0			76.9	
S 132 1,3-Dichloropropene, Total	75				0			81.4	
S 133 Xylenes, Total	106				0		80.0	79.0	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	32.00	Units: uL
vmarolistdw_00217	Amount Added:	32.00	Units: uL
vmrprimw_00254	Amount Added:	32.00	Units: uL
vm50ss_00299	Amount Added:	32.00	Units: uL

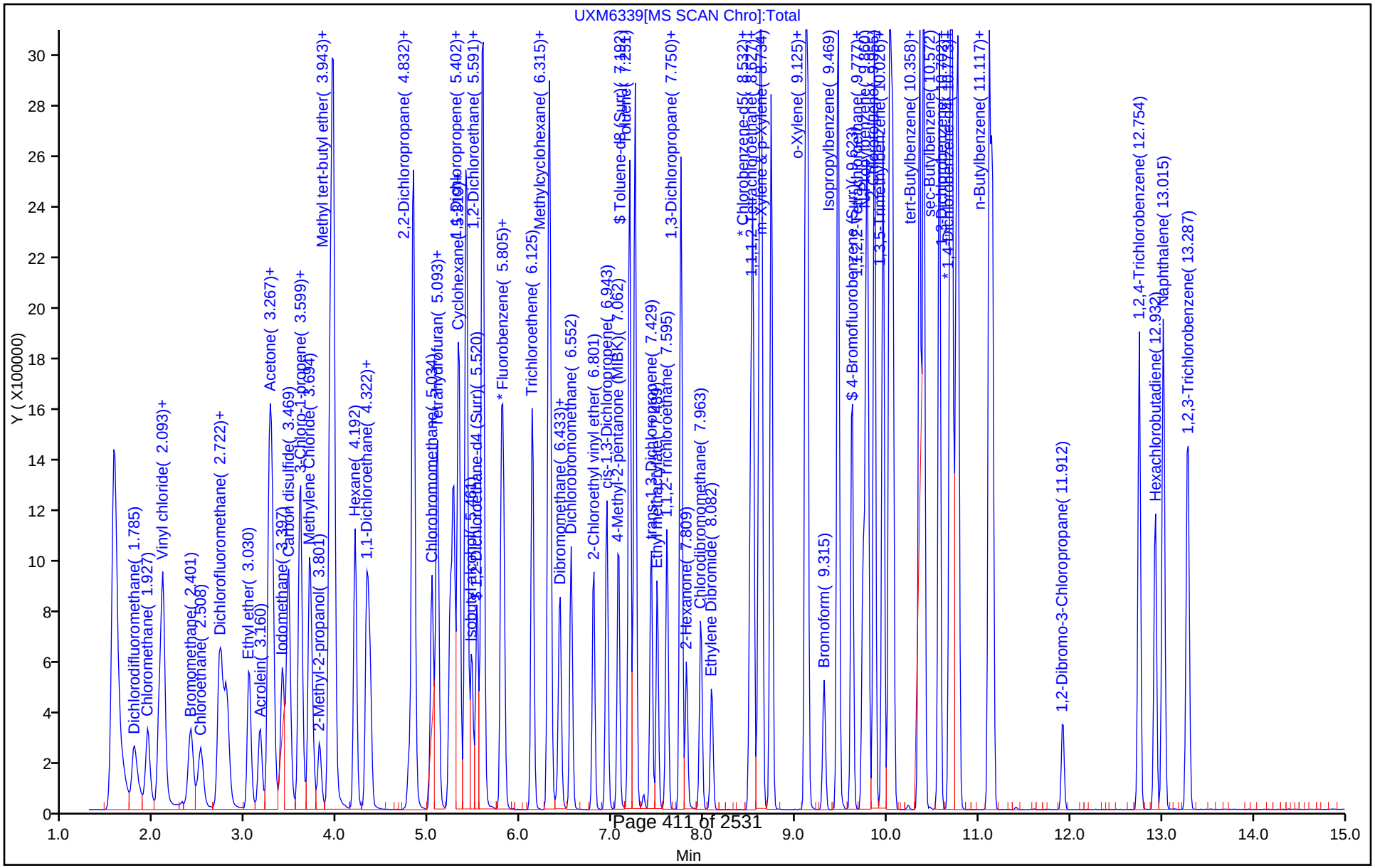
Report Date: 03-Oct-2017 19:37:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6339.D

Injection Date:	03-Oct-2017 18:06:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	std8260 L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D
Lims ID: std8260L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Oct-2017 18:29:30 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-015
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 18:58:13 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 18:50:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1244978	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.508	0.000	85	855348	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	93	545695	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.235	5.236	-0.001	94	989819	60.0	62.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	98	1094461	60.0	60.4	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	3557024	60.0	63.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.611	9.611	0.000	90	1236409	60.0	64.0	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	99	914424	60.0	55.9	
10 Chloromethane	50	1.927	1.927	0.000	99	1011349	60.0	54.9	
11 Vinyl chloride	62	2.057	2.057	0.000	98	1100805	60.0	54.3	
12 Butadiene	54	2.093	2.093	0.000	97	1088421	60.0	52.7	
13 Bromomethane	94	2.389	2.401	-0.012	90	791580	60.0	57.2	
14 Chloroethane	64	2.496	2.508	-0.012	100	768287	60.0	56.0	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	97	1763650	60.0	54.6	
16 Trichlorofluoromethane	101	2.769	2.781	-0.012	99	1268274	60.0	55.0	
17 Ethyl ether	59	3.030	3.042	-0.012	89	860521	60.0	56.5	
18 Acrolein	56	3.148	3.160	-0.012	100	738920	300.0	275.3	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	98	1044326	60.0	55.8	
20 1,1,2-Trichloro-1,2,2-trif	151	3.279	3.291	-0.012	94	728181	60.0	51.1	
21 Acetone	43	3.303	3.303	0.000	100	476147	120.0	120.1	
23 Iodomethane	142	3.397	3.397	0.000	97	1779244	60.0	58.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.457	3.469	-0.012	99	3544018	60.0	58.8	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	89	703617	60.0	59.1	
27 Methyl acetate	43	3.611	3.611	0.000	97	1169526	120.0	114.3	
28 Methylene Chloride	84	3.694	3.706	-0.012	89	1177453	60.0	61.5	
29 2-Methyl-2-propanol	59	3.812	3.801	0.011	99	652608	600.0	635.6	
30 Acrylonitrile	53	3.919	3.919	0.000	99	3194780	600.0	621.4	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	3093794	60.0	62.9	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	98	1219098	60.0	62.5	
33 Hexane	57	4.192	4.192	0.000	91	920727	60.0	53.7	
34 1,1-Dichloroethane	63	4.322	4.322	0.000	97	1924857	60.0	61.4	
35 Vinyl acetate	43	4.358	4.358	0.000	97	1545224	60.0	65.0	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	61	638516	120.0	112.2	
39 cis-1,2-Dichloroethene	96	4.820	4.832	-0.012	83	1311332	60.0	61.1	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	89	300897	60.0	64.6	
45 Chlorobromomethane	128	5.034	5.034	0.000	93	582225	60.0	60.1	
46 Tetrahydrofuran	42	5.081	5.081	0.000	86	411284	120.0	116.9	
47 Chloroform	83	5.093	5.093	0.000	96	1935632	60.0	61.6	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	1579323	60.0	60.6	
49 Cyclohexane	56	5.319	5.330	-0.012	88	1502258	60.0	54.7	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	96	1401323	60.0	60.5	
51 Carbon tetrachloride	117	5.413	5.413	0.000	98	1305500	60.0	57.4	
52 Isobutyl alcohol	41	5.461	5.473	-0.012	93	517266	1500.0	1605.7	
54 Benzene	78	5.579	5.591	-0.012	95	4501045	60.0	63.0	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	97	1355792	60.0	62.4	
56 n-Heptane	57	5.793	5.793	0.000	92	398798	60.0	50.9	
58 Trichloroethene	130	6.125	6.125	0.000	98	1094413	60.0	61.8	
60 Methylcyclohexane	83	6.303	6.315	-0.012	90	1346127	60.0	54.1	
61 1,2-Dichloropropane	63	6.326	6.327	-0.001	93	928017	60.0	64.1	
64 1,4-Dioxane	88	6.433	6.433	0.000	88	167553	1200.0	1205.1	
63 Dibromomethane	93	6.421	6.433	-0.012	94	567344	60.0	60.4	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	1335138	60.0	63.6	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	93	817202	120.0	134.6	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	1391546	60.0	71.0	
69 4-Methyl-2-pentanone (MIBK	43	7.062	7.074	-0.012	96	1298638	120.0	130.3	
70 Toluene	91	7.251	7.251	0.000	98	4286732	60.0	64.2	
71 trans-1,3-Dichloropropene	75	7.429	7.429	0.000	95	1133000	60.0	65.4	
72 Ethyl methacrylate	69	7.489	7.489	0.000	87	915063	60.0	66.4	
73 1,1,2-Trichloroethane	97	7.595	7.595	0.000	91	704092	60.0	62.0	
75 Tetrachloroethene	164	7.750	7.750	0.000	95	728263	60.0	58.1	
74 1,3-Dichloropropane	76	7.750	7.750	0.000	91	1212196	60.0	64.0	
76 2-Hexanone	43	7.809	7.809	0.000	95	706416	120.0	124.0	
78 Chlorodibromomethane	129	7.963	7.963	0.000	90	828348	60.0	66.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	98	690356	60.0	63.6	
82 Chlorobenzene	112	8.532	8.532	0.000	95	2579177	60.0	62.8	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.603	0.000	96	1039927	60.0	63.8	
84 Ethylbenzene	106	8.627	8.627	0.000	98	1432648	60.0	66.1	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	1776387	60.0	66.0	
86 o-Xylene	106	9.113	9.113	0.000	95	1947229	60.0	64.6	
87 Styrene	104	9.125	9.125	0.000	92	3057449	60.0	68.0	
88 Bromoform	173	9.315	9.315	0.000	96	519496	60.0	63.6	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	4766445	60.0	64.5	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	95	999793	60.0	62.8	
93 Bromobenzene	156	9.777	9.777	0.000	95	1127151	60.0	64.0	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	69	237173	60.0	68.9	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	82	310884	60.0	60.2	
96 N-Propylbenzene	120	9.860	9.860	0.000	99	1177191	60.0	63.0	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	1136325	60.0	64.5	
99 1,3,5-Trimethylbenzene	105	10.026	10.026	0.000	95	3992428	60.0	67.9	
100 4-Chlorotoluene	126	10.062	10.062	0.000	98	1130515	60.0	62.6	
102 tert-Butylbenzene	119	10.358	10.358	0.000	91	3731481	60.0	68.7	
104 1,2,4-Trimethylbenzene	105	10.406	10.394	0.012	95	4303202	60.0	67.3	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	4371654	60.0	66.4	
106 1,3-Dichlorobenzene	146	10.690	10.690	0.000	98	2354096	60.0	63.6	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	3924747	60.0	68.2	
108 1,4-Dichlorobenzene	146	10.773	10.773	0.000	95	2419583	60.0	61.9	
111 n-Butylbenzene	91	11.117	11.117	0.000	98	3292320	60.0	63.5	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	98	2351535	60.0	61.0	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	87	217923	60.0	64.6	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	94	1276372	60.0	63.9	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	97	494054	60.0	57.6	
117 Naphthalene	128	13.015	13.015	0.000	97	3605700	60.0	68.5	
118 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	95	1169690	60.0	62.5	
S 134 Trihalomethanes, Total	1				0		240.0	254.9	
S 158 Total BTEX	1				0		300.0	323.8	
S 131 1,2-Dichloroethene, Total	96				0			123.6	
S 132 1,3-Dichloropropene, Total	75				0			136.4	
S 133 Xylenes, Total	106				0		120.0	130.5	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmrgas_00217	Amount Added:	48.00	Units: uL
vmarolistdw_00217	Amount Added:	48.00	Units: uL
vmrprimw_00254	Amount Added:	48.00	Units: uL
vm50ss_00299	Amount Added:	48.00	Units: uL

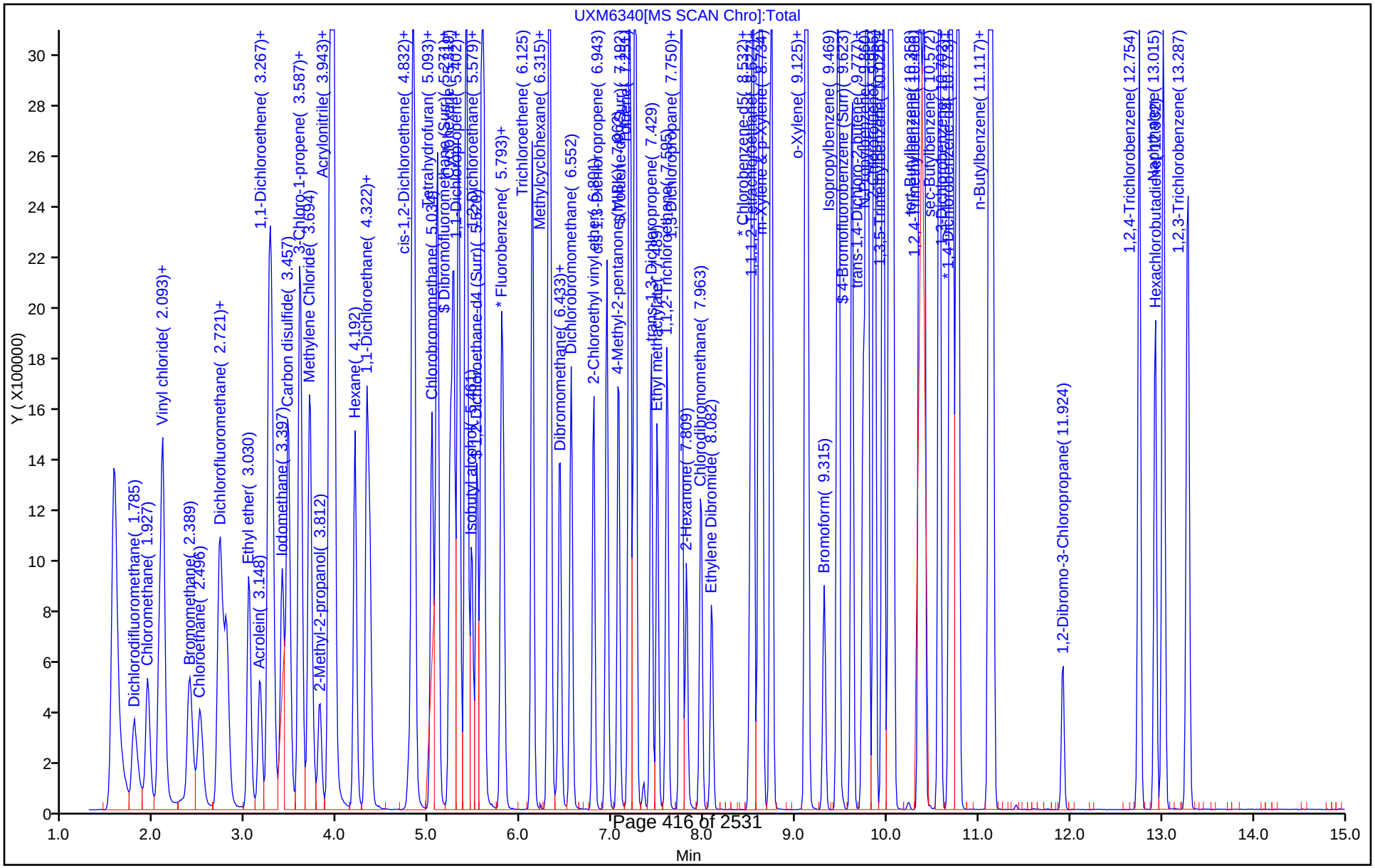
Report Date: 03-Oct-2017 18:58:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Injection Date:	03-Oct-2017 18:29:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	std8260L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 20:03 Calibration End Date: 10/03/2017 21:59 Calibration ID: 41742

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-297419/19	UXM6344.D
Level 2	STDA9 240-297419/20	UXM6345.D
Level 3	STDA9 240-297419/21	UXM6346.D
Level 4	STDA9 240-297419/22	UXM6347.D
Level 5	STDA9 240-297419/23	UXM6348.D
Level 6	STDA9 240-297419/24	UXM6349.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	0.0292 0.0249	0.0279	0.0253	0.0242	0.0243	Ave		0.0260				8.0		20.0			
Diisopropyl ether	0.2450 0.2647	0.2668	0.2897	0.2525	0.2612	Ave		0.2633				5.8		20.0			
2-Chloro-1,3-butadiene	0.4501 0.4561	0.4655	0.4681	0.4153	0.4290	Ave		0.4473				4.7		20.0			
Ethyl t-butyl ether	0.8895 0.8617	0.7991	0.8594	0.8181	0.8293	Ave		0.8428				3.9		20.0			
Ethyl acetate	0.1598 0.1300	0.1596	0.1382	0.1295	0.1305	Ave		0.1413				10.4		20.0			
Propionitrile	0.0323 0.0278	0.0305	0.0282	0.0275	0.0272	Ave		0.0289				7.0		20.0			
Methacrylonitrile	0.1284 0.1146	0.1208	0.1148	0.1077	0.1106	Ave		0.1161				6.4		20.0			
Tert-amyl methyl ether	0.8216 0.8448	0.8177	0.8374	0.7721	0.8122	Ave		0.8176				3.1		20.0			
n-Butanol	0.0042 0.0043	0.0034	0.0041	0.0039	0.0042	Ave		0.0040				8.5		20.0			
Ethyl acrylate	0.1303 0.1613	0.1926	0.1652	0.1545	0.1550	Ave		0.1598				12.6		20.0			
Methyl methacrylate	0.1143 0.1229	0.1195	0.1195	0.1112	0.1203	Ave		0.1179				3.7		20.0			
2-Nitropropane	+++++ 0.0380	0.0290	0.0360	0.0342	0.0367	Ave		0.0348				10.1		20.0			
n-Butyl acetate	+++++ 0.1974	0.2159	0.1984	0.1901	0.1925	Ave		0.1988				5.1		20.0			
1-Chlorohexane	0.3641 0.3808	0.3233	0.3346	0.3146	0.3386	Ave		0.3427				7.3		20.0			
Cyclohexanone	0.0092 0.0136	0.0084	0.0122	0.0110	0.0135	Ave		0.0113				19.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 20:03 Calibration End Date: 10/03/2017 21:59 Calibration ID: 41742

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Pentachloroethane	0.2471 0.2645	0.2288	0.2572	0.2453	0.2550	Ave		0.2496				5.0		20.0			
1,2,3-Trimethylbenzene	2.2800 2.6912	2.1157	2.5526	2.4000	2.5397	Ave		2.4299				8.6		20.0			
Benzyl chloride	0.1119 0.2455	0.1284	0.1900	0.1947	0.2309	Lin1	-0.091	0.2319				17.2			0.9930		0.9900
1,3,5-Trichlorobenzene	0.7546 0.8759	0.7238	0.8497	0.7645	0.8486	Ave		0.8028				7.8		20.0			
2-Methylnaphthalene	+++++ 1.1182	0.6164	0.8725	0.9239	1.0410	Lin1	-1.279	1.0668				14.2			0.9950		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 20:03 Calibration End Date: 10/03/2017 21:59 Calibration ID: 41742

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-297419/19	UXM6344.D
Level 2	STDA9 240-297419/20	UXM6345.D
Level 3	STDA9 240-297419/21	UXM6346.D
Level 4	STDA9 240-297419/22	UXM6347.D
Level 5	STDA9 240-297419/23	UXM6348.D
Level 6	STDA9 240-297419/24	UXM6349.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acetonitrile	FB	Ave	6709 770258	13056	121208	241769	491042	5.00 600	10.0	100	200	400
Diisopropyl ether	FB	Ave	5630 819353	12485	138554	252211	527205	0.500 60.0	1.00	10.0	20.0	40.0
2-Chloro-1,3-butadiene	FB	Ave	10343 1411669	21782	223827	414789	865841	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl t-butyl ether	FB	Ave	20441 2666749	37392	410942	817129	1673780	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	7343 804417	14939	132204	258648	526913	1.00 120	2.00	20.0	40.0	80.0
Propionitrile	FB	Ave	7423 860837	14288	134730	275167	548822	5.00 600	10.0	100	200	400
Methacrylonitrile	FB	Ave	29514 3546513	56513	548741	1075329	2232978	5.00 600	10.0	100	200	400
Tert-amyl methyl ether	FB	Ave	18882 2614662	38264	400430	771187	1639190	0.500 60.0	1.00	10.0	20.0	40.0
n-Butanol	FB	Ave	2404 332867	3934	49020	98305	211132	12.5 1500	25.0	250	500	1000
Ethyl acrylate	FB	Ave	2995 499329	9013	79012	154359	312881	0.500 60.0	1.00	10.0	20.0	40.0
Methyl methacrylate	FB	Ave	5252 760741	11184	114243	222110	485787	1.00 120	2.00	20.0	40.0	80.0
2-Nitropropane	FB	Ave	+++++ 235122	2714	34419	68268	148143	+++++ 120	2.00	20.0	40.0	80.0
n-Butyl acetate	FB	Ave	+++++ 610794	10102	94874	189865	388464	+++++ 60.0	1.00	10.0	20.0	40.0
1-Chlorohexane	CBNZ d5	Ave	5754 771733	10316	111199	209020	459136	0.500 60.0	1.00	10.0	20.0	40.0
Cyclohexanone	DCBd 4	Ave	999 185472	1861	26797	49303	121921	5.00 600	10.0	100	200	400
Pentachloroethane	CBNZ d5	Ave	7808 1072254	14601	170955	325930	691532	1.00 120	2.00	20.0	40.0	80.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 20:03 Calibration End Date: 10/03/2017 21:59 Calibration ID: 41742

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCBd 4	Ave	24715 3671794	46903	562929	1073614	2289866	0.500 60.0	1.00	10.0	20.0	40.0
Benzyl chloride	DCBd 4	Lin1	1213 334986	2847	41895	87117	208204	0.500 60.0	1.00	10.0	20.0	40.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	8180 1195018	16046	187380	342001	765091	0.500 60.0	1.00	10.0	20.0	40.0
2-Methylnaphthalene	DCBd 4	Lin1	+++++ 3051254	27328	384826	826566	1877140	+++++ 120	2.00	20.0	40.0	80.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Report Date: 04-Oct-2017 20:10:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6344.D
Lims ID: stdA9 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 20:03:30 ALS Bottle#: 2 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-019
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub86

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 04-Oct-2017 20:10:12 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: bosworthh Date: 04-Oct-2017 08:14:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	919250	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	86	632083	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	96	433606	20.0	20.0	
25 Acetonitrile	41	3.552	3.564	-0.012	59	6709	5.00	5.62	
36 Isopropyl ether	87	4.382	4.382	0.000	90	5630	0.5000	0.4652	
37 2-Chloro-1,3-butadiene	53	4.406	4.405	0.001	61	10343	0.5000	0.5030	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	97	20441	0.5000	0.5277	
43 Ethyl acetate	43	4.880	4.880	0.000	96	7343	1.00	1.13	
42 Propionitrile	54	4.892	4.880	0.012	89	7423	5.00	5.58	
44 Methacrylonitrile	41	5.022	5.022	0.000	90	29514	5.00	5.53	
55 Tert-amyl methyl ether	73	5.663	5.662	0.000	90	18882	0.5000	0.5024	
57 n-Butanol	56	6.030	6.030	0.000	18	2404	12.5	13.0	
59 Ethyl acrylate	55	6.184	6.196	-0.012	1	2995	0.5000	0.4077	
62 Methyl methacrylate	41	6.398	6.398	0.000	54	5252	1.00	0.9688	
66 2-Nitropropane	41		6.742				ND	ND	
77 n-Butyl acetate	43		7.916				ND	ND	
81 1-Chlorohexane	91	8.485	8.497	-0.012	33	5754	0.5000	0.5313	
91 Cyclohexanone	55	9.576	9.564	0.012	1	999	5.00	4.07	
103 Pentachloroethane	167	10.382	10.382	0.000	86	7808	1.00	0.9897	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	96	24715	0.5000	0.4692	
110 Benzyl chloride	126	10.904	10.904	0.000	97	1213	0.5000	0.6329	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	92	8180	0.5000	0.4700	
119 2-Methylnaphthalene	142		14.414				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmra9w_00222	Amount Added:	0.40	Units: uL

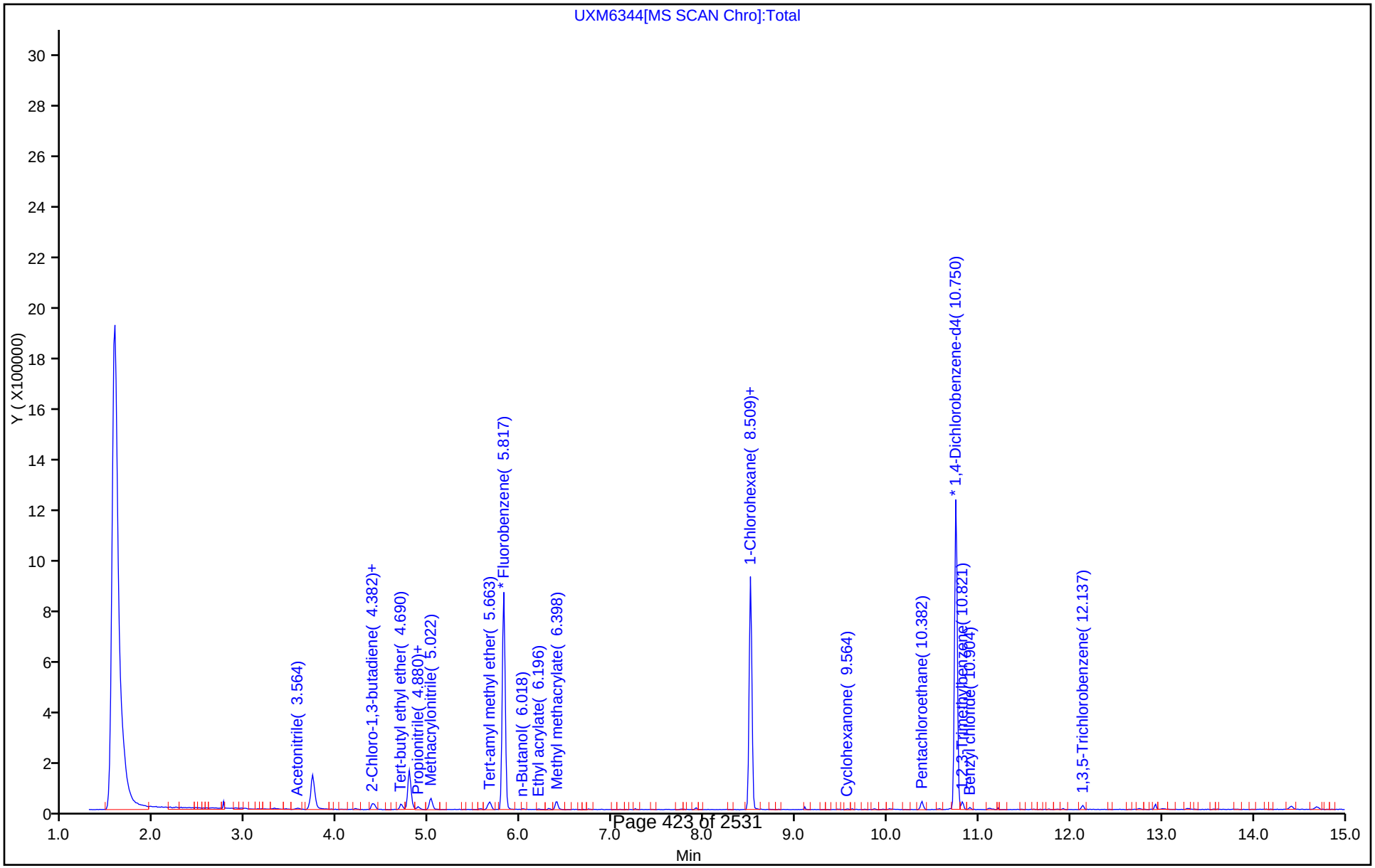
Report Date: 04-Oct-2017 20:10:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6344.D

Injection Date:	03-Oct-2017 20:03:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	stdA9 L1			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 20:10:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6345.D
Lims ID: stdA9 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 20:26:30 ALS Bottle#: 3 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-020
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub86

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 04-Oct-2017 20:10:14 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: bosworthh Date: 04-Oct-2017 08:15:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	935874	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	86	638213	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	443381	20.0	20.0	
25 Acetonitrile	41	3.575	3.564	0.011	90	13056	10.0	10.7	
36 Isopropyl ether	87	4.382	4.382	0.000	93	12485	1.00	1.01	
37 2-Chloro-1,3-butadiene	53	4.406	4.405	0.001	92	21782	1.00	1.04	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	94	37392	1.00	0.9481	
42 Propionitrile	54	4.892	4.880	0.012	64	14288	10.0	10.6	
43 Ethyl acetate	43	4.880	4.880	0.000	31	14939	2.00	2.26	
44 Methacrylonitrile	41	5.010	5.022	-0.012	92	56513	10.0	10.4	
55 Tert-amyl methyl ether	73	5.663	5.662	0.001	97	38264	1.00	1.00	
57 n-Butanol	56	6.030	6.030	0.000	79	3934	25.0	21.0	
59 Ethyl acrylate	55	6.196	6.196	0.000	91	9013	1.00	1.20	
62 Methyl methacrylate	41	6.398	6.398	0.000	89	11184	2.00	2.03	
66 2-Nitropropane	41	6.742	6.742	0.000	75	2714	2.00	1.67	
77 n-Butyl acetate	43	7.916	7.916	0.000	91	10102	1.00	1.09	
81 1-Chlorohexane	91	8.497	8.497	0.000	33	10316	1.00	0.9434	
91 Cyclohexanone	55	9.564	9.564	0.000	9	1861	10.0	7.42	
103 Pentachloroethane	167	10.382	10.382	0.000	91	14601	2.00	1.83	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	96	46903	1.00	0.8707	
110 Benzyl chloride	126	10.904	10.904	0.000	96	2847	1.00	0.9454	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	91	16046	1.00	0.9015	
119 2-Methylnaphthalene	142	14.414	14.414	0.000	90	27328	2.00	2.35	

Reagents:

vm100is_stk_00036 Amount Added: 1.00 Units: uL
vmra9w_00222 Amount Added: 0.80 Units: uL

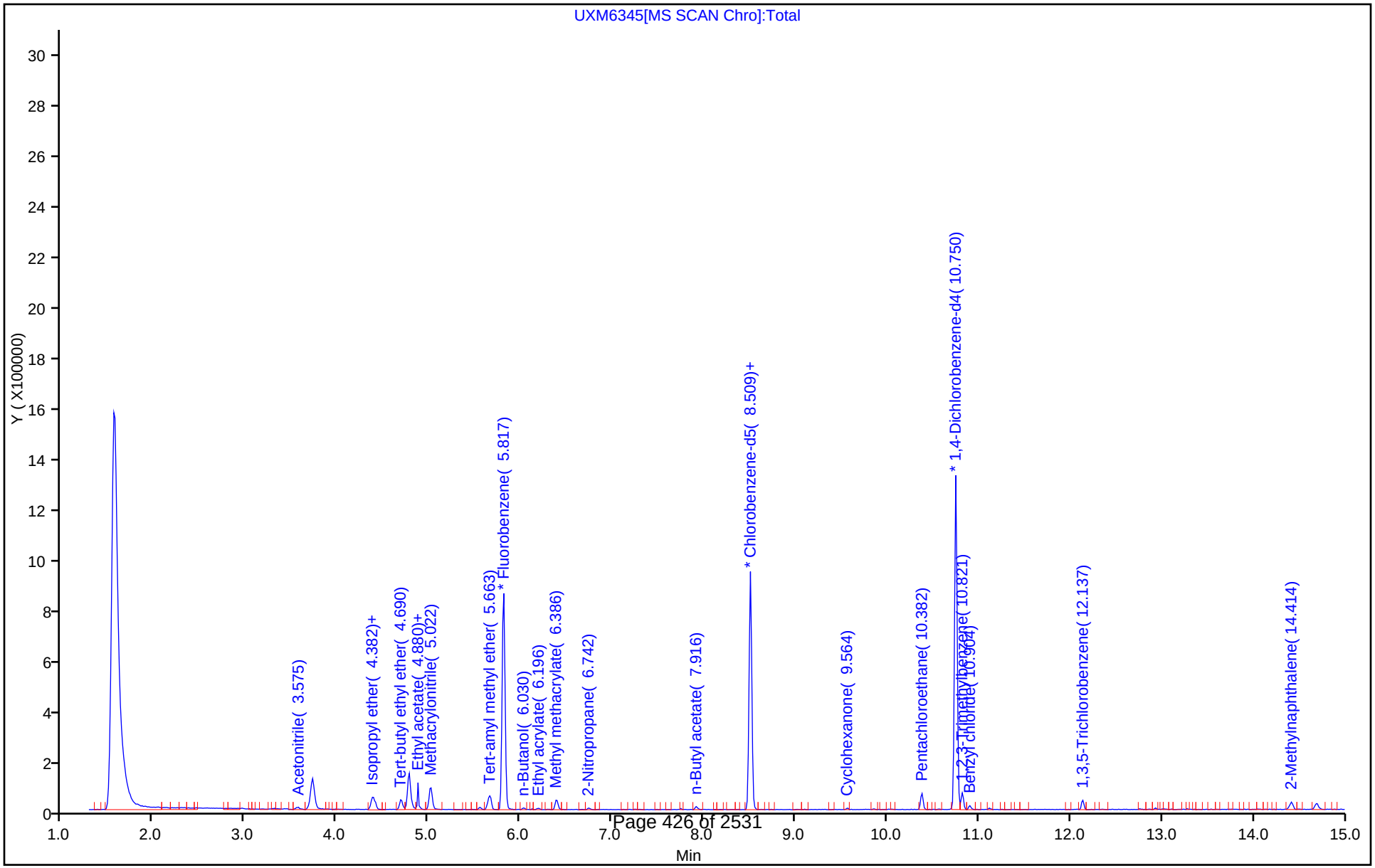
Report Date: 04-Oct-2017 20:10:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6345.D

Injection Date:	03-Oct-2017 20:26:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	stdA9 L2			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6346.D
Lims ID: stdA9 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 20:49:30 ALS Bottle#: 4 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-021
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub86

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 04-Oct-2017 20:10:16 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: bosworthh Date: 04-Oct-2017 08:20:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	956381	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.509	-0.001	86	664725	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	441065	20.0	20.0	
25 Acetonitrile	41	3.563	3.564	-0.001	100	121208	100.0	97.6	
36 Isopropyl ether	87	4.382	4.382	0.000	92	138554	10.0	11.0	
37 2-Chloro-1,3-butadiene	53	4.405	4.405	0.000	91	223827	10.0	10.5	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	96	410942	10.0	10.2	
43 Ethyl acetate	43	4.880	4.880	0.000	99	132204	20.0	19.6	
42 Propionitrile	54	4.892	4.880	0.012	98	134730	100.0	97.4	
44 Methacrylonitrile	41	5.010	5.022	-0.012	91	548741	100.0	98.8	
55 Tert-amyl methyl ether	73	5.662	5.662	0.000	99	400430	10.0	10.2	
57 n-Butanol	56	6.030	6.030	0.000	90	49020	250.0	255.5	
59 Ethyl acrylate	55	6.196	6.196	0.000	98	79012	10.0	10.3	
62 Methyl methacrylate	41	6.398	6.398	0.000	88	114243	20.0	20.3	
66 2-Nitropropane	41	6.742	6.742	0.000	100	34419	20.0	20.7	
77 n-Butyl acetate	43	7.916	7.916	0.000	95	94874	10.0	9.98	
81 1-Chlorohexane	91	8.497	8.497	0.000	96	111199	10.0	9.76	
91 Cyclohexanone	55	9.564	9.564	0.000	90	26797	100.0	107.4	
103 Pentachloroethane	167	10.382	10.382	0.000	95	170955	20.0	20.6	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	98	562929	10.0	10.5	
110 Benzyl chloride	126	10.904	10.904	0.000	98	41895	10.0	8.58	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	97	187380	10.0	10.6	
119 2-Methylnaphthalene	142	14.414	14.414	0.000	92	384826	20.0	17.6	

Reagents:

vm100is_stk_00036 Amount Added: 1.00 Units: uL
vmra9w_00222 Amount Added: 8.00 Units: uL

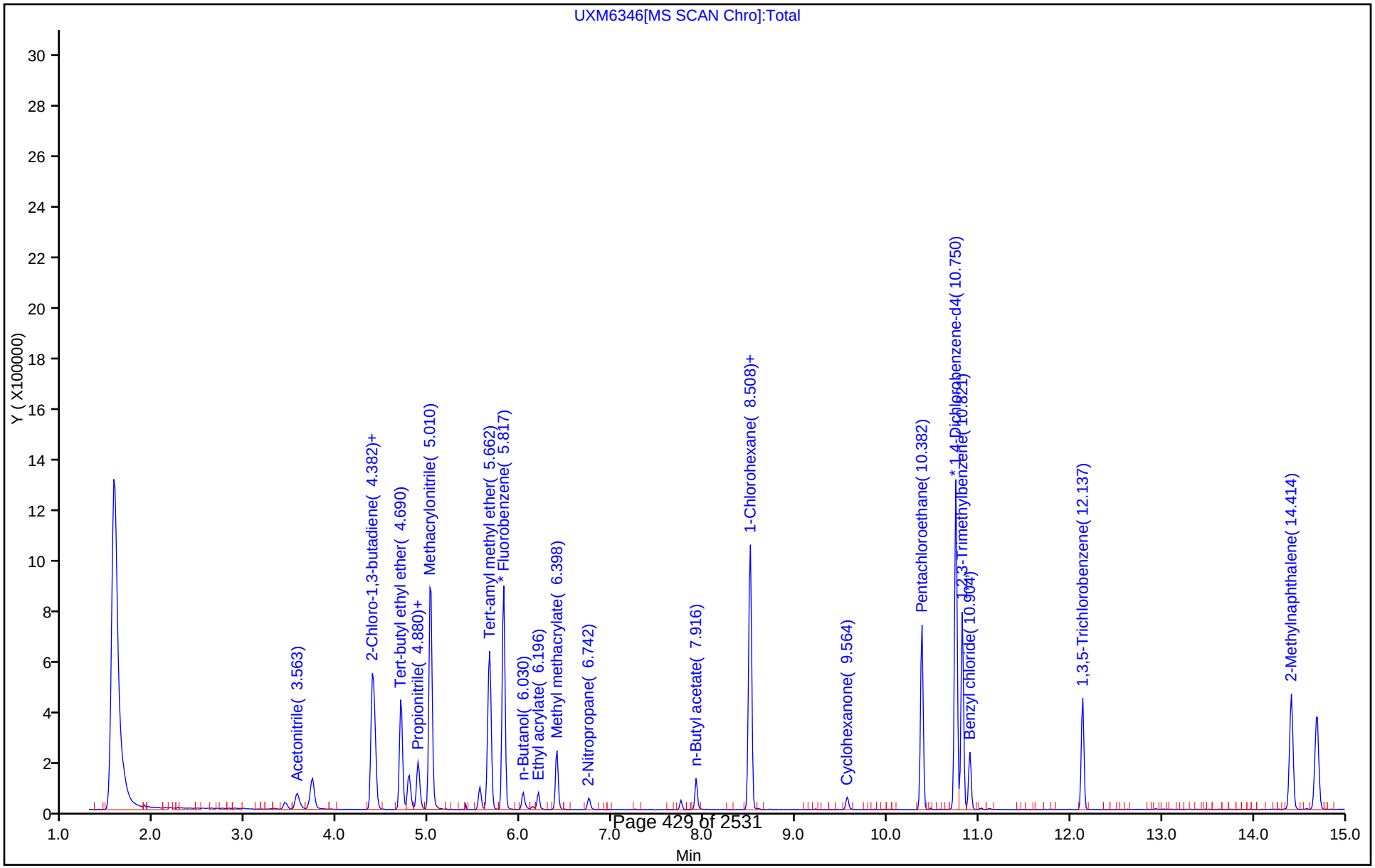
Report Date: 04-Oct-2017 20:10:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6346.D

Injection Date:	03-Oct-2017 20:49:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	stdA9 L3			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6347.D
Lims ID: stdA9 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 21:12:30 ALS Bottle#: 5 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-022
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub86

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 04-Oct-2017 20:10:18 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: bosworthh Date: 04-Oct-2017 08:19:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	998795	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.508	0.000	87	664394	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	447334	20.0	20.0	
25 Acetonitrile	41	3.563	3.563	0.000	98	241769	200.0	186.4	
36 Isopropyl ether	87	4.382	4.382	0.000	92	252211	20.0	19.2	
37 2-Chloro-1,3-butadiene	53	4.405	4.405	0.000	92	414789	20.0	18.6	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	97	817129	20.0	19.4	
42 Propionitrile	54	4.880	4.880	0.000	100	275167	200.0	190.5	
43 Ethyl acetate	43	4.880	4.880	0.000	99	258648	40.0	36.7	
44 Methacrylonitrile	41	5.010	5.010	0.000	91	1075329	200.0	185.4	
55 Tert-amyl methyl ether	73	5.662	5.662	0.000	95	771187	20.0	18.9	
57 n-Butanol	56	6.030	6.030	0.000	90	98305	500.0	490.7	
59 Ethyl acrylate	55	6.196	6.196	0.000	99	154359	20.0	19.3	
62 Methyl methacrylate	41	6.398	6.398	0.000	86	222110	40.0	37.7	
66 2-Nitropropane	41	6.742	6.742	0.000	97	68268	40.0	39.3	
77 n-Butyl acetate	43	7.916	7.916	0.000	96	189865	20.0	19.1	
81 1-Chlorohexane	91	8.497	8.497	0.000	96	209020	20.0	18.4	
91 Cyclohexanone	55	9.564	9.564	0.000	91	49303	200.0	194.8	
103 Pentachloroethane	167	10.382	10.382	0.000	94	325930	40.0	39.3	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	98	1073614	20.0	19.8	
110 Benzyl chloride	126	10.904	10.904	0.000	99	87117	20.0	17.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	97	342001	20.0	19.0	
119 2-Methylnaphthalene	142	14.414	14.414	0.000	92	826566	40.0	35.8	

Reagents:

vm100is_stk_00036 Amount Added: 1.00 Units: uL
vmra9w_00222 Amount Added: 16.00 Units: uL

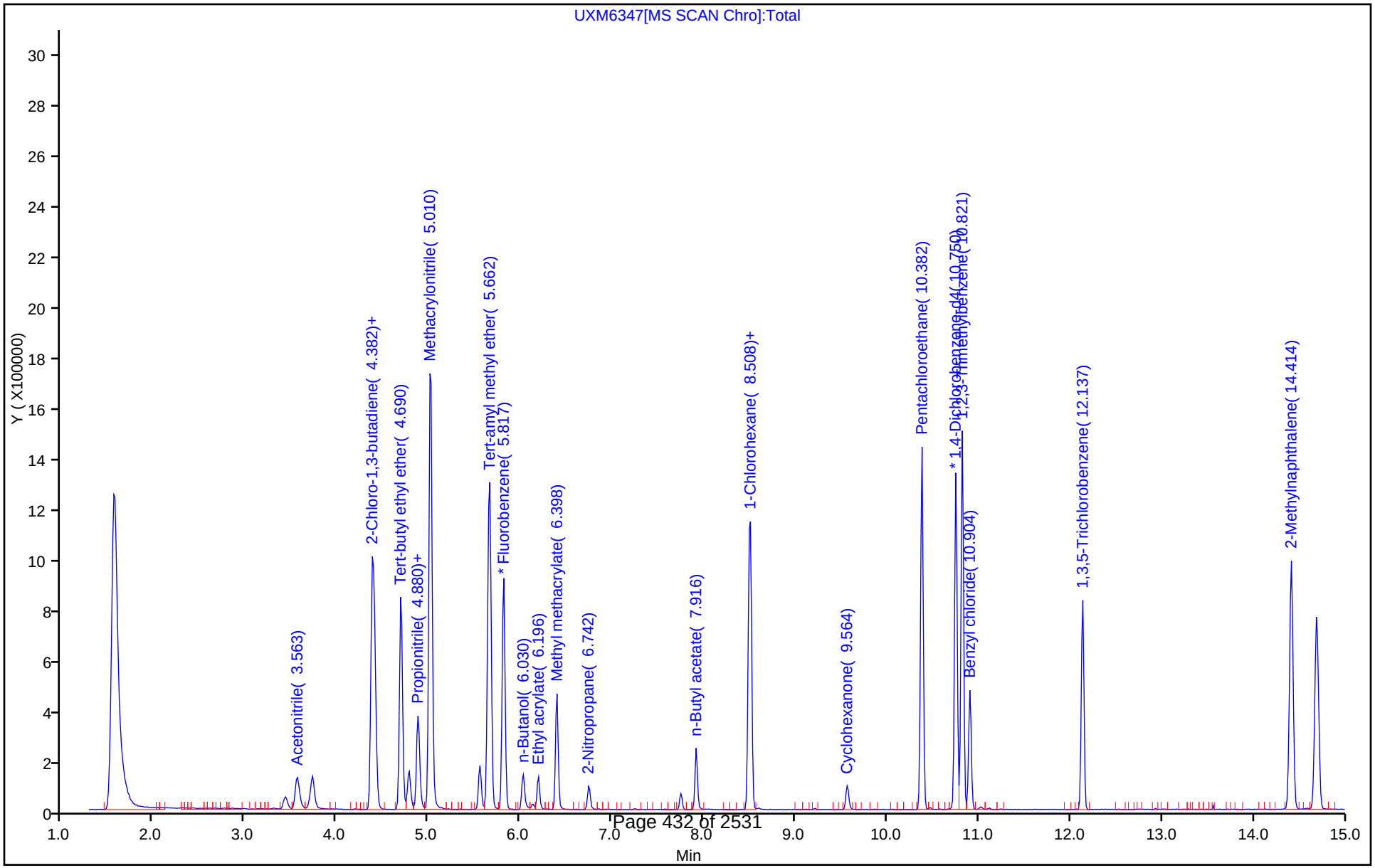
Report Date: 04-Oct-2017 20:10:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6347.D

Injection Date:	03-Oct-2017 21:12:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	stdA9 L4			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6348.D
Lims ID: stdA9 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 21:35:30 ALS Bottle#: 6 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-023
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub86

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 04-Oct-2017 20:10:20 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: bosworthh Date: 04-Oct-2017 08:18:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1009120	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	87	677986	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	450818	20.0	20.0	
25 Acetonitrile	41	3.564	3.564	0.000	100	491042	400.0	374.6	
36 Isopropyl ether	87	4.382	4.382	0.000	92	527205	40.0	39.7	
37 2-Chloro-1,3-butadiene	53	4.405	4.405	0.000	93	865841	40.0	38.4	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	97	1673780	40.0	39.4	
43 Ethyl acetate	43	4.880	4.880	0.000	99	526913	80.0	73.9	
42 Propionitrile	54	4.880	4.880	0.000	99	548822	400.0	376.0	
44 Methacrylonitrile	41	5.022	5.022	0.000	90	2232978	400.0	381.1	
55 Tert-amyl methyl ether	73	5.662	5.662	0.000	99	1639190	40.0	39.7	
57 n-Butanol	56	6.030	6.030	0.000	86	211132	1000.0	1043.0	
59 Ethyl acrylate	55	6.196	6.196	0.000	99	312881	40.0	38.8	
62 Methyl methacrylate	41	6.398	6.398	0.000	87	485787	80.0	81.6	
66 2-Nitropropane	41	6.742	6.742	0.000	99	148143	80.0	84.4	
77 n-Butyl acetate	43	7.916	7.916	0.000	97	388464	40.0	38.7	
81 1-Chlorohexane	91	8.497	8.497	0.000	96	459136	40.0	39.5	
91 Cyclohexanone	55	9.564	9.564	0.000	92	121921	400.0	478.0	
103 Pentachloroethane	167	10.382	10.382	0.000	95	691532	80.0	81.7	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	98	2289866	40.0	41.8	
110 Benzyl chloride	126	10.904	10.904	0.000	99	208204	40.0	40.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	97	765091	40.0	42.3	
119 2-Methylnaphthalene	142	14.414	14.414	0.000	92	1877140	80.0	79.3	

Reagents:

vm100is_stk_00036 Amount Added: 1.00 Units: uL
vmra9w_00222 Amount Added: 32.00 Units: uL

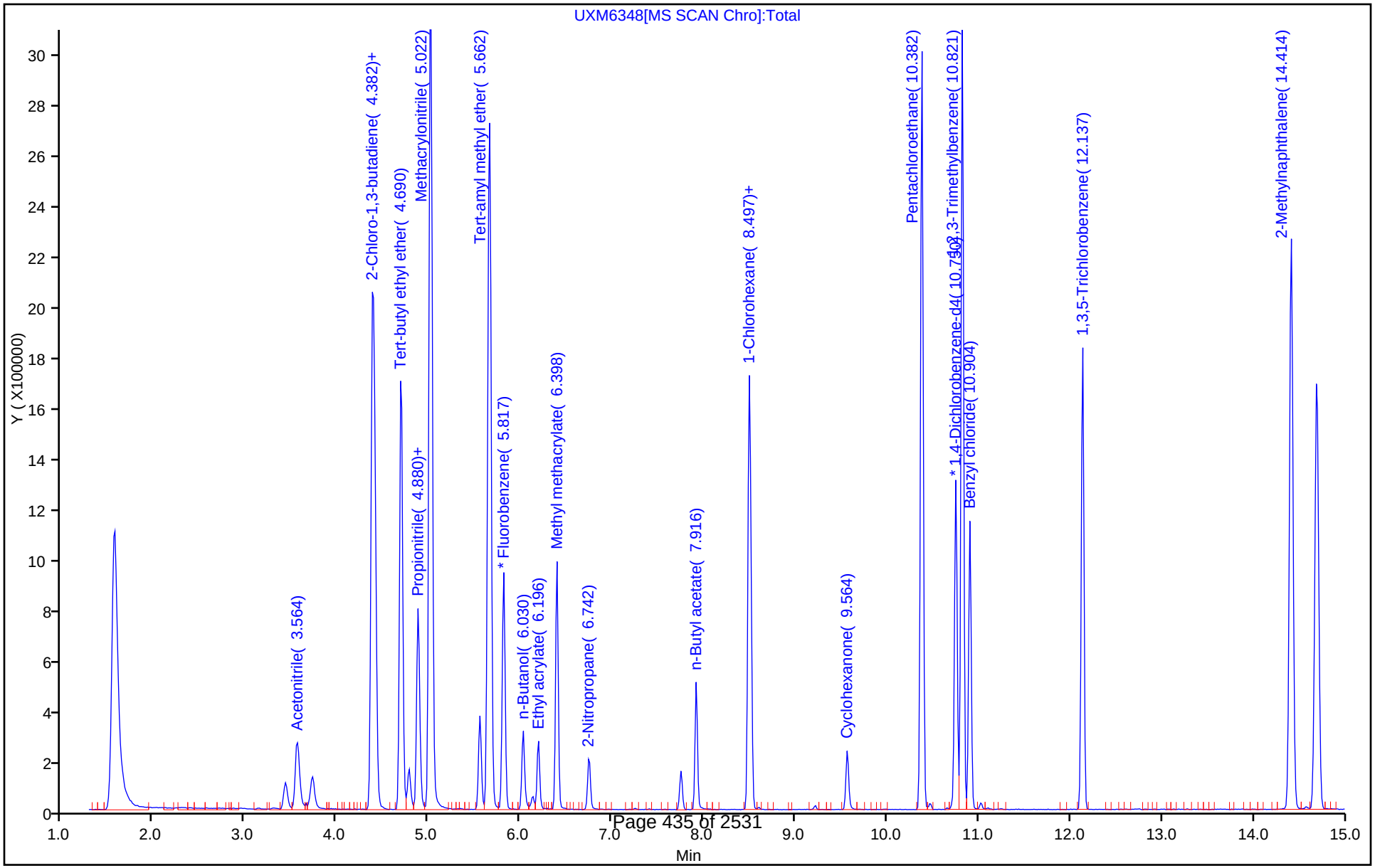
Report Date: 04-Oct-2017 20:10:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6348.D

Injection Date:	03-Oct-2017 21:35:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	stdA9 L5			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D
Lims ID: stdA9 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 21:59:30 ALS Bottle#: 7 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-024
Operator ID: 001904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub86

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 04-Oct-2017 20:10:23 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: laveyt Date: 04-Oct-2017 20:02:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1031628	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	86	675593	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	454784	20.0	20.0	
25 Acetonitrile	41	3.564	3.564	0.000	99	770258	600.0	574.8	
36 Isopropyl ether	87	4.382	4.382	0.000	92	819353	60.0	60.3	
37 2-Chloro-1,3-butadiene	53	4.405	4.405	0.000	93	1411669	60.0	61.2	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	97	2666749	60.0	61.3	
42 Propionitrile	54	4.880	4.880	0.000	99	860837	600.0	576.9	
43 Ethyl acetate	43	4.880	4.880	0.000	99	804417	120.0	110.4	
44 Methacrylonitrile	41	5.010	5.022	-0.012	91	3546513	600.0	592.0	
55 Tert-amyl methyl ether	73	5.662	5.662	0.000	99	2614662	60.0	62.0	
57 n-Butanol	56	6.030	6.030	0.000	86	332867	1500.0	1608.5	
59 Ethyl acrylate	55	6.196	6.196	0.000	99	499329	60.0	60.6	
62 Methyl methacrylate	41	6.398	6.398	0.000	87	760741	120.0	125.0	
66 2-Nitropropane	41	6.742	6.742	0.000	100	235122	120.0	131.1	
77 n-Butyl acetate	43	7.916	7.916	0.000	96	610794	60.0	59.6	
81 1-Chlorohexane	91	8.485	8.497	-0.012	97	771733	60.0	66.7	
91 Cyclohexanone	55	9.564	9.564	0.000	92	185472	600.0	720.8	
103 Pentachloroethane	167	10.382	10.382	0.000	97	1072254	120.0	127.2	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	98	3671794	60.0	66.5	
110 Benzyl chloride	126	10.904	10.904	0.000	99	334986	60.0	63.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	98	1195018	60.0	65.5	
119 2-Methylnaphthalene	142	14.414	14.414	0.000	92	3051254	120.0	127.0	

Reagents:

vm100is_stk_00036 Amount Added: 1.00 Units: uL
vmra9w_00222 Amount Added: 48.00 Units: uL

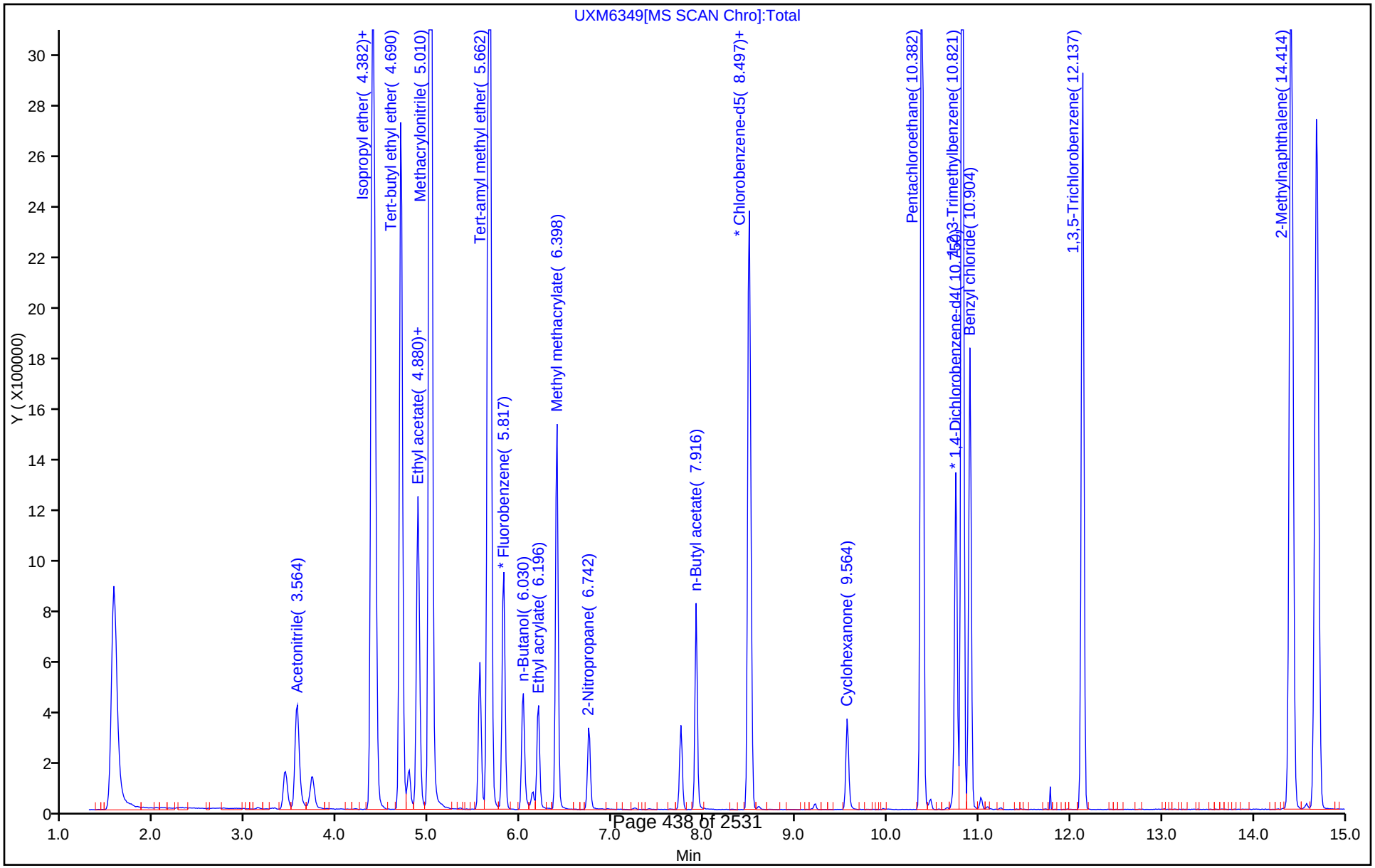
Report Date: 04-Oct-2017 20:10:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Injection Date:	03-Oct-2017 21:59:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	stdA9 L6			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 285694

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/02/2017 08:14 Calibration End Date: 07/02/2017 10:48 Calibration ID: 40518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-285694/18	UX80998.D
Level 2	STDA9 240-285694/17	UX80997.D
Level 3	STDA9 240-285694/16	UX80996.D
Level 4	STDA9 240-285694/15	UX80995.D
Level 5	STDA9 240-285694/14	UX80994.D
Level 6	STDA9 240-285694/13	UX80993.D
Level 7	STDA9 240-285694/12	UX80992.D
Level 8	STDA9 240-285694/11	UX80991.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	+++++ 0.0450	+++++ 0.0560	0.0454 0.0668	0.0440	0.0433	Qua	-0.392	0.0433	0.0000119						1.0000		0.9900
Diisopropyl ether	0.1879 0.2230	0.1825 0.2169	0.2212 0.2152	0.2140	0.2077	Ave		0.2086				7.3		20.0			
2-Chloro-1,3-butadiene	0.4371 0.4958	0.3493 0.4856	0.4371 0.4822	0.4527	0.4443	Ave		0.4480				10.3		20.0			
Ethyl t-butyl ether	0.8319 0.9096	0.6982 0.9060	0.8401 0.8883	0.8216	0.8184	Ave		0.8392				8.1		20.0			
Ethyl acetate	1.1747 0.4207	0.7207 0.5039	0.6054 0.6092	0.4906	0.4214	Qua	1.5447	0.3694	0.0005914						1.0000		0.9900
Propionitrile	0.0541 0.0498	0.0431 0.0600	0.0535 0.0716	0.0489	0.0480	Qua	-0.058	0.0464	0.0000127						1.0000		0.9900
Methacrylonitrile	0.2834 0.2715	0.2304 0.3203	0.2895 0.3185	0.2658	0.2583	Ave		0.2797				10.8		20.0			
Tert-amyl methyl ether	0.5796 0.6562	0.5131 0.6938	0.6237 0.7021	0.6023	0.5952	Ave		0.6207				10.1		20.0			
n-Butanol	+++++ 0.0090	+++++ 0.0136	0.0072 0.0195	0.0083	0.0075	Qua	-0.293	0.0072	0.0000025						1.0000		0.9900
Ethyl acrylate	+++++ 0.4350	0.2793 0.5009	0.3693 0.6081	0.3868	0.3639	Qua	-0.376	0.3924	0.0010895						1.0000		0.9900
Methyl methacrylate	+++++ 0.3915	+++++ 0.4518	0.3732 0.5195	0.3550	0.3400	Qua	-1.073	0.3796	0.0003578						1.0000		0.9900
2-Nitropropane	0.0862 0.0875	0.0550 0.1211	0.0686 +++++	0.0629	0.0654	Qua	0.0565	0.0522	0.0003431						1.0000		0.9900
n-Butyl acetate	+++++ 0.6436	+++++ 0.7412	0.6470 0.8705	0.5853	0.5744	Qua	-0.488	0.6030	0.0013531						1.0000		0.9900
1-Chlorohexane	0.3939 0.3485	0.2714 0.3393	0.3313 0.3557	0.3250	0.3248	Ave		0.3362				10.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 285694

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/02/2017 08:14 Calibration End Date: 07/02/2017 10:48 Calibration ID: 40518

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0103 0.0134	0.0094 0.0197	0.0132 0.0241	0.0126	0.0121	Qua	-0.251	0.0137	0.0000053						0.9990		0.9900
Pentachloroethane	+++++ 0.2725	0.1499 0.3186	0.2212 +++++	0.2234	0.1711	Qua	-0.473	0.2121	0.0005489						0.9980		0.9900
1,2,3-Trimethylbenzene	2.0426 2.4530	1.6937 2.3690	2.3051 2.3251	2.2837	2.2294	Ave		2.2127				10.9		20.0			
Benzyl chloride	+++++ 0.1366	0.0435 0.2008	0.0667 +++++	0.0695	0.0801	Qua	-0.123	0.0707	0.0013161						1.0000		0.9900
1,3,5-Trichlorobenzene	0.8707 0.9127	0.7261 0.8844	0.8775 0.8591	0.8875	0.8669	Ave		0.8606				6.6		20.0			
2-Methylnaphthalene	+++++ 1.5078	0.7770 1.7390	1.0754 +++++	1.1830	1.3559	Qua	-2.616	1.3180	0.0021699						1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 285694

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/02/2017 08:14 Calibration End Date: 07/02/2017 10:48 Calibration ID: 40518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-285694/18	UX80998.D
Level 2	STDA9 240-285694/17	UX80997.D
Level 3	STDA9 240-285694/16	UX80996.D
Level 4	STDA9 240-285694/15	UX80995.D
Level 5	STDA9 240-285694/14	UX80994.D
Level 6	STDA9 240-285694/13	UX80993.D
Level 7	STDA9 240-285694/12	UX80992.D
Level 8	STDA9 240-285694/11	UX80991.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Acetonitrile	FB	Qua	+++++ 599683	+++++ 1473573	62485 3643877	121506	234485	+++++ 500	+++++ 1000	50.0 2000	100	200
Diisopropyl ether	FB	Ave	4989 297486	9762 570210	30470 1174672	59102	112461	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloro-1,3-butadiene	FB	Ave	11605 661246	18690 1276954	60195 2631748	124998	240635	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl t-butyl ether	FB	Ave	22086 1213089	37356 2382246	115699 4847800	226851	443203	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl acetate	FB	Qua	62378 1122292	77125 2650083	166755 6649057	270903	456473	2.00 100	4.00 200	10.0 400	20.0	40.0
Propionitrile	FB	Qua	14367 663536	23057 1578613	73625 3908200	134943	259941	10.0 500	20.0 1000	50.0 2000	100	200
Methacrylonitrile	FB	Ave	75246 3620561	123269 8422803	398751 17384973	734016	1399026	10.0 500	20.0 1000	50.0 2000	100	200
Tert-amyl methyl ether	FB	Ave	15388 875218	27451 1824268	85898 3831614	166318	322312	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butanol	FB	Qua	+++++ 299727	+++++ 896195	24888 2660502	56983	102145	+++++ 1250	+++++ 2500	125 5000	250	500
Ethyl acrylate	FB	Qua	+++++ 580110	14944 1316991	50862 3319011	106815	197076	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Methyl methacrylate	FB	Qua	+++++ 1044327	+++++ 2375987	102807 5670805	196018	368244	+++++ 100	+++++ 200	10.0 400	20.0	40.0
2-Nitropropane	FB	Qua	4579 233282	5885 636976	18907 +++++	34713	70874	2.00 100	4.00 200	10.0 +++++	20.0	40.0
n-Butyl acetate	FB	Qua	+++++ 858391	+++++ 1948921	89103 4751007	161607	311075	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1-Chlorohexane	CBNZ d5	Ave	7662 351566	10501 671048	34089 1480379	66311	127913	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexanone	CBNZ d5	Qua	2008 135441	3636 389660	13537 1004542	25662	47694	10.0 500	20.0 1000	50.0 2000	100	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 285694

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/02/2017 08:14 Calibration End Date: 07/02/2017 10:48 Calibration ID: 40518

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Pentachloroethane	DCBd 4	Qua	+++++ 293210	6274 695551	24003 +++++	48102	71471	+++++ 100	4.00 200	10.0 +++++	20.0	40.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	21563 1319634	35439 2585549	125092 5202961	245894	465572	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Benzyl chloride	DCBd 4	Qua	+++++ 73489	911 219210	3621 +++++	7484	16722	+++++ 50.0	2.00 100	5.00 +++++	10.0	20.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	9192 491017	15192 965250	47619 1922382	95566	181034	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Methylnaphthalene	DCBd 4	Qua	+++++ 1622273	32516 3795926	116722 +++++	254749	566307	+++++ 100	4.00 200	10.0 +++++	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80991.D
Lims ID: STDA9 L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-Jul-2017 08:14:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-011
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:48 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:45:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.160	-0.001	99	1364402	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.692	7.692	0.000	97	1040513	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.881	9.881	0.000	96	559442	50.0	50.0	
25 Acetonitrile	41	3.183	3.181	0.002	99	3643877	2000.0	1997.8	
36 Isopropyl ether	87	3.893	3.891	0.002	94	1174672	200.0	206.4	
37 2-Chloro-1,3-butadiene	53	3.917	3.915	0.002	96	2631748	200.0	215.3	
38 Tert-butyl ethyl ether	59	4.166	4.163	0.003	97	4847800	200.0	211.7	
42 Ethyl acetate	43	4.319	4.317	0.002	99	6649057	400.0	399.7	
43 Propionitrile	54	4.319	4.317	0.002	67	3908200	2000.0	1998.2	
44 Methacrylonitrile	41	4.438	4.436	0.002	94	17384973	2000.0	2277.5	e
55 Tert-amyl methyl ether	73	5.029	5.027	0.002	93	3831614	200.0	226.2	
57 n-Butanol	56	5.337	5.335	0.002	96	2660502	5000.0	4995.3	
59 Ethyl acrylate	55	5.491	5.489	0.002	99	3319011	200.0	199.9	
62 Methyl methacrylate	41	5.680	5.678	0.002	87	5670805	400.0	399.7	
66 2-Nitropropane	41	6.000	5.997	0.003	99	1795876	400.0	368.2	
77 n-Butyl acetate	43	7.112	7.110	0.002	97	4751007	200.0	199.9	
81 1-Chlorohexane	91	7.668	7.666	0.002	79	1480379	200.0	211.6	
91 Cyclohexanone	55	8.709	8.707	0.002	94	1004542	2000.0	1995.4	
101 Pentachloroethane	167	9.514	9.512	0.002	0	1636480	400.0	358.7	
107 1,2,3-Trimethylbenzene	105	9.952	9.950	0.002	99	5202961	200.0	210.2	
108 Benzyl chloride	126	10.035	10.032	0.003	98	581852	200.0	174.0	
112 1,3,5-Trichlorobenzene	180	11.253	11.251	0.002	97	1922382	200.0	199.6	
117 2-Methylnaphthalene	142	13.431	13.428	0.003	92	7179098	400.0	320.1	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

VMRA9W_00211	Amount Added:	20.00	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

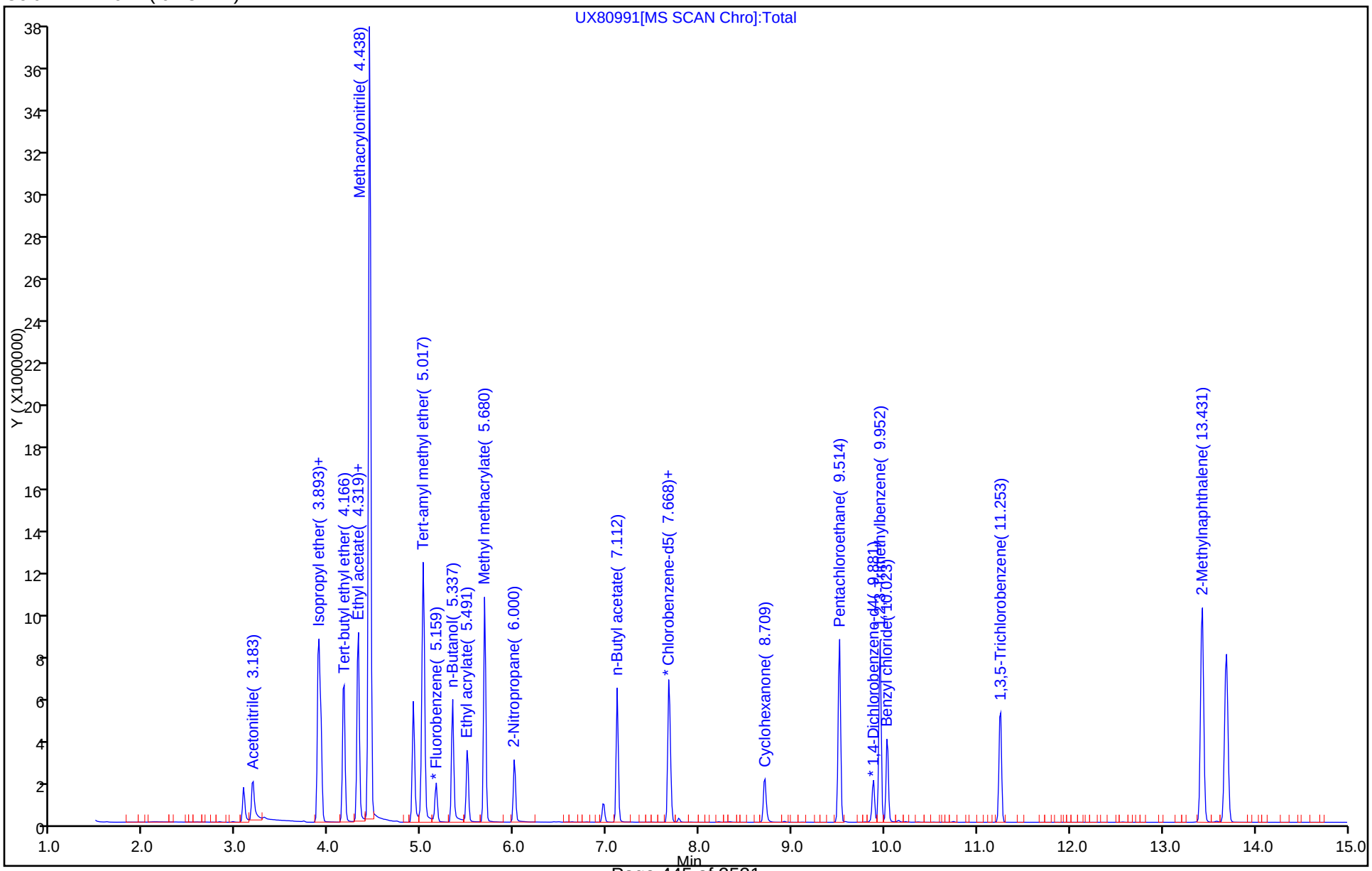
Report Date: 03-Jul-2017 01:23:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80991.D

Injection Date:	02-Jul-2017 08:14:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L8			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80992.D
Lims ID: STDA9 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Jul-2017 08:36:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-012
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:49 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:45:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.156	5.160	-0.004	99	1314713	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.692	-0.003	96	989010	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.881	-0.003	98	545716	50.0	50.0	
25 Acetonitrile	41	3.180	3.181	-0.001	99	1473573	1000.0	1018.4	
36 Isopropyl ether	87	3.890	3.891	-0.001	94	570210	100.0	104.0	
37 2-Chloro-1,3-butadiene	53	3.914	3.915	-0.001	96	1276954	100.0	108.4	
38 Tert-butyl ethyl ether	59	4.162	4.163	-0.001	97	2382246	100.0	108.0	
43 Propionitrile	54	4.316	4.317	-0.001	74	1578613	1000.0	1014.5	
42 Ethyl acetate	43	4.316	4.317	-0.001	99	2650083	200.0	202.8	
44 Methacrylonitrile	41	4.435	4.436	-0.001	98	8422803	1000.0	1145.1	
55 Tert-amyl methyl ether	73	5.026	5.027	-0.001	95	1824268	100.0	111.8	
57 n-Butanol	56	5.334	5.335	-0.001	95	896195	2500.0	2547.2	
59 Ethyl acrylate	55	5.488	5.489	-0.001	99	1316991	100.0	100.5	
62 Methyl methacrylate	41	5.677	5.678	-0.001	87	2375987	200.0	202.3	
66 2-Nitropropane	41	5.996	5.997	-0.001	99	636976	200.0	200.0	
77 n-Butyl acetate	43	7.109	7.110	-0.001	97	1948921	100.0	100.9	
81 1-Chlorohexane	91	7.665	7.666	-0.001	78	671048	100.0	100.9	
91 Cyclohexanone	55	8.706	8.707	-0.001	94	389660	1000.0	1038.7	
101 Pentachloroethane	167	9.511	9.512	-0.001	0	695551	200.0	199.6	
107 1,2,3-Trimethylbenzene	105	9.949	9.950	-0.001	98	2585549	100.0	107.1	
108 Benzyl chloride	126	10.031	10.032	-0.001	98	219210	100.0	99.9	
112 1,3,5-Trichlorobenzene	180	11.250	11.251	-0.001	97	965250	100.0	102.8	
117 2-Methylnaphthalene	142	13.427	13.428	-0.001	93	3795926	200.0	200.0	

Reagents:

VMRA9W_00211	Amount Added:	10.00	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

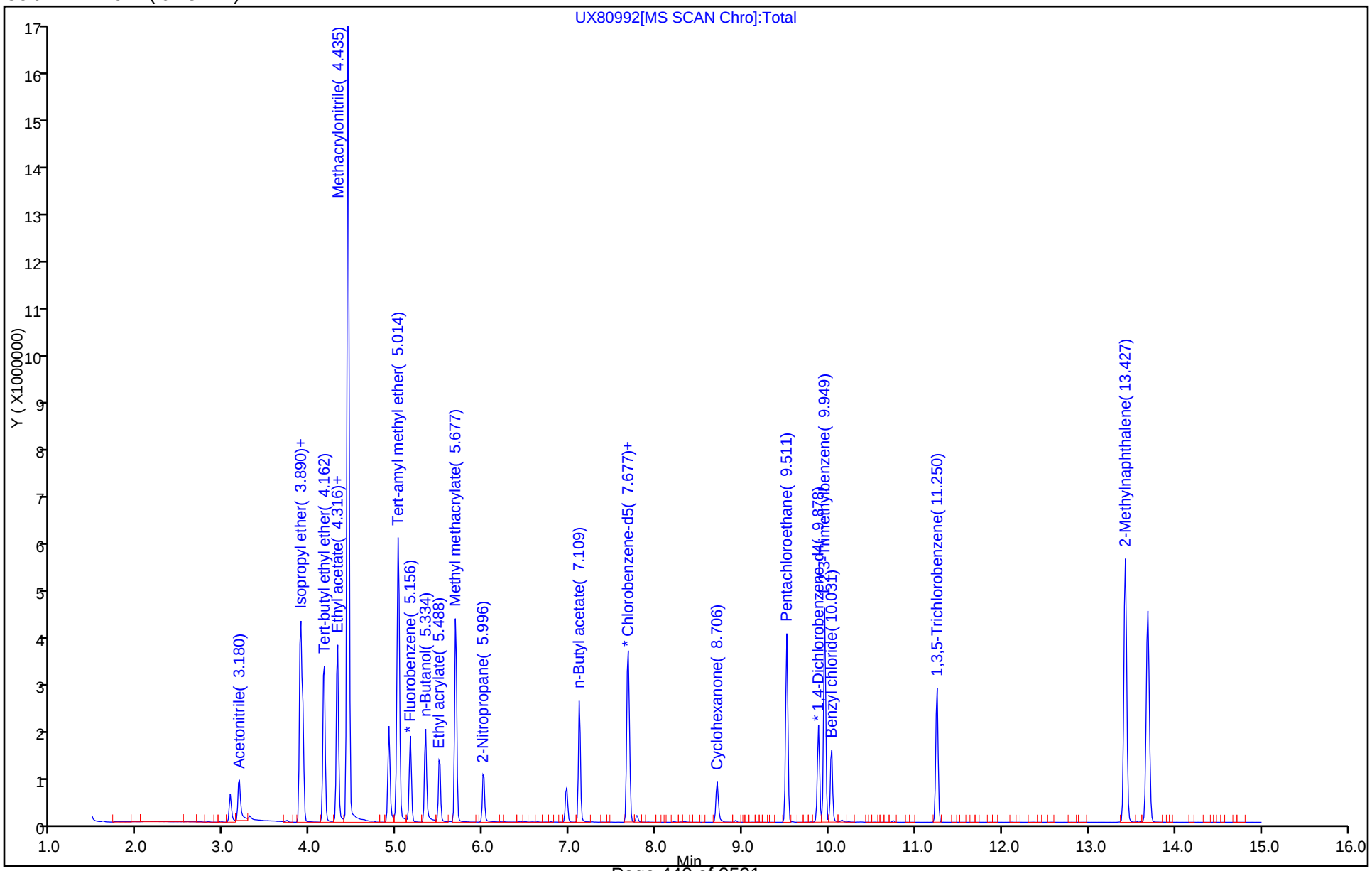
Report Date: 03-Jul-2017 01:23:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80992.D

Injection Date:	02-Jul-2017 08:36:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L7			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80993.D
Lims ID: STDA9 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Jul-2017 08:58:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-013
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:51 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:46:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.160	5.160	0.000	99	1333722	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.692	7.692	0.000	97	1008835	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.881	9.881	0.000	98	537966	50.0	50.0	
25 Acetonitrile	41	3.172	3.181	-0.009	99	599683	500.0	468.0	
36 Isopropyl ether	87	3.894	3.891	0.003	94	297486	50.0	53.5	
37 2-Chloro-1,3-butadiene	53	3.918	3.915	0.003	96	661246	50.0	55.3	
38 Tert-butyl ethyl ether	59	4.154	4.163	-0.009	96	1213089	50.0	54.2	
42 Ethyl acetate	43	4.308	4.317	-0.009	99	1122292	100.0	95.2	
43 Propionitrile	54	4.320	4.317	0.003	72	663536	500.0	475.7	
44 Methacrylonitrile	41	4.438	4.436	0.002	98	3620561	500.0	485.2	
55 Tert-amyl methyl ether	73	5.018	5.027	-0.009	90	875218	50.0	52.9	
57 n-Butanol	56	5.338	5.335	0.003	95	299727	1250.0	1150.1	
59 Ethyl acrylate	55	5.491	5.489	0.002	99	580110	50.0	49.6	
62 Methyl methacrylate	41	5.681	5.678	0.003	87	1044327	100.0	97.1	
66 2-Nitropropane	41	6.000	5.997	0.003	99	233282	100.0	100.3	
77 n-Butyl acetate	43	7.113	7.110	0.003	97	858391	50.0	48.8	
81 1-Chlorohexane	91	7.669	7.666	0.003	82	351566	50.0	51.8	
91 Cyclohexanone	55	8.710	8.707	0.003	94	135441	500.0	435.6	
101 Pentachloroethane	167	9.515	9.512	0.003	0	293210	100.0	103.2	
107 1,2,3-Trimethylbenzene	105	9.952	9.950	0.002	99	1319634	50.0	55.4	
108 Benzyl chloride	126	10.035	10.032	0.003	98	73489	50.0	50.6	
112 1,3,5-Trichlorobenzene	180	11.254	11.251	0.003	97	491017	50.0	53.0	
117 2-Methylnaphthalene	142	13.431	13.428	0.003	93	1622273	100.0	99.9	

Reagents:

VMRA9W_00211	Amount Added:	5.00	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

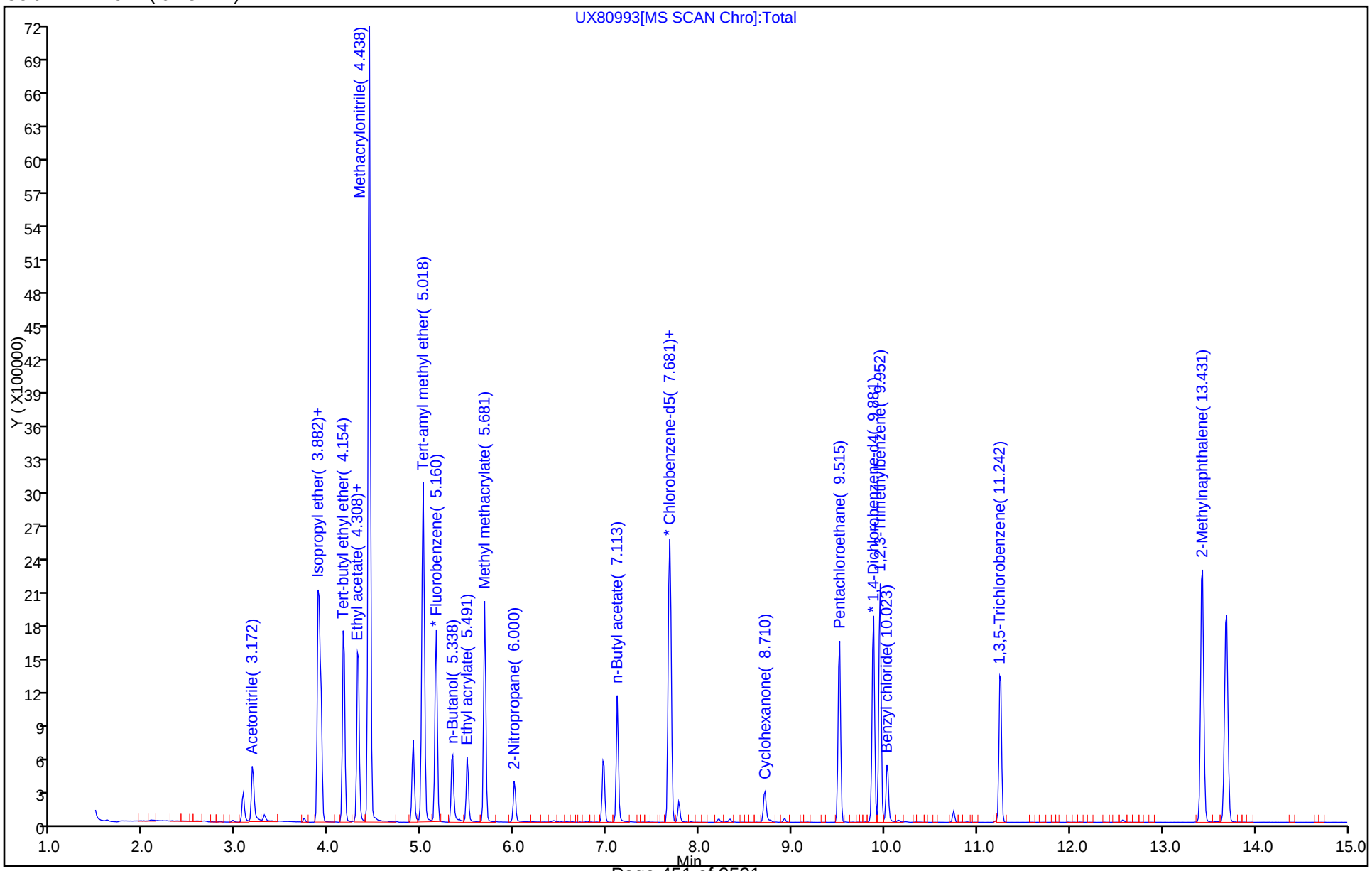
Report Date: 03-Jul-2017 01:23:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80993.D

Injection Date:	02-Jul-2017 08:58:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L6			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80994.D
Lims ID: STDA9 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Jul-2017 09:19:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-014
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:52 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:46:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.157	0.000	99	1353877	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.690	7.690	0.000	97	984580	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.879	0.000	97	522072	50.0	50.0	
25 Acetonitrile	41	3.181	3.181	0.000	99	234485	200.0	198.2	
36 Isopropyl ether	87	3.891	3.891	0.000	94	112461	20.0	19.9	
37 2-Chloro-1,3-butadiene	53	3.915	3.915	0.000	96	240635	20.0	19.8	
38 Tert-butyl ethyl ether	59	4.163	4.163	0.000	96	443203	20.0	19.5	
43 Propionitrile	54	4.317	4.317	0.000	70	259941	200.0	197.6	
42 Ethyl acetate	43	4.317	4.317	0.000	99	456473	40.0	39.0	
44 Methacrylonitrile	41	4.436	4.436	0.000	98	1399026	200.0	184.7	
55 Tert-amyl methyl ether	73	5.027	5.027	0.000	91	322312	20.0	19.2	
57 n-Butanol	56	5.335	5.335	0.000	94	102145	500.0	485.5	
59 Ethyl acrylate	55	5.489	5.489	0.000	99	197076	20.0	18.5	
62 Methyl methacrylate	41	5.678	5.678	0.000	88	368244	40.0	37.3	
66 2-Nitropropane	41	5.997	5.997	0.000	100	70874	40.0	39.0	
77 n-Butyl acetate	43	7.110	7.110	0.000	97	311075	20.0	19.0	
81 1-Chlorohexane	91	7.666	7.666	0.000	85	127913	20.0	19.3	
91 Cyclohexanone	55	8.707	8.707	0.000	94	47694	200.0	182.7	
101 Pentachloroethane	167	9.512	9.512	0.000	0	71471	40.0	31.9	
107 1,2,3-Trimethylbenzene	105	9.950	9.950	0.000	98	465572	20.0	20.2	
108 Benzyl chloride	126	10.032	10.032	0.000	96	16722	20.0	18.2	
112 1,3,5-Trichlorobenzene	180	11.251	11.251	0.000	98	181034	20.0	20.1	
117 2-Methylnaphthalene	142	13.428	13.428	0.000	93	566307	40.0	40.4	

Reagents:

VMRA9W_00211	Amount Added:	2.00	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

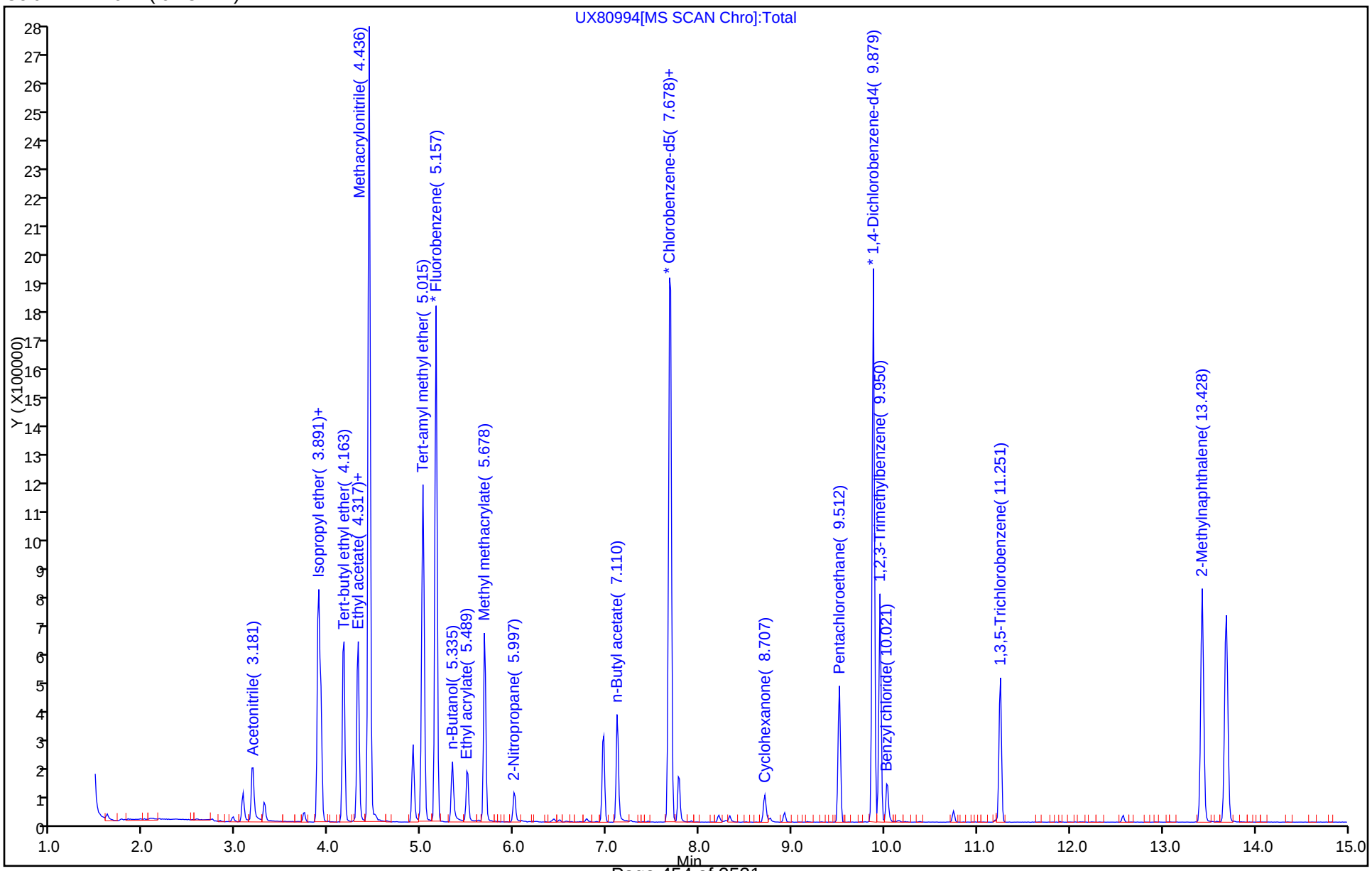
Report Date: 03-Jul-2017 01:23:53 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80994.D

Injection Date:	02-Jul-2017 09:19:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L5			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80995.D
Lims ID: STDA9 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Jul-2017 09:41:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-015
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:54 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:46:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.158	5.157	0.001	98	1380593	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.690	7.690	0.000	97	1020149	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.879	0.001	96	538372	50.0	50.0	
25 Acetonitrile	41	3.182	3.181	0.001	99	121506	100.0	107.5	
36 Isopropyl ether	87	3.892	3.891	0.001	93	59102	10.0	10.3	
37 2-Chloro-1,3-butadiene	53	3.916	3.915	0.001	96	124998	10.0	10.1	
38 Tert-butyl ethyl ether	59	4.164	4.163	0.001	96	226851	10.0	9.79	
42 Ethyl acetate	43	4.318	4.317	0.001	99	270903	20.0	21.6	
43 Propionitrile	54	4.318	4.317	0.001	67	134943	100.0	103.7	
44 Methacrylonitrile	41	4.436	4.436	0.000	98	734016	100.0	95.0	
55 Tert-amyl methyl ether	73	5.028	5.027	0.001	88	166318	10.0	9.70	
57 n-Butanol	56	5.336	5.335	0.001	92	56983	250.0	298.0	
59 Ethyl acrylate	55	5.501	5.489	0.012	99	106815	10.0	10.5	
62 Methyl methacrylate	41	5.679	5.678	0.001	87	196018	20.0	21.1	
66 2-Nitropropane	41	5.998	5.997	0.001	98	34713	20.0	20.3	
77 n-Butyl acetate	43	7.111	7.110	0.001	96	161607	10.0	10.3	
81 1-Chlorohexane	91	7.667	7.666	0.001	77	66311	10.0	9.67	
91 Cyclohexanone	55	8.708	8.707	0.001	91	25662	100.0	106.1	
101 Pentachloroethane	167	9.513	9.512	0.001	0	48102	20.0	22.0	
107 1,2,3-Trimethylbenzene	105	9.951	9.950	0.001	99	245894	10.0	10.3	
108 Benzyl chloride	126	10.033	10.032	0.001	96	7484	10.0	9.78	
112 1,3,5-Trichlorobenzene	180	11.252	11.251	0.001	96	95566	10.0	10.3	
117 2-Methylnaphthalene	142	13.429	13.428	0.001	93	254749	20.0	19.3	

Reagents:

VMRA9W_00211	Amount Added:	1.00	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

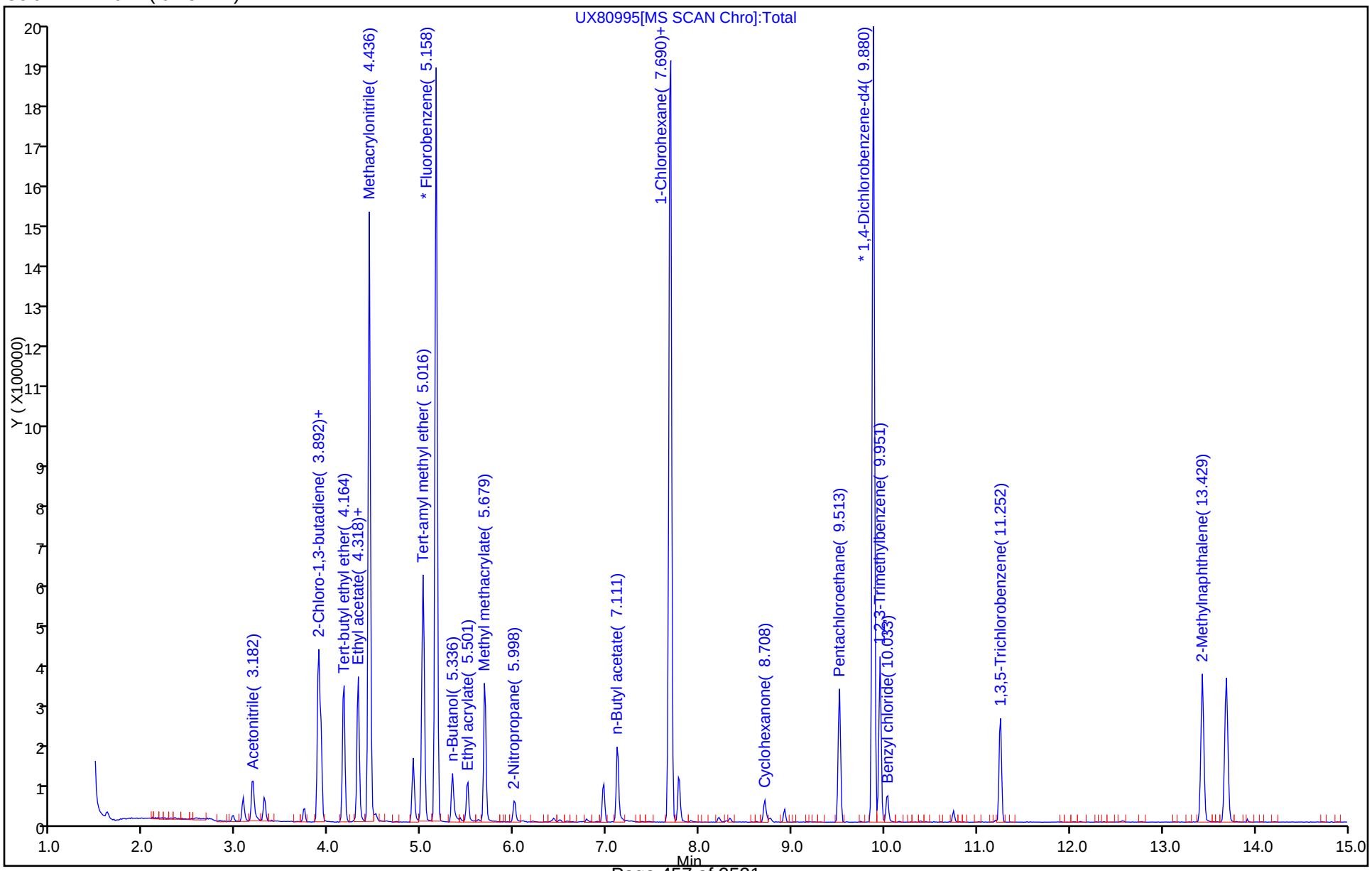
Report Date: 03-Jul-2017 01:23:55 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80995.D

Injection Date:	02-Jul-2017 09:41:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L4			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80996.D
Lims ID: STDA9 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Jul-2017 10:03:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-016
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:56 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:46:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.158	5.157	0.001	99	1377203	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.690	7.690	0.000	97	1029080	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.879	0.001	96	542676	50.0	50.0	
25 Acetonitrile	41	3.182	3.181	0.001	99	62485	50.0	60.4	
36 Isopropyl ether	87	3.892	3.891	0.001	92	30470	5.00	5.30	
37 2-Chloro-1,3-butadiene	53	3.916	3.915	0.001	96	60195	5.00	4.88	
38 Tert-butyl ethyl ether	59	4.164	4.163	0.001	94	115699	5.00	5.01	
43 Propionitrile	54	4.318	4.317	0.001	65	73625	50.0	58.0	
42 Ethyl acetate	43	4.318	4.317	0.001	99	166755	10.0	12.0	
44 Methacrylonitrile	41	4.436	4.436	0.000	98	398751	50.0	51.8	
55 Tert-amyl methyl ether	73	5.028	5.027	0.001	87	85898	5.00	5.02	
57 n-Butanol	56	5.336	5.335	0.001	90	24888	125.0	158.3	
59 Ethyl acrylate	55	5.501	5.489	0.012	99	50862	5.00	5.58	
62 Methyl methacrylate	41	5.679	5.678	0.001	88	102807	10.0	12.5	
66 2-Nitropropane	41	5.998	5.997	0.001	98	18907	10.0	11.2	
77 n-Butyl acetate	43	7.111	7.110	0.001	96	89103	5.00	6.09	
81 1-Chlorohexane	91	7.679	7.666	0.013	75	34089	5.00	4.93	
91 Cyclohexanone	55	8.708	8.707	0.001	90	13537	50.0	64.9	
101 Pentachloroethane	167	9.513	9.512	0.001	0	24003	10.0	12.3	
107 1,2,3-Trimethylbenzene	105	9.951	9.950	0.001	98	125092	5.00	5.21	
108 Benzyl chloride	126	10.033	10.032	0.001	94	3621	5.00	5.82	
112 1,3,5-Trichlorobenzene	180	11.252	11.251	0.001	96	47619	5.00	5.10	
117 2-Methylnaphthalene	142	13.429	13.428	0.001	93	116722	10.0	9.98	

Reagents:

VMRA9W_00211	Amount Added:	0.50	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

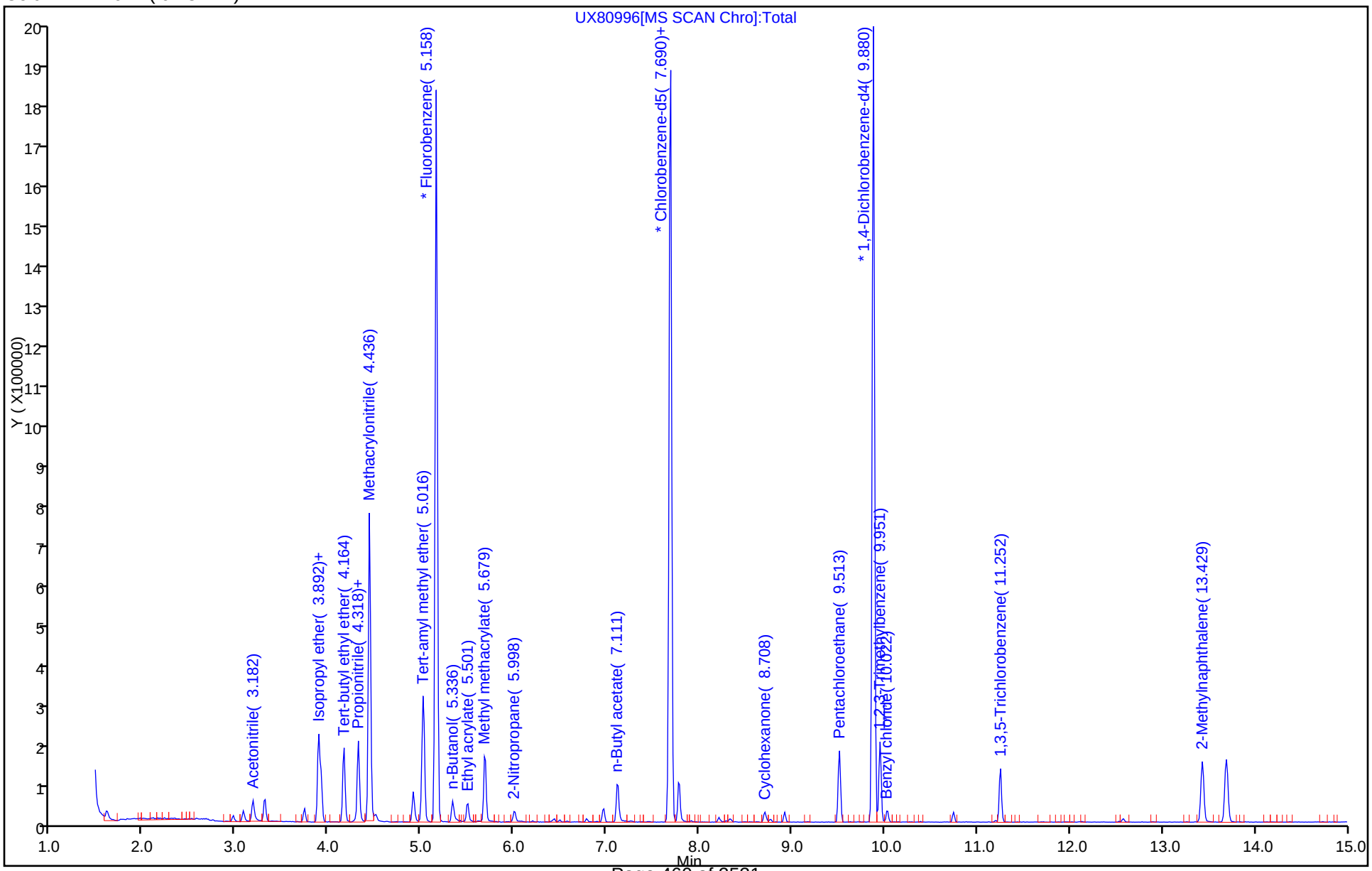
Report Date: 03-Jul-2017 01:23:56 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80996.D

Injection Date:	02-Jul-2017 10:03:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L3			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80997.D
Lims ID: STDA9 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Jul-2017 10:26:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-017
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:57 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:47:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.156	5.157	-0.001	99	1337590	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.690	-0.001	98	967164	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.879	-0.001	95	523086	50.0	50.0	
25 Acetonitrile	41	3.180	3.181	-0.001	99	23769	20.0	29.3	
36 Isopropyl ether	87	3.890	3.891	-0.001	92	9762	2.00	1.75	
37 2-Chloro-1,3-butadiene	53	3.914	3.915	-0.001	97	18690	2.00	1.56	
38 Tert-butyl ethyl ether	59	4.162	4.163	-0.001	93	37356	2.00	1.66	
42 Ethyl acetate	43	4.316	4.317	-0.001	99	77125	4.00	3.60	
43 Propionitrile	54	4.316	4.317	-0.001	55	23057	20.0	19.7	
44 Methacrylonitrile	41	4.435	4.436	-0.001	97	123269	20.0	16.5	
55 Tert-amyl methyl ether	73	5.026	5.027	-0.001	84	27451	2.00	1.65	
57 n-Butanol	56	5.334	5.335	-0.001	93	8541	50.0	83.0	
59 Ethyl acrylate	55	5.500	5.489	0.011	97	14944	2.00	2.37	
62 Methyl methacrylate	41	5.689	5.678	0.011	87	32197	4.00	5.96	
66 2-Nitropropane	41	6.008	5.997	0.011	95	5885	4.00	3.07	
77 n-Butyl acetate	43	7.121	7.110	0.011	96	39455	2.00	3.23	
81 1-Chlorohexane	91	7.677	7.666	0.011	78	10501	2.00	1.61	
91 Cyclohexanone	55	8.706	8.707	-0.001	29	3636	20.0	31.8	
101 Pentachloroethane	167	9.523	9.512	0.011	0	6274	4.00	4.99	
107 1,2,3-Trimethylbenzene	105	9.949	9.950	-0.001	96	35439	2.00	1.53	
108 Benzyl chloride	126	10.032	10.032	0.000	16	911	2.00	2.82	
112 1,3,5-Trichlorobenzene	180	11.250	11.251	-0.001	93	15192	2.00	1.69	
117 2-Methylnaphthalene	142	13.428	13.428	0.000	91	32516	4.00	4.31	

Reagents:

VMRA9W_00211	Amount Added:	0.20	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

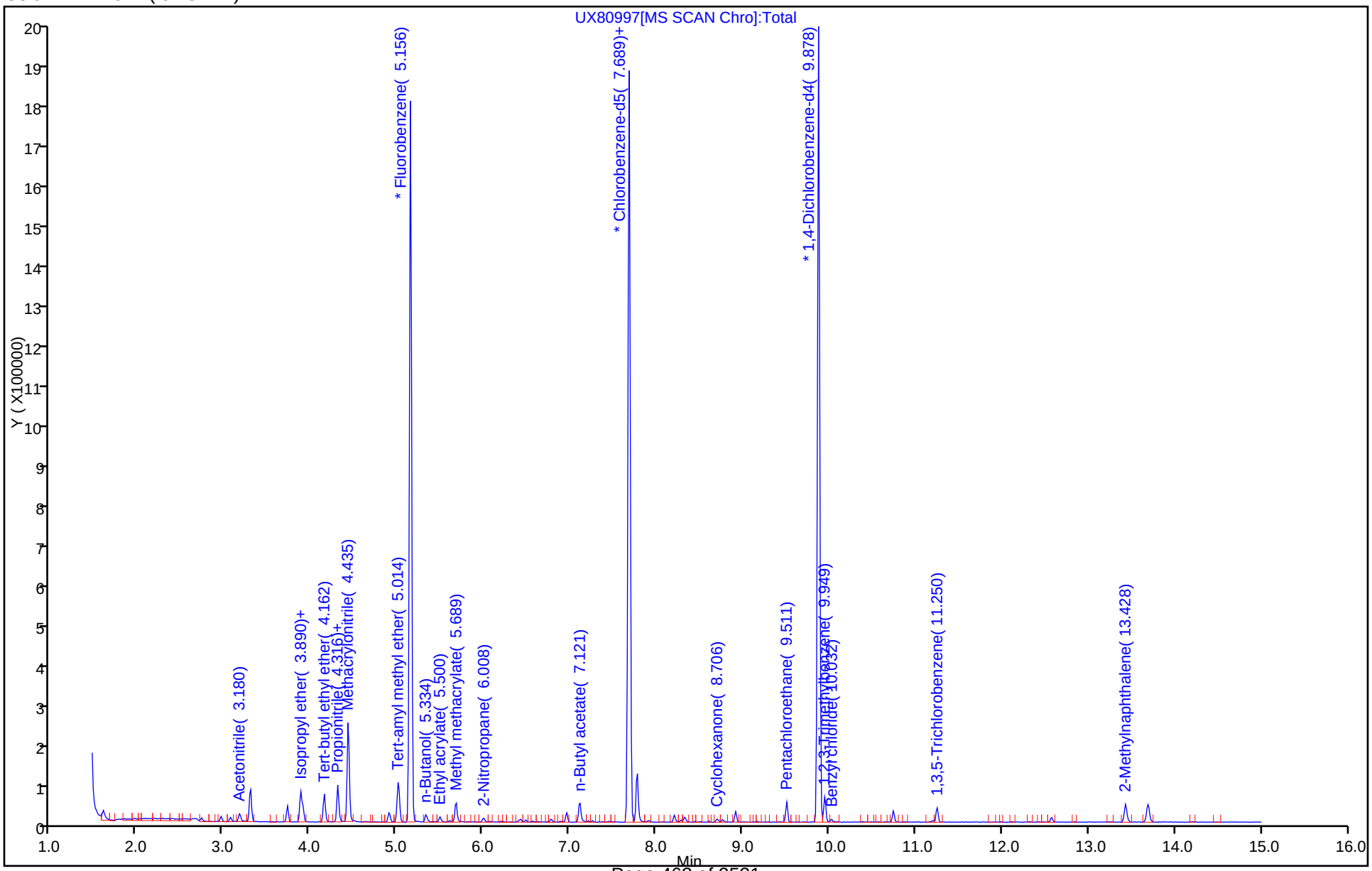
Report Date: 03-Jul-2017 01:23:58 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80997.D

Injection Date:	02-Jul-2017 10:26:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L2			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D
Lims ID: STDA9 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Jul-2017 10:48:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0066573-018
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Jul-2017 01:23:59 Calib Date: 02-Jul-2017 10:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: latat Date: 02-Jul-2017 23:48:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.158	5.157	0.001	99	1327476	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.690	7.690	0.000	97	972657	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.879	0.000	96	527833	50.0	50.0	
25 Acetonitrile	41	3.182	3.181	0.001	97	15558	10.0	22.4	
36 Isopropyl ether	87	3.892	3.891	0.001	95	4989	1.00	0.9010	
37 2-Chloro-1,3-butadiene	53	3.915	3.915	0.000	93	11605	1.00	0.9756	
38 Tert-butyl ethyl ether	59	4.164	4.163	0.001	94	22086	1.00	0.99	
43 Propionitrile	54	4.317	4.317	0.000	49	14367	10.0	12.9	
42 Ethyl acetate	43	4.317	4.317	0.000	98	62378	2.00	2.17	
44 Methacrylonitrile	41	4.436	4.436	0.000	98	75246	10.0	10.1	
55 Tert-amyl methyl ether	73	5.027	5.027	0.000	82	15388	1.00	0.9337	
57 n-Butanol	56	5.335	5.335	0.000	82	3803	25.0	59.6	
59 Ethyl acrylate	55	5.501	5.489	0.012	95	9941	1.00	1.90	
62 Methyl methacrylate	41	5.690	5.678	0.012	87	17445	2.00	4.54	
66 2-Nitropropane	41	5.998	5.997	0.001	93	4579	2.00	2.19	
77 n-Butyl acetate	43	7.110	7.110	0.000	96	31156	1.00	2.74	
81 1-Chlorohexane	91	7.678	7.666	0.012	29	7662	1.00	1.17	
91 Cyclohexanone	55	8.707	8.707	0.000	3	2008	10.0	25.7	
101 Pentachloroethane	167	9.512	9.512	0.000	0	2789	2.00	3.44	
107 1,2,3-Trimethylbenzene	105	9.950	9.950	0.000	98	21563	1.00	0.9231	
108 Benzyl chloride	126		10.032				ND	ND	
112 1,3,5-Trichlorobenzene	180	11.252	11.251	0.001	93	9192	1.00	1.01	
117 2-Methylnaphthalene	142	13.429	13.428	0.001	91	20677	2.00	3.45	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VMRA9W_00211	Amount Added:	0.10	Units: uL	
vm250-IS_00037	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00096	Amount Added:	0.00	Units:	Run Reagent

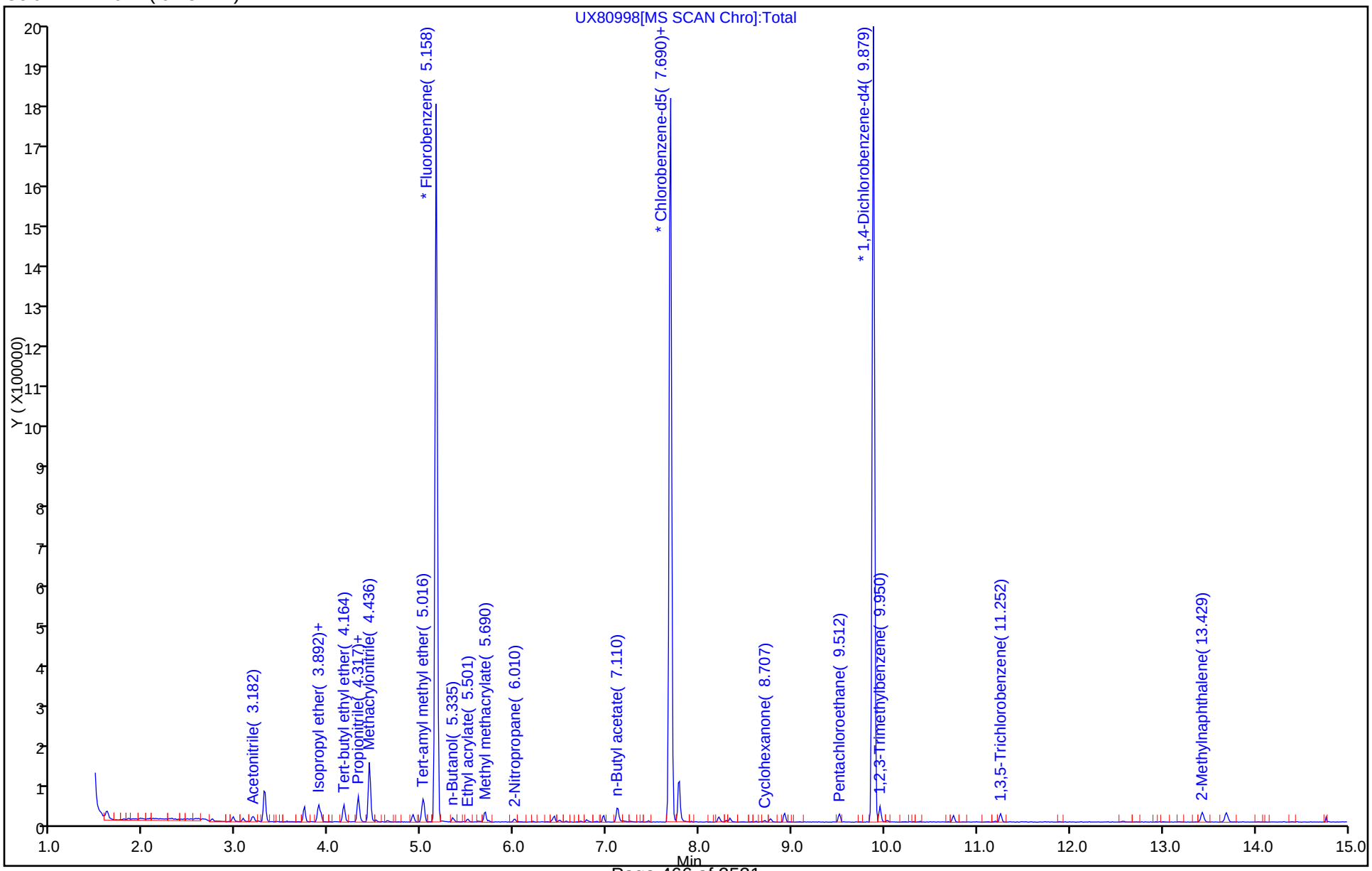
Report Date: 03-Jul-2017 01:23:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D

Injection Date:	02-Jul-2017 10:48:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STDA9 L1			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-291805/10	UX81909.D
Level 2	STD8260 240-291805/9	UX81908.D
Level 3	STD8260 240-291805/8	UX81907.D
Level 4	STD8260 240-291805/7	UX81906.D
Level 5	ICIS 240-291805/6	UX81905.D
Level 6	STD8260 240-291805/5	UX81904.D
Level 7	STD8260 240-291805/4	UX81903.D
Level 8	STD8260 240-291805/3	UX81902.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2337 0.2308	0.2436 0.2393	0.2759 0.2413	0.2312	0.2355	Ave		0.2414			0.1000	6.1		20.0			
Chloromethane	0.4004 0.3459	0.4024 0.3648	0.4391 0.3402	0.3507	0.3522	Ave		0.3744			0.1000	9.5		20.0			
Vinyl chloride	0.2311 0.2317	0.2837 0.2364	0.2894 0.2342	0.2305	0.2269	Ave		0.2455			0.1000	10.4		20.0			
Butadiene	0.3086 0.3108	0.3360 0.3150	0.3720 0.3140	0.2957	0.3098	Ave		0.3202				7.4		20.0			
Bromomethane	+++++ 0.1088	+++++ 0.0970	0.1514 0.0887	0.1222	0.1215	Lin1	0.3718	0.0911			0.0500				0.9940		0.9900
Chloroethane	0.1501 0.1429	0.1836 0.1440	0.1840 +++++	0.1487	0.1470	Ave		0.1572			0.0500	11.7		20.0			
Dichlorofluoromethane	0.3887 0.3235	0.3821 0.3351	0.4270 0.3105	0.3346	0.3377	Ave		0.3549				11.2		20.0			
Trichlorofluoromethane	0.2944 0.2969	0.3116 0.2991	0.3660 0.2869	0.2936	0.2999	Ave		0.3061			0.1000	8.2		20.0			
Ethyl ether	0.3239 0.2383	0.2997 0.2450	0.2643 0.2339	0.2570	0.2447	Ave		0.2634				12.2		20.0			
Acrolein	0.0354 0.0282	0.0306 0.0282	0.0337 0.0258	0.0303	0.0300	Ave		0.0303				10.2		20.0			
1,1-Dichloroethene	0.1873 0.1849	0.1644 0.1747	0.1954 0.1833	0.1693	0.1768	Ave		0.1795			0.1000	5.6		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1707 0.1596	0.1492 0.1510	0.1514 0.1549	0.1590	0.1562	Ave		0.1565			0.0500	4.4		20.0			
Acetone	0.7018 0.1494	0.4445 0.1436	0.2452 0.1328	0.1868	0.1611	Lin1	1.1678	0.1331			0.0100				0.9990		0.9900
Iodomethane	0.3997 0.3567	0.4014 0.3530	0.3806 0.3444	0.3754	0.3593	Ave		0.3713				5.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.5460 0.5752	0.5154 0.5789	0.5127 0.5922	0.5309	0.5251	Ave		0.5470			0.1000	5.7		20.0			
3-Chloro-1-propene	0.1109 0.1189	0.1060 0.1190	0.1117 0.1215	0.1111	0.1136	Ave		0.1141				4.6		20.0			
Methyl acetate	0.4184 0.3387	0.4409 0.3399	0.3683 0.3226	0.3572	0.3303	Ave		0.3645			0.1000	11.8		20.0			
Methylene Chloride	1.5130 0.2515	0.9114 0.2426	0.5013 0.2300	0.3330	0.2802	Lin1	1.3082	0.2246			0.1000				0.9990		0.9900
tert-Butyl alcohol (TBA)	0.0312 0.0320	0.0317 0.0308	0.0340 0.0289	0.0290	0.0302	Ave		0.0310				5.4		20.0			
Acrylonitrile	0.1585 0.1350	0.1609 0.1351	0.1403 0.1278	0.1454	0.1359	Ave		0.1424				8.3		20.0			
trans-1,2-Dichloroethene	0.2401 0.2179	0.2237 0.2175	0.2373 0.2106	0.2283	0.2230	Ave		0.2248			0.1000	4.5		20.0			
Methyl tert-butyl ether	0.6990 0.6930	0.7323 0.7164	0.7167 0.7028	0.7179	0.6830	Ave		0.7076			0.1000	2.3		20.0			
Hexane	0.2206 0.0634	0.1285 0.0634	0.0921 0.0659	0.0777	0.0680	Lin1	0.1444	0.0634							0.9990		0.9900
1,1-Dichloroethane	0.4862 0.4427	0.5044 0.4451	0.4642 0.4380	0.4813	0.4487	Ave		0.4638			0.2000	5.2		20.0			
Vinyl acetate	0.8089 0.7126	0.7148 0.7621	0.6732 0.7596	0.6913	0.6869	Ave		0.7262				6.4		20.0			
2-Butanone (MEK)	0.2943 0.2116	0.2705 0.2094	0.2271 0.2033	0.2258	0.2114	Ave		0.2317			0.0100	14.2		20.0			
cis-1,2-Dichloroethene	0.2715 0.2472	0.2715 0.2518	0.2778 0.2438	0.2754	0.2494	Ave		0.2610			0.1000	5.4		20.0			
2,2-Dichloropropane	0.1732 0.2441	0.2123 0.2454	0.2111 0.2282	0.2334	0.2211	Ave		0.2211				10.5		20.0			
Bromochloromethane	0.1158 0.1262	0.1551 0.1247	0.1307 0.1219	0.1331	0.1281	Ave		0.1295				9.0		20.0			
Tetrahydrofuran	0.1618 0.1339	0.1473 0.1344	0.1262 0.1298	0.1367	0.1290	Ave		0.1374				8.6		20.0			
Chloroform	0.5419 0.4054	0.4959 0.4135	0.4422 0.4018	0.4280	0.4051	Ave		0.4417			0.2000	11.5		20.0			
1,1,1-Trichloroethane	0.3245 0.3404	0.3146 0.3403	0.3192 0.3458	0.3340	0.3285	Ave		0.3309			0.1000	3.4		20.0			
Cyclohexane	0.4860 0.5124	0.4745 0.5005	0.4891 0.5048	0.5061	0.5064	Ave		0.4975			0.1000	2.6		20.0			
1,1-Dichloropropene	0.2735 0.3035	0.2831 0.2992	0.2985 0.3055	0.3120	0.3021	Ave		0.2972				4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2682 0.3026	0.2587 0.3034	0.2627 0.3121	0.2822	0.2865	Ave		0.2845			0.1000	7.1		20.0			
Isobutyl alcohol	0.0169 0.0166	0.0166 0.0160	0.0201 0.0151	0.0164	0.0167	Ave		0.0168				8.6		20.0			
1,2-Dichloroethane	0.5134 0.4253	0.5245 0.4410	0.4673 0.4268	0.4616	0.4240	Ave		0.4605			0.1000	8.6		20.0			
Benzene	0.9819 0.8611	0.9574 0.8710	0.9257 0.8703	0.9511	0.8783	Ave		0.9121			0.5000	5.2		20.0			
n-Heptane	+++++ 0.0676	0.0474 0.0694	0.0646 0.0723	0.0735	0.0635	Ave		0.0655				13.4		20.0			
Trichloroethene	0.2487 0.2392	0.2917 0.2370	0.2585 0.2387	0.2598	0.2341	Ave		0.2510			0.1500	7.6		20.0			
Methylcyclohexane	0.3957 0.3964	0.3710 0.3934	0.3873 0.3942	0.3788	0.3957	Ave		0.3891			0.1000	2.4		20.0			
1,2-Dichloropropane	0.2964 0.2444	0.2620 0.2507	0.2551 0.2514	0.2649	0.2533	Ave		0.2598			0.1000	6.2		20.0			
Dibromomethane	0.1583 0.1377	0.1543 0.1449	0.1387 0.1406	0.1539	0.1412	Ave		0.1462				5.5		20.0			
1,4-Dioxane	0.0025 0.0027	0.0025 0.0026	0.0028 0.0025	0.0026	0.0027	Ave		0.0026				4.5		20.0			
Bromodichloromethane	0.2346 0.2912	0.2543 0.3156	0.2626 0.3211	0.2780	0.2688	Ave		0.2783			0.1500	10.7		20.0			
2-Chloroethyl vinyl ether	0.1062 0.1249	0.1139 0.1357	0.1049 0.1401	0.1302	0.1240	Ave		0.1225				10.7		20.0			
cis-1,3-Dichloropropene	+++++ 0.3186	0.2262 0.3459	0.2429 0.3611	0.2986	0.2996	Lin1	-0.421	0.3523			0.1500				0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	0.3691 0.4201	0.4090 0.4250	0.3883 0.4173	0.4261	0.4218	Ave		0.4096			0.0500	5.0		20.0			
Toluene	1.5138 1.2739	1.3692 1.2522	1.3216 1.2694	1.3524	1.2819	Ave		1.3293			0.4000	6.4		20.0			
trans-1,3-Dichloropropene	+++++ 0.4055	0.2623 0.4304	0.3016 0.4569	0.3495	0.3588	Lin1	-0.611	0.4436			0.1000				0.9970		0.9900
Ethyl methacrylate	0.3112 0.4264	0.3945 0.4223	0.3581 0.4287	0.4235	0.4034	Ave		0.3960				10.5		20.0			
1,1,2-Trichloroethane	0.3879 0.2753	0.3240 0.2669	0.3000 0.2648	0.2980	0.2822	Ave		0.2999			0.1000	13.6		20.0			
1,3-Dichloropropane	0.4780 0.4863	0.5437 0.4769	0.5254 0.4771	0.5497	0.4864	Ave		0.5029				6.2		20.0			
Tetrachloroethene	0.3068 0.2726	0.2787 0.2591	0.2961 0.2577	0.3004	0.2817	Ave		0.2816			0.1500	6.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.3710 0.4159	0.4039 0.3999	0.3980 0.3921	0.4284	0.4192	Ave		0.4036			0.0500	4.4		20.0			
Dibromochloromethane	+++++ 0.3016	0.2174 0.3130	0.2303 0.3196	0.2650	0.2696	Ave		0.2738				14.6		20.0			
1,2-Dibromoethane	0.2667 0.2868	0.2730 0.2799	0.2768 0.2773	0.2956	0.2848	Ave		0.2801				3.2		20.0			
Chlorobenzene	1.1048 0.8808	1.0327 0.8621	0.9865 0.8515	0.9428	0.8812	Ave		0.9428			0.3000	9.7		20.0			
1,1,1,2-Tetrachloroethane	0.2963 0.3351	0.2960 0.3283	0.3030 0.3227	0.3404	0.3187	Ave		0.3176				5.5		20.0			
Ethylbenzene	0.4587 0.4417	0.4388 0.4377	0.4405 0.4315	0.4757	0.4370	Ave		0.4452				3.3		20.0			
m-Xylene & p-Xylene	0.5791 0.5519	0.5250 0.5301	0.5125 0.5328	0.5465	0.5409	Ave		0.5398				3.7		20.0			
o-Xylene	0.5409 0.5555	0.5332 0.5310	0.5679 0.5098	0.5766	0.5422	Ave		0.5446				3.9		20.0			
Styrene	0.8951 0.9444	0.8694 0.9309	0.8943 0.9269	0.9326	0.8995	Ave		0.9116			0.3000	2.8		20.0			
Bromoform	+++++ 0.1778	+++++ 0.1947	0.1323 0.1996	0.1465	0.1595	Lin1	-0.468	0.1984			0.1000				0.9980		0.9900
Isopropylbenzene	1.3074 1.4843	1.3281 1.4089	1.4025 1.3748	1.4603	1.4227	Ave		1.3986			0.1000	4.3		20.0			
1,1,2,2-Tetrachloroethane	0.6949 0.6454	0.6035 0.6308	0.6225 0.6319	0.6760	0.6568	Ave		0.6452			0.3000	4.6		20.0			
Bromobenzene	0.7707 0.6855	0.7686 0.6641	0.7282 0.6956	0.7532	0.7124	Ave		0.7223				5.5		20.0			
1,2,3-Trichloropropane	0.3156 0.2313	0.2866 0.2259	0.2473 0.2212	0.2496	0.2421	Ave		0.2524				12.9		20.0			
trans-1,4-Dichloro-2-butene	0.2672 0.2703	0.2519 0.2867	0.2221 0.3059	0.2629	0.2632	Ave		0.2663				9.2		20.0			
N-Propylbenzene	0.6476 0.7543	0.6419 0.7310	0.7018 0.7526	0.7812	0.7789	Ave		0.7237				7.6		20.0			
2-Chlorotoluene	0.6127 0.6400	0.6689 0.6272	0.6418 0.6392	0.6842	0.6878	Ave		0.6502				4.2		20.0			
1,3,5-Trimethylbenzene	1.7979 2.3165	1.8682 2.2176	2.0679 2.2658	2.3114	2.3368	Ave		2.1478				9.9		20.0			
4-Chlorotoluene	0.6709 0.6701	0.6980 0.6557	0.6799 0.6799	0.7156	0.7057	Ave		0.6845				3.0		20.0			
tert-Butylbenzene	1.8122 2.1962	1.7958 2.1101	1.9925 2.2985	2.4360	2.2278	Ave		2.1086				10.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	1.9239 2.3776	1.9178 2.3115	2.1867 2.3380	2.4213	2.4228	Ave		2.2374				9.4		20.0			
sec-Butylbenzene	2.2165 2.8599	2.3094 2.7587	2.5943 2.7598	2.8894	2.9334	Ave		2.6652				10.1		20.0			
1,3-Dichlorobenzene	1.5824 1.3184	1.5249 1.2962	1.4082 1.2991	1.4665	1.3952	Ave		1.4114			0.6000	7.6		20.0			
p-Isopropyltoluene	1.9495 2.6544	2.0569 2.5509	2.3956 2.5743	2.6266	2.6378	Ave		2.4307				11.4		20.0			
1,4-Dichlorobenzene	1.8272 1.3627	1.7188 1.3312	1.4947 1.3399	1.5146	1.4404	Ave		1.5037			0.5000	12.1		20.0			
n-Butylbenzene	1.6837 2.1653	1.7006 2.1152	1.9184 2.1435	2.1306	2.2041	Ave		2.0077				10.6		20.0			
1,2-Dichlorobenzene	1.6283 1.3082	1.4242 1.2642	1.3837 1.2368	1.4438	1.3445	Ave		1.3792			0.4000	9.0		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1127	0.0774 0.1245	0.0889 0.1256	0.0912	0.0997	Lin1	-0.165	0.1236			0.0500				0.9970		0.9900
1,2,4-Trichlorobenzene	0.8861 0.8675	0.8244 0.8654	0.8759 0.8541	0.8387	0.8519	Ave		0.8580			0.2000	2.3		20.0			
Hexachlorobutadiene	0.5622 0.5049	0.4844 0.4686	0.5393 0.4504	0.5142	0.5125	Ave		0.5046				7.2		20.0			
Naphthalene	1.7665 2.2247	1.7703 2.2114	1.7839 2.0903	1.9178	2.0678	Ave		1.9791				9.8		20.0			
1,2,3-Trichlorobenzene	0.9888 0.8638	0.8618 0.8458	0.8500 0.8015	0.8968	0.8733	Ave		0.8727				6.2		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2209	+++++ 0.2217	0.2697 0.2204	0.2505	0.2472	Ave		0.2384				8.6		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3096	+++++ 0.3243	0.4208 0.3226	0.3899	0.3699	Ave		0.3562				12.4		20.0			
Toluene-d8 (Surr)	+++++ 1.1979	+++++ 1.1405	1.4226 1.1301	1.3190	1.2868	Ave		1.2495				9.1		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4454	+++++ 0.4490	0.6422 0.4372	0.5573	0.5355	Lin1	1.2119	0.4333							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-291805/10	UX81909.D
Level 2	STD8260 240-291805/9	UX81908.D
Level 3	STD8260 240-291805/8	UX81907.D
Level 4	STD8260 240-291805/7	UX81906.D
Level 5	ICIS 240-291805/6	UX81905.D
Level 6	STD8260 240-291805/5	UX81904.D
Level 7	STD8260 240-291805/4	UX81903.D
Level 8	STD8260 240-291805/3	UX81902.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	8220 437657	16859 858856	49415 1886070	85184	175061	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	14086 655874	27845 1309351	78649 2659336	129226	261746	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	8131 439277	19631 848448	51847 1830233	84951	168625	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Butadiene	FB	Ave	10858 589426	23249 1130546	66632 2454653	108950	230296	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Lin1	+++++ 206366	+++++ 348325	27124 693509	45012	90308	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Chloroethane	FB	Ave	5279 271022	12708 516957	32956 +++++	54811	109268	1.00 50.0	2.00 100	5.00 +++++	10.0	20.0
Dichlorofluoromethane	FB	Ave	13675 613360	26441 1202690	76480 2427232	123286	250968	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	10357 562940	21562 1073725	65564 2242370	108208	222900	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	11394 451899	20737 879570	47352 1828184	94720	181840	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	6227 267442	10595 506979	30177 1006817	55750	111425	5.00 250	10.0 500	25.0 1000	50.0	100
1,1-Dichloroethene	FB	Ave	6590 350663	11377 627181	35001 1433025	62391	131426	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	6005 302678	10328 541832	27113 1210688	58609	116080	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Lin1	49381 566473	61514 1030880	87837 2076653	137704	239405	2.00 100	4.00 200	10.0 400	20.0	40.0
Iodomethane	FB	Ave	14061 676300	27774 1266902	68173 2692263	138347	267044	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	19209 1090720	35662 2077945	91832 4628686	195637	390280	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	3902 225376	7332 427257	20013 949815	40932	84427	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	29440 1284336	61026 2440001	131954 5042754	263261	490971	2.00 100	4.00 200	10.0 400	20.0	40.0
Methylene Chloride	FB	Lin1	53228 476963	63066 870796	89792 1797956	122716	208237	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butyl alcohol (TBA)	FB	Ave	10984 606072	21921 1105534	60914 2262609	106735	224542	10.0 500	20.0 1000	50.0 2000	100	200
Acrylonitrile	FB	Ave	55765 2559278	111330 4848840	251374 9989547	535793	1010121	10.0 500	20.0 1000	50.0 2000	100	200
trans-1,2-Dichloroethene	FB	Ave	8448 413248	15477 780572	42506 1645817	84143	165762	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	24592 1314119	50672 2571592	128381 5492977	264544	507663	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	FB	Lin1	7762 120145	8891 227731	16490 515050	28624	50555	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	17103 839496	34904 1597489	83155 3423699	177366	333485	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	28458 1351239	49461 2735380	120595 5937302	254739	510582	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	20706 802295	37440 1502994	81351 3178205	166408	314307	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	9550 468751	18791 903925	49761 1905536	101482	185355	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	6092 462918	14688 880935	37810 1783903	86004	164337	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	4075 239382	10732 447607	23404 952668	49046	95229	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	11381 507979	20383 964556	45199 2029402	100734	191768	2.00 100	4.00 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	19066 768699	34313 1484259	79217 3140392	157729	301087	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	11415 645466	21769 1221378	57182 2703259	123081	244140	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	17096 971586	32835 1796600	87603 3945572	186488	376384	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	9623 575510	19590 1073865	53467 2388259	114967	224564	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	9436 573741	17905 1088865	47050 2439805	103985	212956	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isobutyl alcohol	FB	Ave	14823 788212	28709 1438109	89959 2953666	150666	309931	25.0 1250	50.0 2500	125 5000	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	18062 806550	36295 1583022	83713 3335767	170101	315175	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Benzene	FB	Ave	34542 1632774	66249 3126314	165819 6802665	350479	652811	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Heptane	FB	Ave	+++++ 128199	3282 249224	11578 565278	27100	47204	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	8748 453665	20187 850652	46308 1866044	95726	174012	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	13920 751758	25673 1411927	69376 3081264	139581	294100	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	10429 463348	18127 899845	45694 1965042	97599	188266	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromomethane	FB	Ave	5568 261144	10678 519946	24846 1099106	56708	104922	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	1756 101450	3434 183739	10099 391192	18988	39598	20.0 1000	40.0 2000	100 4000	200	400
Bromodichloromethane	FB	Ave	8254 552221	17600 1132707	47045 2510194	102435	199767	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	7473 473523	15767 974058	37578 2190065	95962	184314	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	+++++ 604202	15656 1241659	43515 2822120	110016	222693	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	25970 1593246	56601 3050866	139098 6523778	313999	626943	2.00 100	4.00 200	10.0 400	20.0	40.0
Toluene	CBNZ d5	Ave	37489 1652903	66170 3248338	162726 7236706	346357	665378	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Lin1	+++++ 526197	12676 1116403	37132 2604910	89509	186237	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	7707 553228	19064 1095444	44092 2443679	108476	209413	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	9607 357166	15656 692320	36941 1509368	76311	146468	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	11837 631024	26273 1237017	64690 2719752	140792	252488	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	7597 353755	13471 672065	36460 1469085	76933	146229	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	CBNZ d5	Ave	18378 1079390	39034 2074870	98023 4470435	219426	435160	2.00 100	4.00 200	10.0 400	20.0	40.0
Dibromochloromethane	CBNZ d5	Ave	+++++ 391358	10507 811918	28351 1821864	67863	139965	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	CBNZ d5	Ave	6604 372147	13195 725961	34079 1580750	75701	147847	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	27362 1142834	49907 2236314	121462 4854296	241462	457388	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	7339 434821	14303 851538	37309 1839592	87170	165442	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	11361 573169	21206 1135416	54238 2459810	121833	226857	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	14342 716052	25371 1374996	63106 3037173	139972	280750	1.00 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBNZ d5	Ave	13396 720787	25767 1377403	69923 2906335	147687	281453	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBNZ d5	Ave	22168 1225398	42015 2414710	110114 5283725	238852	466912	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBNZ d5	Lin1	+++++ 230686	+++++ 505111	16285 1137614	37531	82780	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	32379 1925903	64183 3654848	172690 7837379	374000	738490	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	9538 468823	16617 895154	44212 1862438	95568	183775	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCBd 4	Ave	10578 497954	21165 942501	51714 2050044	106484	199319	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	4331 167975	7892 320587	17560 651876	35284	67747	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3667 196317	6936 406818	15773 901537	37168	73649	1.00 50.0	2.00 100	5.00 200	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	8888 547887	17676 1037357	49842 2218040	110441	217930	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	8409 464847	18418 890071	45578 1883871	96728	192453	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	24676 1682649	51441 3147093	146866 6677959	326773	653817	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	9208 486770	19221 930584	48286 2003998	101175	197460	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	24873 1595266	49447 2994564	141507 6774317	344391	623334	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	26406 1726990	52808 3280371	155297 6890740	342312	677886	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	30421 2077333	63590 3915051	184247 8133874	408489	820738	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	21718 957627	41988 1839574	100010 3828793	207325	390367	1.00 50.0	2.00 100	5.00 200	10.0	20.0
p-Isopropyltoluene	DCBd 4	Ave	26757 1928039	56637 3620128	170136 7587157	371333	738033	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 291805

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41245

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	25079 989782	47328 1889136	106156 3948959	214123	403003	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	23109 1572810	46827 3001847	136248 6317601	301215	616698	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	22349 950205	39215 1794117	98268 3645082	204112	376190	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	+++++ 81844	2130 176658	6312 370068	12889	27903	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	12162 630114	22701 1228113	62203 2517213	118576	238354	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	7716 366740	13337 664960	38303 1327576	72689	143393	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCBd 4	Ave	24246 1615962	48746 3138402	126694 6160832	271133	578567	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	13572 627458	23730 1200305	60369 2362230	126788	244339	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 418956	+++++ 795603	48316 1722533	92324	183720	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 587117	+++++ 1164098	75382 2521162	143678	274960	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 1554306	+++++ 2958411	175162 6442118	337822	667960	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Lin1	+++++ 577877	+++++ 1164807	79071 2492419	142739	277975	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81902.D
Lims ID: STD8260 L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Aug-2017 00:54:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-003
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:26:49 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 20-Aug-2017 03:54:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.160	-0.003	98	1954069	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.692	-0.003	95	1425169	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.881	-0.002	96	736820	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.625	4.627	-0.002	93	1722533	200.0	184.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.885	4.888	-0.003	97	2521162	200.0	181.1	
$ 6 Toluene-d8 (Surr)	98	6.423	6.426	-0.003	96	6442118	200.0	180.9	
$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.757	0.009	89	2492419	200.0	199.0	
9 Dichlorodifluoromethane	85	1.584	1.586	-0.002	98	1886070	200.0	199.9	
10 Chloromethane	50	1.761	1.752	0.009	100	2659336	200.0	181.7	
11 Vinyl chloride	62	1.880	1.870	0.010	100	1830233	200.0	190.8	
12 Butadiene	54	1.903	1.906	-0.003	0	2454653	200.0	196.1	
13 Bromomethane	94	2.152	2.178	-0.026	90	693509	200.0	190.7	
14 Chloroethane	64	2.246	2.284	-0.038	94	885111	200.0	144.1	
15 Dichlorofluoromethane	67	2.448	2.450	-0.002	99	2427232	200.0	175.0	
16 Trichlorofluoromethane	101	2.483	2.497	-0.014	98	2242370	200.0	187.5	
17 Ethyl ether	59	2.732	2.746	-0.014	93	1828184	200.0	177.6	
18 Acrolein	56	2.838	2.841	-0.003	98	1006817	1000.0	851.0	
19 1,1-Dichloroethene	96	2.921	2.923	-0.002	93	1433025	200.0	204.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.933	2.947	-0.014	92	1210688	200.0	197.9	
21 Acetone	43	2.956	2.959	-0.003	96	2076653	400.0	390.5	
23 Iodomethane	142	3.039	3.054	-0.015	99	2692263	200.0	185.5	
24 Carbon disulfide	76	3.098	3.113	-0.015	97	4628686	200.0	216.5	
26 3-Chloro-1-propene	76	3.205	3.207	-0.002	84	949815	200.0	213.0	
27 Methyl acetate	43	3.217	3.219	-0.002	100	5042754	400.0	354.0	
28 Methylene Chloride	84	3.299	3.302	-0.003	90	1797956	200.0	199.0	
29 2-Methyl-2-propanol	59	3.394	3.385	0.009	91	2262609	2000.0	1869.2	
30 Acrylonitrile	53	3.477	3.480	-0.003	96	9989547	2000.0	1795.5	
31 trans-1,2-Dichloroethene	96	3.512	3.527	-0.015	90	1645817	200.0	187.3	
32 Methyl tert-butyl ether	73	3.524	3.527	-0.003	95	5492977	200.0	198.6	
33 Hexane	86	3.725	3.728	-0.003	93	515050	200.0	205.5	
34 1,1-Dichloroethane	63	3.832	3.835	-0.003	98	3423699	200.0	188.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.856	3.858	-0.002	97	5937302	200.0	209.2	
40 2-Butanone (MEK)	43	4.270	4.272	-0.002	95	3178205	400.0	351.0	
39 cis-1,2-Dichloroethene	96	4.270	4.272	-0.002	91	1905536	200.0	186.8	
41 2,2-Dichloropropane	77	4.282	4.284	-0.002	81	1783903	200.0	206.5	
45 Chlorobromomethane	128	4.459	4.462	-0.003	89	952668	200.0	188.3	
46 Tetrahydrofuran	42	4.495	4.497	-0.002	90	2029402	400.0	378.0	
47 Chloroform	83	4.506	4.509	-0.003	99	3140392	200.0	181.9	
48 1,1,1-Trichloroethane	97	4.672	4.675	-0.003	97	2703259	200.0	209.0	
49 Cyclohexane	56	4.719	4.722	-0.003	98	3945572	200.0	202.9	
50 1,1-Dichloropropene	75	4.790	4.793	-0.003	82	2388259	200.0	205.6	
51 Carbon tetrachloride	117	4.802	4.805	-0.003	94	2439805	200.0	219.4	
52 Isobutyl alcohol	41	4.826	4.829	-0.002	94	2953666	5000.0	4500.7	
53 1,2-Dichloroethane	62	4.944	4.947	-0.003	67	3335767	200.0	185.3	
54 Benzene	78	4.944	4.947	-0.003	92	6802665	200.0	190.8	
56 n-Heptane	100	5.134	5.136	-0.002	96	565278	200.0	220.8	
58 Trichloroethene	130	5.441	5.444	-0.003	94	1866044	200.0	190.3	
60 Methylcyclohexane	83	5.607	5.609	-0.002	93	3081264	200.0	202.6	
61 1,2-Dichloropropane	63	5.619	5.621	-0.002	90	1965042	200.0	193.6	
64 1,4-Dioxane	88	5.713	5.716	-0.003	93	391192	4000.0	3854.9	
63 Dibromomethane	93	5.713	5.716	-0.003	94	1099106	200.0	192.4	
65 Dichlorobromomethane	83	5.832	5.834	-0.002	96	2510194	200.0	230.8	
67 2-Chloroethyl vinyl ether	63	6.057	6.047	0.010	86	2190065	400.0	457.5	
68 cis-1,3-Dichloropropene	75	6.187	6.189	-0.002	82	2822120	200.0	206.2	
69 4-Methyl-2-pentanone (MIBK	43	6.305	6.308	-0.003	97	6523778	400.0	407.6	
70 Toluene	91	6.483	6.485	-0.003	96	7236706	200.0	191.0	
71 trans-1,3-Dichloropropene	75	6.648	6.651	-0.003	90	2604910	200.0	207.4	
72 Ethyl methacrylate	69	6.707	6.710	-0.003	87	2443679	200.0	216.5	
73 1,1,2-Trichloroethane	97	6.814	6.805	0.009	96	1509368	200.0	176.6	
74 1,3-Dichloropropane	76	6.956	6.958	-0.002	89	2719752	200.0	189.7	
75 Tetrachloroethene	164	6.968	6.958	0.010	96	1469085	200.0	183.0	
76 2-Hexanone	43	7.003	7.006	-0.003	96	4470435	400.0	388.6	
78 Chlorodibromomethane	129	7.157	7.160	-0.003	90	1821864	200.0	233.5	
80 Ethylene Dibromide	107	7.275	7.278	-0.003	98	1580750	200.0	198.0	
82 Chlorobenzene	112	7.713	7.716	-0.003	90	4854296	200.0	180.6	
83 1,1,1,2-Tetrachloroethane	131	7.772	7.775	-0.003	92	1839592	200.0	203.2	
84 Ethylbenzene	106	7.808	7.799	0.009	98	2459810	200.0	193.8	
85 m-Xylene & p-Xylene	106	7.902	7.905	-0.003	98	3037173	200.0	197.4	
86 o-Xylene	106	8.281	8.272	0.009	97	2906335	200.0	187.2	
87 Styrene	104	8.281	8.284	-0.003	84	5283725	200.0	203.3	
88 Bromoform	173	8.459	8.461	-0.002	95	1137614	200.0	203.5	
89 Isopropylbenzene	105	8.612	8.615	-0.003	97	7837379	200.0	196.6	
92 1,1,2,2-Tetrachloroethane	83	8.873	8.875	-0.002	98	1862438	200.0	195.9	
93 Bromobenzene	156	8.920	8.911	0.009	93	2050044	200.0	192.6	
94 1,2,3-Trichloropropane	110	8.932	8.923	0.009	90	651876	200.0	175.2	
95 trans-1,4-Dichloro-2-buten	53	8.932	8.934	-0.002	78	901537	200.0	229.8	
96 N-Propylbenzene	120	9.003	9.005	-0.002	99	2218040	200.0	208.0	
97 2-Chlorotoluene	126	9.098	9.100	-0.002	95	1883871	200.0	196.6	
98 1,3,5-Trimethylbenzene	105	9.169	9.171	-0.002	95	6677959	200.0	211.0	
99 4-Chlorotoluene	126	9.204	9.195	0.009	98	2003998	200.0	198.7	
100 tert-Butylbenzene	119	9.488	9.491	-0.003	96	6774317	200.0	218.0	
102 1,2,4-Trimethylbenzene	105	9.535	9.538	-0.003	96	6890740	200.0	209.0	
103 sec-Butylbenzene	105	9.701	9.704	-0.003	96	8133874	200.0	207.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.819	9.822	-0.003	96	3828793	200.0	184.1	
105 4-Isopropyltoluene	119	9.843	9.846	-0.003	98	7587157	200.0	211.8	
106 1,4-Dichlorobenzene	146	9.902	9.905	-0.003	94	3948959	200.0	178.2	
109 n-Butylbenzene	91	10.245	10.236	0.009	97	6317601	200.0	213.5	
110 1,2-Dichlorobenzene	146	10.269	10.272	-0.003	96	3645082	200.0	179.3	
111 1,2-Dibromo-3-Chloropropan	157	11.026	11.029	-0.003	76	370068	200.0	204.4	
113 1,2,4-Trichlorobenzene	180	11.866	11.857	0.009	94	2517213	200.0	199.1	
114 Hexachlorobutadiene	225	12.032	12.035	-0.003	97	1327576	200.0	178.6	
115 Naphthalene	128	12.103	12.106	-0.003	97	6160832	200.0	211.2	
116 1,2,3-Trichlorobenzene	180	12.363	12.366	-0.003	96	2362230	200.0	183.7	
S 126 1,2-Dichloroethene, Total	96				0			374.1	
S 127 1,3-Dichloropropene, Total	75				0			413.6	
S 128 Xylenes, Total	106				0		400.0	384.6	
S 129 Trihalomethanes, Total	1				0		800.0	849.7	

Reagents:

VMRPRIMW_00248	Amount Added:	20.00	Units: uL	
VMAROLISTDW_00211	Amount Added:	20.00	Units: uL	
VMRGAS_00212	Amount Added:	20.00	Units: uL	
vm50ss_00294	Amount Added:	20.00	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

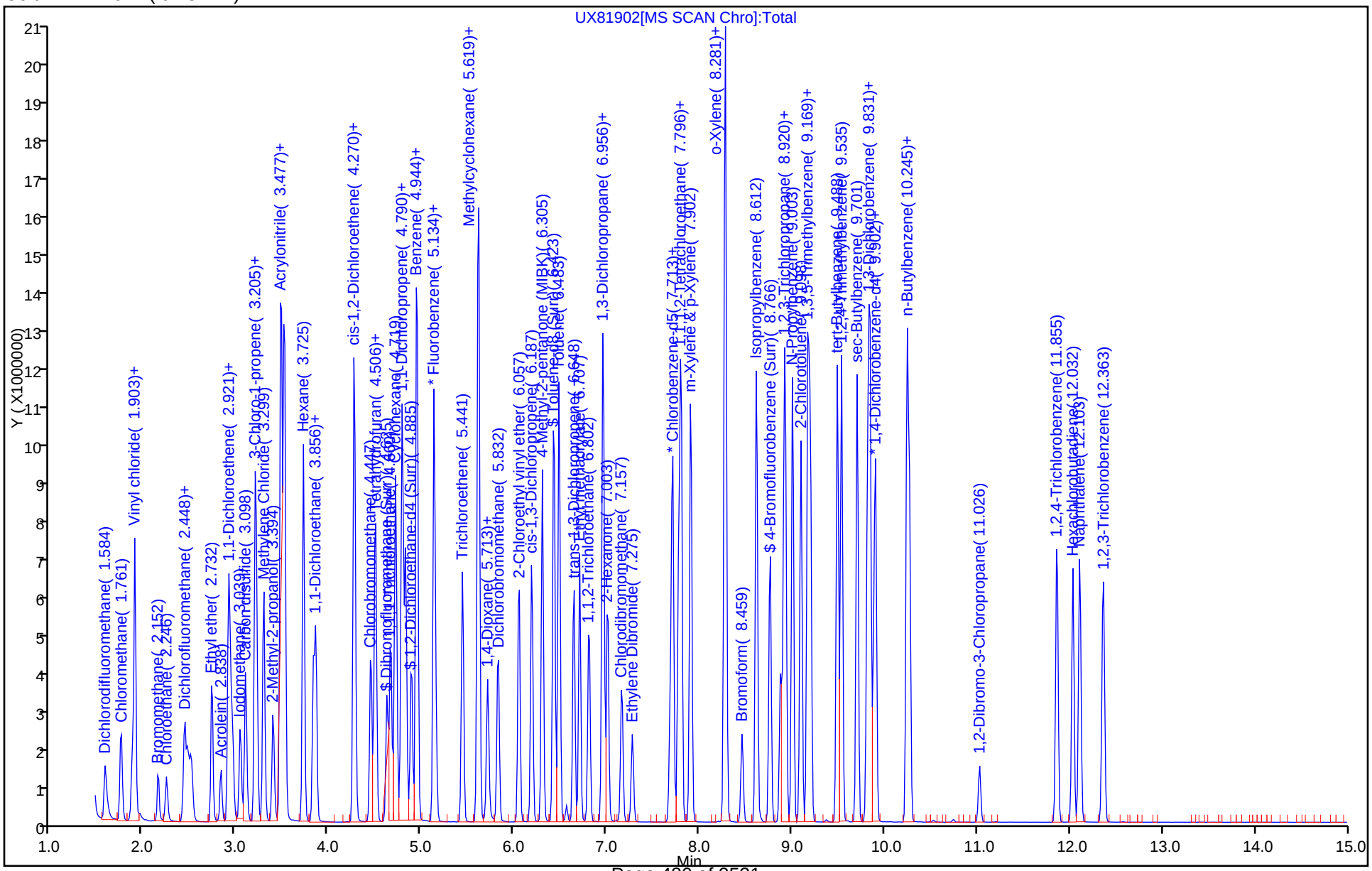
Report Date: 21-Aug-2017 01:26:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81902.D

Injection Date:	20-Aug-2017 00:54:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L8			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81903.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Aug-2017 01:17:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-004
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:26:52 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:10:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.160	-0.001	98	1794720	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.692	-0.001	96	1297027	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.881	-0.001	98	709584	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.627	4.627	0.000	93	795603	100.0	93.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.887	4.888	-0.001	98	1164098	100.0	91.0	
$ 6 Toluene-d8 (Surr)	98	6.425	6.426	-0.001	96	2958411	100.0	91.3	
$ 7 4-Bromofluorobenzene (Surr	95	8.756	8.757	-0.001	86	1164807	100.0	100.8	
9 Dichlorodifluoromethane	85	1.586	1.586	0.000	98	858856	100.0	99.1	
10 Chloromethane	50	1.751	1.752	-0.001	99	1309351	100.0	97.4	
11 Vinyl chloride	62	1.870	1.870	0.000	100	848448	100.0	96.3	
12 Butadiene	54	1.905	1.906	-0.001	0	1130546	100.0	98.4	
13 Bromomethane	94	2.153	2.178	-0.025	93	348325	100.0	102.5	
14 Chloroethane	64	2.260	2.284	-0.024	95	516957	100.0	91.6	
15 Dichlorofluoromethane	67	2.449	2.450	-0.001	99	1202690	100.0	94.4	
16 Trichlorofluoromethane	101	2.497	2.497	0.000	98	1073725	100.0	97.7	
17 Ethyl ether	59	2.733	2.746	-0.013	93	879570	100.0	93.0	
18 Acrolein	56	2.840	2.841	-0.001	98	506979	500.0	466.6	
19 1,1-Dichloroethene	96	2.923	2.923	0.000	92	627181	100.0	97.3	
20 1,1,2-Trichloro-1,2,2-trif	151	2.934	2.947	-0.013	94	541832	100.0	96.5	
21 Acetone	43	2.958	2.959	-0.001	96	1030880	200.0	207.0	
23 Iodomethane	142	3.041	3.054	-0.013	99	1266902	100.0	95.1	
24 Carbon disulfide	76	3.100	3.113	-0.013	97	2077945	100.0	105.8	
26 3-Chloro-1-propene	76	3.207	3.207	0.000	84	427257	100.0	104.3	
27 Methyl acetate	43	3.218	3.219	-0.001	99	2440001	200.0	186.5	
28 Methylene Chloride	84	3.301	3.302	-0.001	90	870796	100.0	102.2	
29 2-Methyl-2-propanol	59	3.384	3.385	-0.001	91	1105534	1000.0	994.4	
30 Acrylonitrile	53	3.479	3.480	-0.001	96	4848840	1000.0	948.9	
32 Methyl tert-butyl ether	73	3.526	3.527	-0.001	94	2571592	100.0	101.2	
31 trans-1,2-Dichloroethene	96	3.514	3.527	-0.013	90	780572	100.0	96.7	
33 Hexane	86	3.727	3.728	-0.001	94	227731	100.0	97.7	
34 1,1-Dichloroethane	63	3.834	3.835	-0.001	98	1597489	100.0	96.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.857	3.858	-0.001	97	2735380	100.0	104.9	
39 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	91	903925	100.0	96.5	
40 2-Butanone (MEK)	43	4.272	4.272	0.000	96	1502994	200.0	180.7	
41 2,2-Dichloropropane	77	4.283	4.284	-0.001	77	880935	100.0	111.0	
45 Chlorobromomethane	128	4.461	4.462	-0.001	92	447607	100.0	96.3	
46 Tetrahydrofuran	42	4.496	4.497	-0.001	91	964556	200.0	195.6	
47 Chloroform	83	4.508	4.509	-0.001	99	1484259	100.0	93.6	
48 1,1,1-Trichloroethane	97	4.662	4.675	-0.013	97	1221378	100.0	102.8	
49 Cyclohexane	56	4.721	4.722	-0.001	98	1796600	100.0	100.6	
50 1,1-Dichloropropene	75	4.792	4.793	-0.001	93	1073865	100.0	100.7	
51 Carbon tetrachloride	117	4.804	4.805	-0.001	94	1088865	100.0	106.6	
52 Isobutyl alcohol	41	4.828	4.829	0.000	93	1438109	2500.0	2385.9	
54 Benzene	78	4.946	4.947	-0.001	92	3126314	100.0	95.5	
53 1,2-Dichloroethane	62	4.946	4.947	-0.001	69	1583022	100.0	95.8	
56 n-Heptane	100	5.135	5.136	-0.001	96	249224	100.0	106.0	
58 Trichloroethene	130	5.443	5.444	-0.001	94	850652	100.0	94.4	
60 Methylcyclohexane	83	5.609	5.609	0.000	92	1411927	100.0	101.1	
61 1,2-Dichloropropane	63	5.621	5.621	-0.001	87	899845	100.0	96.5	
63 Dibromomethane	93	5.715	5.716	-0.001	93	519946	100.0	99.1	
64 1,4-Dioxane	88	5.715	5.716	-0.001	65	183739	2000.0	1971.4	
65 Dichlorobromomethane	83	5.822	5.834	-0.012	96	1132707	100.0	113.4	
67 2-Chloroethyl vinyl ether	63	6.046	6.047	-0.001	86	974058	200.0	221.6	
68 cis-1,3-Dichloropropene	75	6.188	6.189	-0.001	82	1241659	100.0	99.4	
69 4-Methyl-2-pentanone (MIBK	43	6.307	6.308	-0.001	97	3050866	200.0	207.5	
70 Toluene	91	6.484	6.485	-0.001	96	3248338	100.0	94.2	
71 trans-1,3-Dichloropropene	75	6.650	6.651	-0.001	90	1116403	100.0	98.4	
72 Ethyl methacrylate	69	6.709	6.710	-0.001	88	1095444	100.0	106.6	
73 1,1,2-Trichloroethane	97	6.804	6.805	-0.001	96	692320	100.0	89.0	
75 Tetrachloroethene	164	6.958	6.958	0.000	73	672065	100.0	92.0	
74 1,3-Dichloropropane	76	6.958	6.958	0.000	87	1237017	100.0	94.8	
76 2-Hexanone	43	7.005	7.006	-0.001	96	2074870	200.0	198.2	
78 Chlorodibromomethane	129	7.159	7.160	-0.001	90	811918	100.0	114.3	
80 Ethylene Dibromide	107	7.277	7.278	-0.001	99	725961	100.0	99.9	
82 Chlorobenzene	112	7.715	7.716	-0.001	91	2236314	100.0	91.4	
83 1,1,1,2-Tetrachloroethane	131	7.774	7.775	-0.001	92	851538	100.0	103.4	
84 Ethylbenzene	106	7.798	7.799	-0.001	98	1135416	100.0	98.3	
85 m-Xylene & p-Xylene	106	7.904	7.905	-0.001	98	1374996	100.0	98.2	
86 o-Xylene	106	8.271	8.272	-0.001	97	1377403	100.0	97.5	
87 Styrene	104	8.283	8.284	-0.001	88	2414710	100.0	102.1	
88 Bromoform	173	8.460	8.461	-0.001	95	505111	100.0	100.5	
89 Isopropylbenzene	105	8.614	8.615	-0.001	97	3654848	100.0	100.7	
92 1,1,2,2-Tetrachloroethane	83	8.875	8.875	0.000	98	895154	100.0	97.8	
93 Bromobenzene	156	8.922	8.911	0.011	93	942501	100.0	91.9	
94 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	91	320587	100.0	89.5	
95 trans-1,4-Dichloro-2-buten	53	8.934	8.934	0.000	74	406818	100.0	107.7	
96 N-Propylbenzene	120	9.005	9.005	0.000	99	1037357	100.0	101.0	
97 2-Chlorotoluene	126	9.099	9.100	-0.001	95	890071	100.0	96.5	
98 1,3,5-Trimethylbenzene	105	9.170	9.171	-0.001	95	3147093	100.0	103.3	
99 4-Chlorotoluene	126	9.194	9.195	-0.001	98	930584	100.0	95.8	
100 tert-Butylbenzene	119	9.490	9.491	-0.001	95	2994564	100.0	100.1	
102 1,2,4-Trimethylbenzene	105	9.537	9.538	-0.001	96	3280371	100.0	103.3	
103 sec-Butylbenzene	105	9.703	9.704	-0.001	95	3915051	100.0	103.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.821	9.822	-0.001	96	1839574	100.0	91.8	
105 4-Isopropyltoluene	119	9.845	9.846	-0.001	97	3620128	100.0	104.9	
106 1,4-Dichlorobenzene	146	9.904	9.905	-0.001	92	1889136	100.0	88.5	
109 n-Butylbenzene	91	10.235	10.236	-0.001	97	3001847	100.0	105.4	
110 1,2-Dichlorobenzene	146	10.271	10.272	-0.001	96	1794117	100.0	91.7	
111 1,2-Dibromo-3-Chloropropan	157	11.028	11.029	-0.001	73	176658	100.0	102.0	
113 1,2,4-Trichlorobenzene	180	11.856	11.857	-0.001	95	1228113	100.0	100.9	
114 Hexachlorobutadiene	225	12.034	12.035	-0.001	97	664960	100.0	92.9	
115 Naphthalene	128	12.105	12.106	-0.001	98	3138402	100.0	111.7	
116 1,2,3-Trichlorobenzene	180	12.365	12.366	-0.001	95	1200305	100.0	96.9	
S 126 1,2-Dichloroethene, Total	96				0			193.2	
S 127 1,3-Dichloropropene, Total	75				0			197.8	
S 128 Xylenes, Total	106				0		200.0	195.7	
S 129 Trihalomethanes, Total	1				0		400.0	421.8	

Reagents:

VMRPRIMW_00248	Amount Added:	10.00	Units: uL	
VMAROLISTDW_00211	Amount Added:	10.00	Units: uL	
VMRGAS_00212	Amount Added:	10.00	Units: uL	
vm50ss_00294	Amount Added:	10.00	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

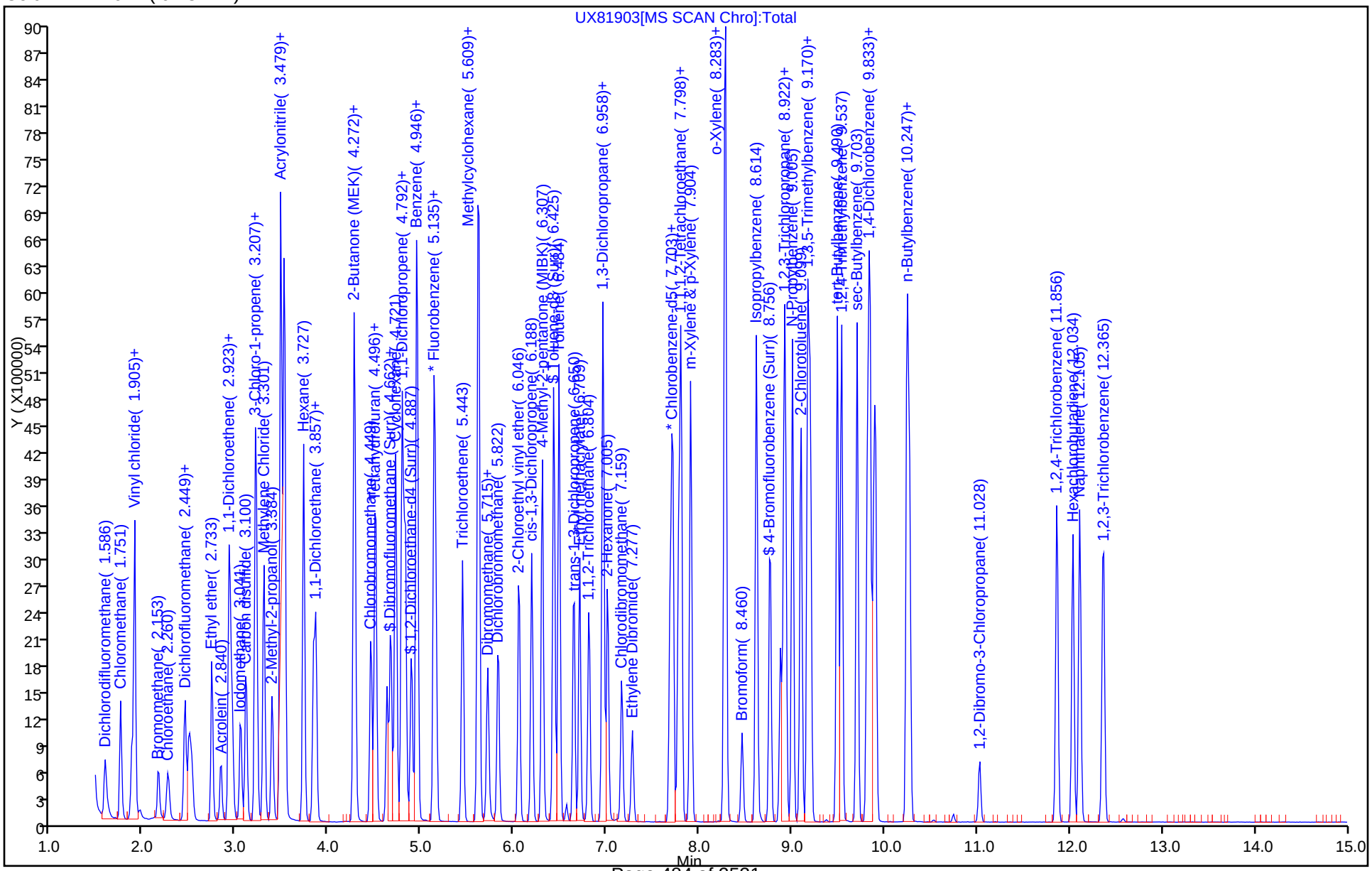
Report Date: 21-Aug-2017 01:26:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81903.D

Injection Date:	20-Aug-2017 01:17:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L7			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81904.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Aug-2017 01:38:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-005
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:26:54 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:11:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.160	-0.001	99	1896225	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.692	-0.001	96	1297502	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.881	-0.001	97	726360	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.626	4.627	-0.001	93	418956	50.0	46.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.886	4.888	-0.002	98	587117	50.0	43.5	
$ 6 Toluene-d8 (Surr)	98	6.425	6.426	-0.001	96	1554306	50.0	47.9	
$ 7 4-Bromofluorobenzene (Surr	95	8.756	8.757	-0.001	86	577877	50.0	48.6	
9 Dichlorodifluoromethane	85	1.585	1.586	-0.001	98	437657	50.0	47.8	
10 Chloromethane	50	1.751	1.752	-0.001	100	655874	50.0	46.2	
11 Vinyl chloride	62	1.881	1.870	0.011	99	439277	50.0	47.2	
12 Butadiene	54	1.905	1.906	-0.001	0	589426	50.0	48.5	
13 Bromomethane	94	2.177	2.178	-0.001	91	206366	50.0	55.7	
14 Chloroethane	64	2.283	2.284	-0.001	95	271022	50.0	45.5	
15 Dichlorofluoromethane	67	2.449	2.450	-0.001	99	613360	50.0	45.6	
16 Trichlorofluoromethane	101	2.496	2.497	-0.001	99	562940	50.0	48.5	
17 Ethyl ether	59	2.733	2.746	-0.013	94	451899	50.0	45.2	
18 Acrolein	56	2.839	2.841	-0.002	98	267442	250.0	233.0	
19 1,1-Dichloroethene	96	2.922	2.923	-0.001	93	350663	50.0	51.5	
20 1,1,2-Trichloro-1,2,2-trif	151	2.946	2.947	-0.001	91	302678	50.0	51.0	
21 Acetone	43	2.958	2.959	-0.001	96	566473	100.0	103.5	
23 Iodomethane	142	3.052	3.054	-0.002	100	676300	50.0	48.0	
24 Carbon disulfide	76	3.112	3.113	-0.001	97	1090720	50.0	52.6	
26 3-Chloro-1-propene	76	3.206	3.207	-0.001	84	225376	50.0	52.1	
27 Methyl acetate	43	3.218	3.219	-0.001	99	1284336	100.0	92.9	
28 Methylene Chloride	84	3.301	3.302	-0.001	91	476963	50.0	50.2	
29 2-Methyl-2-propanol	59	3.384	3.385	-0.001	89	606072	500.0	516.0	
30 Acrylonitrile	53	3.478	3.480	-0.002	96	2559278	500.0	474.0	
31 trans-1,2-Dichloroethene	96	3.526	3.527	-0.001	66	413248	50.0	48.5	
32 Methyl tert-butyl ether	73	3.526	3.527	-0.001	92	1314119	50.0	49.0	
33 Hexane	86	3.727	3.728	-0.001	93	120145	50.0	47.7	
34 1,1-Dichloroethane	63	3.833	3.835	-0.002	98	839496	50.0	47.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.857	3.858	-0.001	97	1351239	50.0	49.1	
40 2-Butanone (MEK)	43	4.271	4.272	-0.001	96	802295	100.0	91.3	
39 cis-1,2-Dichloroethene	96	4.271	4.272	-0.001	91	468751	50.0	47.3	
41 2,2-Dichloropropane	77	4.283	4.284	-0.001	75	462918	50.0	55.2	
45 Chlorobromomethane	128	4.460	4.462	-0.002	89	239382	50.0	48.8	
46 Tetrahydrofuran	42	4.496	4.497	-0.001	91	507979	100.0	97.5	
47 Chloroform	83	4.508	4.509	-0.001	99	768699	50.0	45.9	
48 1,1,1-Trichloroethane	97	4.673	4.675	-0.002	97	645466	50.0	51.4	
49 Cyclohexane	56	4.721	4.722	-0.001	98	971586	50.0	51.5	
50 1,1-Dichloropropene	75	4.792	4.793	-0.001	85	575510	50.0	51.1	
51 Carbon tetrachloride	117	4.804	4.805	-0.001	93	573741	50.0	53.2	
52 Isobutyl alcohol	41	4.827	4.829	-0.001	92	788212	1250.0	1237.7	
53 1,2-Dichloroethane	62	4.946	4.947	-0.001	68	806550	50.0	46.2	
54 Benzene	78	4.946	4.947	-0.001	92	1632774	50.0	47.2	
56 n-Heptane	100	5.135	5.136	-0.001	95	128199	50.0	51.6	
58 Trichloroethene	130	5.443	5.444	-0.001	94	453665	50.0	47.7	
60 Methylcyclohexane	83	5.608	5.609	-0.001	93	751758	50.0	50.9	
61 1,2-Dichloropropane	63	5.620	5.621	-0.001	82	463348	50.0	47.0	
64 1,4-Dioxane	88	5.715	5.716	-0.001	55	101450	1000.0	1030.2	
63 Dibromomethane	93	5.715	5.716	-0.001	94	261144	50.0	47.1	
65 Dichlorobromomethane	83	5.833	5.834	-0.001	96	552221	50.0	52.3	
67 2-Chloroethyl vinyl ether	63	6.046	6.047	-0.001	85	473523	100.0	101.9	
68 cis-1,3-Dichloropropene	75	6.188	6.189	-0.001	81	604202	50.0	46.4	
69 4-Methyl-2-pentanone (MIBK	43	6.306	6.308	-0.002	97	1593246	100.0	102.6	
70 Toluene	91	6.484	6.485	-0.001	96	1652903	50.0	47.9	
71 trans-1,3-Dichloropropene	75	6.650	6.651	-0.001	89	526197	50.0	47.1	
72 Ethyl methacrylate	69	6.709	6.710	-0.001	88	553228	50.0	53.8	
73 1,1,2-Trichloroethane	97	6.803	6.805	-0.002	97	357166	50.0	45.9	
74 1,3-Dichloropropane	76	6.957	6.958	-0.001	88	631024	50.0	48.4	
75 Tetrachloroethene	164	6.957	6.958	-0.001	76	353755	50.0	48.4	
76 2-Hexanone	43	7.004	7.006	-0.002	96	1079390	100.0	103.1	
78 Chlorodibromomethane	129	7.158	7.160	-0.002	90	391358	50.0	55.1	
80 Ethylene Dibromide	107	7.277	7.278	-0.001	97	372147	50.0	51.2	
82 Chlorobenzene	112	7.714	7.716	-0.002	94	1142834	50.0	46.7	
83 1,1,1,2-Tetrachloroethane	131	7.774	7.775	-0.001	92	434821	50.0	52.8	
84 Ethylbenzene	106	7.797	7.799	-0.002	99	573169	50.0	49.6	
85 m-Xylene & p-Xylene	106	7.904	7.905	-0.001	98	716052	50.0	51.1	
86 o-Xylene	106	8.271	8.272	-0.001	97	720787	50.0	51.0	
87 Styrene	104	8.282	8.284	-0.002	89	1225398	50.0	51.8	
88 Bromoform	173	8.460	8.461	-0.001	96	230686	50.0	47.2	
89 Isopropylbenzene	105	8.614	8.615	-0.001	97	1925903	50.0	53.1	
92 1,1,2,2-Tetrachloroethane	83	8.874	8.875	-0.001	97	468823	50.0	50.0	
93 Bromobenzene	156	8.921	8.911	0.010	93	497954	50.0	47.5	
94 1,2,3-Trichloropropane	110	8.933	8.923	0.010	89	167975	50.0	45.8	
95 trans-1,4-Dichloro-2-buten	53	8.933	8.934	-0.001	77	196317	50.0	50.8	
96 N-Propylbenzene	120	9.004	9.005	-0.001	99	547887	50.0	52.1	
97 2-Chlorotoluene	126	9.099	9.100	-0.001	96	464847	50.0	49.2	
98 1,3,5-Trimethylbenzene	105	9.170	9.171	-0.001	95	1682649	50.0	53.9	
99 4-Chlorotoluene	126	9.194	9.195	-0.001	98	486770	50.0	49.0	
100 tert-Butylbenzene	119	9.489	9.491	-0.002	95	1595266	50.0	52.1	
102 1,2,4-Trimethylbenzene	105	9.537	9.538	-0.001	96	1726990	50.0	53.1	
103 sec-Butylbenzene	105	9.702	9.704	-0.002	96	2077333	50.0	53.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.821	9.822	-0.001	97	957627	50.0	46.7	
105 4-Isopropyltoluene	119	9.844	9.846	-0.002	97	1928039	50.0	54.6	
106 1,4-Dichlorobenzene	146	9.904	9.905	-0.001	95	989782	50.0	45.3	
109 n-Butylbenzene	91	10.247	10.236	0.011	97	1572810	50.0	53.9	
110 1,2-Dichlorobenzene	146	10.270	10.272	-0.002	96	950205	50.0	47.4	
111 1,2-Dibromo-3-Chloropropan	157	11.028	11.029	-0.001	71	81844	50.0	46.9	
113 1,2,4-Trichlorobenzene	180	11.856	11.857	-0.001	95	630114	50.0	50.6	
114 Hexachlorobutadiene	225	12.033	12.035	-0.002	97	366740	50.0	50.0	
115 Naphthalene	128	12.104	12.106	-0.002	97	1615962	50.0	56.2	
116 1,2,3-Trichlorobenzene	180	12.365	12.366	-0.001	95	627458	50.0	49.5	
S 126 1,2-Dichloroethene, Total	96				0			95.8	
S 127 1,3-Dichloropropene, Total	75				0			93.5	
S 128 Xylenes, Total	106				0		100.0	102.1	
S 129 Trihalomethanes, Total	1				0		200.0	200.5	

Reagents:

VMRPRIMW_00248	Amount Added:	5.00	Units: uL	
VMAROLISTDW_00211	Amount Added:	5.00	Units: uL	
VMRGAS_00212	Amount Added:	5.00	Units: uL	
vm50ss_00294	Amount Added:	5.00	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

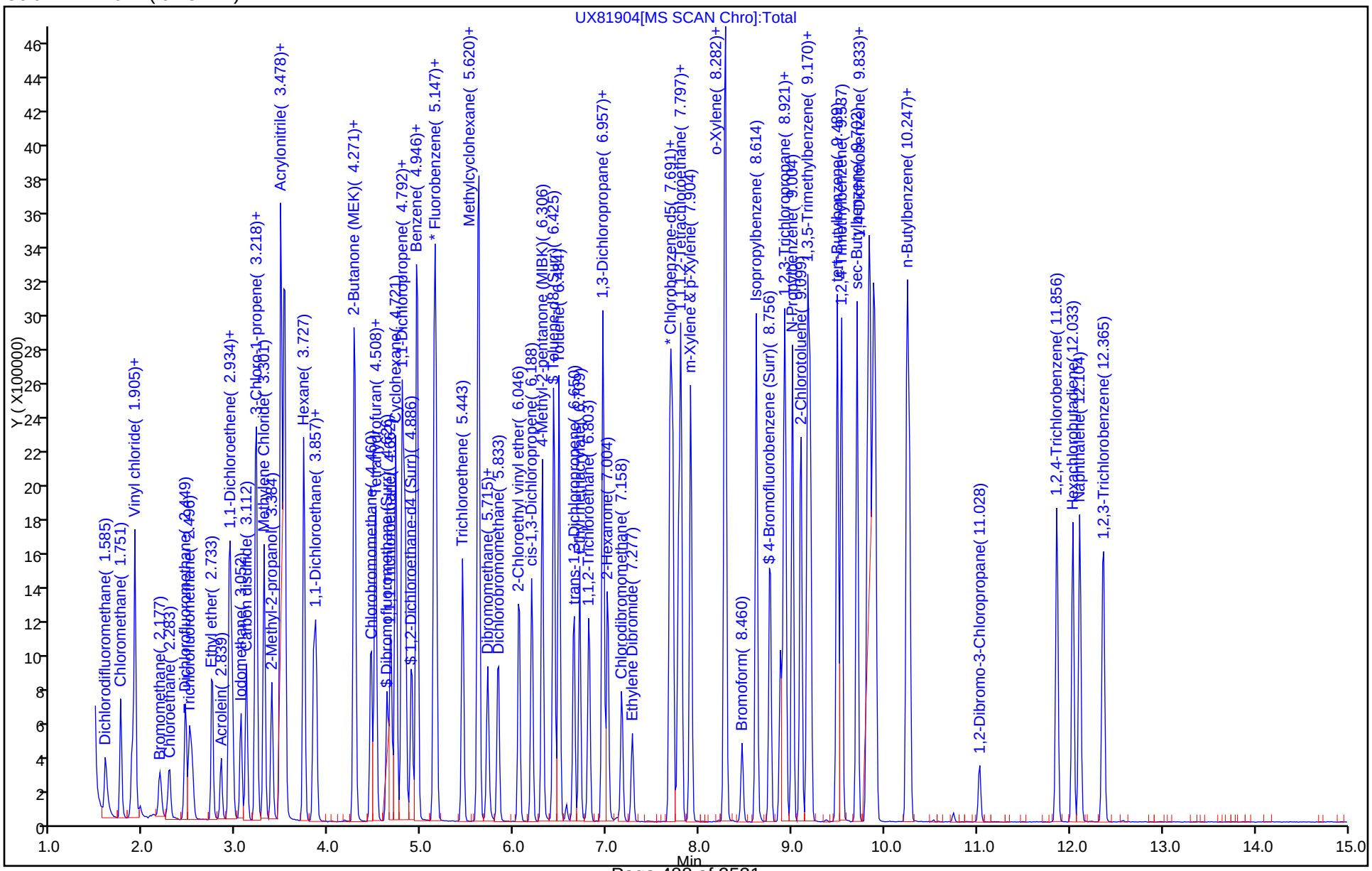
Report Date: 21-Aug-2017 01:26:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81904.D

Injection Date:	20-Aug-2017 01:38:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L6			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81905.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 20-Aug-2017 02:00:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-006
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:26:55 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:15:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.160	5.160	0.000	99	1858152	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.680	7.680	0.000	96	1297679	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.881	9.881	0.000	97	699487	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.627	4.627	0.000	93	183720	20.0	20.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.888	4.888	0.000	99	274960	20.0	20.8	
$ 6 Toluene-d8 (Surr)	98	6.426	6.426	0.000	96	667960	20.0	20.6	
$ 7 4-Bromofluorobenzene (Surr	95	8.757	8.757	0.000	87	277975	20.0	21.9	
9 Dichlorodifluoromethane	85	1.586	1.586	0.000	98	175061	20.0	19.5	
10 Chloromethane	50	1.752	1.752	0.000	100	261746	20.0	18.8	
11 Vinyl chloride	62	1.870	1.870	0.000	99	168625	20.0	18.5	
12 Butadiene	54	1.906	1.906	0.000	0	230296	20.0	19.4	
13 Bromomethane	94	2.178	2.178	0.000	92	90308	20.0	22.6	
14 Chloroethane	64	2.284	2.284	0.000	95	109268	20.0	18.7	
15 Dichlorofluoromethane	67	2.450	2.450	0.000	99	250968	20.0	19.0	
16 Trichlorofluoromethane	101	2.497	2.497	0.000	99	222900	20.0	19.6	
17 Ethyl ether	59	2.746	2.746	0.000	95	181840	20.0	18.6	
18 Acrolein	56	2.841	2.841	0.000	99	111425	100.0	99.0	
19 1,1-Dichloroethene	96	2.923	2.923	0.000	92	131426	20.0	19.7	
20 1,1,2-Trichloro-1,2,2-trif	151	2.947	2.947	0.000	92	116080	20.0	20.0	
21 Acetone	43	2.959	2.959	0.000	96	239405	40.0	39.6	
23 Iodomethane	142	3.054	3.054	0.000	99	267044	20.0	19.4	
24 Carbon disulfide	76	3.113	3.113	0.000	97	390280	20.0	19.2	
26 3-Chloro-1-propene	76	3.207	3.207	0.000	84	84427	20.0	19.9	
27 Methyl acetate	43	3.219	3.219	0.000	99	490971	40.0	36.2	
28 Methylene Chloride	84	3.302	3.302	0.000	91	208237	20.0	19.1	
29 2-Methyl-2-propanol	59	3.385	3.385	0.000	89	224542	200.0	195.1	
30 Acrylonitrile	53	3.480	3.480	0.000	97	1010121	200.0	190.9	
32 Methyl tert-butyl ether	73	3.527	3.527	0.000	92	507663	20.0	19.3	
31 trans-1,2-Dichloroethene	96	3.527	3.527	0.000	67	165762	20.0	19.8	
33 Hexane	86	3.728	3.728	0.000	92	50555	20.0	19.2	
34 1,1-Dichloroethane	63	3.835	3.835	0.000	98	333485	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.858	3.858	0.000	97	510582	20.0	18.9	
39 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	91	185355	20.0	19.1	
40 2-Butanone (MEK)	43	4.272	4.272	0.000	97	314307	40.0	36.5	
41 2,2-Dichloropropane	77	4.284	4.284	0.000	72	164337	20.0	20.0	
45 Chlorobromomethane	128	4.462	4.462	0.000	89	95229	20.0	19.8	
46 Tetrahydrofuran	42	4.497	4.497	0.000	92	191768	40.0	37.6	
47 Chloroform	83	4.509	4.509	0.000	99	301087	20.0	18.3	
48 1,1,1-Trichloroethane	97	4.675	4.675	0.000	96	244140	20.0	19.9	
49 Cyclohexane	56	4.722	4.722	0.000	97	376384	20.0	20.4	
50 1,1-Dichloropropene	75	4.793	4.793	0.000	86	224564	20.0	20.3	
51 Carbon tetrachloride	117	4.805	4.805	0.000	97	212956	20.0	20.1	
52 Isobutyl alcohol	41	4.829	4.829	0.000	93	309931	500.0	496.6	
54 Benzene	78	4.947	4.947	0.000	93	652811	20.0	19.3	
53 1,2-Dichloroethane	62	4.947	4.947	0.000	67	315175	20.0	18.4	
56 n-Heptane	100	5.136	5.136	0.000	95	47204	20.0	19.4	
58 Trichloroethene	130	5.444	5.444	0.000	93	174012	20.0	18.7	
60 Methylcyclohexane	83	5.609	5.609	0.000	88	294100	20.0	20.3	
61 1,2-Dichloropropane	63	5.621	5.621	0.000	91	188266	20.0	19.5	
63 Dibromomethane	93	5.716	5.716	0.000	94	104922	20.0	19.3	
64 1,4-Dioxane	88	5.716	5.716	0.000	65	39598	400.0	410.3	
65 Dichlorobromomethane	83	5.834	5.834	0.000	95	199767	20.0	19.3	
67 2-Chloroethyl vinyl ether	63	6.047	6.047	0.000	86	184314	40.0	40.5	
68 cis-1,3-Dichloropropene	75	6.189	6.189	0.000	82	222693	20.0	18.2	
69 4-Methyl-2-pentanone (MIBK	43	6.308	6.308	0.000	98	626943	40.0	41.2	
70 Toluene	91	6.485	6.485	0.000	97	665378	20.0	19.3	
71 trans-1,3-Dichloropropene	75	6.651	6.651	0.000	92	186237	20.0	17.6	
72 Ethyl methacrylate	69	6.710	6.710	0.000	87	209413	20.0	20.4	
73 1,1,2-Trichloroethane	97	6.805	6.805	0.000	96	146468	20.0	18.8	
75 Tetrachloroethene	164	6.958	6.958	0.000	75	146229	20.0	20.0	
74 1,3-Dichloropropane	76	6.958	6.958	0.000	87	252488	20.0	19.3	
76 2-Hexanone	43	7.006	7.006	0.000	96	435160	40.0	41.5	
78 Chlorodibromomethane	129	7.160	7.160	0.000	90	139965	20.0	19.7	
80 Ethylene Dibromide	107	7.278	7.278	0.000	98	147847	20.0	20.3	
82 Chlorobenzene	112	7.716	7.716	0.000	92	457388	20.0	18.7	
83 1,1,1,2-Tetrachloroethane	131	7.775	7.775	0.000	91	165442	20.0	20.1	
84 Ethylbenzene	106	7.799	7.799	0.000	99	226857	20.0	19.6	
85 m-Xylene & p-Xylene	106	7.905	7.905	0.000	97	280750	20.0	20.0	
86 o-Xylene	106	8.272	8.272	0.000	97	281453	20.0	19.9	
87 Styrene	104	8.284	8.284	0.000	89	466912	20.0	19.7	
88 Bromoform	173	8.461	8.461	0.000	95	82780	20.0	18.4	
89 Isopropylbenzene	105	8.615	8.615	0.000	97	738490	20.0	20.3	
92 1,1,2,2-Tetrachloroethane	83	8.875	8.875	0.000	98	183775	20.0	20.4	
93 Bromobenzene	156	8.911	8.911	0.000	93	199319	20.0	19.7	
94 1,2,3-Trichloropropane	110	8.923	8.923	0.000	92	67747	20.0	19.2	
95 trans-1,4-Dichloro-2-buten	53	8.934	8.934	0.000	71	73649	20.0	19.8	
96 N-Propylbenzene	120	9.005	9.005	0.000	99	217930	20.0	21.5	
97 2-Chlorotoluene	126	9.100	9.100	0.000	96	192453	20.0	21.2	
98 1,3,5-Trimethylbenzene	105	9.171	9.171	0.000	95	653817	20.0	21.8	
99 4-Chlorotoluene	126	9.195	9.195	0.000	98	197460	20.0	20.6	
100 tert-Butylbenzene	119	9.491	9.491	0.000	95	623334	20.0	21.1	
102 1,2,4-Trimethylbenzene	105	9.538	9.538	0.000	95	677886	20.0	21.7	
103 sec-Butylbenzene	105	9.704	9.704	0.000	96	820738	20.0	22.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.822	9.822	0.000	97	390367	20.0	19.8	
105 4-Isopropyltoluene	119	9.846	9.846	0.000	97	738033	20.0	21.7	
106 1,4-Dichlorobenzene	146	9.905	9.905	0.000	92	403003	20.0	19.2	
109 n-Butylbenzene	91	10.236	10.236	0.000	97	616698	20.0	22.0	
110 1,2-Dichlorobenzene	146	10.272	10.272	0.000	96	376190	20.0	19.5	
111 1,2-Dibromo-3-Chloropropan	157	11.029	11.029	0.000	68	27903	20.0	17.5	
113 1,2,4-Trichlorobenzene	180	11.857	11.857	0.000	95	238354	20.0	19.9	
114 Hexachlorobutadiene	225	12.035	12.035	0.000	96	143393	20.0	20.3	
115 Naphthalene	128	12.106	12.106	0.000	97	578567	20.0	20.9	
116 1,2,3-Trichlorobenzene	180	12.366	12.366	0.000	95	244339	20.0	20.0	
S 128 Xylenes, Total	106				0		40.0	39.9	
S 129 Trihalomethanes, Total	1				0		80.0	75.8	

Reagents:

VMRPRIMW_00248	Amount Added:	2.00	Units: uL	
VMAROLISTDW_00211	Amount Added:	2.00	Units: uL	
VMRGAS_00212	Amount Added:	2.00	Units: uL	
vm50ss_00294	Amount Added:	2.00	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

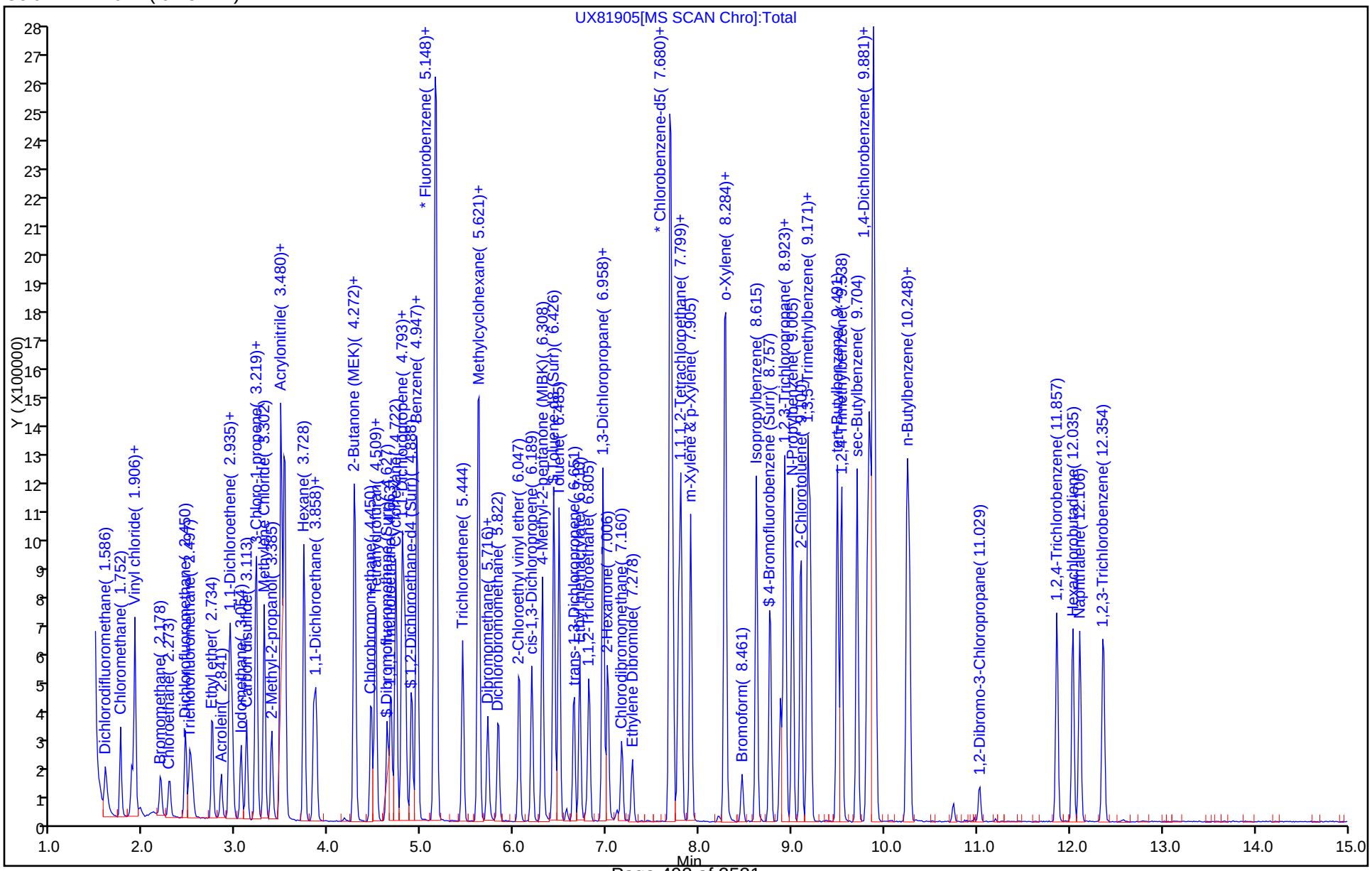
Report Date: 21-Aug-2017 01:26:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81905.D

Injection Date:	20-Aug-2017 02:00:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81906.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 20-Aug-2017 02:21:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-007
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:26:58 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:16:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.160	-0.003	98	1842478	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.680	0.009	98	1280573	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.881	-0.003	96	706879	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.624	4.627	-0.003	93	92324	10.0	10.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.888	0.009	98	143678	10.0	10.9	
$ 6 Toluene-d8 (Surr)	98	6.435	6.426	0.009	95	337822	10.0	10.6	
$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.757	0.009	89	142739	10.0	10.1	
9 Dichlorodifluoromethane	85	1.583	1.586	-0.003	99	85184	10.0	9.58	
10 Chloromethane	50	1.749	1.752	-0.003	99	129226	10.0	9.37	
11 Vinyl chloride	62	1.867	1.870	-0.003	99	84951	10.0	9.39	
12 Butadiene	54	1.903	1.906	-0.003	0	108950	10.0	9.23	
13 Bromomethane	94	2.187	2.178	0.009	91	45012	10.0	9.33	
14 Chloroethane	64	2.282	2.284	-0.002	95	54811	10.0	9.46	
15 Dichlorofluoromethane	67	2.447	2.450	-0.003	98	123286	10.0	9.43	
16 Trichlorofluoromethane	101	2.506	2.497	0.009	97	108208	10.0	9.59	
17 Ethyl ether	59	2.743	2.746	-0.003	92	94720	10.0	9.76	
18 Acrolein	56	2.838	2.841	-0.003	98	55750	50.0	50.0	
19 1,1-Dichloroethene	96	2.932	2.923	0.009	92	62391	10.0	9.43	
20 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.947	-0.003	92	58609	10.0	10.2	
21 Acetone	43	2.956	2.959	-0.003	96	137704	20.0	19.3	
23 Iodomethane	142	3.051	3.054	-0.003	98	138347	10.0	10.1	
24 Carbon disulfide	76	3.110	3.113	-0.003	97	195637	10.0	9.71	
26 3-Chloro-1-propene	76	3.216	3.207	0.009	82	40932	10.0	9.74	
27 Methyl acetate	43	3.216	3.219	-0.003	100	263261	20.0	19.6	
28 Methylene Chloride	84	3.299	3.302	-0.003	91	122716	10.0	9.00	
29 2-Methyl-2-propanol	59	3.382	3.385	-0.003	87	106735	100.0	93.5	
30 Acrylonitrile	53	3.477	3.480	-0.003	96	535793	100.0	102.1	
31 trans-1,2-Dichloroethene	96	3.524	3.527	-0.003	68	84143	10.0	10.2	
32 Methyl tert-butyl ether	73	3.524	3.527	-0.003	91	264544	10.0	10.1	
33 Hexane	86	3.737	3.728	0.009	93	28624	10.0	9.97	
34 1,1-Dichloroethane	63	3.843	3.835	0.008	98	177366	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.867	3.858	0.009	97	254739	10.0	9.52	
40 2-Butanone (MEK)	43	4.269	4.272	-0.003	94	166408	20.0	19.5	
39 cis-1,2-Dichloroethene	96	4.269	4.272	-0.003	90	101482	10.0	10.5	
41 2,2-Dichloropropane	77	4.281	4.284	-0.003	71	86004	10.0	10.6	
45 Chlorobromomethane	128	4.459	4.462	-0.003	89	49046	10.0	10.3	
46 Tetrahydrofuran	42	4.494	4.497	-0.003	92	100734	20.0	19.9	
47 Chloroform	83	4.506	4.509	-0.003	97	157729	10.0	9.69	
48 1,1,1-Trichloroethane	97	4.672	4.675	-0.003	96	123081	10.0	10.1	
49 Cyclohexane	56	4.719	4.722	-0.003	97	186488	10.0	10.2	
50 1,1-Dichloropropene	75	4.790	4.793	-0.003	83	114967	10.0	10.5	
51 Carbon tetrachloride	117	4.802	4.805	-0.003	96	103985	10.0	9.92	
52 Isobutyl alcohol	41	4.826	4.829	-0.002	93	150666	250.0	243.5	
53 1,2-Dichloroethane	62	4.956	4.947	0.009	66	170101	10.0	10.0	
54 Benzene	78	4.956	4.947	0.009	93	350479	10.0	10.4	
56 n-Heptane	100	5.133	5.136	-0.003	95	27100	10.0	11.2	
58 Trichloroethene	130	5.441	5.444	-0.003	94	95726	10.0	10.4	
60 Methylcyclohexane	83	5.618	5.609	0.009	90	139581	10.0	9.74	
61 1,2-Dichloropropane	63	5.618	5.621	-0.003	86	97599	10.0	10.2	
64 1,4-Dioxane	88	5.713	5.716	-0.003	49	18988	200.0	198.4	
63 Dibromomethane	93	5.713	5.716	-0.003	95	56708	10.0	10.5	
65 Dichlorobromomethane	83	5.831	5.834	-0.003	96	102435	10.0	9.99	
67 2-Chloroethyl vinyl ether	63	6.056	6.047	0.009	89	95962	20.0	21.3	
68 cis-1,3-Dichloropropene	75	6.186	6.189	-0.003	81	110016	10.0	9.67	
69 4-Methyl-2-pentanone (MIBK	43	6.305	6.308	-0.003	97	313999	20.0	20.8	
70 Toluene	91	6.482	6.485	-0.003	96	346357	10.0	10.2	
71 trans-1,3-Dichloropropene	75	6.648	6.651	-0.003	88	89509	10.0	9.25	
72 Ethyl methacrylate	69	6.707	6.710	-0.003	88	108476	10.0	10.7	
73 1,1,2-Trichloroethane	97	6.814	6.805	0.009	95	76311	10.0	9.94	
74 1,3-Dichloropropane	76	6.956	6.958	-0.002	90	140792	10.0	10.9	
75 Tetrachloroethene	164	6.967	6.958	0.009	91	76933	10.0	10.7	
76 2-Hexanone	43	7.015	7.006	0.009	96	219426	20.0	21.2	
78 Chlorodibromomethane	129	7.168	7.160	0.008	90	67863	10.0	9.68	
80 Ethylene Dibromide	107	7.275	7.278	-0.003	99	75701	10.0	10.6	
82 Chlorobenzene	112	7.713	7.716	-0.003	92	241462	10.0	10.0	
83 1,1,1,2-Tetrachloroethane	131	7.784	7.775	0.009	87	87170	10.0	10.7	
84 Ethylbenzene	106	7.807	7.799	0.008	98	121833	10.0	10.7	
85 m-Xylene & p-Xylene	106	7.902	7.905	-0.003	97	139972	10.0	10.1	
86 o-Xylene	106	8.269	8.272	-0.003	97	147687	10.0	10.6	
87 Styrene	104	8.281	8.284	-0.003	84	238852	10.0	10.2	
88 Bromoform	173	8.458	8.461	-0.003	94	37531	10.0	9.74	
89 Isopropylbenzene	105	8.612	8.615	-0.003	97	374000	10.0	10.4	
92 1,1,2,2-Tetrachloroethane	83	8.872	8.875	-0.003	98	95568	10.0	10.5	
93 Bromobenzene	156	8.920	8.911	0.009	91	106484	10.0	10.4	
94 1,2,3-Trichloropropane	110	8.932	8.923	0.009	88	35284	10.0	9.89	
95 trans-1,4-Dichloro-2-buten	53	8.932	8.934	-0.002	66	37168	10.0	9.87	
96 N-Propylbenzene	120	9.003	9.005	-0.002	99	110441	10.0	10.8	
97 2-Chlorotoluene	126	9.097	9.100	-0.003	95	96728	10.0	10.5	
98 1,3,5-Trimethylbenzene	105	9.168	9.171	-0.003	95	326773	10.0	10.8	
99 4-Chlorotoluene	126	9.192	9.195	-0.003	99	101175	10.0	10.5	
100 tert-Butylbenzene	119	9.488	9.491	-0.003	95	344391	10.0	11.6	
102 1,2,4-Trimethylbenzene	105	9.535	9.538	-0.003	96	342312	10.0	10.8	
103 sec-Butylbenzene	105	9.701	9.704	-0.003	95	408489	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.819	9.822	-0.003	97	207325	10.0	10.4	
105 4-Isopropyltoluene	119	9.843	9.846	-0.003	98	371333	10.0	10.8	
106 1,4-Dichlorobenzene	146	9.902	9.905	-0.003	93	214123	10.0	10.1	
109 n-Butylbenzene	91	10.245	10.236	0.009	97	301215	10.0	10.6	
110 1,2-Dichlorobenzene	146	10.269	10.272	-0.003	95	204112	10.0	10.5	
111 1,2-Dibromo-3-Chloropropan	157	11.026	11.029	-0.003	68	12889	10.0	8.70	
113 1,2,4-Trichlorobenzene	180	11.866	11.857	0.009	94	118576	10.0	9.78	
114 Hexachlorobutadiene	225	12.032	12.035	-0.003	97	72689	10.0	10.2	
115 Naphthalene	128	12.103	12.106	-0.003	98	271133	10.0	9.69	
116 1,2,3-Trichlorobenzene	180	12.363	12.366	-0.003	95	126788	10.0	10.3	
S 126 1,2-Dichloroethene, Total	96				0			20.7	
S 127 1,3-Dichloropropene, Total	75				0			18.9	
S 128 Xylenes, Total	106				0		20.0	20.7	
S 129 Trihalomethanes, Total	1				0		40.0	39.1	

Reagents:

VMRPRIMW_00248	Amount Added:	1.00	Units: uL	
VMAROLISTDW_00211	Amount Added:	1.00	Units: uL	
VMRGAS_00212	Amount Added:	1.00	Units: uL	
vm50ss_00294	Amount Added:	1.00	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

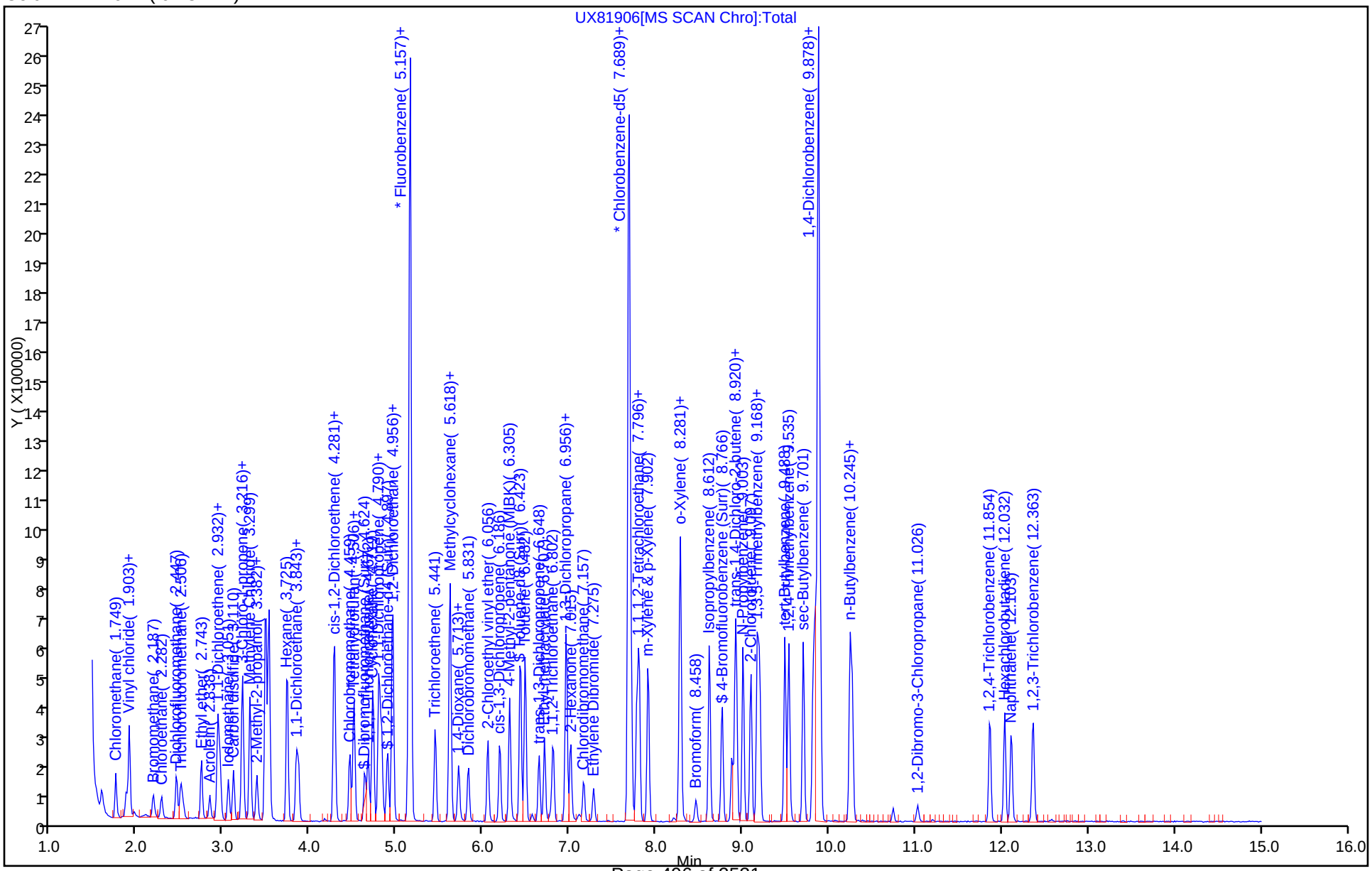
Report Date: 21-Aug-2017 01:26:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81906.D

Injection Date:	20-Aug-2017 02:21:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L4			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81907.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Aug-2017 02:42:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-008
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:27:01 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:16:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.158	5.160	-0.002	99	1791287	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.690	7.680	0.010	97	1231303	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.881	-0.002	96	710201	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.625	4.627	-0.002	91	48316	5.00	5.66	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.886	4.888	-0.002	98	75382	5.00	5.91	
$ 6 Toluene-d8 (Surr)	98	6.424	6.426	-0.002	96	175162	5.00	5.69	
$ 7 4-Bromofluorobenzene (Surr	95	8.767	8.757	0.010	87	79071	5.00	4.61	
9 Dichlorodifluoromethane	85	1.584	1.586	-0.002	98	49415	5.00	5.71	
10 Chloromethane	50	1.750	1.752	-0.002	100	78649	5.00	5.86	
11 Vinyl chloride	62	1.868	1.870	-0.002	100	51847	5.00	5.90	
12 Butadiene	54	1.904	1.906	-0.002	0	66632	5.00	5.81	
13 Bromomethane	94	2.188	2.178	0.010	91	27124	5.00	4.23	
14 Chloroethane	64	2.282	2.284	-0.002	94	32956	5.00	5.85	
15 Dichlorofluoromethane	67	2.448	2.450	-0.002	99	76480	5.00	6.02	
16 Trichlorofluoromethane	101	2.507	2.497	0.010	97	65564	5.00	5.98	
17 Ethyl ether	59	2.744	2.746	-0.002	92	47352	5.00	5.02	
18 Acrolein	56	2.839	2.841	-0.002	97	30177	25.0	27.8	
19 1,1-Dichloroethene	96	2.933	2.923	0.010	95	35001	5.00	5.44	
20 1,1,2-Trichloro-1,2,2-trif	151	2.945	2.947	-0.002	92	27113	5.00	4.84	
21 Acetone	43	2.957	2.959	-0.002	96	87837	10.0	9.65	
23 Iodomethane	142	3.052	3.054	-0.002	99	68173	5.00	5.12	
24 Carbon disulfide	76	3.111	3.113	-0.002	98	91832	5.00	4.69	
26 3-Chloro-1-propene	76	3.205	3.207	-0.002	84	20013	5.00	4.90	
27 Methyl acetate	43	3.217	3.219	-0.002	99	131954	10.0	10.1	
28 Methylene Chloride	84	3.300	3.302	-0.002	91	89792	5.00	5.33	
29 2-Methyl-2-propanol	59	3.383	3.385	-0.002	88	60914	50.0	54.9	
30 Acrylonitrile	53	3.478	3.480	-0.002	96	251374	50.0	49.3	
32 Methyl tert-butyl ether	73	3.525	3.527	-0.002	91	128381	5.00	5.06	
31 trans-1,2-Dichloroethene	96	3.525	3.527	-0.002	66	42506	5.00	5.28	
33 Hexane	86	3.738	3.728	0.010	94	16490	5.00	4.98	
34 1,1-Dichloroethane	63	3.844	3.835	0.009	98	83155	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.868	3.858	0.010	97	120595	5.00	4.64	
39 cis-1,2-Dichloroethene	96	4.282	4.272	0.010	89	49761	5.00	5.32	
40 2-Butanone (MEK)	43	4.270	4.272	-0.002	95	81351	10.0	9.80	
41 2,2-Dichloropropane	77	4.282	4.284	-0.002	69	37810	5.00	4.77	
45 Chlorobromomethane	128	4.460	4.462	-0.002	89	23404	5.00	5.05	
46 Tetrahydrofuran	42	4.495	4.497	-0.002	87	45199	10.0	9.18	
47 Chloroform	83	4.507	4.509	-0.002	98	79217	5.00	5.01	
48 1,1,1-Trichloroethane	97	4.673	4.675	-0.002	97	57182	5.00	4.82	
49 Cyclohexane	56	4.720	4.722	-0.002	97	87603	5.00	4.92	
50 1,1-Dichloropropene	75	4.791	4.793	-0.002	84	53467	5.00	5.02	
51 Carbon tetrachloride	117	4.803	4.805	-0.002	94	47050	5.00	4.62	
52 Isobutyl alcohol	41	4.826	4.829	-0.002	91	89959	125.0	149.5	
54 Benzene	78	4.957	4.947	0.010	94	165819	5.00	5.07	
53 1,2-Dichloroethane	62	4.945	4.947	-0.002	69	83713	5.00	5.07	
56 n-Heptane	100	5.134	5.136	-0.002	93	11578	5.00	4.93	
58 Trichloroethene	130	5.442	5.444	-0.002	93	46308	5.00	5.15	
60 Methylcyclohexane	83	5.619	5.609	0.010	92	69376	5.00	4.98	
61 1,2-Dichloropropane	63	5.619	5.621	-0.002	64	45694	5.00	4.91	
63 Dibromomethane	93	5.714	5.716	-0.002	94	24846	5.00	4.74	
64 1,4-Dioxane	88	5.714	5.716	-0.002	51	10099	100.0	108.6	
65 Dichlorobromomethane	83	5.832	5.834	-0.002	95	47045	5.00	4.72	
67 2-Chloroethyl vinyl ether	63	6.057	6.047	0.010	84	37578	10.0	8.56	
68 cis-1,3-Dichloropropene	75	6.187	6.189	-0.002	80	43515	5.00	4.64	
69 4-Methyl-2-pentanone (MIBK	43	6.306	6.308	-0.002	97	139098	10.0	9.48	
70 Toluene	91	6.483	6.485	-0.002	97	162726	5.00	4.97	
71 trans-1,3-Dichloropropene	75	6.649	6.651	-0.002	89	37132	5.00	4.78	
72 Ethyl methacrylate	69	6.708	6.710	-0.002	87	44092	5.00	4.52	
73 1,1,2-Trichloroethane	97	6.814	6.805	0.009	93	36941	5.00	5.00	
75 Tetrachloroethene	164	6.968	6.958	0.010	94	36460	5.00	5.26	
74 1,3-Dichloropropane	76	6.956	6.958	-0.002	89	64690	5.00	5.22	
76 2-Hexanone	43	7.016	7.006	0.010	96	98023	10.0	9.86	
78 Chlorodibromomethane	129	7.158	7.160	-0.002	91	28351	5.00	4.20	
80 Ethylene Dibromide	107	7.276	7.278	-0.002	99	34079	5.00	4.94	
82 Chlorobenzene	112	7.714	7.716	-0.002	93	121462	5.00	5.23	
83 1,1,1,2-Tetrachloroethane	131	7.773	7.775	-0.002	65	37309	5.00	4.77	
84 Ethylbenzene	106	7.808	7.799	0.009	98	54238	5.00	4.95	
85 m-Xylene & p-Xylene	106	7.903	7.905	-0.002	97	63106	5.00	4.75	
86 o-Xylene	106	8.270	8.272	-0.002	96	69923	5.00	5.21	
87 Styrene	104	8.282	8.284	-0.002	83	110114	5.00	4.90	
88 Bromoform	173	8.459	8.461	-0.002	95	16285	5.00	5.69	
89 Isopropylbenzene	105	8.613	8.615	-0.002	97	172690	5.00	5.01	
92 1,1,2,2-Tetrachloroethane	83	8.873	8.875	-0.002	97	44212	5.00	4.82	
93 Bromobenzene	156	8.921	8.911	0.010	93	51714	5.00	5.04	
94 1,2,3-Trichloropropane	110	8.932	8.923	0.009	88	17560	5.00	4.90	
95 trans-1,4-Dichloro-2-buten	53	8.932	8.934	-0.002	65	15773	5.00	4.17	
96 N-Propylbenzene	120	9.003	9.005	-0.002	99	49842	5.00	4.85	
97 2-Chlorotoluene	126	9.098	9.100	-0.002	95	45578	5.00	4.94	
98 1,3,5-Trimethylbenzene	105	9.169	9.171	-0.002	96	146866	5.00	4.81	
99 4-Chlorotoluene	126	9.193	9.195	-0.002	98	48286	5.00	4.97	
100 tert-Butylbenzene	119	9.489	9.491	-0.002	96	141507	5.00	4.72	
102 1,2,4-Trimethylbenzene	105	9.536	9.538	-0.002	95	155297	5.00	4.89	
103 sec-Butylbenzene	105	9.702	9.704	-0.002	96	184247	5.00	4.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.820	9.822	-0.002	96	100010	5.00	4.99	
105 4-Isopropyltoluene	119	9.844	9.846	-0.002	97	170136	5.00	4.93	
106 1,4-Dichlorobenzene	146	9.903	9.905	-0.002	92	106156	5.00	4.97	
109 n-Butylbenzene	91	10.246	10.236	0.010	98	136248	5.00	4.78	
110 1,2-Dichlorobenzene	146	10.270	10.272	-0.002	94	98268	5.00	5.02	
111 1,2-Dibromo-3-Chloropropan	157	11.027	11.029	-0.002	67	6312	5.00	4.93	
113 1,2,4-Trichlorobenzene	180	11.867	11.857	0.010	94	62203	5.00	5.10	
114 Hexachlorobutadiene	225	12.033	12.035	-0.002	95	38303	5.00	5.34	
115 Naphthalene	128	12.104	12.106	-0.002	98	126694	5.00	4.51	
116 1,2,3-Trichlorobenzene	180	12.364	12.366	-0.002	92	60369	5.00	4.87	
S 126 1,2-Dichloroethene, Total	96				0			10.6	
S 127 1,3-Dichloropropene, Total	75				0			9.42	
S 128 Xylenes, Total	106				0		10.0	9.96	
S 129 Trihalomethanes, Total	1				0		20.0	19.6	

Reagents:

VMRPRIMW_00248	Amount Added:	0.50	Units: uL	
VMAROLISTDW_00211	Amount Added:	0.50	Units: uL	
VMRGAS_00212	Amount Added:	0.50	Units: uL	
vm50ss_00294	Amount Added:	0.50	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

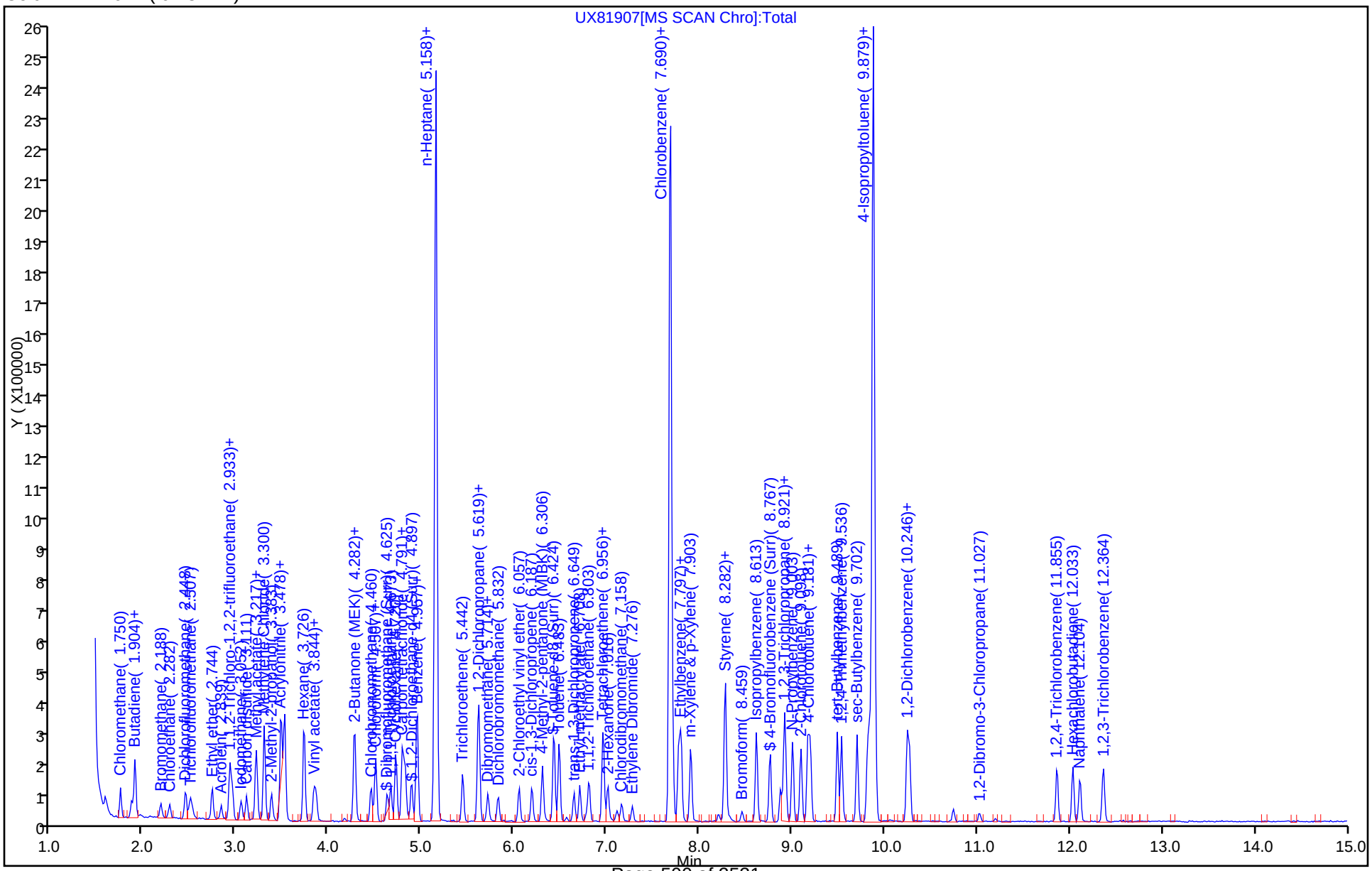
Report Date: 21-Aug-2017 01:27:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81907.D

Injection Date:	20-Aug-2017 02:42:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L3			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81908.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Aug-2017 03:03:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-009
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:27:04 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:17:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.160	-0.003	98	1729989	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.680	0.009	97	1208173	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.881	-0.003	97	688385	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.624	4.627	-0.003	91	23468	2.00	2.85	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.896	4.888	0.008	95	36293	2.00	2.94	
$ 6 Toluene-d8 (Surr)	98	6.435	6.426	0.009	97	83386	2.00	2.76	
$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.757	0.009	88	32424	2.00	0.3000	
9 Dichlorodifluoromethane	85	1.595	1.586	0.009	94	16859	2.00	2.02	
10 Chloromethane	50	1.749	1.752	-0.003	99	27845	2.00	2.15	
11 Vinyl chloride	62	1.867	1.870	-0.003	96	19631	2.00	2.31	
12 Butadiene	54	1.903	1.906	-0.003	0	23249	2.00	2.10	
13 Bromomethane	94	2.187	2.178	0.009	92	10823	2.00	-0.6478	
14 Chloroethane	64	2.281	2.284	-0.003	92	12708	2.00	2.34	
15 Dichlorofluoromethane	67	2.447	2.450	-0.003	98	26441	2.00	2.15	
16 Trichlorofluoromethane	101	2.494	2.497	-0.003	93	21562	2.00	2.04	
17 Ethyl ether	59	2.743	2.746	-0.003	96	20737	2.00	2.28	
18 Acrolein	56	2.838	2.841	-0.003	96	10595	10.0	10.1	
19 1,1-Dichloroethene	96	2.920	2.923	-0.003	91	11377	2.00	1.83	
20 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.947	-0.003	94	10328	2.00	1.91	
21 Acetone	43	2.956	2.959	-0.003	96	61514	4.00	4.58	
23 Iodomethane	142	3.051	3.054	-0.003	98	27774	2.00	2.16	
24 Carbon disulfide	76	3.110	3.113	-0.003	97	35662	2.00	1.88	
26 3-Chloro-1-propene	76	3.216	3.207	0.009	84	7332	2.00	1.86	
27 Methyl acetate	43	3.216	3.219	-0.003	99	61026	4.00	4.84	
28 Methylene Chloride	84	3.299	3.302	-0.003	90	63066	2.00	2.29	
29 2-Methyl-2-propanol	59	3.382	3.385	-0.003	83	21921	20.0	20.5	
30 Acrylonitrile	53	3.488	3.480	0.008	97	111330	20.0	22.6	
31 trans-1,2-Dichloroethene	96	3.524	3.527	-0.003	66	15477	2.00	1.99	
32 Methyl tert-butyl ether	73	3.524	3.527	-0.003	90	50672	2.00	2.07	
33 Hexane	86	3.737	3.728	0.009	94	8891	2.00	1.78	
34 1,1-Dichloroethane	63	3.843	3.835	0.008	97	34904	2.00	2.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.867	3.858	0.009	98	49461	2.00	1.97	
40 2-Butanone (MEK)	43	4.269	4.272	-0.003	95	37440	4.00	4.67	
39 cis-1,2-Dichloroethene	96	4.269	4.272	-0.003	86	18791	2.00	2.08	
41 2,2-Dichloropropane	77	4.281	4.284	-0.003	70	14688	2.00	1.92	
45 Chlorobromomethane	128	4.459	4.462	-0.003	89	10732	2.00	2.40	
46 Tetrahydrofuran	42	4.494	4.497	-0.003	81	20383	4.00	4.29	
47 Chloroform	83	4.506	4.509	-0.003	97	34313	2.00	2.25	
48 1,1,1-Trichloroethane	97	4.672	4.675	-0.003	95	21769	2.00	1.90	
49 Cyclohexane	56	4.719	4.722	-0.003	94	32835	2.00	1.91	
50 1,1-Dichloropropene	75	4.790	4.793	-0.003	78	19590	2.00	1.91	
51 Carbon tetrachloride	117	4.802	4.805	-0.003	95	17905	2.00	1.82	
52 Isobutyl alcohol	41	4.825	4.829	-0.003	91	28709	50.0	49.4	
53 1,2-Dichloroethane	62	4.956	4.947	0.009	71	36295	2.00	2.28	
54 Benzene	78	4.956	4.947	0.009	92	66249	2.00	2.10	
56 n-Heptane	100	5.133	5.136	-0.003	95	3282	2.00	1.45	
58 Trichloroethene	130	5.441	5.444	-0.003	91	20187	2.00	2.32	
60 Methylcyclohexane	83	5.618	5.609	0.009	75	25673	2.00	1.91	
61 1,2-Dichloropropane	63	5.618	5.621	-0.003	61	18127	2.00	2.02	
64 1,4-Dioxane	88	5.713	5.716	-0.003	50	3434	40.0	38.2	
63 Dibromomethane	93	5.713	5.716	-0.003	94	10678	2.00	2.11	
65 Dichlorobromomethane	83	5.831	5.834	-0.003	95	17600	2.00	1.83	
67 2-Chloroethyl vinyl ether	63	6.056	6.047	0.009	84	15767	4.00	3.72	
68 cis-1,3-Dichloropropene	75	6.186	6.189	-0.003	74	15656	2.00	2.48	
69 4-Methyl-2-pentanone (MIBK	43	6.305	6.308	-0.003	97	56601	4.00	3.99	
70 Toluene	91	6.482	6.485	-0.003	96	66170	2.00	2.06	
71 trans-1,3-Dichloropropene	75	6.648	6.651	-0.003	82	12676	2.00	2.56	
72 Ethyl methacrylate	69	6.707	6.710	-0.003	88	19064	2.00	1.99	
73 1,1,2-Trichloroethane	97	6.813	6.805	0.008	94	15656	2.00	2.16	
74 1,3-Dichloropropane	76	6.955	6.958	-0.003	88	26273	2.00	2.16	
75 Tetrachloroethene	164	6.955	6.958	-0.003	80	13471	2.00	1.98	
76 2-Hexanone	43	7.015	7.006	0.009	98	39034	4.00	4.00	
78 Chlorodibromomethane	129	7.168	7.160	0.008	88	10507	2.00	1.59	
80 Ethylene Dibromide	107	7.275	7.278	-0.003	98	13195	2.00	1.95	
82 Chlorobenzene	112	7.713	7.716	-0.003	94	49907	2.00	2.19	
83 1,1,1,2-Tetrachloroethane	131	7.772	7.775	-0.003	52	14303	2.00	1.86	
84 Ethylbenzene	106	7.807	7.799	0.008	97	21206	2.00	1.97	
85 m-Xylene & p-Xylene	106	7.902	7.905	-0.003	98	25371	2.00	1.94	
86 o-Xylene	106	8.281	8.272	0.009	94	25767	2.00	1.96	
87 Styrene	104	8.281	8.284	-0.003	90	42015	2.00	1.91	
88 Bromoform	173	8.470	8.461	0.009	89	5841	2.00	3.58	
89 Isopropylbenzene	105	8.612	8.615	-0.003	97	64183	2.00	1.90	
92 1,1,2,2-Tetrachloroethane	83	8.872	8.875	-0.003	92	16617	2.00	1.87	
93 Bromobenzene	156	8.920	8.911	0.009	92	21165	2.00	2.13	
94 1,2,3-Trichloropropane	110	8.931	8.923	0.008	89	7892	2.00	2.27	
95 trans-1,4-Dichloro-2-buten	53	8.931	8.934	-0.003	64	6936	2.00	1.89	
96 N-Propylbenzene	120	9.002	9.005	-0.003	98	17676	2.00	1.77	
97 2-Chlorotoluene	126	9.097	9.100	-0.003	95	18418	2.00	2.06	
98 1,3,5-Trimethylbenzene	105	9.168	9.171	-0.003	94	51441	2.00	1.74	
99 4-Chlorotoluene	126	9.204	9.195	0.009	97	19221	2.00	2.04	
100 tert-Butylbenzene	119	9.488	9.491	-0.003	93	49447	2.00	1.70	
102 1,2,4-Trimethylbenzene	105	9.535	9.538	-0.003	94	52808	2.00	1.71	
103 sec-Butylbenzene	105	9.701	9.704	-0.003	95	63590	2.00	1.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.819	9.822	-0.003	96	41988	2.00	2.16	
105 4-Isopropyltoluene	119	9.843	9.846	-0.003	97	56637	2.00	1.69	
106 1,4-Dichlorobenzene	146	9.902	9.905	-0.003	94	47328	2.00	2.29	
109 n-Butylbenzene	91	10.245	10.236	0.009	97	46827	2.00	1.69	
110 1,2-Dichlorobenzene	146	10.269	10.272	-0.003	92	39215	2.00	2.07	
111 1,2-Dibromo-3-Chloropropan	157	11.038	11.029	0.009	60	2130	2.00	2.58	
113 1,2,4-Trichlorobenzene	180	11.866	11.857	0.009	92	22701	2.00	1.92	
114 Hexachlorobutadiene	225	12.032	12.035	-0.003	94	13337	2.00	1.92	
115 Naphthalene	128	12.114	12.106	0.008	97	48746	2.00	1.79	
116 1,2,3-Trichlorobenzene	180	12.363	12.366	-0.003	91	23730	2.00	1.97	
S 126 1,2-Dichloroethene, Total	96				0			4.07	
S 127 1,3-Dichloropropene, Total	75				0			5.04	
S 128 Xylenes, Total	106				0		4.00	3.90	
S 129 Trihalomethanes, Total	1				0		8.00	9.24	

Reagents:

VMRPRIMW_00248	Amount Added:	0.20	Units: uL	
VMAROLISTDW_00211	Amount Added:	0.20	Units: uL	
VMRGAS_00212	Amount Added:	0.20	Units: uL	
vm50ss_00294	Amount Added:	0.20	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

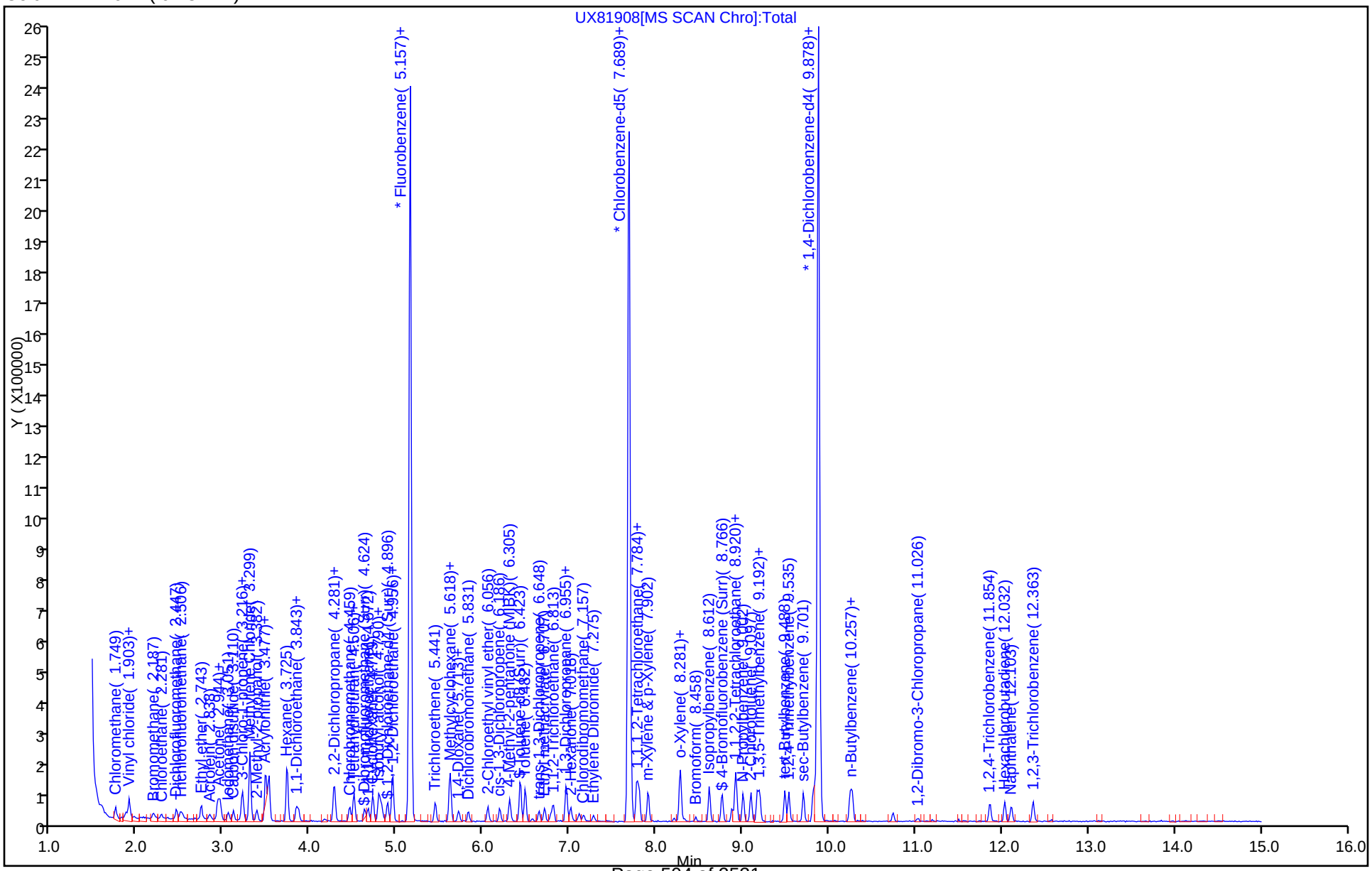
Report Date: 21-Aug-2017 01:27:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81908.D

Injection Date:	20-Aug-2017 03:03:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L2			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Aug-2017 03:24:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-010
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:27:07 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:33:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.160	-0.003	98	1759019	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.680	0.009	98	1238282	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.881	-0.003	95	686254	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.624	4.627	-0.003	90	12377	1.00	1.48	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.896	4.888	0.008	91	20535	1.00	1.64	
$ 6 Toluene-d8 (Surr)	98	6.435	6.426	0.009	96	45025	1.00	1.46	
$ 7 4-Bromofluorobenzene (Surr	95		8.757				ND	ND	
9 Dichlorodifluoromethane	85	1.583	1.586	-0.003	63	8220	1.00	0.9679	
10 Chloromethane	50	1.749	1.752	-0.003	98	14086	1.00	1.07	
11 Vinyl chloride	62	1.867	1.870	-0.003	96	8131	1.00	0.9415	
12 Butadiene	54	1.903	1.906	-0.003	0	10858	1.00	0.9638	
13 Bromomethane	94	2.187	2.178	0.009	93	5066	1.00	-2.50	
14 Chloroethane	64	2.281	2.284	-0.003	79	5279	1.00	0.9546	
15 Dichlorofluoromethane	67	2.459	2.450	0.009	98	13675	1.00	1.10	
16 Trichlorofluoromethane	101	2.506	2.497	0.009	96	10357	1.00	0.9619	
17 Ethyl ether	59	2.743	2.746	-0.003	93	11394	1.00	1.23	
18 Acrolein	56	2.837	2.841	-0.004	94	6227	5.00	5.85	
19 1,1-Dichloroethene	96	2.932	2.923	0.009	94	6590	1.00	1.04	
20 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.947	-0.003	37	6005	1.00	1.09	
21 Acetone	43	2.968	2.959	0.009	96	49381	2.00	1.77	
23 Iodomethane	142	3.050	3.054	-0.004	99	14061	1.00	1.08	
24 Carbon disulfide	76	3.110	3.113	-0.003	97	19209	1.00	1.00	
26 3-Chloro-1-propene	76	3.216	3.207	0.009	83	3902	1.00	0.9722	
27 Methyl acetate	43	3.228	3.219	0.009	99	29440	2.00	2.30	
28 Methylene Chloride	84	3.299	3.302	-0.003	90	53228	1.00	0.9116	
29 2-Methyl-2-propanol	59	3.382	3.385	-0.003	80	10984	10.0	10.1	
30 Acrylonitrile	53	3.488	3.480	0.008	96	55765	10.0	11.1	
32 Methyl tert-butyl ether	73	3.524	3.527	-0.003	90	24592	1.00	0.9878	
31 trans-1,2-Dichloroethene	96	3.524	3.527	-0.003	68	8448	1.00	1.07	
33 Hexane	86	3.737	3.728	0.009	90	7762	1.00	1.20	
34 1,1-Dichloroethane	63	3.843	3.835	0.008	97	17103	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.867	3.858	0.009	97	28458	1.00	1.11	
39 cis-1,2-Dichloroethene	96	4.281	4.272	0.009	88	9550	1.00	1.04	
40 2-Butanone (MEK)	43	4.281	4.272	0.009	92	20706	2.00	2.54	
41 2,2-Dichloropropane	77	4.281	4.284	-0.003	58	6092	1.00	0.7832	
45 Chlorobromomethane	128	4.459	4.462	-0.004	92	4075	1.00	0.8948	
46 Tetrahydrofuran	42	4.494	4.497	-0.003	81	11381	2.00	2.35	
47 Chloroform	83	4.506	4.509	-0.003	95	19066	1.00	1.23	
48 1,1,1-Trichloroethane	97	4.671	4.675	-0.004	95	11415	1.00	0.9805	
49 Cyclohexane	56	4.731	4.722	0.009	95	17096	1.00	0.9769	
50 1,1-Dichloropropene	75	4.790	4.793	-0.003	78	9623	1.00	0.9204	
51 Carbon tetrachloride	117	4.802	4.805	-0.003	94	9436	1.00	0.9426	
52 Isobutyl alcohol	41	4.825	4.829	-0.003	89	14823	25.0	25.1	
54 Benzene	78	4.955	4.947	0.008	93	34542	1.00	1.08	
53 1,2-Dichloroethane	62	4.955	4.947	0.008	69	18062	1.00	1.11	
56 n-Heptane	100	5.145	5.136	0.009	37	1759	1.00	0.7634	
58 Trichloroethene	130	5.452	5.444	0.008	93	8748	1.00	0.99	
60 Methylcyclohexane	83	5.618	5.609	0.009	78	13920	1.00	1.02	
61 1,2-Dichloropropane	63	5.618	5.621	-0.003	60	10429	1.00	1.14	
63 Dibromomethane	93	5.713	5.716	-0.003	94	5568	1.00	1.08	
64 1,4-Dioxane	88	5.725	5.716	0.009	52	1756	20.0	19.2	
65 Dichlorobromomethane	83	5.831	5.834	-0.003	92	8254	1.00	0.8431	
67 2-Chloroethyl vinyl ether	63	6.056	6.047	0.009	81	7473	2.00	1.73	
68 cis-1,3-Dichloropropene	75	6.198	6.189	0.009	73	7525	1.00	1.80	
69 4-Methyl-2-pentanone (MIBK	43	6.304	6.308	-0.004	98	25970	2.00	1.80	
70 Toluene	91	6.482	6.485	-0.003	96	37489	1.00	1.14	
71 trans-1,3-Dichloropropene	75	6.648	6.651	-0.003	86	6374	1.00	1.96	
72 Ethyl methacrylate	69	6.707	6.710	-0.003	83	7707	1.00	0.7858	
73 1,1,2-Trichloroethane	97	6.813	6.805	0.008	93	9607	1.00	1.29	
75 Tetrachloroethene	164	6.967	6.958	0.009	80	7597	1.00	1.09	
74 1,3-Dichloropropane	76	6.967	6.958	0.009	86	11837	1.00	0.9504	
76 2-Hexanone	43	7.014	7.006	0.008	95	18378	2.00	1.84	
78 Chlorodibromomethane	129	7.156	7.160	-0.004	88	5634	1.00	0.8309	
80 Ethylene Dibromide	107	7.275	7.278	-0.003	51	6604	1.00	0.9520	
82 Chlorobenzene	112	7.713	7.716	-0.003	93	27362	1.00	1.17	
83 1,1,1,2-Tetrachloroethane	131	7.772	7.775	-0.003	41	7339	1.00	0.9332	
84 Ethylbenzene	106	7.807	7.799	0.008	98	11361	1.00	1.03	
85 m-Xylene & p-Xylene	106	7.902	7.905	-0.003	98	14342	1.00	1.07	
86 o-Xylene	106	8.281	8.272	0.008	84	13396	1.00	0.99	
87 Styrene	104	8.281	8.284	-0.004	82	22168	1.00	0.9819	
88 Bromoform	173	8.458	8.461	-0.003	87	2658	1.00	2.90	
89 Isopropylbenzene	105	8.612	8.615	-0.003	96	32379	1.00	0.9348	
92 1,1,2,2-Tetrachloroethane	83	8.872	8.875	-0.003	93	9538	1.00	1.08	
93 Bromobenzene	156	8.919	8.911	0.008	80	10578	1.00	1.07	
94 1,2,3-Trichloropropane	110	8.931	8.923	0.008	90	4331	1.00	1.25	
95 trans-1,4-Dichloro-2-buten	53	8.943	8.934	0.009	65	3667	1.00	1.00	
96 N-Propylbenzene	120	9.002	9.005	-0.003	99	8888	1.00	0.8949	
97 2-Chlorotoluene	126	9.097	9.100	-0.003	95	8409	1.00	0.9423	
98 1,3,5-Trimethylbenzene	105	9.168	9.171	-0.003	94	24676	1.00	0.8371	
99 4-Chlorotoluene	126	9.203	9.195	0.008	95	9208	1.00	0.9801	
100 tert-Butylbenzene	119	9.487	9.491	-0.004	95	24873	1.00	0.8594	
102 1,2,4-Trimethylbenzene	105	9.535	9.538	-0.003	95	26406	1.00	0.8599	
103 sec-Butylbenzene	105	9.700	9.704	-0.004	95	30421	1.00	0.8316	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.819	9.822	-0.003	95	21718	1.00	1.12	
105 4-Isopropyltoluene	119	9.842	9.846	-0.004	96	26757	1.00	0.8020	
106 1,4-Dichlorobenzene	146	9.902	9.905	-0.003	93	25079	1.00	1.22	
109 n-Butylbenzene	91	10.245	10.236	0.009	95	23109	1.00	0.8386	
110 1,2-Dichlorobenzene	146	10.268	10.272	-0.004	96	22349	1.00	1.18	
111 1,2-Dibromo-3-Chloropropan	157		11.029				ND	ND	
113 1,2,4-Trichlorobenzene	180	11.866	11.857	0.009	92	12162	1.00	1.03	
114 Hexachlorobutadiene	225	12.032	12.035	-0.003	90	7716	1.00	1.11	
115 Naphthalene	128	12.114	12.106	0.008	97	24246	1.00	0.8926	
116 1,2,3-Trichlorobenzene	180	12.363	12.366	-0.003	92	13572	1.00	1.13	
S 126 1,2-Dichloroethene, Total	96				0			2.11	
S 127 1,3-Dichloropropene, Total	75				0			3.76	
S 128 Xylenes, Total	106				0		2.00	2.07	
S 129 Trihalomethanes, Total	1				0		4.00	5.80	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VMRPRIMW_00248	Amount Added:	0.10	Units: uL	
VMAROLISTDW_00211	Amount Added:	0.10	Units: uL	
VMRGAS_00212	Amount Added:	0.10	Units: uL	
vm50ss_00294	Amount Added:	0.10	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

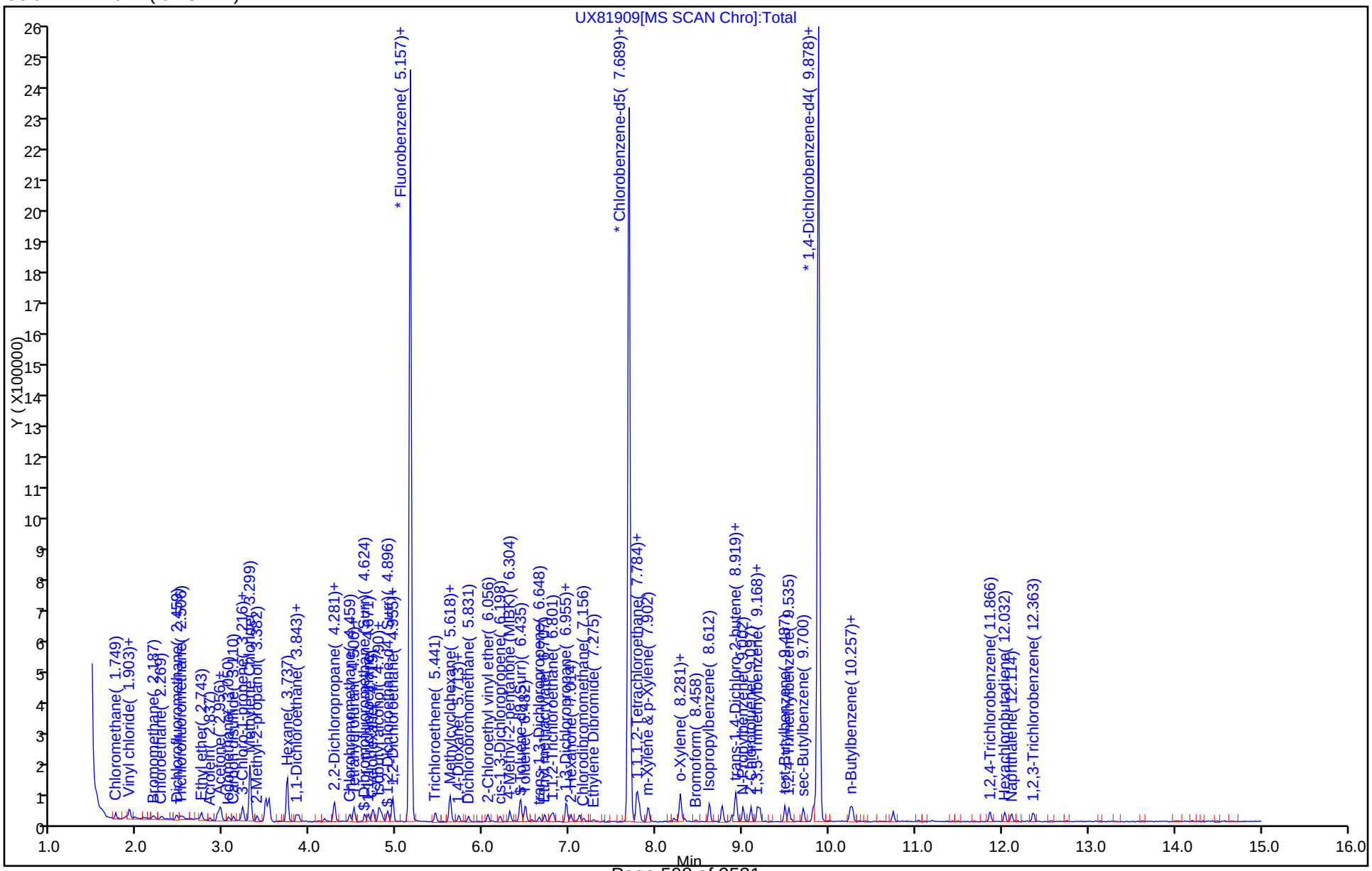
Report Date: 21-Aug-2017 01:27:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Injection Date:	20-Aug-2017 03:24:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L1			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2629	0.2734	0.1000	0.0208	0.0200	4.0	30.0
Chloromethane	Ave	0.2961	0.2972	0.1000	0.0201	0.0200	0.4	30.0
Vinyl chloride	Ave	0.3256	0.3316	0.1000	0.0204	0.0200	1.8	30.0
Butadiene	Ave	0.3315	0.3265		0.0197	0.0200	-1.5	30.0
Bromomethane	Ave	0.2224	0.2222	0.0500	0.0200	0.0200	-0.0	30.0
Chloroethane	Ave	0.2202	0.2215	0.0500	0.0201	0.0200	0.6	30.0
Dichlorofluoromethane	Ave	0.5193	0.5397		0.0208	0.0200	3.9	30.0
Trichlorofluoromethane	Ave	0.3702	0.3847	0.1000	0.0208	0.0200	3.9	30.0
Ethyl ether	Ave	0.2448	0.2415		0.0197	0.0200	-1.3	30.0
Acrolein	Ave	0.0431	0.0400		0.0927	0.100	-7.3	50.0
1,1-Dichloroethene	Ave	0.3004	0.2842	0.1000	0.0189	0.0200	-5.4	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2290	0.2106	0.0500	0.0184	0.0200	-8.0	30.0
Acetone	Lin1		0.0672	0.0100	0.0406	0.0400	1.4	50.0
Iodomethane	Ave	0.4928	0.4835		0.0196	0.0200	-1.9	30.0
Carbon disulfide	Ave	0.9690	0.9411	0.1000	0.0194	0.0200	-2.9	30.0
3-Chloro-1-propene	Ave	0.1913	0.1776		0.0186	0.0200	-7.2	30.0
Methyl acetate	Ave	0.1644	0.1530	0.1000	0.0372	0.0400	-6.9	30.0
Methylene Chloride	Lin1		0.3310	0.1000	0.0207	0.0200	3.4	50.0
tert-Butyl alcohol (TBA)	Ave	0.0165	0.0172		0.209	0.200	4.4	50.0
Acrylonitrile	Ave	0.0826	0.0835		0.202	0.200	1.1	30.0
Methyl tert-butyl ether	Ave	0.7901	0.7986	0.1000	0.0202	0.0200	1.1	30.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3187	0.1000	0.0203	0.0200	1.7	30.0
Hexane	Ave	0.2754	0.2486		0.0181	0.0200	-9.7	30.0
1,1-Dichloroethane	Ave	0.5036	0.5122	0.2000	0.0203	0.0200	1.7	30.0
Vinyl acetate	Ave	0.3820	0.4053		0.0212	0.0200	6.1	50.0
2,2-Dichloropropane	Ave	0.0748	0.0764		0.0204	0.0200	2.1	30.0
2-Butanone (MEK)	Ave	0.0914	0.0835	0.0100	0.0365	0.0400	-8.7	30.0
cis-1,2-Dichloroethene	Ave	0.3447	0.3472	0.1000	0.0201	0.0200	0.7	30.0
Bromochloromethane	Ave	0.1556	0.1536		0.0197	0.0200	-1.3	30.0
Tetrahydrofuran	Ave	0.0565	0.0532		0.0376	0.0400	-5.9	30.0
Chloroform	Ave	0.5052	0.5201	0.2000	0.0206	0.0200	2.9	30.0
1,1,1-Trichloroethane	Ave	0.4189	0.4188	0.1000	0.0200	0.0200	-0.0	30.0
Cyclohexane	Ave	0.4409	0.4136	0.1000	0.0188	0.0200	-6.2	30.0
1,1-Dichloropropene	Ave	0.3722	0.3608		0.0194	0.0200	-3.1	30.0
Carbon tetrachloride	Ave	0.3651	0.3452	0.1000	0.0189	0.0200	-5.4	30.0
Isobutyl alcohol	Ave	0.0052	0.0054		0.524	0.500	4.8	30.0
1,2-Dichloroethane	Ave	0.3489	0.3550	0.1000	0.0203	0.0200	1.7	30.0
Benzene	Ave	1.147	1.149	0.5000	0.0200	0.0200	0.1	30.0
n-Heptane	Lin1		0.1268		0.0166	0.0200	-16.9	30.0
Trichloroethene	Ave	0.2846	0.2800	0.1500	0.0197	0.0200	-1.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3995	0.3535	0.1000	0.0177	0.0200	-11.5	30.0
1,2-Dichloropropane	Ave	0.2327	0.2504	0.1000	0.0215	0.0200	7.6	30.0
Dibromomethane	Ave	0.1508	0.1478		0.0196	0.0200	-2.0	30.0
1,4-Dioxane	Ave	0.0022	0.0020		0.362	0.400	-9.4	50.0
Bromodichloromethane	Ave	0.3372	0.3375	0.1500	0.0200	0.0200	0.0	30.0
2-Chloroethyl vinyl ether	Ave	0.0975	0.1022		0.0210	0.0200	4.8	30.0
cis-1,3-Dichloropropene	Ave	0.3148	0.3502	0.1500	0.0222	0.0200	11.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1601	0.1637	0.0500	0.0409	0.0400	2.2	30.0
Toluene	Ave	1.562	1.595	0.4000	0.0204	0.0200	2.1	30.0
trans-1,3-Dichloropropene	Ave	0.4048	0.4038	0.1000	0.0199	0.0200	-0.3	30.0
Ethyl methacrylate	Ave	0.3224	0.3399		0.0211	0.0200	5.4	30.0
1,1,2-Trichloroethane	Ave	0.2655	0.2737	0.1000	0.0206	0.0200	3.1	30.0
1,3-Dichloropropane	Ave	0.4428	0.4579		0.0207	0.0200	3.4	30.0
Tetrachloroethene	Ave	0.2933	0.2836	0.1500	0.0193	0.0200	-3.3	30.0
2-Hexanone	Ave	0.1332	0.1405	0.0500	0.0422	0.0400	5.5	30.0
Dibromochloromethane	Ave	0.2930	0.3030		0.0207	0.0200	3.4	30.0
1,2-Dibromoethane	Ave	0.2537	0.2673		0.0211	0.0200	5.4	30.0
Chlorobenzene	Ave	0.9610	0.9772	0.3000	0.0203	0.0200	1.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3809	0.3966		0.0208	0.0200	4.1	30.0
Ethylbenzene	Ave	0.5071	0.5317		0.0210	0.0200	4.9	30.0
m-Xylene & p-Xylene	Ave	0.6295	0.6749		0.0214	0.0200	7.2	30.0
o-Xylene	Ave	0.7052	0.7318		0.0208	0.0200	3.8	30.0
Styrene	Ave	1.052	1.117	0.3000	0.0212	0.0200	6.2	30.0
Bromoform	Ave	0.1910	0.1895	0.1000	0.0198	0.0200	-0.8	30.0
Isopropylbenzene	Ave	1.729	1.791	0.1000	0.0207	0.0200	3.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5836	0.5941	0.3000	0.0204	0.0200	1.8	30.0
Bromobenzene	Ave	0.6452	0.6715		0.0208	0.0200	4.1	30.0
1,2,3-Trichloropropane	Ave	0.1891	0.1866		0.0197	0.0200	-1.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1262	0.1441		0.0228	0.0200	14.2	30.0
N-Propylbenzene	Ave	0.6845	0.6899		0.0202	0.0200	0.8	30.0
2-Chlorotoluene	Ave	0.6453	0.6591		0.0204	0.0200	2.1	30.0
1,3,5-Trimethylbenzene	Ave	2.156	2.285		0.0212	0.0200	6.0	30.0
4-Chlorotoluene	Ave	0.6621	0.6697		0.0202	0.0200	1.2	30.0
tert-Butylbenzene	Ave	1.989	2.089		0.0210	0.0200	5.0	30.0
1,2,4-Trimethylbenzene	Ave	2.342	2.419		0.0207	0.0200	3.3	30.0
sec-Butylbenzene	Ave	2.414	2.550		0.0211	0.0200	5.6	30.0
1,3-Dichlorobenzene	Ave	1.357	1.396	0.6000	0.0206	0.0200	2.9	30.0
p-Isopropyltoluene	Ave	2.110	2.267		0.0215	0.0200	7.4	30.0
1,4-Dichlorobenzene	Ave	1.434	1.447	0.5000	0.0202	0.0200	0.9	30.0
n-Butylbenzene	Ave	1.901	1.922		0.0202	0.0200	1.1	30.0
1,2-Dichlorobenzene	Ave	1.414	1.422	0.4000	0.0201	0.0200	0.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1236	0.1125	0.0500	0.0182	0.0200	-8.9	50.0
1,2,4-Trichlorobenzene	Ave	0.7323	0.7715	0.2000	0.0211	0.0200	5.3	50.0
Hexachlorobutadiene	Ave	0.3145	0.3424		0.0218	0.0200	8.9	30.0
Naphthalene	Ave	1.928	2.081		0.0216	0.0200	7.9	50.0
1,2,3-Trichlorobenzene	Ave	0.6863	0.7072		0.0206	0.0200	3.0	30.0
Dibromofluoromethane (Surr)	Ave	0.2546	0.2442		0.0192	0.0200	-4.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2807		0.0193	0.0200	-3.5	30.0
Toluene-d8 (Surr)	Ave	1.301	1.316		0.0202	0.0200	1.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4760		0.0211	0.0200	5.3	30.0

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6341.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 18:52:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069287-016
Operator ID: 001904 Instrument ID: A3UX16
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 03-Oct-2017 19:37:29 Calib Date: 03-Oct-2017 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 03-Oct-2017 19:38:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1187854	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.508	0.001	85	799475	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	94	529764	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	290094	20.0	19.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	98	333441	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	1051887	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	92	380532	20.0	21.1	
9 Dichlorodifluoromethane	85	1.785	1.785	0.000	100	324758	20.0	20.8	
10 Chloromethane	50	1.927	1.927	0.000	99	353011	20.0	20.1	
11 Vinyl chloride	62	2.058	2.057	0.001	97	393939	20.0	20.4	
12 Butadiene	54	2.093	2.093	0.000	96	387830	20.0	19.7	
13 Bromomethane	94	2.401	2.401	0.000	90	263988	20.0	20.0	
14 Chloroethane	64	2.508	2.508	0.000	99	263161	20.0	20.1	
15 Dichlorofluoromethane	67	2.722	2.710	0.012	98	641085	20.0	20.8	
16 Trichlorofluoromethane	101	2.769	2.781	-0.012	98	456904	20.0	20.8	
17 Ethyl ether	59	3.042	3.042	0.000	89	286880	20.0	19.7	
18 Acrolein	56	3.160	3.160	0.000	99	237265	100.0	92.7	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	98	337552	20.0	18.9	
20 1,1,2-Trichloro-1,2,2-trif	151	3.279	3.291	-0.012	94	250168	20.0	18.4	
21 Acetone	43	3.303	3.303	0.000	100	159588	40.0	40.6	
23 Iodomethane	142	3.398	3.397	0.001	98	574283	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.469	3.469	0.000	99	1117919	20.0	19.4	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	89	211003	20.0	18.6	
27 Methyl acetate	43	3.611	3.611	0.000	97	363575	40.0	37.2	
28 Methylene Chloride	84	3.706	3.706	0.000	88	393178	20.0	20.7	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	99	204482	200.0	208.7	
30 Acrylonitrile	53	3.919	3.919	0.000	99	991750	200.0	202.2	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	948614	20.0	20.2	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	98	378548	20.0	20.3	
33 Hexane	57	4.192	4.192	0.000	92	295286	20.0	18.1	
34 1,1-Dichloroethane	63	4.323	4.322	0.001	97	608398	20.0	20.3	
35 Vinyl acetate	43	4.358	4.358	0.000	97	481373	20.0	21.2	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	53	198366	40.0	36.5	
39 cis-1,2-Dichloroethene	96	4.832	4.832	0.000	83	412384	20.0	20.1	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	91	90708	20.0	20.4	
45 Chlorobromomethane	128	5.034	5.034	0.000	93	182404	20.0	19.7	
46 Tetrahydrofuran	42	5.081	5.081	0.000	85	126371	40.0	37.6	
47 Chloroform	83	5.093	5.093	0.000	93	617786	20.0	20.6	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	497416	20.0	20.0	
49 Cyclohexane	56	5.331	5.330	0.000	89	491289	20.0	18.8	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	95	428610	20.0	19.4	
51 Carbon tetrachloride	117	5.414	5.413	0.001	98	410076	20.0	18.9	
52 Isobutyl alcohol	41	5.461	5.473	-0.012	96	161096	500.0	524.1	
54 Benzene	78	5.591	5.591	0.000	95	1364256	20.0	20.0	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	96	421670	20.0	20.3	
56 n-Heptane	57	5.793	5.793	0.000	89	150624	20.0	16.6	
58 Trichloroethene	130	6.125	6.125	0.000	97	332633	20.0	19.7	
60 Methylcyclohexane	83	6.315	6.315	0.000	89	419943	20.0	17.7	
61 1,2-Dichloropropane	63	6.327	6.327	0.000	93	297428	20.0	21.5	
64 1,4-Dioxane	88	6.433	6.433	0.000	39	48052	400.0	362.2	
63 Dibromomethane	93	6.421	6.433	-0.012	94	175571	20.0	19.6	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	400904	20.0	20.0	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	92	121412	20.0	21.0	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	415942	20.0	22.2	
69 4-Methyl-2-pentanone (MIBK	43	7.062	7.074	-0.012	96	388796	40.0	40.9	
70 Toluene	91	7.252	7.251	0.001	98	1275100	20.0	20.4	
71 trans-1,3-Dichloropropene	75	7.429	7.429	0.000	95	322788	20.0	19.9	
72 Ethyl methacrylate	69	7.489	7.489	0.000	87	271752	20.0	21.1	
73 1,1,2-Trichloroethane	97	7.595	7.595	0.000	90	218811	20.0	20.6	
75 Tetrachloroethene	164	7.750	7.750	0.000	94	226730	20.0	19.3	
74 1,3-Dichloropropane	76	7.750	7.750	0.000	91	366036	20.0	20.7	
76 2-Hexanone	43	7.809	7.809	0.000	95	224650	40.0	42.2	
78 Chlorodibromomethane	129	7.963	7.963	0.000	91	242241	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.082	8.082	0.000	97	213669	20.0	21.1	
82 Chlorobenzene	112	8.532	8.532	0.000	95	781229	20.0	20.3	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.603	0.000	96	317039	20.0	20.8	
84 Ethylbenzene	106	8.627	8.627	0.000	98	425103	20.0	21.0	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	539578	20.0	21.4	
86 o-Xylene	106	9.113	9.113	0.000	94	585081	20.0	20.8	
87 Styrene	104	9.125	9.125	0.000	92	893375	20.0	21.2	
88 Bromoform	173	9.315	9.315	0.000	96	151501	20.0	19.8	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	1432217	20.0	20.7	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	92	314756	20.0	20.4	
93 Bromobenzene	156	9.777	9.777	0.000	94	355746	20.0	20.8	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	70	76329	20.0	22.8	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	84	98860	20.0	19.7	
96 N-Propylbenzene	120	9.860	9.860	0.000	99	365487	20.0	20.2	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	349145	20.0	20.4	
99 1,3,5-Trimethylbenzene	105	10.026	10.026	0.000	95	1210353	20.0	21.2	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	354797	20.0	20.2	
102 tert-Butylbenzene	119	10.359	10.358	0.000	91	1106880	20.0	21.0	
104 1,2,4-Trimethylbenzene	105	10.406	10.394	0.012	94	1281405	20.0	20.7	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	1350772	20.0	21.1	
106 1,3-Dichlorobenzene	146	10.691	10.690	0.001	97	739364	20.0	20.6	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	1200901	20.0	21.5	
108 1,4-Dichlorobenzene	146	10.774	10.773	0.001	95	766395	20.0	20.2	
111 n-Butylbenzene	91	11.117	11.117	0.000	97	1018404	20.0	20.2	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	97	753094	20.0	20.1	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	83	59613	20.0	18.2	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	94	408710	20.0	21.1	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	96	181373	20.0	21.8	
117 Naphthalene	128	13.015	13.015	0.000	97	1102615	20.0	21.6	
118 1,2,3-Trichlorobenzene	180	13.288	13.287	0.001	94	374659	20.0	20.6	
S 134 Trihalomethanes, Total	1				0		80.0	81.1	
S 158 Total BTEX	1				0		100.0	103.6	
S 133 Xylenes, Total	106				0		40.0	42.2	

Reagents:

vmfasgw_00227	Amount Added:	16.00	Units: uL	
vmfasaw_00205	Amount Added:	16.00	Units: uL	
vmfaspw_00221	Amount Added:	16.00	Units: uL	
vm100ss_stk_00027	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

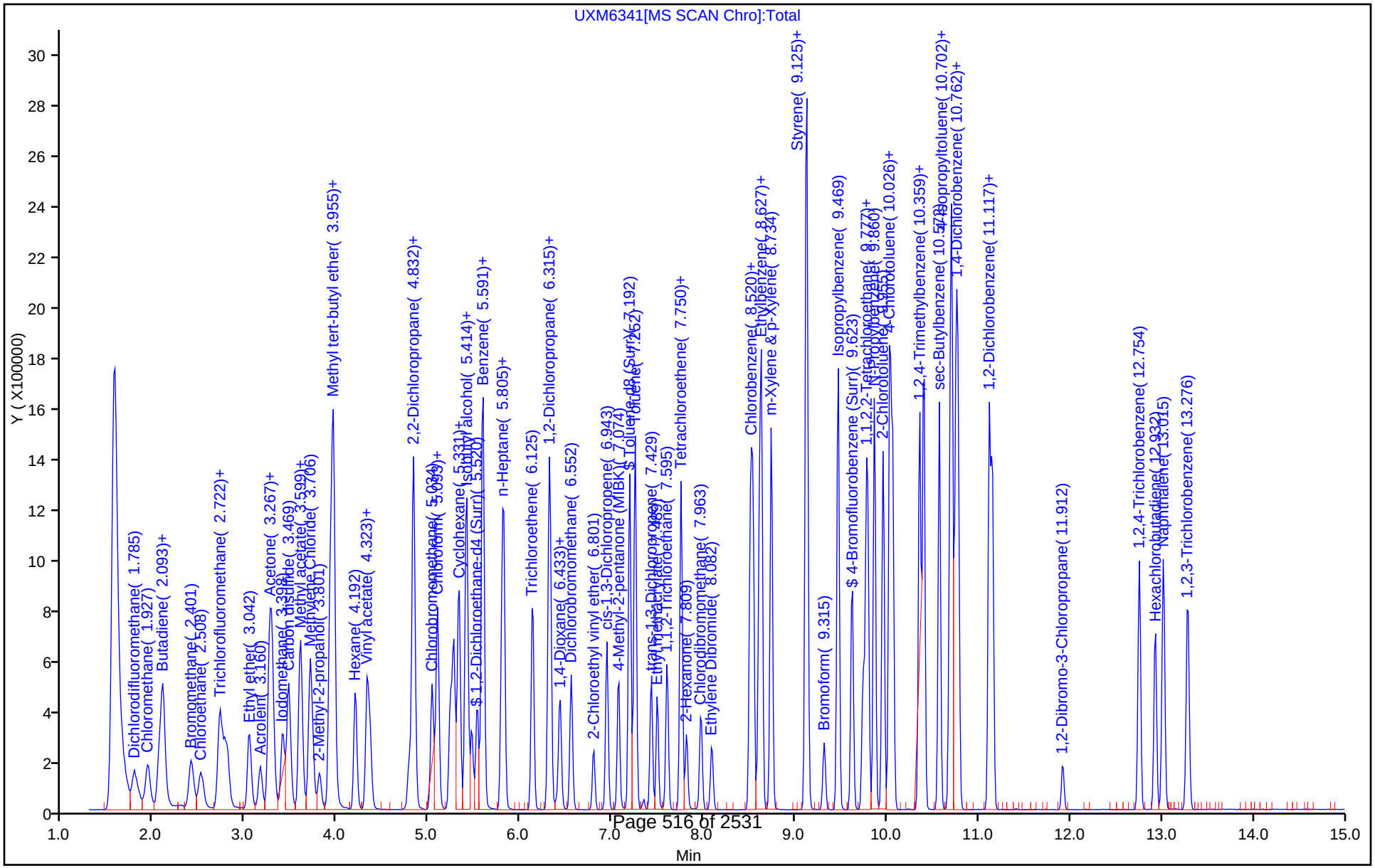
Report Date: 03-Oct-2017 19:38:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6341.D

Injection Date:	03-Oct-2017 18:52:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	ICV			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298687/3 Calibration Date: 10/12/2017 07:59

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6683.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2629	0.2309	0.1000	0.0176	0.0200	-12.2	20.0
Chloromethane	Ave	0.2961	0.3051	0.1000	0.0206	0.0200	3.1	20.0
Vinyl chloride	Ave	0.3256	0.3339	0.1000	0.0205	0.0200	2.5	20.0
Butadiene	Ave	0.3315	0.2926		0.0177	0.0200	-11.7	20.0
Bromomethane	Ave	0.2224	0.2342	0.0500	0.0211	0.0200	5.3	20.0
Chloroethane	Ave	0.2202	0.2215	0.0500	0.0201	0.0200	0.6	20.0
Dichlorofluoromethane	Ave	0.5193	0.5442		0.0210	0.0200	4.8	20.0
Trichlorofluoromethane	Ave	0.3702	0.3206	0.1000	0.0173	0.0200	-13.4	20.0
Ethyl ether	Ave	0.2448	0.2412		0.0197	0.0200	-1.5	20.0
Acrolein	Ave	0.0431	0.0395		0.0915	0.100	-8.5	50.0
1,1-Dichloroethene	Ave	0.3004	0.2876	0.1000	0.0191	0.0200	-4.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2290	0.1795	0.0500	0.0157	0.0200	-21.6*	20.0
Acetone	Lin1		0.0648	0.0100	0.0390	0.0400	-2.5	50.0
Iodomethane	Ave	0.4928	0.5046		0.0205	0.0200	2.4	20.0
Carbon disulfide	Ave	0.9690	0.9209	0.1000	0.0190	0.0200	-5.0	20.0
3-Chloro-1-propene	Ave	0.1913	0.1907		0.0199	0.0200	-0.3	20.0
Methyl acetate	Ave	0.1644	0.1585	0.1000	0.0385	0.0400	-3.6	20.0
Methylene Chloride	Lin1		0.3559	0.1000	0.0223	0.0200	11.7	50.0
tert-Butyl alcohol (TBA)	Ave	0.0165	0.0168		0.204	0.200	1.8	50.0
Acrylonitrile	Ave	0.0826	0.0851		0.206	0.200	3.1	20.0
Methyl tert-butyl ether	Ave	0.7901	0.8195	0.1000	0.0207	0.0200	3.7	20.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3376	0.1000	0.0215	0.0200	7.7	20.0
Hexane	Ave	0.2754	0.1996		0.0145	0.0200	-27.5*	20.0
1,1-Dichloroethane	Ave	0.5036	0.5313	0.2000	0.0211	0.0200	5.5	20.0
Vinyl acetate	Ave	0.3820	0.3627		0.0190	0.0200	-5.1	50.0
cis-1,2-Dichloroethene	Ave	0.3447	0.3663	0.1000	0.0213	0.0200	6.3	20.0
2,2-Dichloropropane	Ave	0.0748	0.0821		0.0220	0.0200	9.8	20.0
2-Butanone (MEK)	Ave	0.0914	0.0811	0.0100	0.0355	0.0400	-11.2	20.0
Bromochloromethane	Ave	0.1556	0.1624		0.0209	0.0200	4.4	20.0
Tetrahydrofuran	Ave	0.0565	0.0489		0.0346	0.0400	-13.4	20.0
Chloroform	Ave	0.5052	0.5422	0.2000	0.0215	0.0200	7.3	20.0
1,1,1-Trichloroethane	Ave	0.4189	0.4373	0.1000	0.0209	0.0200	4.4	20.0
Cyclohexane	Ave	0.4409	0.3595	0.1000	0.0163	0.0200	-18.5	20.0
1,1-Dichloropropene	Ave	0.3722	0.3642		0.0196	0.0200	-2.2	20.0
Carbon tetrachloride	Ave	0.3651	0.3558	0.1000	0.0195	0.0200	-2.6	20.0
Isobutyl alcohol	Ave	0.0052	0.0053		0.511	0.500	2.3	20.0
Benzene	Ave	1.147	1.200	0.5000	0.0209	0.0200	4.6	20.0
1,2-Dichloroethane	Ave	0.3489	0.3664	0.1000	0.0210	0.0200	5.0	20.0
n-Heptane	Lin1		0.1080		0.0133	0.0200	-33.6*	20.0
Trichloroethene	Ave	0.2846	0.2841	0.1500	0.0200	0.0200	-0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298687/3 Calibration Date: 10/12/2017 07:59

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6683.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3995	0.3280	0.1000	0.0164	0.0200	-17.9	20.0
1,2-Dichloropropane	Ave	0.2327	0.2487	0.1000	0.0214	0.0200	6.9	20.0
Dibromomethane	Ave	0.1508	0.1547		0.0205	0.0200	2.6	20.0
1,4-Dioxane	Ave	0.0022	0.0022		0.384	0.400	-3.9	50.0
Bromodichloromethane	Ave	0.3372	0.3450	0.1500	0.0205	0.0200	2.3	20.0
2-Chloroethyl vinyl ether	Ave	0.0975	0.1012		0.0415	0.0400	3.7	20.0
cis-1,3-Dichloropropene	Ave	0.3148	0.3482	0.1500	0.0221	0.0200	10.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1601	0.1631	0.0500	0.0408	0.0400	1.9	20.0
Toluene	Ave	1.562	1.626	0.4000	0.0208	0.0200	4.1	20.0
trans-1,3-Dichloropropene	Ave	0.4048	0.3946	0.1000	0.0195	0.0200	-2.5	20.0
Ethyl methacrylate	Ave	0.3224	0.3218		0.0200	0.0200	-0.2	20.0
1,1,2-Trichloroethane	Ave	0.2655	0.2701	0.1000	0.0203	0.0200	1.7	20.0
1,3-Dichloropropane	Ave	0.4428	0.4611		0.0208	0.0200	4.1	20.0
Tetrachloroethene	Ave	0.2933	0.2752	0.1500	0.0188	0.0200	-6.2	20.0
2-Hexanone	Ave	0.1332	0.1285	0.0500	0.0386	0.0400	-3.5	20.0
Dibromochloromethane	Ave	0.2930	0.3008		0.0205	0.0200	2.7	20.0
1,2-Dibromoethane	Ave	0.2537	0.2614		0.0206	0.0200	3.0	20.0
Chlorobenzene	Ave	0.9610	1.018	0.3000	0.0212	0.0200	5.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3809	0.4049		0.0213	0.0200	6.3	20.0
Ethylbenzene	Ave	0.5071	0.5562		0.0219	0.0200	9.7	20.0
m-Xylene & p-Xylene	Ave	0.6295	0.6843		0.0217	0.0200	8.7	20.0
o-Xylene	Ave	0.7052	0.7528		0.0213	0.0200	6.7	20.0
Styrene	Ave	1.052	1.193	0.3000	0.0227	0.0200	13.4	20.0
Bromoform	Ave	0.1910	0.1824	0.1000	0.0191	0.0200	-4.5	20.0
Isopropylbenzene	Ave	1.729	1.810	0.1000	0.0209	0.0200	4.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5836	0.5662	0.3000	0.0194	0.0200	-3.0	20.0
Bromobenzene	Ave	0.6452	0.6532		0.0202	0.0200	1.2	20.0
1,2,3-Trichloropropane	Ave	0.1891	0.1814		0.0192	0.0200	-4.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1262	0.1296		0.0205	0.0200	2.7	20.0
N-Propylbenzene	Ave	0.6845	0.6659		0.0195	0.0200	-2.7	20.0
2-Chlorotoluene	Ave	0.6453	0.6620		0.0205	0.0200	2.6	20.0
1,3,5-Trimethylbenzene	Ave	2.156	2.244		0.0208	0.0200	4.1	20.0
4-Chlorotoluene	Ave	0.6621	0.6510		0.0197	0.0200	-1.7	20.0
tert-Butylbenzene	Ave	1.989	1.894		0.0190	0.0200	-4.8	20.0
1,2,4-Trimethylbenzene	Ave	2.342	2.456		0.0210	0.0200	4.8	20.0
sec-Butylbenzene	Ave	2.414	2.395		0.0198	0.0200	-0.8	20.0
1,3-Dichlorobenzene	Ave	1.357	1.396	0.6000	0.0206	0.0200	2.9	20.0
p-Isopropyltoluene	Ave	2.110	2.177		0.0206	0.0200	3.2	20.0
1,4-Dichlorobenzene	Ave	1.434	1.443	0.5000	0.0201	0.0200	0.6	20.0
n-Butylbenzene	Ave	1.901	1.831		0.0193	0.0200	-3.7	20.0
1,2-Dichlorobenzene	Ave	1.414	1.438	0.4000	0.0203	0.0200	1.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298687/3 Calibration Date: 10/12/2017 07:59

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6683.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1236	0.1144	0.0500	0.0185	0.0200	-7.4	50.0
1,2,4-Trichlorobenzene	Ave	0.7323	0.7498	0.2000	0.0205	0.0200	2.4	50.0
Hexachlorobutadiene	Ave	0.3145	0.2769		0.0176	0.0200	-12.0	20.0
Naphthalene	Ave	1.928	2.010		0.0208	0.0200	4.2	50.0
1,2,3-Trichlorobenzene	Ave	0.6863	0.6886		0.0201	0.0200	0.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2546	0.2498		0.0196	0.0200	-1.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2719		0.0187	0.0200	-6.5	20.0
Toluene-d8 (Surr)	Ave	1.301	1.300		0.0200	0.0200	-0.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4654		0.0206	0.0200	3.0	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6683.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Oct-2017 07:59:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-003
Operator ID: 001765 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub84

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 08:32:43 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 08:32:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1012699	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	86	710806	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	93	491716	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	252927	20.0	19.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	98	275365	20.0	18.7	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	923962	20.0	20.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.611	9.611	0.000	90	330791	20.0	20.6	
9 Dichlorodifluoromethane	85	1.773	1.773	0.000	99	233823	20.0	17.6	
10 Chloromethane	50	1.927	1.927	0.000	100	308995	20.0	20.6	
11 Vinyl chloride	62	2.058	2.058	0.000	98	338111	20.0	20.5	
12 Butadiene	54	2.093	2.093	0.000	97	296299	20.0	17.7	
13 Bromomethane	94	2.402	2.402	0.000	90	237194	20.0	21.1	
14 Chloroethane	64	2.508	2.508	0.000	99	224338	20.0	20.1	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	99	551105	20.0	21.0	
16 Trichlorofluoromethane	101	2.781	2.781	0.000	99	324659	20.0	17.3	
17 Ethyl ether	59	3.030	3.030	0.000	89	244291	20.0	19.7	
18 Acrolein	56	3.160	3.160	0.000	99	199751	100.0	91.5	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	97	291243	20.0	19.1	
20 1,1,2-Trichloro-1,2,2-trif	151	3.291	3.291	0.000	94	181735	20.0	15.7	
21 Acetone	43	3.303	3.303	0.000	100	131193	40.0	39.0	
23 Iodomethane	142	3.398	3.398	0.000	98	511030	20.0	20.5	
24 Carbon disulfide	76	3.469	3.469	0.000	99	932545	20.0	19.0	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	88	193110	20.0	19.9	
27 Methyl acetate	43	3.611	3.611	0.000	97	320929	40.0	38.5	
28 Methylene Chloride	84	3.706	3.706	0.000	88	360454	20.0	22.3	
29 2-Methyl-2-propanol	59	3.801	3.801	0.000	99	170078	200.0	203.6	
30 Acrylonitrile	53	3.919	3.919	0.000	98	862036	200.0	206.1	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	829944	20.0	20.7	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	70	341889	20.0	21.5	
33 Hexane	57	4.192	4.192	0.000	91	202148	20.0	14.5	
34 1,1-Dichloroethane	63	4.323	4.323	0.000	97	538083	20.0	21.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.358	4.358	0.000	97	367309	20.0	19.0	
39 cis-1,2-Dichloroethene	96	4.821	4.821	0.000	83	370941	20.0	21.3	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	90	83176	20.0	22.0	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	54	164342	40.0	35.5	
45 Chlorobromomethane	128	5.034	5.034	0.000	91	164479	20.0	20.9	
46 Tetrahydrofuran	42	5.082	5.082	0.000	80	99111	40.0	34.6	
47 Chloroform	83	5.093	5.093	0.000	96	549112	20.0	21.5	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	442863	20.0	20.9	
49 Cyclohexane	56	5.319	5.319	0.000	87	364100	20.0	16.3	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	96	368774	20.0	19.6	
51 Carbon tetrachloride	117	5.414	5.414	0.000	97	360269	20.0	19.5	
52 Isobutyl alcohol	41	5.461	5.461	0.000	93	133985	500.0	511.3	
54 Benzene	78	5.580	5.580	0.000	95	1215315	20.0	20.9	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	98	371025	20.0	21.0	
56 n-Heptane	57	5.793	5.793	0.000	88	109353	20.0	13.3	
58 Trichloroethene	130	6.125	6.125	0.000	98	287691	20.0	20.0	
60 Methylcyclohexane	83	6.303	6.303	0.000	89	332118	20.0	16.4	
61 1,2-Dichloropropane	63	6.327	6.327	0.000	94	251853	20.0	21.4	
63 Dibromomethane	93	6.422	6.422	0.000	94	156707	20.0	20.5	
64 1,4-Dioxane	88	6.433	6.433	0.000	42	43455	400.0	384.2	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	349363	20.0	20.5	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	91	204871	40.0	41.5	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	352667	20.0	22.1	
69 4-Methyl-2-pentanone (MIBK	43	7.074	7.074	0.000	96	330382	40.0	40.8	
70 Toluene	91	7.252	7.252	0.000	98	1155790	20.0	20.8	
71 trans-1,3-Dichloropropene	75	7.430	7.430	0.000	94	280482	20.0	19.5	
72 Ethyl methacrylate	69	7.489	7.489	0.000	87	228757	20.0	20.0	
73 1,1,2-Trichloroethane	97	7.596	7.596	0.000	90	191975	20.0	20.3	
75 Tetrachloroethene	164	7.750	7.750	0.000	97	195589	20.0	18.8	
74 1,3-Dichloropropane	76	7.750	7.750	0.000	89	327751	20.0	20.8	
76 2-Hexanone	43	7.809	7.809	0.000	97	182654	40.0	38.6	
78 Chlorodibromomethane	129	7.963	7.963	0.000	90	213824	20.0	20.5	
80 Ethylene Dibromide	107	8.082	8.082	0.000	98	185799	20.0	20.6	
82 Chlorobenzene	112	8.532	8.532	0.000	95	723487	20.0	21.2	
83 1,1,1,2-Tetrachloroethane	131	8.604	8.604	0.000	94	287807	20.0	21.3	
84 Ethylbenzene	106	8.627	8.627	0.000	98	395377	20.0	21.9	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	486401	20.0	21.7	
86 o-Xylene	106	9.113	9.113	0.000	95	535063	20.0	21.3	
87 Styrene	104	9.125	9.125	0.000	92	848054	20.0	22.7	
88 Bromoform	173	9.315	9.315	0.000	96	129682	20.0	19.1	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	1286397	20.0	20.9	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	94	278383	20.0	19.4	
93 Bromobenzene	156	9.777	9.777	0.000	94	321169	20.0	20.2	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	82	89206	20.0	19.2	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	67	63724	20.0	20.5	
96 N-Propylbenzene	120	9.861	9.861	0.000	99	327444	20.0	19.5	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	325497	20.0	20.5	
99 1,3,5-Trimethylbenzene	105	10.027	10.027	0.000	95	1103183	20.0	20.8	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	320084	20.0	19.7	
102 tert-Butylbenzene	119	10.359	10.359	0.000	91	931519	20.0	19.0	
104 1,2,4-Trimethylbenzene	105	10.406	10.406	0.000	94	1207427	20.0	21.0	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	1177812	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.691	10.691	0.000	98	686330	20.0	20.6	
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	1070640	20.0	20.6	
108 1,4-Dichlorobenzene	146	10.774	10.774	0.000	94	709414	20.0	20.1	
111 n-Butylbenzene	91	11.118	11.118	0.000	98	900233	20.0	19.3	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	98	706877	20.0	20.3	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	82	56264	20.0	18.5	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	94	368707	20.0	20.5	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	97	136160	20.0	17.6	
117 Naphthalene	128	13.015	13.015	0.000	96	988418	20.0	20.8	
118 1,2,3-Trichlorobenzene	180	13.288	13.288	0.000	95	338610	20.0	20.1	
S 158 Total BTEX	1				0		100.0	106.8	
S 134 Trihalomethanes, Total	1				0		80.0	81.6	
S 133 Xylenes, Total	106				0		40.0	43.1	

Reagents:

vmrprimw_00255	Amount Added: 16.00	Units: uL		
vmarolistdw_00218	Amount Added: 16.00	Units: uL		
vmrgas_00218	Amount Added: 16.00	Units: uL		
vm100ss_stk_00027	Amount Added: 1.00	Units: uL	Run Reagent	
vmDist_H2o_00101	Amount Added: 0.00	Units:	Run Reagent	
vm100is_stk_00036	Amount Added: 1.00	Units: uL	Run Reagent	

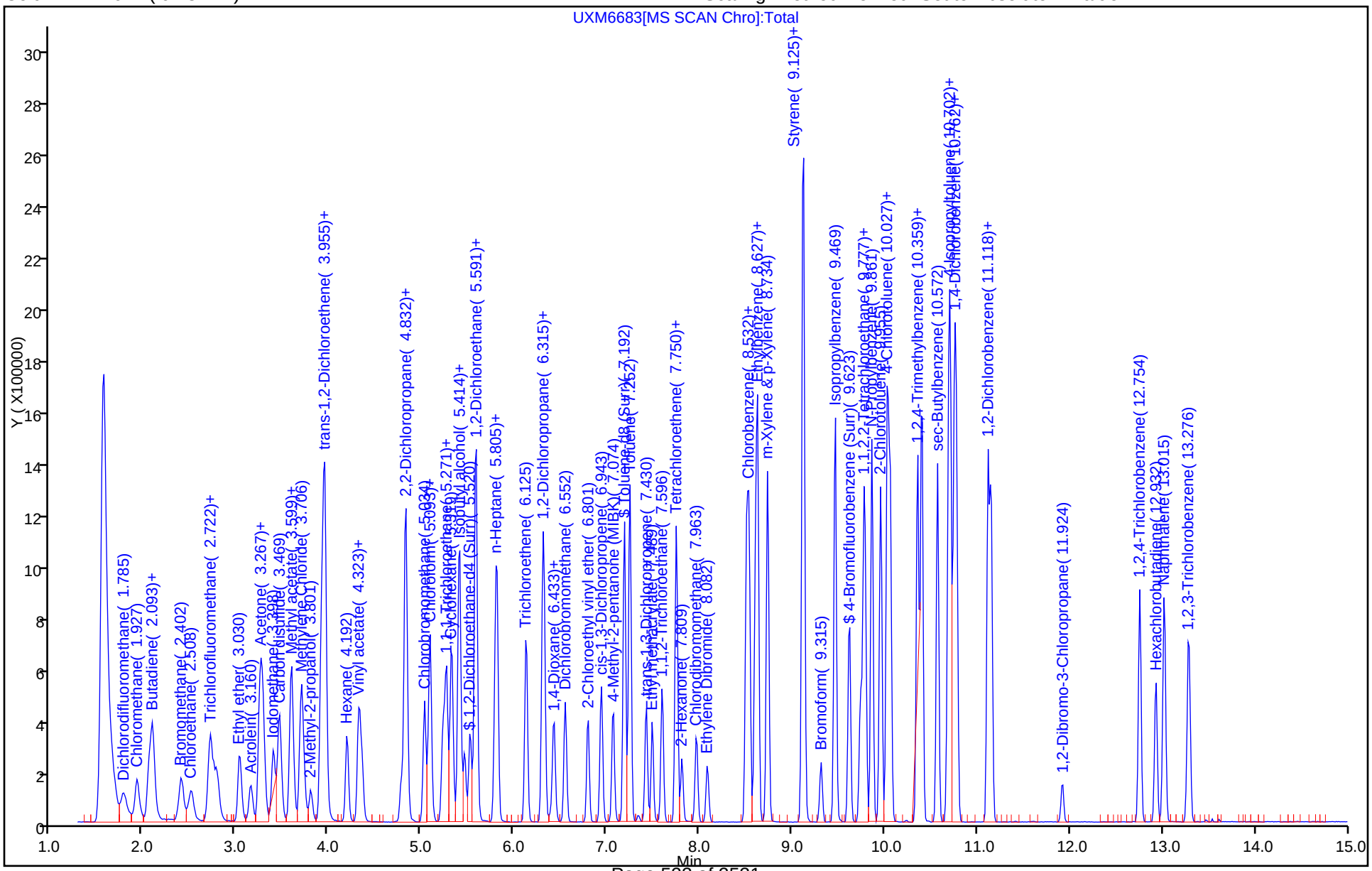
Report Date: 12-Oct-2017 08:32:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6683.D

Injection Date:	12-Oct-2017 07:59:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298687/4 Calibration Date: 10/12/2017 08:24

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 20:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 21:59

Lab File ID: UXM6684.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0260	0.0245		0.188	0.200	-5.8	20.0
Diisopropyl ether	Ave	0.2633	0.2337		0.0177	0.0200	-11.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4473	0.3951		0.0177	0.0200	-11.7	20.0
Ethyl t-butyl ether	Ave	0.8428	0.7454		0.0177	0.0200	-11.6	20.0
Ethyl acetate	Ave	0.1413	0.1658		0.0469	0.0400	17.3	50.0
Propionitrile	Ave	0.0289	0.0307		0.212	0.200	6.0	20.0
Methacrylonitrile	Ave	0.1161	0.1260		0.217	0.200	8.5	20.0
Tert-amyl methyl ether	Ave	0.8176	0.7374		0.0180	0.0200	-9.8	20.0
n-Butanol	Ave	0.0040	0.0049		0.616	0.500	23.1*	20.0
Ethyl acrylate	Ave	0.1598	0.1952		0.0244	0.0200	22.1*	20.0
Methyl methacrylate	Ave	0.1179	0.1393		0.0473	0.0400	18.1	20.0
2-Nitropropane	Ave	0.0348	0.0393		0.0452	0.0400	13.1	20.0
n-Butyl acetate	Ave	0.1988	0.2182		0.0220	0.0200	9.8	20.0
1-Chlorohexane	Ave	0.3427	0.2922		0.0171	0.0200	-14.7	20.0
Cyclohexanone	Ave	0.0113	0.0157		0.277	0.200	38.6*	20.0
Pentachloroethane	Ave	0.2496	0.2124		0.0340	0.0400	-14.9	20.0
1,2,3-Trimethylbenzene	Ave	2.430	2.171		0.0179	0.0200	-10.6	20.0
Benzyl chloride	Lin1		0.1932		0.0171	0.0200	-14.7	20.0
1,3,5-Trichlorobenzene	Ave	0.8028	0.6726		0.0168	0.0200	-16.2	20.0
2-Methylnaphthalene	Lin1		0.9230		0.0358	0.0400	-10.5	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6684.D
Lims ID: CCV A9
Client ID:
Sample Type: CCV
Inject. Date: 12-Oct-2017 08:24:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-004
Operator ID: 001765 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub85

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 09:07:32 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 09:07:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1128967	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	87	783832	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	473410	20.0	20.0	
25 Acetonitrile	41	3.564	3.564	0.000	99	276287	200.0	188.4	
36 Isopropyl ether	87	4.382	4.382	0.000	92	263833	20.0	17.7	
37 2-Chloro-1,3-butadiene	53	4.406	4.406	0.000	92	446090	20.0	17.7	
38 Tert-butyl ethyl ether	59	4.690	4.690	0.000	96	841530	20.0	17.7	
42 Propionitrile	54	4.880	4.880	0.000	99	346242	200.0	212.0	
43 Ethyl acetate	43	4.880	4.880	0.000	99	374287	40.0	46.9	
44 Methacrylonitrile	41	5.010	5.010	0.000	91	1422722	200.0	217.0	
55 Tert-amyl methyl ether	73	5.663	5.663	0.000	96	832513	20.0	18.0	
57 n-Butanol	56	6.030	6.030	0.000	88	139398	500.0	615.5	
59 Ethyl acrylate	55	6.196	6.196	0.000	98	220369	20.0	24.4	
62 Methyl methacrylate	41	6.398	6.398	0.000	87	314627	40.0	47.3	
66 2-Nitropropane	41	6.742	6.742	0.000	100	88790	40.0	45.2	
77 n-Butyl acetate	43	7.916	7.916	0.000	96	246375	20.0	22.0	
81 1-Chlorohexane	91	8.485	8.485	0.000	97	229022	20.0	17.1	
91 Cyclohexanone	55	9.564	9.564	0.000	90	74230	200.0	277.1	
103 Pentachloroethane	167	10.382	10.382	0.000	95	332974	40.0	34.0	
109 1,2,3-Trimethylbenzene	105	10.821	10.821	0.000	98	1027880	20.0	17.9	
110 Benzyl chloride	126	10.904	10.904	0.000	99	91460	20.0	17.1	
114 1,3,5-Trichlorobenzene	180	12.137	12.137	0.000	97	318433	20.0	16.8	
119 2-Methylnaphthalene	142	14.414	14.414	0.000	92	873877	40.0	35.8	
T 159 1-Chloro-1-fluoroethane TI	47	2.425	2.437	-0.012	0	298704	20.0	20.1	

Reagents:

vm100is_stk_00036	Amount Added:	1.00	Units: uL
vmra9w_00223	Amount Added:	16.00	Units: uL
vmfre151w_00003	Amount Added:	16.00	Units: uL

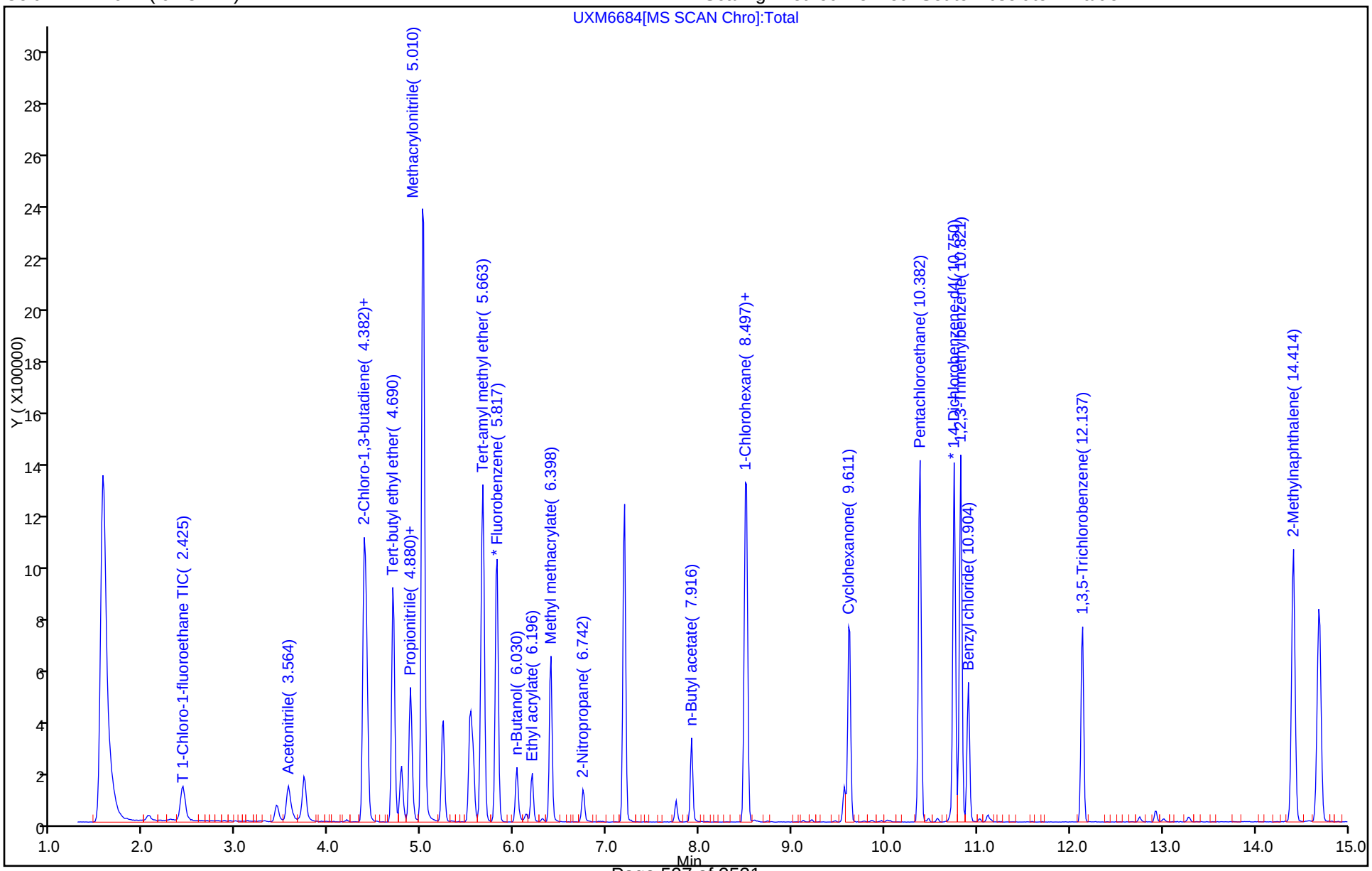
Report Date: 12-Oct-2017 09:07:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6684.D

Injection Date:	12-Oct-2017 08:24:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	CCV A9			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-291805/12 Calibration Date: 08/20/2017 04:10

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX81911.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2414	0.2447	0.1000	0.0253	0.0250	1.4	30.0
Chloromethane	Ave	0.3744	0.3570	0.1000	0.0238	0.0250	-4.7	30.0
Vinyl chloride	Ave	0.2455	0.2124	0.1000	0.0216	0.0250	-13.5	30.0
Butadiene	Ave	0.3202	0.2462		0.0192	0.0250	-23.1	30.0
Bromomethane	Lin1		0.1073	0.0500	0.0254	0.0250	1.5	30.0
Chloroethane	Ave	0.1572	0.1249	0.0500	0.0199	0.0250	-20.5	30.0
Dichlorofluoromethane	Ave	0.3549	0.2721		0.0192	0.0250	-23.3	30.0
Trichlorofluoromethane	Ave	0.3061	0.2486	0.1000	0.0203	0.0250	-18.8	30.0
Ethyl ether	Ave	0.2634	0.2931		0.0278	0.0250	11.3	30.0
Acrolein	Ave	0.0303	0.0459		0.189	0.125	51.5*	50.0
1,1-Dichloroethene	Ave	0.1795	0.1764	0.1000	0.0246	0.0250	-1.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1565	0.1514	0.0500	0.0242	0.0250	-3.3	30.0
Acetone	Lin1		0.1569	0.0100	0.0502	0.0500	0.4	50.0
Iodomethane	Ave	0.3713	0.3371		0.0227	0.0250	-9.2	30.0
Carbon disulfide	Ave	0.5470	0.4731	0.1000	0.0216	0.0250	-13.5	30.0
3-Chloro-1-propene	Ave	0.1141	0.1155		0.0253	0.0250	1.2	30.0
Methyl acetate	Ave	0.3645	0.3456	0.1000	0.0474	0.0500	-5.2	30.0
Methylene Chloride	Lin1		0.2745	0.1000	0.0247	0.0250	-1.1	50.0
tert-Butyl alcohol (TBA)	Ave	0.0310	0.0316		0.255	0.250	2.0	50.0
Acrylonitrile	Ave	0.1424	0.1408		0.247	0.250	-1.1	30.0
Methyl tert-butyl ether	Ave	0.7076	0.7098	0.1000	0.0251	0.0250	0.3	30.0
trans-1,2-Dichloroethene	Ave	0.2248	0.2273	0.1000	0.0253	0.0250	1.1	30.0
Hexane	Lin1		0.0672		0.0242	0.0250	-3.2	30.0
1,1-Dichloroethane	Ave	0.4638	0.4495	0.2000	0.0242	0.0250	-3.1	30.0
Vinyl acetate	Ave	0.7262	0.8361		0.0288	0.0250	15.1	50.0
2-Butanone (MEK)	Ave	0.2317	0.2255	0.0100	0.0487	0.0500	-2.7	30.0
2,2-Dichloropropane	Ave	0.2211	0.1848		0.0209	0.0250	-16.4	30.0
cis-1,2-Dichloroethene	Ave	0.2610	0.2607	0.1000	0.0250	0.0250	-0.2	30.0
Bromochloromethane	Ave	0.1295	0.1309		0.0253	0.0250	1.1	30.0
Tetrahydrofuran	Ave	0.1374	0.1437		0.0523	0.0500	4.6	30.0
Chloroform	Ave	0.4417	0.4195	0.2000	0.0237	0.0250	-5.0	30.0
1,1,1-Trichloroethane	Ave	0.3309	0.3312	0.1000	0.0250	0.0250	0.0	30.0
Cyclohexane	Ave	0.4975	0.4749	0.1000	0.0239	0.0250	-4.5	30.0
1,1-Dichloropropene	Ave	0.2972	0.2979		0.0251	0.0250	0.2	30.0
Carbon tetrachloride	Ave	0.2845	0.2863	0.1000	0.0252	0.0250	0.6	30.0
Isobutyl alcohol	Ave	0.0168	0.0173		0.644	0.625	3.0	30.0
1,2-Dichloroethane	Ave	0.4605	0.4610	0.1000	0.0250	0.0250	0.1	30.0
Benzene	Ave	0.9121	0.9015	0.5000	0.0247	0.0250	-1.2	30.0
n-Heptane	Ave	0.0655	0.0694		0.0265	0.0250	6.0	30.0
Trichloroethene	Ave	0.2510	0.2379	0.1500	0.0237	0.0250	-5.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-291805/12 Calibration Date: 08/20/2017 04:10

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX81911.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2598	0.2709	0.1000	0.0261	0.0250	4.3	30.0
Methylcyclohexane	Ave	0.3891	0.3576	0.1000	0.0230	0.0250	-8.1	30.0
1,4-Dioxane	Ave	0.0026	0.0029		0.551	0.500	10.3	50.0
Dibromomethane	Ave	0.1462	0.1463		0.0250	0.0250	0.0	30.0
Bromodichloromethane	Ave	0.2783	0.2950	0.1500	0.0265	0.0250	6.0	30.0
2-Chloroethyl vinyl ether	Ave	0.1225	0.1380		0.0282	0.0250	12.7	30.0
cis-1,3-Dichloropropene	Lin1		0.3272	0.1500	0.0244	0.0250	-2.3	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4096	0.4479	0.0500	0.0547	0.0500	9.3	30.0
Toluene	Ave	1.329	1.320	0.4000	0.0248	0.0250	-0.7	30.0
trans-1,3-Dichloropropene	Lin1		0.3717	0.1000	0.0223	0.0250	-10.7	30.0
Ethyl methacrylate	Ave	0.3960	0.4476		0.0283	0.0250	13.0	30.0
1,1,2-Trichloroethane	Ave	0.2999	0.2995	0.1000	0.0250	0.0250	-0.1	30.0
1,3-Dichloropropane	Ave	0.5029	0.5196		0.0258	0.0250	3.3	30.0
Tetrachloroethene	Ave	0.2816	0.2613	0.1500	0.0232	0.0250	-7.2	30.0
2-Hexanone	Ave	0.4036	0.4294	0.0500	0.0532	0.0500	6.4	30.0
Dibromochloromethane	Ave	0.2738	0.2950		0.0269	0.0250	7.7	30.0
1,2-Dibromoethane	Ave	0.2801	0.3019		0.0269	0.0250	7.8	30.0
Chlorobenzene	Ave	0.9428	0.8930	0.3000	0.0237	0.0250	-5.3	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3176	0.3292		0.0259	0.0250	3.7	30.0
Ethylbenzene	Ave	0.4452	0.4371		0.0245	0.0250	-1.8	30.0
m-Xylene & p-Xylene	Ave	0.5398	0.5363		0.0248	0.0250	-0.7	30.0
o-Xylene	Ave	0.5446	0.5516		0.0253	0.0250	1.3	30.0
Styrene	Ave	0.9116	0.9264	0.3000	0.0254	0.0250	1.6	30.0
Bromoform	Lin1		0.1680	0.1000	0.0235	0.0250	-5.9	30.0
Isopropylbenzene	Ave	1.399	1.382	0.1000	0.0247	0.0250	-1.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6452	0.6809	0.3000	0.0264	0.0250	5.5	30.0
Bromobenzene	Ave	0.7223	0.7335		0.0254	0.0250	1.5	30.0
1,2,3-Trichloropropane	Ave	0.2524	0.2596		0.0257	0.0250	2.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2663	0.2935		0.0276	0.0250	10.2	30.0
N-Propylbenzene	Ave	0.7237	0.7465		0.0258	0.0250	3.2	30.0
2-Chlorotoluene	Ave	0.6502	0.6696		0.0257	0.0250	3.0	30.0
1,3,5-Trimethylbenzene	Ave	2.148	2.204		0.0257	0.0250	2.6	30.0
4-Chlorotoluene	Ave	0.6845	0.6890		0.0252	0.0250	0.7	30.0
tert-Butylbenzene	Ave	2.109	2.099		0.0249	0.0250	-0.5	30.0
1,2,4-Trimethylbenzene	Ave	2.237	2.291		0.0256	0.0250	2.4	30.0
sec-Butylbenzene	Ave	2.665	2.740		0.0257	0.0250	2.8	30.0
1,3-Dichlorobenzene	Ave	1.411	1.349	0.6000	0.0239	0.0250	-4.5	30.0
p-Isopropyltoluene	Ave	2.431	2.520		0.0259	0.0250	3.7	30.0
1,4-Dichlorobenzene	Ave	1.504	1.384	0.5000	0.0230	0.0250	-8.0	30.0
n-Butylbenzene	Ave	2.008	1.931		0.0240	0.0250	-3.8	30.0
1,2-Dichlorobenzene	Ave	1.379	1.323	0.4000	0.0240	0.0250	-4.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-291805/12 Calibration Date: 08/20/2017 04:10

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX81911.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1063	0.0500	0.0228	0.0250	-8.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8580	0.7724	0.2000	0.0225	0.0250	-10.0	50.0
Hexachlorobutadiene	Ave	0.5046	0.4588		0.0227	0.0250	-9.1	30.0
Naphthalene	Ave	1.979	1.923		0.0243	0.0250	-2.8	50.0
1,2,3-Trichlorobenzene	Ave	0.8727	0.7810		0.0224	0.0250	-10.5	30.0
Dibromofluoromethane (Surr)	Ave	0.2384	0.2192		0.0460	0.0500	-8.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3562	0.3159		0.0443	0.0500	-11.3	30.0
Toluene-d8 (Surr)	Ave	1.249	1.192		0.0477	0.0500	-4.6	30.0
4-Bromofluorobenzene (Surr)	Lin1		0.4599		0.0503	0.0500	0.5	30.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81911.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 20-Aug-2017 04:10:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068016-012
Operator ID: 402279 Instrument ID: A3UX8
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2017 01:27:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: latat Date: 21-Aug-2017 00:55:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.160	5.160	0.000	98	1793726	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.692	7.692	0.000	98	1306084	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.881	9.881	0.000	96	706618	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.627	4.627	0.000	93	393162	50.0	46.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.899	4.888	0.011	96	566608	50.0	44.3	
$ 6 Toluene-d8 (Surr)	98	6.426	6.426	0.000	96	1557362	50.0	47.7	
$ 7 4-Bromofluorobenzene (Surr	95	8.769	8.757	0.012	89	600646	50.0	50.3	
9 Dichlorodifluoromethane	85	1.586	1.586	0.000	98	219482	25.0	25.3	
10 Chloromethane	50	1.752	1.752	0.000	100	320154	25.0	23.8	
11 Vinyl chloride	62	1.882	1.870	0.012	99	190505	25.0	21.6	
12 Butadiene	54	1.917	1.906	0.011	0	220761	25.0	19.2	
13 Bromomethane	94	2.190	2.178	0.012	93	96235	25.0	25.4	
14 Chloroethane	64	2.296	2.284	0.012	95	112049	25.0	19.9	
15 Dichlorofluoromethane	67	2.462	2.450	0.012	99	244028	25.0	19.2	
16 Trichlorofluoromethane	101	2.509	2.497	0.012	98	222912	25.0	20.3	
17 Ethyl ether	59	2.746	2.746	0.000	94	262841	25.0	27.8	
18 Acrolein	56	2.840	2.841	-0.001	98	205610	125.0	189.3	
19 1,1-Dichloroethene	96	2.935	2.923	0.012	93	158188	25.0	24.6	
20 1,1,2-Trichloro-1,2,2-trif	151	2.959	2.947	0.012	92	135753	25.0	24.2	
21 Acetone	43	2.971	2.959	0.012	96	281437	50.0	50.2	
23 Iodomethane	142	3.053	3.054	-0.001	99	302300	25.0	22.7	
24 Carbon disulfide	76	3.124	3.113	0.011	97	424312	25.0	21.6	
26 3-Chloro-1-propene	76	3.219	3.207	0.012	84	103556	25.0	25.3	
27 Methyl acetate	43	3.231	3.219	0.012	99	619850	50.0	47.4	
28 Methylene Chloride	84	3.314	3.302	0.012	91	246147	25.0	24.7	
29 2-Methyl-2-propanol	59	3.385	3.385	0.000	91	283267	250.0	254.9	
30 Acrylonitrile	53	3.491	3.480	0.011	95	1262950	250.0	247.3	
31 trans-1,2-Dichloroethene	96	3.527	3.527	0.000	67	203809	25.0	25.3	
32 Methyl tert-butyl ether	73	3.527	3.527	0.000	92	636600	25.0	25.1	
33 Hexane	86	3.740	3.728	0.012	93	60275	25.0	24.2	
34 1,1-Dichloroethane	63	3.846	3.835	0.011	99	403160	25.0	24.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.870	3.858	0.012	97	749834	25.0	28.8	
40 2-Butanone (MEK)	43	4.272	4.272	0.000	94	404496	50.0	48.7	
39 cis-1,2-Dichloroethene	96	4.284	4.272	0.012	90	233765	25.0	25.0	
41 2,2-Dichloropropane	77	4.284	4.284	0.000	69	165778	25.0	20.9	
45 Chlorobromomethane	128	4.462	4.462	0.000	89	117353	25.0	25.3	
46 Tetrahydrofuran	42	4.497	4.497	0.000	91	257760	50.0	52.3	
47 Chloroform	83	4.509	4.509	0.000	98	376247	25.0	23.7	
48 1,1,1-Trichloroethane	97	4.675	4.675	0.000	96	297013	25.0	25.0	
49 Cyclohexane	56	4.722	4.722	0.000	97	425873	25.0	23.9	
50 1,1-Dichloropropene	75	4.793	4.793	0.000	86	267180	25.0	25.1	
51 Carbon tetrachloride	117	4.805	4.805	0.000	96	256770	25.0	25.2	
52 Isobutyl alcohol	41	4.828	4.829	0.000	92	387906	625.0	643.9	
53 1,2-Dichloroethane	62	4.959	4.947	0.011	69	413442	25.0	25.0	
54 Benzene	78	4.959	4.947	0.011	93	808510	25.0	24.7	
56 n-Heptane	100	5.148	5.136	0.012	96	62274	25.0	26.5	
58 Trichloroethene	130	5.444	5.444	0.000	93	213374	25.0	23.7	
60 Methylcyclohexane	83	5.621	5.609	0.012	89	320672	25.0	23.0	
61 1,2-Dichloropropane	63	5.621	5.621	0.000	89	243000	25.0	26.1	
64 1,4-Dioxane	88	5.716	5.716	0.000	49	51367	500.0	551.4	
63 Dibromomethane	93	5.716	5.716	0.000	94	131209	25.0	25.0	
65 Dichlorobromomethane	83	5.834	5.834	0.000	96	264531	25.0	26.5	
67 2-Chloroethyl vinyl ether	63	6.059	6.047	0.012	85	123764	25.0	28.2	
68 cis-1,3-Dichloropropene	75	6.189	6.189	0.000	82	293444	25.0	24.4	
69 4-Methyl-2-pentanone (MIBK	43	6.307	6.308	-0.001	97	803326	50.0	54.7	
70 Toluene	91	6.485	6.485	0.000	97	862203	25.0	24.8	
71 trans-1,3-Dichloropropene	75	6.651	6.651	0.000	89	242765	25.0	22.3	
72 Ethyl methacrylate	69	6.710	6.710	0.000	89	292316	25.0	28.3	
73 1,1,2-Trichloroethane	97	6.816	6.805	0.011	96	195552	25.0	25.0	
74 1,3-Dichloropropane	76	6.958	6.958	0.000	90	339313	25.0	25.8	
75 Tetrachloroethene	164	6.970	6.958	0.012	96	170605	25.0	23.2	
76 2-Hexanone	43	7.017	7.006	0.011	96	560768	50.0	53.2	
78 Chlorodibromomethane	129	7.171	7.160	0.011	90	192617	25.0	26.9	
80 Ethylene Dibromide	107	7.278	7.278	0.000	99	197163	25.0	26.9	
82 Chlorobenzene	112	7.716	7.716	0.000	92	583167	25.0	23.7	
83 1,1,1,2-Tetrachloroethane	131	7.775	7.775	0.000	90	214962	25.0	25.9	
84 Ethylbenzene	106	7.810	7.799	0.011	98	285417	25.0	24.5	
85 m-Xylene & p-Xylene	106	7.905	7.905	0.000	98	350222	25.0	24.8	
86 o-Xylene	106	8.272	8.272	0.000	97	360230	25.0	25.3	
87 Styrene	104	8.284	8.284	0.000	87	604954	25.0	25.4	
88 Bromoform	173	8.461	8.461	0.000	96	109694	25.0	23.5	
89 Isopropylbenzene	105	8.615	8.615	0.000	97	902473	25.0	24.7	
92 1,1,2,2-Tetrachloroethane	83	8.875	8.875	0.000	98	240565	25.0	26.4	
93 Bromobenzene	156	8.923	8.911	0.011	95	259141	25.0	25.4	
94 1,2,3-Trichloropropane	110	8.934	8.923	0.011	90	91703	25.0	25.7	
95 trans-1,4-Dichloro-2-buten	53	8.934	8.934	0.000	71	103695	25.0	27.6	
96 N-Propylbenzene	120	9.005	9.005	0.000	99	263752	25.0	25.8	
97 2-Chlorotoluene	126	9.100	9.100	0.000	95	236560	25.0	25.7	
98 1,3,5-Trimethylbenzene	105	9.171	9.171	0.000	95	778736	25.0	25.7	
99 4-Chlorotoluene	126	9.195	9.195	0.000	99	243436	25.0	25.2	
100 tert-Butylbenzene	119	9.490	9.491	-0.001	95	741496	25.0	24.9	
102 1,2,4-Trimethylbenzene	105	9.538	9.538	0.000	95	809272	25.0	25.6	
103 sec-Butylbenzene	105	9.703	9.704	-0.001	95	968211	25.0	25.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.822	9.822	0.000	97	476437	25.0	23.9	
105 4-Isopropyltoluene	119	9.845	9.846	-0.001	98	890479	25.0	25.9	
106 1,4-Dichlorobenzene	146	9.905	9.905	0.000	93	488803	25.0	23.0	
109 n-Butylbenzene	91	10.248	10.236	0.012	97	682159	25.0	24.0	
110 1,2-Dichlorobenzene	146	10.271	10.272	-0.001	96	467265	25.0	24.0	
111 1,2-Dibromo-3-Chloropropan	157	11.029	11.029	0.000	69	37555	25.0	22.8	
113 1,2,4-Trichlorobenzene	180	11.857	11.857	0.000	93	272907	25.0	22.5	
114 Hexachlorobutadiene	225	12.035	12.035	0.000	97	162102	25.0	22.7	
115 Naphthalene	128	12.106	12.106	0.000	97	679566	25.0	24.3	
116 1,2,3-Trichlorobenzene	180	12.366	12.366	0.000	95	275929	25.0	22.4	
S 128 Xylenes, Total	106				0		50.0	50.2	
S 129 Trihalomethanes, Total	1				0		100.0	100.7	

Reagents:

VMFASPW_00215	Amount Added:	2.50	Units: uL	
VMFASAW_00199	Amount Added:	2.50	Units: uL	
VMFASGW_00222	Amount Added:	2.50	Units: uL	
VMUX8SS_00026	Amount Added:	1.15	Units: uL	
vmDist_H2o_00099	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent

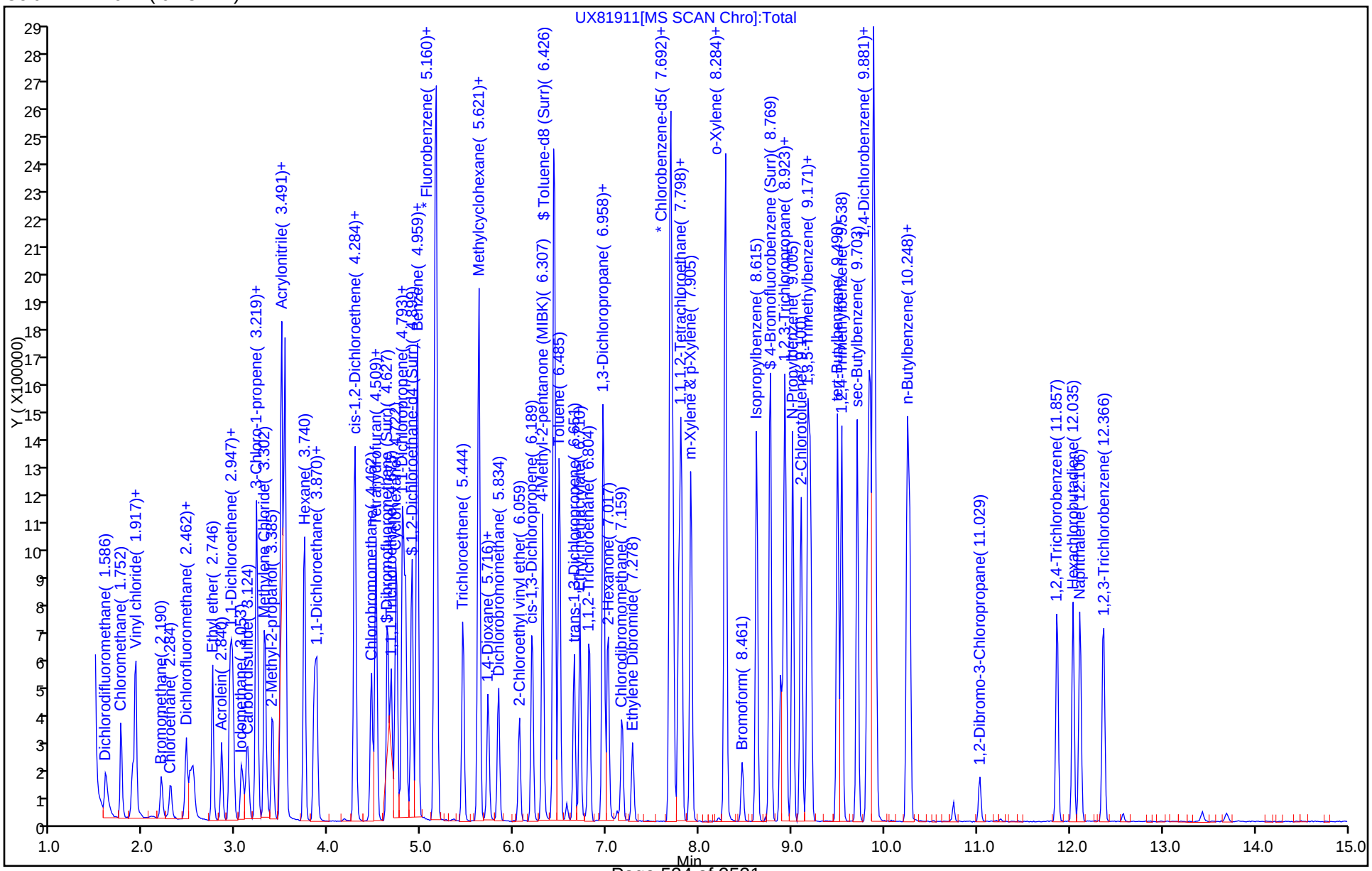
Report Date: 21-Aug-2017 01:27:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81911.D

Injection Date:	20-Aug-2017 04:10:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298471/4 Calibration Date: 10/11/2017 00:27

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX83142.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2414	0.2060	0.1000	0.0171	0.0200	-14.7	20.0
Chloromethane	Ave	0.3744	0.3108	0.1000	0.0166	0.0200	-17.0	20.0
Vinyl chloride	Ave	0.2455	0.2060	0.1000	0.0168	0.0200	-16.1	20.0
Butadiene	Ave	0.3202	0.2659		0.0166	0.0200	-17.0	20.0
Bromomethane	Lin1		0.1086	0.0500	0.0198	0.0200	-1.2	20.0
Chloroethane	Ave	0.1572	0.1374	0.0500	0.0175	0.0200	-12.6	20.0
Dichlorofluoromethane	Ave	0.3549	0.2975		0.0168	0.0200	-16.2	20.0
Trichlorofluoromethane	Ave	0.3061	0.2756	0.1000	0.0180	0.0200	-9.9	20.0
Ethyl ether	Ave	0.2634	0.2825		0.0214	0.0200	7.2	20.0
Acrolein	Ave	0.0303	0.0535		0.177	0.100	76.9*	50.0
1,1-Dichloroethene	Ave	0.1795	0.2019	0.1000	0.0225	0.0200	12.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1565	0.1656	0.0500	0.0212	0.0200	5.8	20.0
Acetone	Lin1		0.1670	0.0100	0.0414	0.0400	3.6	50.0
Iodomethane	Ave	0.3713	0.3736		0.0201	0.0200	0.6	20.0
Carbon disulfide	Ave	0.5470	0.6655	0.1000	0.0243	0.0200	21.7*	20.0
3-Chloro-1-propene	Ave	0.1141	0.1240		0.0217	0.0200	8.7	20.0
Methyl acetate	Ave	0.3645	0.3864	0.1000	0.0424	0.0400	6.0	20.0
Methylene Chloride	Lin1		0.2742	0.1000	0.0186	0.0200	-7.1	50.0
tert-Butyl alcohol (TBA)	Ave	0.0310	0.0323		0.209	0.200	4.4	50.0
Acrylonitrile	Ave	0.1424	0.1470		0.207	0.200	3.3	20.0
Methyl tert-butyl ether	Ave	0.7076	0.7210	0.1000	0.0204	0.0200	1.9	20.0
trans-1,2-Dichloroethene	Ave	0.2248	0.2356	0.1000	0.0210	0.0200	4.8	20.0
Hexane	Lin1		0.0720		0.0204	0.0200	2.1	20.0
1,1-Dichloroethane	Ave	0.4638	0.4764	0.2000	0.0205	0.0200	2.7	20.0
Vinyl acetate	Ave	0.7262	0.6152		0.0169	0.0200	-15.3	50.0
2-Butanone (MEK)	Ave	0.2317	0.2369	0.0100	0.0409	0.0400	2.2	20.0
cis-1,2-Dichloroethene	Ave	0.2610	0.2681	0.1000	0.0205	0.0200	2.7	20.0
2,2-Dichloropropane	Ave	0.2211	0.2407		0.0218	0.0200	8.9	20.0
Bromochloromethane	Ave	0.1295	0.1311		0.0203	0.0200	1.3	20.0
Tetrahydrofuran	Ave	0.1374	0.1450		0.0422	0.0400	5.5	20.0
Chloroform	Ave	0.4417	0.4328	0.2000	0.0196	0.0200	-2.0	20.0
1,1,1-Trichloroethane	Ave	0.3309	0.3531	0.1000	0.0213	0.0200	6.7	20.0
Cyclohexane	Ave	0.4975	0.5479	0.1000	0.0220	0.0200	10.1	20.0
1,1-Dichloropropene	Ave	0.2972	0.3279		0.0221	0.0200	10.3	20.0
Carbon tetrachloride	Ave	0.2845	0.3017	0.1000	0.0212	0.0200	6.0	20.0
Isobutyl alcohol	Ave	0.0168	0.0162		0.481	0.500	-3.7	20.0
1,2-Dichloroethane	Ave	0.4605	0.4506	0.1000	0.0196	0.0200	-2.1	20.0
Benzene	Ave	0.9121	0.9601	0.5000	0.0211	0.0200	5.3	20.0
n-Heptane	Ave	0.0655	0.0813		0.0248	0.0200	24.1*	20.0
Trichloroethene	Ave	0.2510	0.2675	0.1500	0.0213	0.0200	6.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298471/4 Calibration Date: 10/11/2017 00:27

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX83142.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3891	0.4266	0.1000	0.0219	0.0200	9.6	20.0
1,2-Dichloropropane	Ave	0.2598	0.2790	0.1000	0.0215	0.0200	7.4	20.0
1,4-Dioxane	Ave	0.0026	0.0028		0.435	0.400	8.7	50.0
Dibromomethane	Ave	0.1462	0.1556		0.0213	0.0200	6.4	20.0
Bromodichloromethane	Ave	0.2783	0.3219	0.1500	0.0231	0.0200	15.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1225	0.1477		0.0482	0.0400	20.6*	20.0
cis-1,3-Dichloropropene	Lin1		0.3555	0.1500	0.0214	0.0200	6.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4096	0.4687	0.0500	0.0458	0.0400	14.4	20.0
Toluene	Ave	1.329	1.404	0.4000	0.0211	0.0200	5.7	20.0
trans-1,3-Dichloropropene	Lin1		0.4320	0.1000	0.0209	0.0200	4.3	20.0
Ethyl methacrylate	Ave	0.3960	0.4558		0.0230	0.0200	15.1	20.0
1,1,2-Trichloroethane	Ave	0.2999	0.3071	0.1000	0.0205	0.0200	2.4	20.0
1,3-Dichloropropane	Ave	0.5029	0.5471		0.0218	0.0200	8.8	20.0
Tetrachloroethene	Ave	0.2816	0.3073	0.1500	0.0218	0.0200	9.1	20.0
2-Hexanone	Ave	0.4036	0.4522	0.0500	0.0448	0.0400	12.1	20.0
Dibromochloromethane	Ave	0.2738	0.3247		0.0237	0.0200	18.6	20.0
1,2-Dibromoethane	Ave	0.2801	0.3036		0.0217	0.0200	8.4	20.0
Chlorobenzene	Ave	0.9428	0.9835	0.3000	0.0209	0.0200	4.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3176	0.3423		0.0216	0.0200	7.8	20.0
Ethylbenzene	Ave	0.4452	0.4774		0.0214	0.0200	7.2	20.0
m-Xylene & p-Xylene	Ave	0.5398	0.5952		0.0221	0.0200	10.3	20.0
o-Xylene	Ave	0.5446	0.5914		0.0217	0.0200	8.6	20.0
Styrene	Ave	0.9116	1.012	0.3000	0.0222	0.0200	11.0	20.0
Bromoform	Lin1		0.2053	0.1000	0.0231	0.0200	15.3	20.0
Isopropylbenzene	Ave	1.399	1.523	0.1000	0.0218	0.0200	8.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6452	0.7323	0.3000	0.0227	0.0200	13.5	20.0
Bromobenzene	Ave	0.7223	0.7746		0.0214	0.0200	7.2	20.0
1,2,3-Trichloropropane	Ave	0.2524	0.2660		0.0211	0.0200	5.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2663	0.2946		0.0221	0.0200	10.6	20.0
N-Propylbenzene	Ave	0.7237	0.8211		0.0227	0.0200	13.5	20.0
2-Chlorotoluene	Ave	0.6502	0.7193		0.0221	0.0200	10.6	20.0
1,3,5-Trimethylbenzene	Ave	2.148	2.363		0.0220	0.0200	10.0	20.0
4-Chlorotoluene	Ave	0.6845	0.7579		0.0221	0.0200	10.7	20.0
tert-Butylbenzene	Ave	2.109	2.217		0.0210	0.0200	5.1	20.0
1,2,4-Trimethylbenzene	Ave	2.237	2.486		0.0222	0.0200	11.1	20.0
sec-Butylbenzene	Ave	2.665	2.960		0.0222	0.0200	11.1	20.0
1,3-Dichlorobenzene	Ave	1.411	1.468	0.6000	0.0208	0.0200	4.0	20.0
p-Isopropyltoluene	Ave	2.431	2.691		0.0221	0.0200	10.7	20.0
1,4-Dichlorobenzene	Ave	1.504	1.496	0.5000	0.0199	0.0200	-0.5	20.0
n-Butylbenzene	Ave	2.008	2.195		0.0219	0.0200	9.3	20.0
1,2-Dichlorobenzene	Ave	1.379	1.413	0.4000	0.0205	0.0200	2.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298471/4 Calibration Date: 10/11/2017 00:27

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX83142.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1218	0.0500	0.0210	0.0200	5.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8580	0.8678	0.2000	0.0202	0.0200	1.1	50.0
Hexachlorobutadiene	Ave	0.5046	0.5004		0.0198	0.0200	-0.8	20.0
Naphthalene	Ave	1.979	1.982		0.0200	0.0200	0.1	50.0
1,2,3-Trichlorobenzene	Ave	0.8727	0.8183		0.0188	0.0200	-6.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2384	0.2331		0.0489	0.0500	-2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3562	0.3299		0.0463	0.0500	-7.4	20.0
Toluene-d8 (Surr)	Ave	1.249	1.262		0.0505	0.0500	1.0	20.0
4-Bromofluorobenzene (Surr)	Lin1		0.4952		0.0543	0.0500	8.7	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83142.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 11-Oct-2017 00:27:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-004
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub57

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:08 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 00:53:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.159	0.000	99	1609721	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.691	0.000	99	1173160	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.880	0.000	97	637373	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.627	4.627	0.000	94	375237	50.0	48.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.887	4.887	0.000	95	531027	50.0	46.3	
$ 6 Toluene-d8 (Surr)	98	6.425	6.425	0.000	96	1480571	50.0	50.5	
$ 7 4-Bromofluorobenzene (Surr	95	8.768	8.768	0.000	91	580898	50.0	54.3	
9 Dichlorodifluoromethane	85	1.586	1.586	0.000	97	132656	20.0	17.1	
10 Chloromethane	50	1.751	1.751	0.000	100	200094	20.0	16.6	
11 Vinyl chloride	62	1.870	1.870	0.000	98	132633	20.0	16.8	
12 Butadiene	54	1.905	1.905	0.000	0	171200	20.0	16.6	
13 Bromomethane	94	2.189	2.189	0.000	91	69917	20.0	19.8	
14 Chloroethane	64	2.284	2.284	0.000	96	88484	20.0	17.5	
15 Dichlorofluoromethane	67	2.461	2.461	0.000	99	191541	20.0	16.8	
16 Trichlorofluoromethane	101	2.509	2.509	0.000	98	177466	20.0	18.0	
17 Ethyl ether	59	2.733	2.733	0.000	96	181865	20.0	21.4	
18 Acrolein	56	2.840	2.840	0.000	98	172376	100.0	176.9	
19 1,1-Dichloroethene	96	2.923	2.923	0.000	93	129971	20.0	22.5	
20 1,1,2-Trichloro-1,2,2-trif	151	2.946	2.946	0.000	93	106596	20.0	21.2	
21 Acetone	43	2.958	2.958	0.000	96	215085	40.0	41.4	
23 Iodomethane	142	3.053	3.053	0.000	99	240557	20.0	20.1	
24 Carbon disulfide	76	3.112	3.112	0.000	98	428507	20.0	24.3	
26 3-Chloro-1-propene	76	3.207	3.207	0.000	84	79839	20.0	21.7	
27 Methyl acetate	43	3.218	3.218	0.000	100	497563	40.0	42.4	
28 Methylene Chloride	84	3.301	3.301	0.000	91	176525	20.0	18.6	
29 2-Methyl-2-propanol	59	3.384	3.384	0.000	92	208213	200.0	208.8	
30 Acrylonitrile	53	3.479	3.479	0.000	96	946693	200.0	206.6	
31 trans-1,2-Dichloroethene	96	3.526	3.526	0.000	67	151705	20.0	21.0	
32 Methyl tert-butyl ether	73	3.526	3.526	0.000	93	464222	20.0	20.4	
33 Hexane	86	3.727	3.727	0.000	93	46353	20.0	20.4	
34 1,1-Dichloroethane	63	3.834	3.834	0.000	98	306732	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.857	3.857	0.000	97	396086	20.0	16.9	
40 2-Butanone (MEK)	43	4.272	4.272	0.000	97	305040	40.0	40.9	
39 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	89	172629	20.0	20.5	
41 2,2-Dichloropropane	77	4.283	4.283	0.000	76	155006	20.0	21.8	
45 Chlorobromomethane	128	4.461	4.461	0.000	88	84426	20.0	20.3	
46 Tetrahydrofuran	42	4.496	4.496	0.000	89	186706	40.0	42.2	
47 Chloroform	83	4.508	4.508	0.000	99	278676	20.0	19.6	
48 1,1,1-Trichloroethane	97	4.674	4.674	0.000	96	227346	20.0	21.3	
49 Cyclohexane	56	4.721	4.721	0.000	98	352811	20.0	22.0	
50 1,1-Dichloropropene	75	4.792	4.792	0.000	87	211155	20.0	22.1	
51 Carbon tetrachloride	117	4.804	4.804	0.000	97	194263	20.0	21.2	
52 Isobutyl alcohol	41	4.828	4.828	0.000	93	260222	500.0	481.3	
53 1,2-Dichloroethane	62	4.946	4.946	0.000	67	290161	20.0	19.6	
54 Benzene	78	4.958	4.958	0.000	93	618178	20.0	21.1	
56 n-Heptane	100	5.135	5.135	0.000	96	52339	20.0	24.8	
58 Trichloroethene	130	5.443	5.443	0.000	95	172216	20.0	21.3	
60 Methylcyclohexane	83	5.609	5.609	0.000	96	274659	20.0	21.9	
61 1,2-Dichloropropane	63	5.621	5.621	0.000	77	179658	20.0	21.5	
63 Dibromomethane	93	5.715	5.715	0.000	91	100199	20.0	21.3	
64 1,4-Dioxane	88	5.715	5.715	0.000	46	36342	400.0	434.7	
65 Dichlorobromomethane	83	5.834	5.834	0.000	96	207284	20.0	23.1	
67 2-Chloroethyl vinyl ether	63	6.058	6.058	0.000	87	190259	40.0	48.2	
68 cis-1,3-Dichloropropene	75	6.189	6.189	0.000	84	228903	20.0	21.4	
69 4-Methyl-2-pentanone (MIBK	43	6.307	6.307	0.000	98	603585	40.0	45.8	
70 Toluene	91	6.484	6.484	0.000	97	659050	20.0	21.1	
71 trans-1,3-Dichloropropene	75	6.650	6.650	0.000	92	202731	20.0	20.9	
72 Ethyl methacrylate	69	6.709	6.709	0.000	89	213869	20.0	23.0	
73 1,1,2-Trichloroethane	97	6.816	6.816	0.000	96	144107	20.0	20.5	
74 1,3-Dichloropropane	76	6.958	6.958	0.000	90	256709	20.0	21.8	
75 Tetrachloroethene	164	6.969	6.969	0.000	92	144206	20.0	21.8	
76 2-Hexanone	43	7.005	7.005	0.000	97	424413	40.0	44.8	
78 Chlorodibromomethane	129	7.159	7.159	0.000	90	152345	20.0	23.7	
80 Ethylene Dibromide	107	7.277	7.277	0.000	98	142456	20.0	21.7	
82 Chlorobenzene	112	7.715	7.715	0.000	95	461521	20.0	20.9	
83 1,1,1,2-Tetrachloroethane	131	7.774	7.774	0.000	91	160625	20.0	21.6	
84 Ethylbenzene	106	7.798	7.798	0.000	98	224009	20.0	21.4	
85 m-Xylene & p-Xylene	106	7.904	7.904	0.000	98	279319	20.0	22.1	
86 o-Xylene	106	8.271	8.271	0.000	92	277528	20.0	21.7	
87 Styrene	104	8.283	8.283	0.000	91	474888	20.0	22.2	
88 Bromoform	173	8.460	8.460	0.000	96	96352	20.0	23.1	
89 Isopropylbenzene	105	8.614	8.614	0.000	97	714556	20.0	21.8	
92 1,1,2,2-Tetrachloroethane	83	8.875	8.875	0.000	97	186690	20.0	22.7	
93 Bromobenzene	156	8.922	8.922	0.000	94	197482	20.0	21.4	
94 1,2,3-Trichloropropane	110	8.934	8.934	0.000	89	67811	20.0	21.1	
95 trans-1,4-Dichloro-2-buten	53	8.934	8.934	0.000	71	75105	20.0	22.1	
96 N-Propylbenzene	120	9.005	9.005	0.000	98	209339	20.0	22.7	
97 2-Chlorotoluene	126	9.099	9.099	0.000	96	183387	20.0	22.1	
98 1,3,5-Trimethylbenzene	105	9.170	9.170	0.000	95	602443	20.0	22.0	
99 4-Chlorotoluene	126	9.194	9.194	0.000	98	193231	20.0	22.1	
100 tert-Butylbenzene	119	9.490	9.490	0.000	95	565233	20.0	21.0	
102 1,2,4-Trimethylbenzene	105	9.537	9.537	0.000	95	633718	20.0	22.2	
103 sec-Butylbenzene	105	9.703	9.703	0.000	95	754708	20.0	22.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.821	9.821	0.000	98	374138	20.0	20.8	
105 4-Isopropyltoluene	119	9.845	9.845	0.000	97	686015	20.0	22.1	
106 1,4-Dichlorobenzene	146	9.904	9.904	0.000	94	381362	20.0	19.9	
109 n-Butylbenzene	91	10.247	10.247	0.000	97	559704	20.0	21.9	
110 1,2-Dichlorobenzene	146	10.271	10.271	0.000	97	360254	20.0	20.5	
111 1,2-Dibromo-3-Chloropropan	157	11.028	11.028	0.000	72	31055	20.0	21.0	
113 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	95	221249	20.0	20.2	
114 Hexachlorobutadiene	225	12.034	12.034	0.000	96	127570	20.0	19.8	
115 Naphthalene	128	12.105	12.105	0.000	97	505198	20.0	20.0	
116 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	95	208614	20.0	18.8	
S 128 Xylenes, Total	106				0		40.0	43.8	
S 129 Trihalomethanes, Total	1				0		80.0	89.5	

Reagents:

VMRPRIMW_00254	Amount Added:	2.00	Units: uL	
VMAROLISTDW_00218	Amount Added:	2.00	Units: uL	
VMRGAS_00218	Amount Added:	2.00	Units: uL	
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

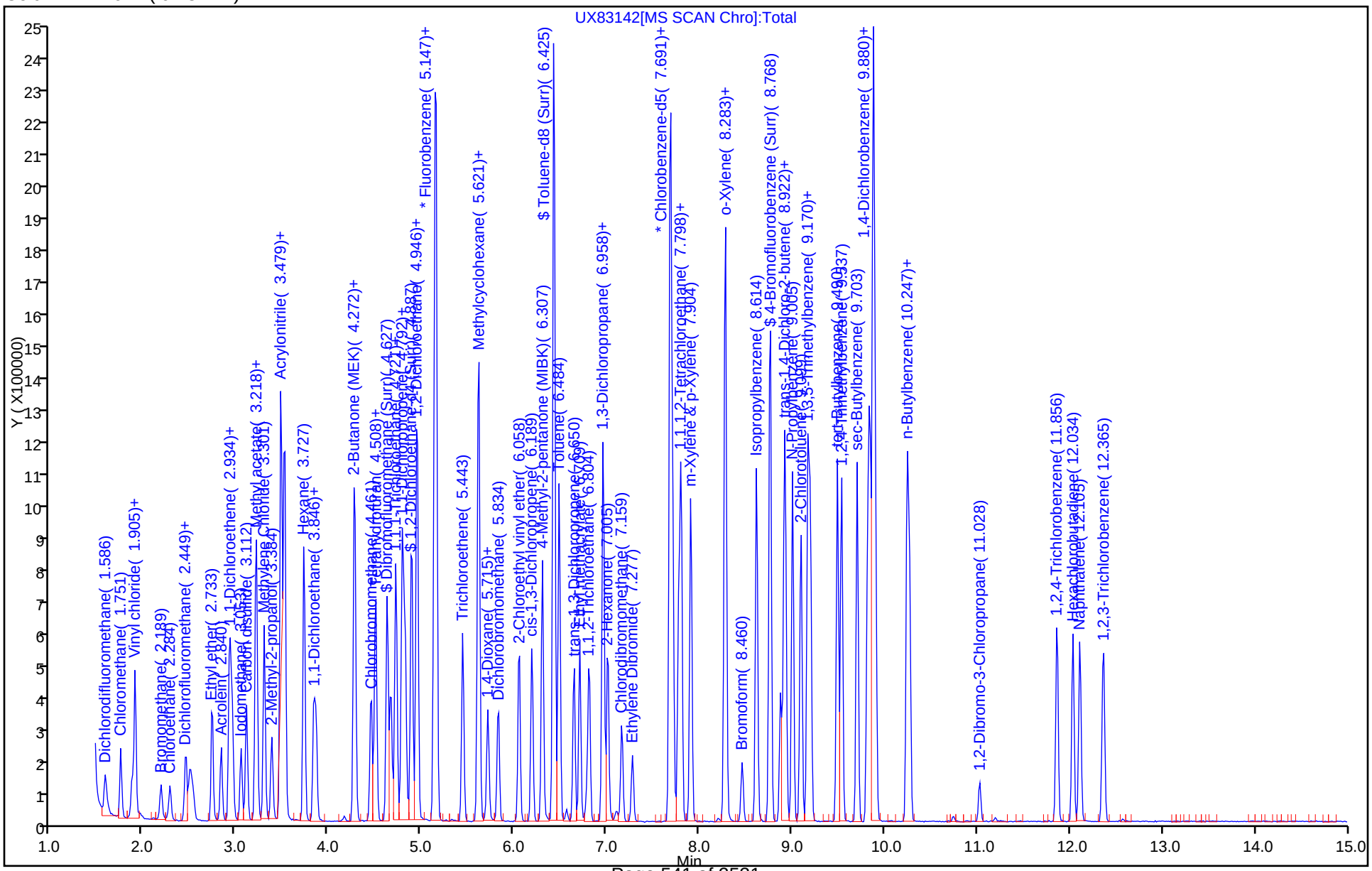
Report Date: 12-Oct-2017 01:07:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83142.D

Injection Date:	11-Oct-2017 00:27:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298471/5 Calibration Date: 10/11/2017 00:49

Instrument ID: A3UX8 Calib Start Date: 07/02/2017 08:14

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2017 10:48

Lab File ID: UX83143.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Qua		0.0526		0.237	0.200	18.3	20.0
Diisopropyl ether	Ave	0.2086	0.2019		0.0194	0.0200	-3.2	20.0
2-Chloro-1,3-butadiene	Ave	0.4480	0.4919		0.0220	0.0200	9.8	20.0
Ethyl t-butyl ether	Ave	0.8392	0.8148		0.0194	0.0200	-2.9	20.0
Ethyl acetate	Qua		0.4068		0.0376	0.0400	-6.0	50.0
Propionitrile	Qua		0.0514		0.211	0.200	5.4	20.0
Methacrylonitrile	Ave	0.2797	0.2739		0.196	0.200	-2.1	20.0
Tert-amyl methyl ether	Ave	0.6207	0.5928		0.0191	0.0200	-4.5	20.0
n-Butanol	Qua		0.0078		0.497	0.500	-0.7	20.0
Ethyl acrylate	Qua		0.4190		0.0211	0.0200	5.4	20.0
Methyl methacrylate	Qua		0.3783		0.0411	0.0400	2.7	20.0
2-Nitropropane	Qua		0.0910		0.0513	0.0400	28.3*	20.0
n-Butyl acetate	Qua		0.5905		0.0195	0.0200	-2.3	20.0
1-Chlorohexane	Ave	0.3362	0.3751		0.0223	0.0200	11.6	20.0
Cyclohexanone	Qua		0.0142		0.209	0.200	4.4	20.0
Pentachloroethane	Qua		0.3654		0.0614	0.0400	53.4*	20.0
1,2,3-Trimethylbenzene	Ave	2.213	2.285		0.0207	0.0200	3.3	20.0
Benzyl chloride	Qua		0.1284		0.0257	0.0200	28.7*	20.0
1,3,5-Trichlorobenzene	Ave	0.8606	0.9750		0.0227	0.0200	13.3	20.0
2-Methylnaphthalene	Qua		0.9759		0.0301	0.0400	-24.7*	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83143.D
Lims ID: CCV A9
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2017 00:49:30 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-005
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub58

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 01:37:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.157	0.000	99	1634108	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.689	0.000	97	1194862	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.878	0.000	97	629158	50.0	50.0	
25 Acetonitrile	41	3.181	3.181	0.000	99	343893	200.0	236.6	
36 Isopropyl ether	87	3.891	3.891	0.000	95	131940	20.0	19.4	
37 2-Chloro-1,3-butadiene	53	3.914	3.914	0.000	94	321496	20.0	22.0	
38 Tert-butyl ethyl ether	59	4.163	4.163	0.000	95	532577	20.0	19.4	
42 Ethyl acetate	43	4.317	4.317	0.000	99	531786	40.0	37.6	
43 Propionitrile	54	4.317	4.317	0.000	74	335961	200.0	210.7	
44 Methacrylonitrile	41	4.435	4.435	0.000	98	1790052	200.0	195.8	
55 Tert-amyl methyl ether	73	5.027	5.027	0.000	89	387480	20.0	19.1	
57 n-Butanol	56	5.334	5.334	0.000	95	126784	500.0	496.6	
59 Ethyl acrylate	55	5.500	5.500	0.000	99	273897	20.0	21.1	
62 Methyl methacrylate	41	5.677	5.677	0.000	89	494517	40.0	41.1	
66 2-Nitropropane	41	6.009	6.009	0.000	99	119005	40.0	51.3	
77 n-Butyl acetate	43	7.109	7.109	0.000	97	385949	20.0	19.5	
81 1-Chlorohexane	91	7.677	7.677	0.000	75	179271	20.0	22.3	
91 Cyclohexanone	55	8.707	8.707	0.000	92	67752	200.0	208.9	
101 Pentachloroethane	167	9.511	9.511	0.000	0	183902	40.0	61.4	
107 1,2,3-Trimethylbenzene	105	9.949	9.949	0.000	98	575022	20.0	20.7	
108 Benzyl chloride	126	10.032	10.032	0.000	97	32321	20.0	25.7	
112 1,3,5-Trichlorobenzene	180	11.251	11.251	0.000	97	245382	20.0	22.7	
117 2-Methylnaphthalene	142	13.428	13.428	0.000	93	491191	40.0	30.1	

Reagents:

VMRA9W_00223 Amount Added: 2.00 Units: uL
VM250-IS_00038 Amount Added: 1.00 Units: uL

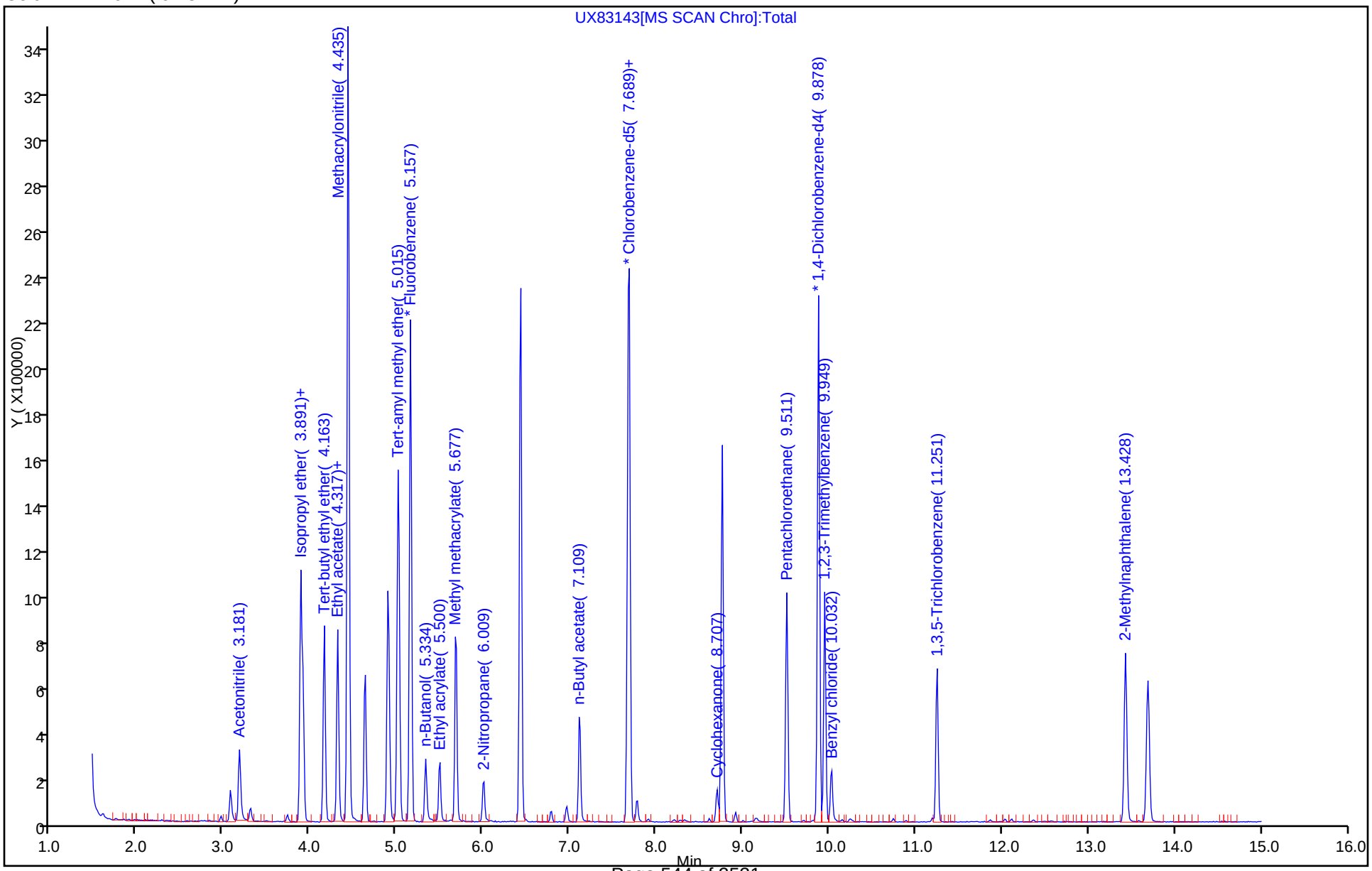
Report Date: 12-Oct-2017 01:07:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83143.D

Injection Date:	11-Oct-2017 00:49:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	CCV A9			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton

Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\BFB5411.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	03-Oct-2017 15:09:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0069287-001				
Operator ID:	001904	Instrument ID:	A3UX16		
Method:	\\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\8260_16.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	03-Oct-2017 18:58:49	Calib Date:	03-Oct-2017 18:29:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6340.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK032				
First Level Reviewer: laveyt		Date:	03-Oct-2017 18:58:49		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.834	3.834	0.000	0	889802	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\BFB5411.D

Injection Date: 03-Oct-2017 15:09:30 Instrument ID: A3UX16

Lims ID: BFB

Client ID:

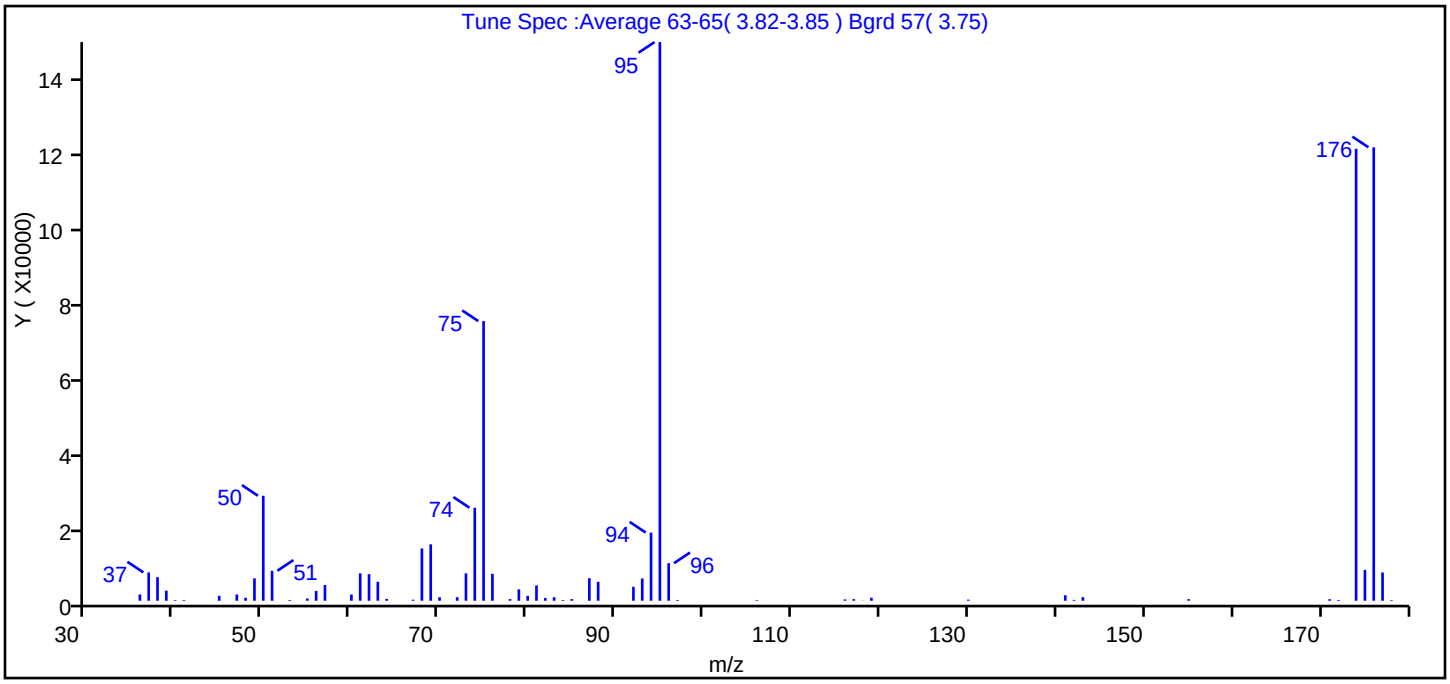
Operator ID: 001904 ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_16 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.8
75	30 to 60% of m/z 95	50.1
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.9
175	5 to 9% of m/z 174	5.5 (6.8)
176	Greater than 95% but less than 101% of m/z 174	81.2 (100.3)
177	5 to 9% of m/z 176	5.1 (6.2)

Report Date: 03-Oct-2017 18:58:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\BFB5411.D\8260_16.rslt\spectra.d

Injection Date: 03-Oct-2017 15:09:30

Spectrum: Tune Spec :Average 63-65(3.82-3.85) Bgrd 57(3.75)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1657	60.00	1646	80.00	1289	117.00	423
37.00	7469	61.00	7217	81.00	4039	118.00	47
38.00	6219	62.00	7008	82.00	733	119.00	785
39.00	2666	63.00	5004	83.00	923	130.00	287
40.00	169	64.00	468	84.00	199	141.00	1435
41.00	184	67.00	283	85.00	437	142.00	223
45.00	1295	68.00	13800	87.00	5934	143.00	937
47.00	1645	69.00	14878	88.00	4988	155.00	416
48.00	766	70.00	926	92.00	3666	171.00	408
49.00	5917	72.00	941	93.00	5865	172.00	213
50.00	27696	73.00	7228	94.00	17984	174.00	119240
51.00	7911	74.00	24536	95.00	147392	175.00	8136
53.00	197	75.00	73776	96.00	9906	176.00	119624
55.00	584	76.00	7103	97.00	206	177.00	7449
56.00	2595	78.00	428	106.00	170	178.00	175
57.00	4140	79.00	2989	116.00	353		

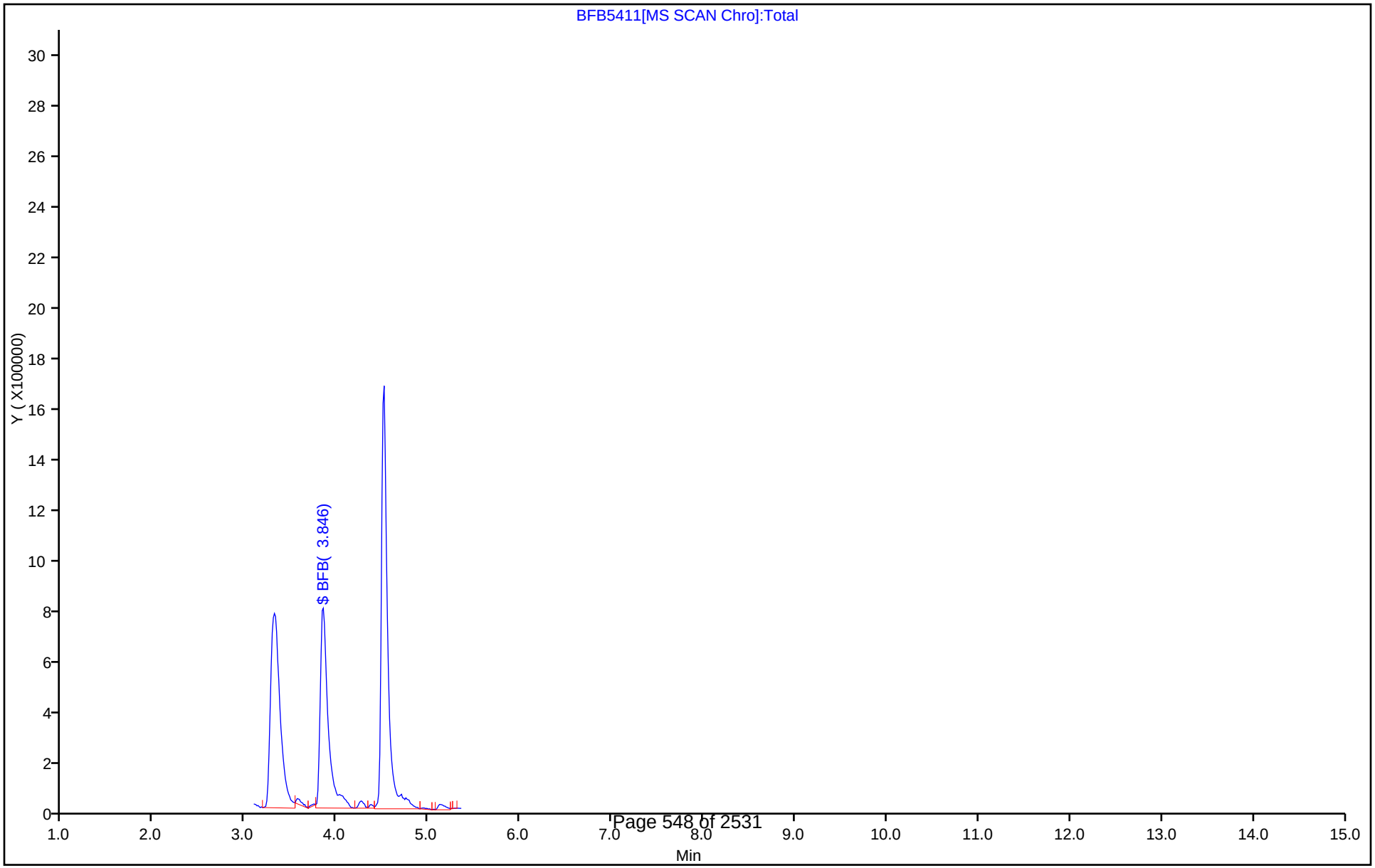
Report Date: 03-Oct-2017 18:58:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\BFB5411.D

Injection Date:	03-Oct-2017 15:09:30	Instrument ID:	A3UX16	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\BFB5423.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 12-Oct-2017 07:34:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-001
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 08:28:52 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 08:28:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.703	3.703	0.000	0	1005714	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

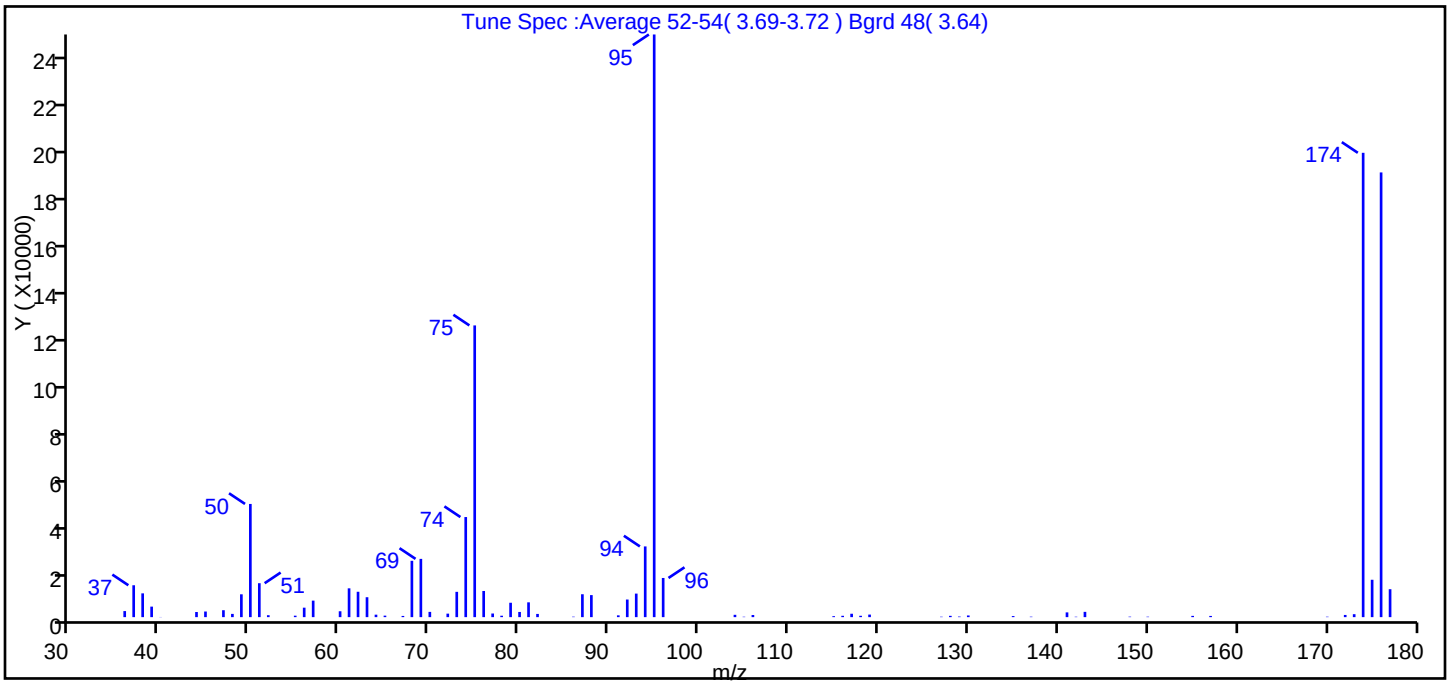
vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\BFB5423.D
Injection Date: 12-Oct-2017 07:34:30 Instrument ID: A3UX16
Lims ID: BFB
Client ID:
Operator ID: 001765 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_16 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.4
75	30 to 60% of m/z 95	50.1
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	79.7
175	5 to 9% of m/z 174	6.4 (8.0)
176	Greater than 95% but less than 101% of m/z 174	76.3 (95.8)
177	5 to 9% of m/z 176	4.8 (6.3)

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\BFB5423.D\8260_16.rslt\spectra.d
Injection Date: 12-Oct-2017 07:34:30
Spectrum: Tune Spec :Average 52-54(3.69-3.72) Bgrd 48(3.64)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2589	63.00	8512	87.00	9785	130.00	716
37.00	13624	64.00	1056	88.00	9416	135.00	453
38.00	10164	65.00	642	91.00	770	137.00	200
39.00	4494	67.00	514	92.00	7530	141.00	2032
40.00	69	68.00	24072	93.00	10060	142.00	178
44.00	2194	69.00	24896	94.00	30216	143.00	2260
45.00	2403	70.00	2247	95.00	248960	148.00	208
47.00	2963	72.00	1499	96.00	16736	150.00	189
48.00	1388	73.00	10812	104.00	997	155.00	539
49.00	9758	74.00	42768	105.00	171	157.00	519
50.00	48368	75.00	124648	106.00	909	170.00	187
51.00	14498	76.00	11175	115.00	412	172.00	936
52.00	826	77.00	1553	116.00	573	173.00	1265
55.00	624	78.00	607	117.00	1452	174.00	198400
56.00	4047	79.00	6147	118.00	583	175.00	15970
57.00	7059	80.00	2215	119.00	1095	176.00	190016
60.00	2515	81.00	6328	127.00	183	177.00	11938
61.00	12310	82.00	1374	128.00	556		
62.00	10842	86.00	196	129.00	251		

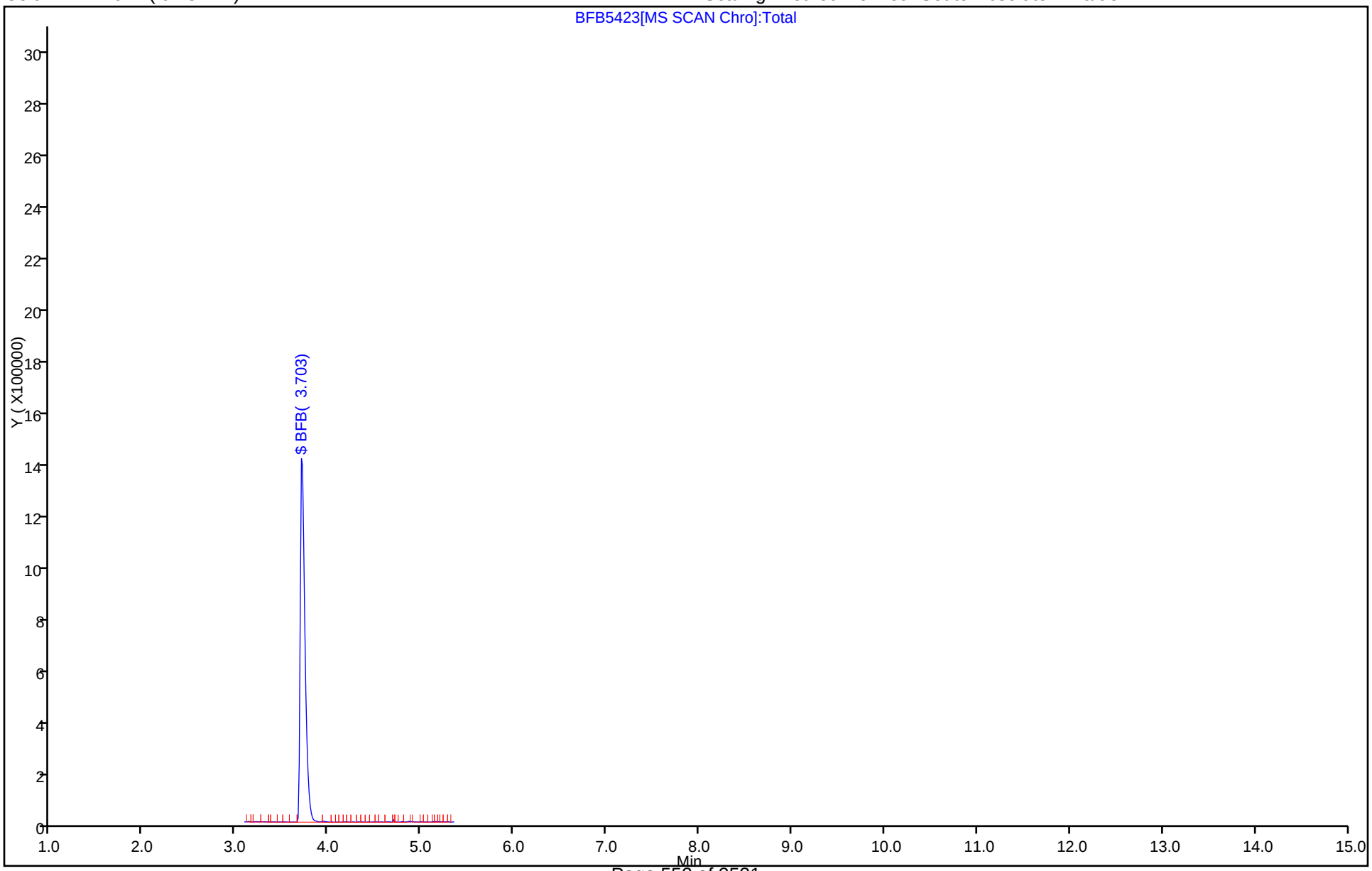
Report Date: 12-Oct-2017 08:28:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\BFB5423.D

Injection Date:	12-Oct-2017 07:34:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\BFB8386.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	02-Jul-2017 04:39:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0066573-001				
Misc. Info.:	BFB				
Operator ID:	402279	Instrument ID:	A3UX8		
Method:	\\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\8260_8.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	03-Jul-2017 01:23:31	Calib Date:	02-Jul-2017 10:48:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\UX80998.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK025				
First Level Reviewer: latat		Date:	02-Jul-2017 05:34:56		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.697	3.697	0.000	0	657185	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

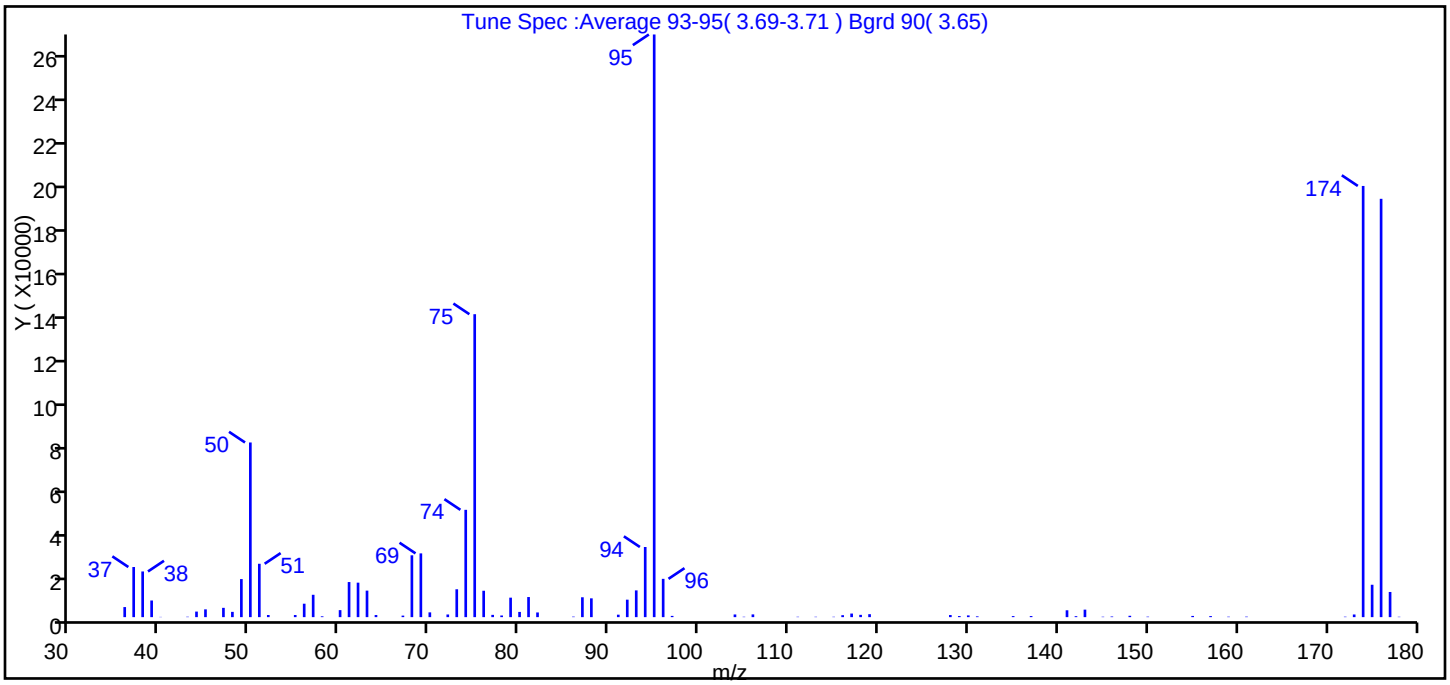
vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\BFB8386.D
Injection Date: 02-Jul-2017 04:39:30 Instrument ID: A3UX8
Lims ID: BFB
Client ID:
Operator ID: 402279 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_8 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	30.0
75	30 to 60% of m/z 95	52.0
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	74.0
175	5 to 9% of m/z 174	5.6 (7.5)
176	Greater than 95% but less than 101% of m/z 174	71.8 (97.0)
177	5 to 9% of m/z 176	4.3 (6.0)

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\BFB8386.D\8260_8.rslt\spectra.d
Injection Date: 02-Jul-2017 04:39:30
Spectrum: Tune Spec :Average 93-95(3.69-3.71) Bgrd 90(3.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4608	63.00	12135	92.00	7997	137.00	491
37.00	22936	64.00	967	93.00	12241	141.00	3141
38.00	20904	67.00	699	94.00	32096	142.00	441
39.00	7620	68.00	28296	95.00	266624	143.00	3435
40.00	109	69.00	29176	96.00	17528	145.00	193
43.00	187	70.00	2188	97.00	575	146.00	293
44.00	2548	72.00	1217	104.00	1229	148.00	621
45.00	3566	73.00	12756	105.00	175	150.00	219
47.00	4258	74.00	49104	106.00	1257	155.00	555
48.00	2417	75.00	138624	111.00	175	157.00	482
49.00	17416	76.00	12077	113.00	170	159.00	206
50.00	79928	77.00	1043	115.00	169	161.00	232
51.00	24424	78.00	757	116.00	896	172.00	205
52.00	976	79.00	8916	117.00	1645	173.00	1220
55.00	970	80.00	2388	118.00	1051	174.00	197312
56.00	6148	81.00	9199	119.00	1353	175.00	14822
57.00	10233	82.00	2145	128.00	958	176.00	191424
58.00	376	86.00	235	129.00	497	177.00	11516
60.00	3210	87.00	9094	130.00	793	178.00	172
61.00	16058	88.00	8606	131.00	360		
62.00	15778	91.00	1128	135.00	478		

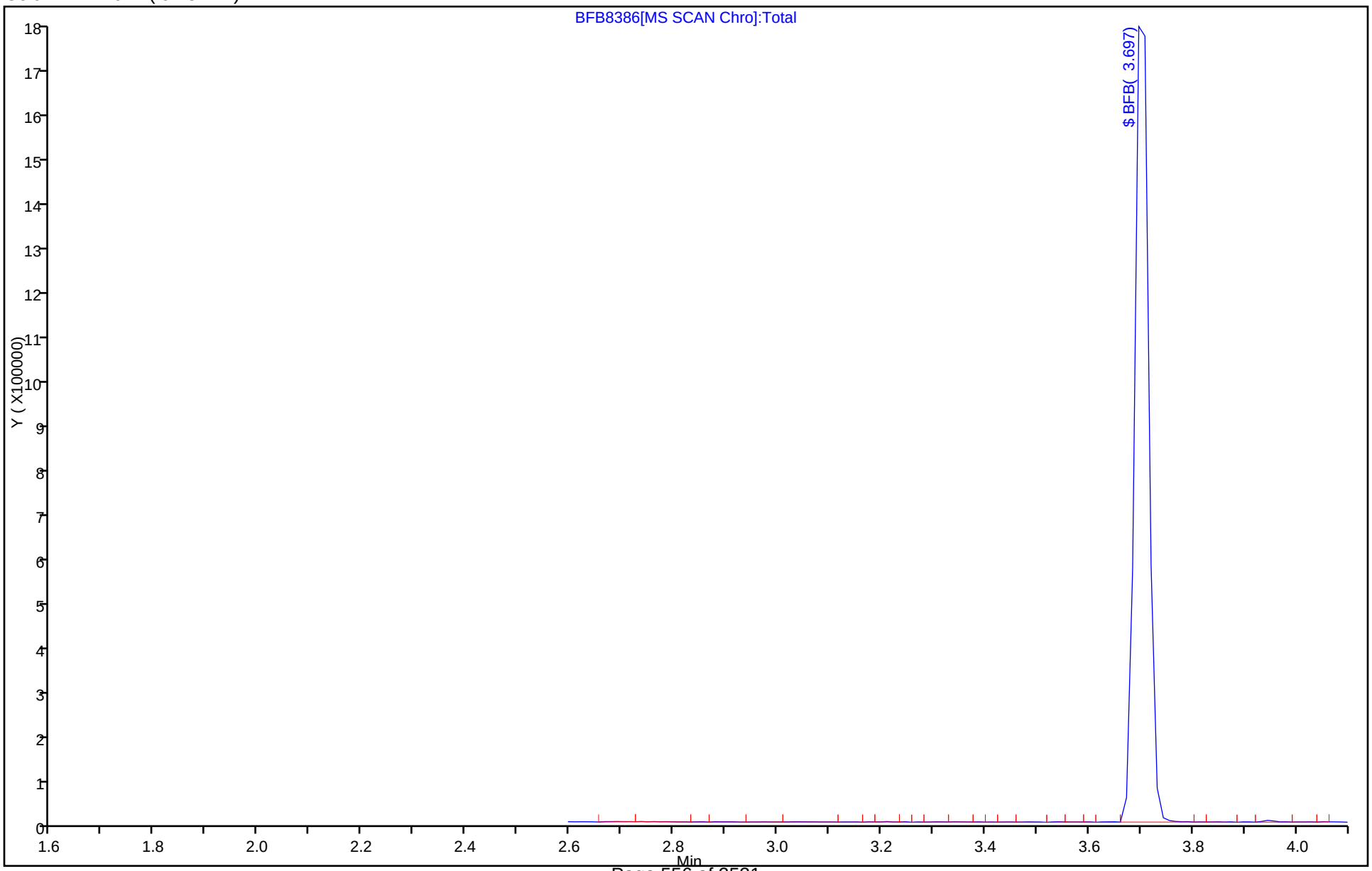
Report Date: 03-Jul-2017 01:23:31 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170702-66573.b\BFB8386.D

Injection Date:	02-Jul-2017 04:39:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\BFB8425.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Aug-2017 00:19:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0068016-001				
Misc. Info.:	BFB				
Operator ID:	402279	Instrument ID:	A3UX8		
Method:	\\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\8260_8.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	21-Aug-2017 01:26:46	Calib Date:	20-Aug-2017 03:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK011				
First Level Reviewer: latat		Date:	20-Aug-2017 01:40:33		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.706	3.706	0.000	0	868344	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

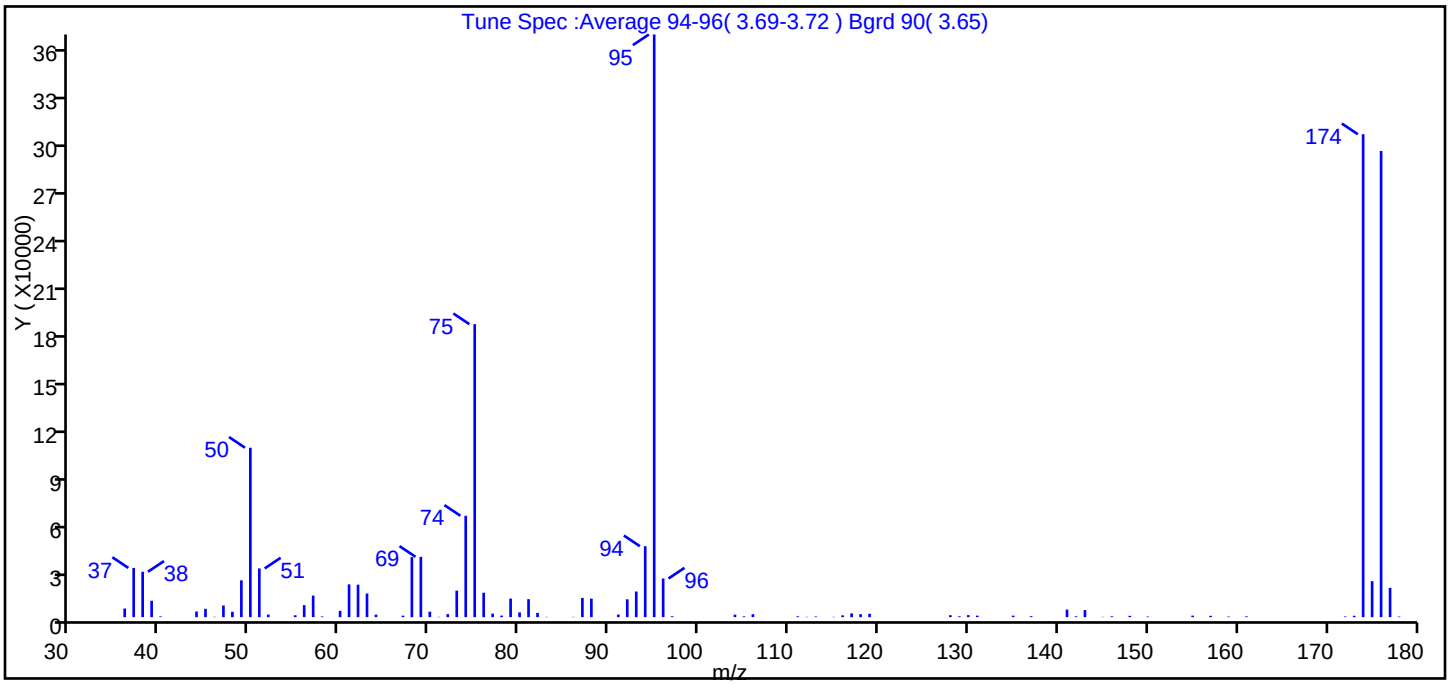
vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\BFB8425.D
Injection Date: 20-Aug-2017 00:19:30 Instrument ID: A3UX8
Lims ID: BFB
Client ID:
Operator ID: 402279 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_8 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	29.1
75	30 to 60% of m/z 95	50.3
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	82.9
175	5 to 9% of m/z 174	6.2 (7.5)
176	Greater than 95% but less than 101% of m/z 174	80.0 (96.5)
177	5 to 9% of m/z 176	5.0 (6.3)

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\BFB8425.D\8260_8.rslt\spectra.d
Injection Date: 20-Aug-2017 00:19:30
Spectrum: Tune Spec :Average 94-96(3.69-3.72) Bgrd 90(3.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5331	64.00	1555	92.00	11025	137.00	609
37.00	30416	67.00	922	93.00	15846	141.00	4659
38.00	28056	68.00	37096	94.00	43840	142.00	516
39.00	10121	69.00	37280	95.00	360064	143.00	4369
40.00	434	70.00	3382	96.00	23872	145.00	171
44.00	3488	71.00	196	97.00	542	146.00	516
45.00	5150	72.00	1861	104.00	1533	148.00	801
46.00	218	73.00	16373	105.00	493	150.00	362
47.00	7187	74.00	62648	106.00	1835	155.00	940
48.00	3327	75.00	181056	111.00	534	157.00	818
49.00	22752	76.00	15077	112.00	196	159.00	343
50.00	104704	77.00	2183	113.00	409	161.00	494
51.00	30088	78.00	962	115.00	191	172.00	404
52.00	1579	79.00	11485	116.00	1112	173.00	870
55.00	1165	80.00	2925	117.00	2304	174.00	298432
56.00	7425	81.00	11128	118.00	1819	175.00	22248
57.00	13330	82.00	2643	119.00	2083	176.00	288064
58.00	422	83.00	181	128.00	1201	177.00	18088
60.00	3892	86.00	185	129.00	521	178.00	364
61.00	20264	87.00	11870	130.00	1239		
62.00	20064	88.00	11425	131.00	925		
63.00	14576	91.00	1592	135.00	929		

Report Date: 21-Aug-2017 01:26:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\BFB8425.D

Injection Date:	20-Aug-2017 00:19:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\BFB8465.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	10-Oct-2017 23:54:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0069531-001				
Misc. Info.:	BFB				
Operator ID:	402279	Instrument ID:	A3UX8		
Method:	\\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	12-Oct-2017 01:07:06	Calib Date:	20-Aug-2017 03:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK028				
First Level Reviewer: latat		Date:	11-Oct-2017 02:29:37		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.706	3.706	0.000	0	843680	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

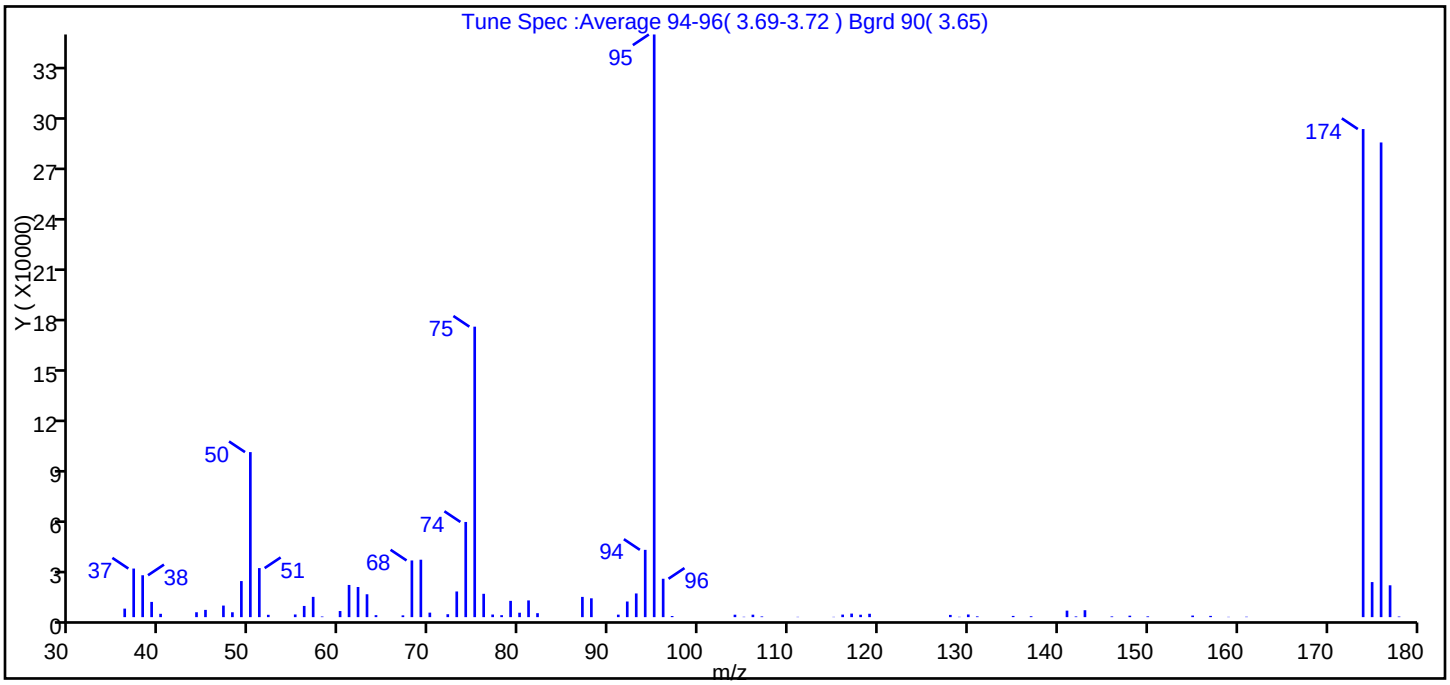
vmbfb_00018 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\BFB8465.D
Injection Date: 10-Oct-2017 23:54:30 Instrument ID: A3UX8
Lims ID: BFB
Client ID:
Operator ID: 402279 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_8 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	28.3
75	30 to 60% of m/z 95	49.9
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.8
175	5 to 9% of m/z 174	6.0 (7.2)
176	Greater than 95% but less than 101% of m/z 174	81.5 (97.3)
177	5 to 9% of m/z 176	5.5 (6.7)

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\BFB8465.D\8260_8.rslt\spectra.d
Injection Date: 10-Oct-2017 23:54:30
Spectrum: Tune Spec :Average 94-96(3.69-3.72) Bgrd 90(3.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5085	63.00	13642	92.00	9322	135.00	731
37.00	28968	64.00	1186	93.00	14124	137.00	539
38.00	24976	67.00	1065	94.00	40120	141.00	3885
39.00	9083	68.00	33800	95.00	347392	142.00	431
40.00	1989	69.00	34240	96.00	22888	143.00	4129
44.00	2924	70.00	2692	97.00	663	146.00	434
45.00	4331	72.00	1738	104.00	1455	148.00	873
47.00	6899	73.00	15307	105.00	216	150.00	464
48.00	2909	74.00	56752	106.00	1473	155.00	943
49.00	21512	75.00	173184	107.00	418	157.00	749
50.00	98392	76.00	13918	111.00	175	159.00	175
51.00	29240	77.00	1564	115.00	170	161.00	252
52.00	1399	78.00	1166	116.00	1524	174.00	291008
55.00	1596	79.00	9706	117.00	2125	175.00	20904
56.00	6676	80.00	2632	118.00	1441	176.00	283008
57.00	12085	81.00	9977	119.00	2011	177.00	18992
58.00	377	82.00	2366	128.00	1334	178.00	359
60.00	3645	87.00	12072	129.00	202		
61.00	19192	88.00	11232	130.00	1591		
62.00	17976	91.00	1491	131.00	475		

Report Date: 12-Oct-2017 01:07:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\BFB8465.D

Injection Date:	10-Oct-2017 23:54:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298471/8

Matrix: Solid | Lab File ID: UX83146.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/11/2017 01:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.36	U	5.0	0.36
71-55-6	1,1,1-Trichloroethane	0.23	U	5.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	5.0	0.26
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	U	5.0	0.49
75-34-3	1,1-Dichloroethane	0.33	U	5.0	0.33
75-35-4	1,1-Dichloroethene	0.54	U	5.0	0.54
563-58-6	1,1-Dichloropropene	0.19	U	5.0	0.19
87-61-6	1,2,3-Trichlorobenzene	0.35	U	5.0	0.35
96-18-4	1,2,3-Trichloropropane	0.39	U	5.0	0.39
526-73-8	1,2,3-Trimethylbenzene	0.10	U	5.0	0.10
120-82-1	1,2,4-Trichlorobenzene	0.24	U	5.0	0.24
95-63-6	1,2,4-Trimethylbenzene	0.25	U	5.0	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	0.68	U	10	0.68
95-50-1	1,2-Dichlorobenzene	0.22	U	5.0	0.22
107-06-2	1,2-Dichloroethane	0.29	U	5.0	0.29
78-87-5	1,2-Dichloropropane	0.31	U	5.0	0.31
541-73-1	1,3-Dichlorobenzene	0.29	U	5.0	0.29
142-28-9	1,3-Dichloropropane	0.23	U	5.0	0.23
106-46-7	1,4-Dichlorobenzene	0.35	U	5.0	0.35
594-20-7	2,2-Dichloropropane	0.30	U	5.0	0.30
78-93-3	2-Butanone (MEK)	1.3	U	20	1.3
110-75-8	2-Chloroethyl vinyl ether	2.8	U	50	2.8
95-49-8	2-Chlorotoluene	0.37	U	5.0	0.37
591-78-6	2-Hexanone	0.58	U	20	0.58
106-43-4	4-Chlorotoluene	0.24	U	5.0	0.24
99-87-6	p-Isopropyltoluene	0.18	U	5.0	0.18
108-10-1	4-Methyl-2-pentanone (MIBK)	0.89	U	20	0.89
67-64-1	Acetone	3.1	U	20	3.1
71-43-2	Benzene	0.32	U	5.0	0.32
108-86-1	Bromobenzene	0.27	U	5.0	0.27
75-25-2	Bromoform	0.40	U	5.0	0.40
74-83-9	Bromomethane	0.59	U	5.0	0.59
75-15-0	Carbon disulfide	0.241	J	5.0	0.21
56-23-5	Carbon tetrachloride	0.25	U	5.0	0.25
108-90-7	Chlorobenzene	0.33	U	5.0	0.33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298471/8

Matrix: Solid | Lab File ID: UX83146.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/11/2017 01:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.30	U	5.0	0.30
75-00-3	Chloroethane	0.38	U	5.0	0.38
67-66-3	Chloroform	0.23	U	5.0	0.23
74-87-3	Chloromethane	0.38	U	5.0	0.38
156-59-2	cis-1,2-Dichloroethene	0.28	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	0.26	U	5.0	0.26
74-95-3	Dibromomethane	0.38	U	5.0	0.38
74-97-5	Bromochloromethane	0.36	U	5.0	0.36
75-71-8	Dichlorodifluoromethane	0.35	U	5.0	0.35
75-27-4	Bromodichloromethane	0.33	U	5.0	0.33
75-65-0	tert-Butyl alcohol (TBA)	2.4	U	200	2.4
100-41-4	Ethylbenzene	0.27	U	5.0	0.27
87-68-3	Hexachlorobutadiene	0.44	U	5.0	0.44
108-20-3	Diisopropyl ether	0.24	U	10	0.24
98-82-8	Isopropylbenzene	0.20	U	5.0	0.20
1634-04-4	Methyl tert-butyl ether	0.27	U	5.0	0.27
75-09-2	Methylene Chloride	0.24	U	5.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.40	U	10	0.40
91-20-3	Naphthalene	0.33	U	5.0	0.33
104-51-8	n-Butylbenzene	0.25	U	5.0	0.25
103-65-1	N-Propylbenzene	0.28	U	5.0	0.28
95-47-6	o-Xylene	0.22	U	5.0	0.22
135-98-8	sec-Butylbenzene	0.19	U	5.0	0.19
100-42-5	Styrene	0.27	U	5.0	0.27
994-05-8	Tert-amyl methyl ether	0.21	U	5.0	0.21
637-92-3	Ethyl t-butyl ether	0.13	U	5.0	0.13
127-18-4	Tetrachloroethene	0.37	U	5.0	0.37
108-88-3	Toluene	0.34	U	5.0	0.34
156-60-5	trans-1,2-Dichloroethene	0.38	U	5.0	0.38
10061-02-6	trans-1,3-Dichloropropene	0.21	U	5.0	0.21
79-01-6	Trichloroethene	0.41	U	5.0	0.41
75-69-4	Trichlorofluoromethane	0.24	U	5.0	0.24
108-05-4	Vinyl acetate	0.87	U	10	0.87
75-01-4	Vinyl chloride	0.28	U	5.0	0.28
1330-20-7	Xylenes, Total	0.40	U	10	0.40
98-06-6	tert-Butylbenzene	0.21	U	5.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298471/8

Matrix: Solid | Lab File ID: UX83146.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/11/2017 01:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.35	U	5.0	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	94		66-125
1868-53-7	Dibromofluoromethane (Surr)	90		43-131
460-00-4	4-Bromofluorobenzene (Surr)	99		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		61-127

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83146.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-Oct-2017 01:56:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-008
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 02:34:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.157	0.000	98	1623334	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.689	0.000	97	1188727	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.878	0.001	96	616506	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.637	4.627	0.010	94	348226	50.0	45.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.887	0.010	93	503009	50.0	43.5	
$ 6 Toluene-d8 (Surr)	98	6.435	6.425	0.010	95	1399613	50.0	47.1	
$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	89	538136	50.0	49.4	
9 Dichlorodifluoromethane	85		1.586					ND	
10 Chloromethane	50		1.751					ND	
11 Vinyl chloride	62		1.870					ND	
12 Butadiene	54		1.905					ND	
13 Bromomethane	94		2.189					ND	
14 Chloroethane	64		2.284					ND	
15 Dichlorofluoromethane	67		2.461					ND	
16 Trichlorofluoromethane	101		2.509					ND	
17 Ethyl ether	59		2.733					ND	
18 Acrolein	56		2.840					ND	
19 1,1-Dichloroethene	96		2.923					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.946					ND	
21 Acetone	43		2.958					ND	
22 Methylal	45		2.980					ND	
23 Iodomethane	142		3.053					ND	
24 Carbon disulfide	76	3.110	3.112	-0.002	91	4273		0.2406	
25 Acetonitrile	41		3.181					ND	
26 3-Chloro-1-propene	76		3.207					ND	
27 Methyl acetate	43		3.218					ND	
28 Methylene Chloride	84		3.301					ND	
29 2-Methyl-2-propanol	59		3.384					ND	
30 Acrylonitrile	53		3.479					ND	
31 trans-1,2-Dichloroethene	96		3.526					ND	
32 Methyl tert-butyl ether	73		3.526					ND	
33 Hexane	86		3.727					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63		3.834					ND	
35 Vinyl acetate	43		3.857					ND	
36 Isopropyl ether	87		3.891					ND	
37 2-Chloro-1,3-butadiene	53		3.914					ND	
38 Tert-butyl ethyl ether	59		4.163					ND	
40 2-Butanone (MEK)	43		4.272					ND	
39 cis-1,2-Dichloroethene	96		4.272					ND	
41 2,2-Dichloropropane	77		4.283					ND	
42 Ethyl acetate	43		4.317					ND	
43 Propionitrile	54	4.317	4.317	0.000	87	3080		3.29	
44 Methacrylonitrile	41	4.447	4.435	0.012	90	6042		0.6653	
45 Chlorobromomethane	128		4.461					ND	
46 Tetrahydrofuran	42		4.496					ND	
47 Chloroform	83		4.508					ND	
48 1,1,1-Trichloroethane	97		4.674					ND	
49 Cyclohexane	56		4.721					ND	
50 1,1-Dichloropropene	75		4.792					ND	
51 Carbon tetrachloride	117		4.804					ND	
52 Isobutyl alcohol	41		4.828					ND	
53 1,2-Dichloroethane	62		4.946					ND	
54 Benzene	78		4.958					ND	
55 Tert-amyl methyl ether	73		5.027					ND	
56 n-Heptane	100		5.135					ND	
57 n-Butanol	56	5.335	5.334	0.001	77	2376		50.2	
58 Trichloroethene	130		5.443					ND	
59 Ethyl acrylate	55		5.500					ND	
60 Methylcyclohexane	83		5.609					ND	
61 1,2-Dichloropropane	63		5.621					ND	
62 Methyl methacrylate	41		5.677					ND	
63 Dibromomethane	93		5.715					ND	
64 1,4-Dioxane	88		5.715					ND	
65 Dichlorobromomethane	83		5.834					ND	
66 2-Nitropropane	41		6.009					ND	
67 2-Chloroethyl vinyl ether	63		6.058					ND	
68 cis-1,3-Dichloropropene	75		6.189					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.307					ND	
70 Toluene	91		6.484					ND	
71 trans-1,3-Dichloropropene	75		6.650					ND	
72 Ethyl methacrylate	69		6.709					ND	
73 1,1,2-Trichloroethane	97		6.816					ND	
74 1,3-Dichloropropane	76		6.958					ND	
75 Tetrachloroethene	164		6.969					ND	
76 2-Hexanone	43		7.005					ND	
77 n-Butyl acetate	43	7.121	7.109	0.012	91	13877		1.51	
78 Chlorodibromomethane	129		7.159					ND	
79 Tetrahydrothiophene	60		7.168					ND	
80 Ethylene Dibromide	107		7.277					ND	
81 1-Chlorohexane	91		7.677					ND	
82 Chlorobenzene	112		7.715					ND	
83 1,1,1,2-Tetrachloroethane	131		7.774					ND	
84 Ethylbenzene	106		7.798					ND	
85 m-Xylene & p-Xylene	106		7.904					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 o-Xylene	106		8.271					ND	
87 Styrene	104		8.283					ND	
88 Bromoform	173		8.460					ND	
89 Isopropylbenzene	105		8.614					ND	
90 1,4-Dichlorobutane	90		8.697					ND	
91 Cyclohexanone	55		8.707					ND	
92 1,1,2,2-Tetrachloroethane	83		8.875					ND	
93 Bromobenzene	156		8.922					ND	
94 1,2,3-Trichloropropane	110		8.934					ND	
95 trans-1,4-Dichloro-2-buten	53		8.934					ND	
96 N-Propylbenzene	120		9.005					ND	
97 2-Chlorotoluene	126		9.099					ND	
98 1,3,5-Trimethylbenzene	105		9.170					ND	
99 4-Chlorotoluene	126		9.194					ND	
100 tert-Butylbenzene	119		9.490					ND	
101 Pentachloroethane	167		9.511					ND	
102 1,2,4-Trimethylbenzene	105		9.537					ND	
103 sec-Butylbenzene	105		9.703					ND	
104 1,3-Dichlorobenzene	146		9.821					ND	
105 4-Isopropyltoluene	119		9.845					ND	
106 1,4-Dichlorobenzene	146		9.904					ND	
107 1,2,3-Trimethylbenzene	105		9.949					ND	
108 Benzyl chloride	126		10.032					ND	
109 n-Butylbenzene	91		10.247					ND	
110 1,2-Dichlorobenzene	146		10.271					ND	
111 1,2-Dibromo-3-Chloropropan	157		11.028					ND	
112 1,3,5-Trichlorobenzene	180	11.251	11.251	0.000	90	2940		0.2771	
113 1,2,4-Trichlorobenzene	180		11.856					ND	
114 Hexachlorobutadiene	225		12.034					ND	
115 Naphthalene	128	12.115	12.105	0.010	90	6171		0.2529	
116 1,2,3-Trichlorobenzene	180		12.365					ND	
117 2-Methylnaphthalene	142	13.428	13.428	0.000	93	29843		3.80	
121 Ethylene oxide	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
119 Epichlorohydrin	1		0.000					ND	
120 3-Ethyltoluene	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
118 2-Ethyltoluene	1		0.000					ND	
123 1,3-Diethylbenzene TIC	1		0.000					ND	
S 126 1,2-Dichloroethene, Total	96		1.140					ND	
S 127 1,3-Dichloropropene, Total	75		6.760					ND	
S 128 Xylenes, Total	106		16.530					ND	
S 129 Trihalomethanes, Total	1		0.000					ND	
T 132 Chlorodifluoromethane TIC	51	1.596	1.590	0.006	0	25485		0.7850	
T 156 1-Chloro-1-fluoroethane TI	47		2.220					ND	
T 130 Butyl Methacrylate TIC	69		9.231					ND	
T 131 Hexachloroethane TIC	166		10.500					ND	

Reagents:

VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

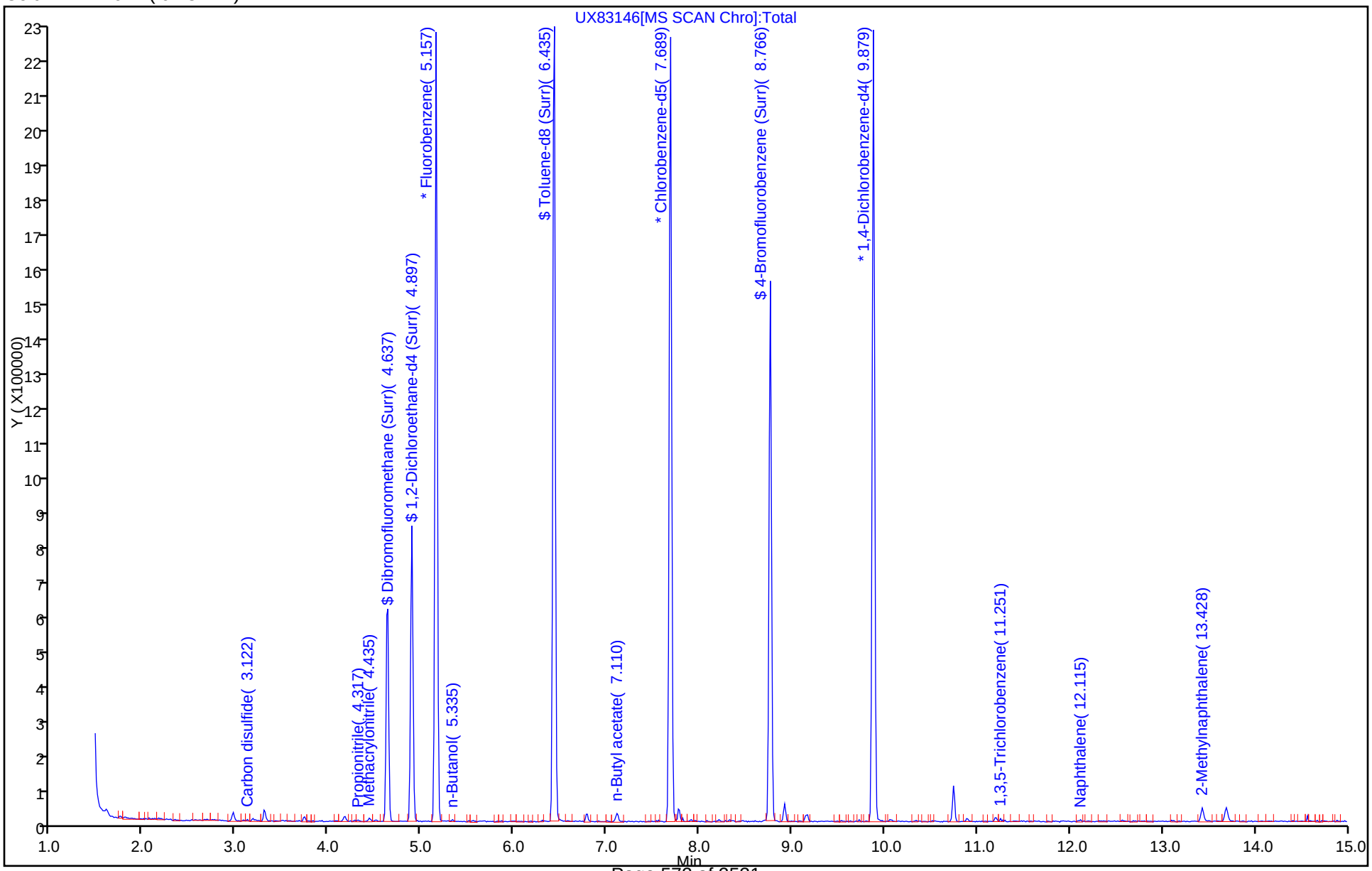
Report Date: 12-Oct-2017 01:07:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83146.D

Injection Date:	11-Oct-2017 01:56:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83146.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-Oct-2017 01:56:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-008
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 02:34:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	45.0	89.98
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	43.5	87.00
$ 6 Toluene-d8 (Surr)	50.0	47.1	94.23
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.4	98.88

Report Date: 12-Oct-2017 01:07:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83146.D

Injection Date: 11-Oct-2017 01:56:30 Instrument ID: A3UX8

Lims ID: MB

Client ID:

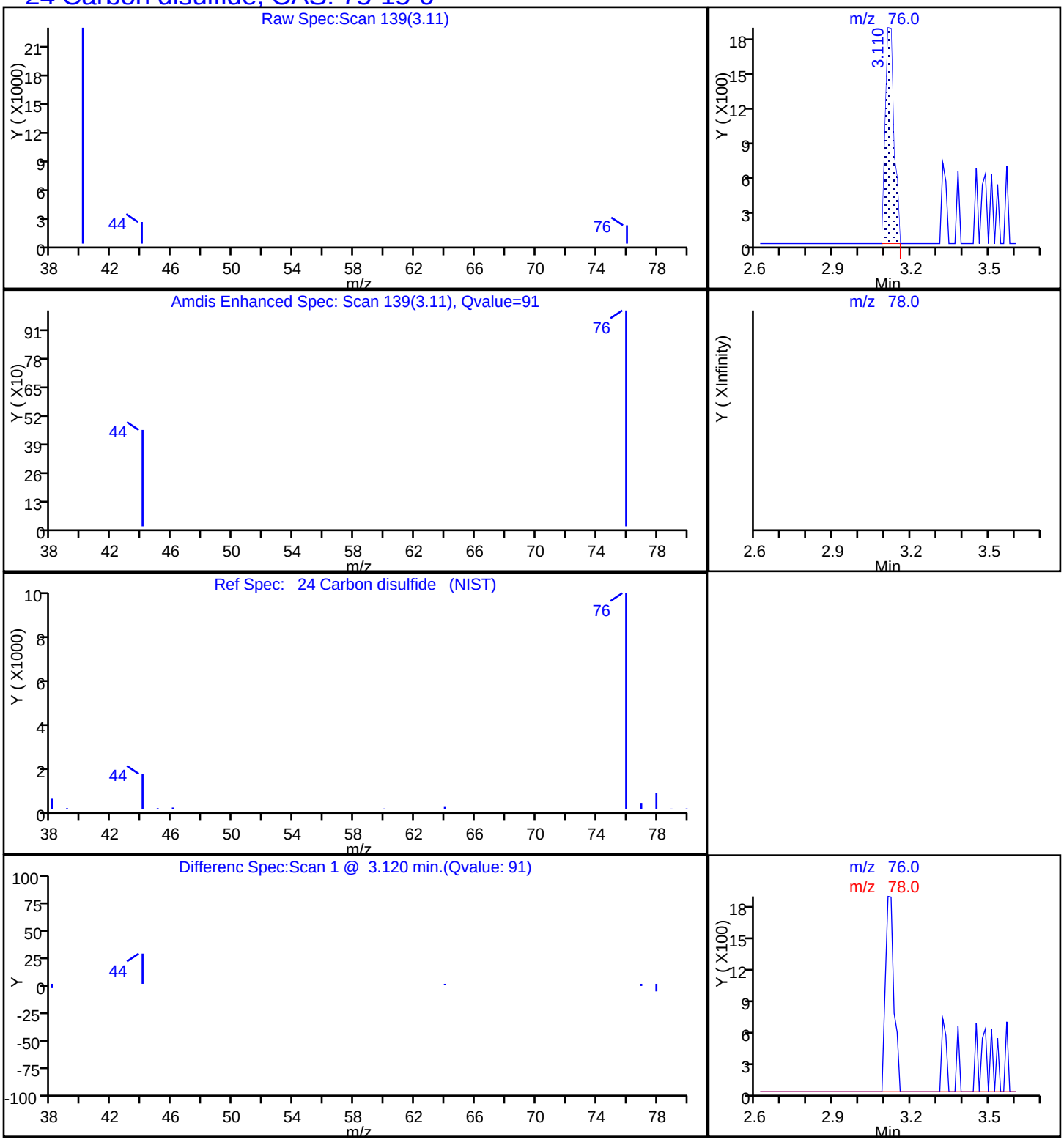
Operator ID: 402279 ALS Bottle#: 6 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260_8 Limit Group: MSV 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298687/7

Matrix: Water | Lab File ID: UXM6687.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 09:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.46	U	1.0	0.46
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
563-58-6	1,1-Dichloropropene	0.28	U	1.0	0.28
87-61-6	1,2,3-Trichlorobenzene	0.35	U	1.0	0.35
96-18-4	1,2,3-Trichloropropane	0.54	U	1.0	0.54
526-73-8	1,2,3-Trimethylbenzene	0.22	U	5.0	0.22
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
95-63-6	1,2,4-Trimethylbenzene	0.24	U	1.0	0.24
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
142-28-9	1,3-Dichloropropane	0.29	U	1.0	0.29
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
594-20-7	2,2-Dichloropropane	0.34	U	1.0	0.34
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
110-75-8	2-Chloroethyl vinyl ether	0.65	U	10	0.65
95-49-8	2-Chlorotoluene	0.28	U	1.0	0.28
591-78-6	2-Hexanone	1.2	U	10	1.2
106-43-4	4-Chlorotoluene	0.23	U	1.0	0.23
99-87-6	p-Isopropyltoluene	0.29	U	1.0	0.29
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
108-86-1	Bromobenzene	0.31	U	1.0	0.31
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298687/7

Matrix: Water | Lab File ID: UXM6687.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 09:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.25	U	1.0	0.25
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
74-95-3	Dibromomethane	0.46	U	1.0	0.46
74-97-5	Bromochloromethane	0.47	U	1.0	0.47
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
75-27-4	Bromodichloromethane	0.30	U	1.0	0.30
75-65-0	tert-Butyl alcohol (TBA)	4.6	U	50	4.6
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
87-68-3	Hexachlorobutadiene	0.592	J	1.0	0.36
108-20-3	Diisopropyl ether	0.44	U	10	0.44
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
179601-23-1	m-Xylene & p-Xylene	0.24	U	2.0	0.24
91-20-3	Naphthalene	0.25	U	1.0	0.25
104-51-8	n-Butylbenzene	0.21	U	1.0	0.21
103-65-1	N-Propylbenzene	0.45	U	1.0	0.45
95-47-6	o-Xylene	0.28	U	1.0	0.28
135-98-8	sec-Butylbenzene	0.27	U	1.0	0.27
100-42-5	Styrene	0.23	U	1.0	0.23
994-05-8	Tert-amyl methyl ether	0.29	U	5.0	0.29
637-92-3	Ethyl t-butyl ether	0.35	U	5.0	0.35
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
108-05-4	Vinyl acetate	0.28	U	2.0	0.28
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24
98-06-6	tert-Butylbenzene	0.26	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298687/7

Matrix: Water | Lab File ID: UXM6687.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 09:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.23	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		69-124
460-00-4	4-Bromofluorobenzene (Surr)	99		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		61-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6687.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2017 09:34:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-007
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 09:58:02 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 09:58:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	100	910447	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	86	670318	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	95	450380	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	243163	20.0	21.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	98	267972	20.0	20.2	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	94	795745	20.0	18.2	
$ 7 4-Bromofluorobenzene (Surr	95	9.611	9.611	0.000	90	301377	20.0	19.9	
9 Dichlorodifluoromethane	85		1.773					ND	
10 Chloromethane	50		1.927					ND	
11 Vinyl chloride	62		2.058					ND	
12 Butadiene	54		2.093					ND	
13 Bromomethane	94		2.402					ND	
123 Ethylene oxide	44		2.487					ND	
14 Chloroethane	64		2.508					ND	
15 Dichlorofluoromethane	67		2.710					ND	
16 Trichlorofluoromethane	101		2.781					ND	
17 Ethyl ether	59		3.030					ND	
120 Propene oxide	58		3.103					ND	
18 Acrolein	56		3.160					ND	
19 1,1-Dichloroethene	96		3.255					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.291					ND	
21 Acetone	43		3.303					ND	
23 Iodomethane	142		3.398					ND	
24 Carbon disulfide	76		3.469					ND	
22 Methylal	45		3.529					ND	
25 Acetonitrile	41		3.564					ND	
26 3-Chloro-1-propene	76		3.587					ND	
27 Methyl acetate	43		3.611					ND	
28 Methylene Chloride	84		3.706					ND	
29 2-Methyl-2-propanol	59		3.801					ND	
30 Acrylonitrile	53		3.919					ND	
31 Methyl tert-butyl ether	73		3.955					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 trans-1,2-Dichloroethene	96		3.955					ND	
33 Hexane	57		4.192					ND	
34 1,1-Dichloroethane	63		4.323					ND	
35 Vinyl acetate	43		4.358					ND	
36 Isopropyl ether	87		4.382					ND	
37 2-Chloro-1,3-butadiene	53		4.406					ND	
38 Tert-butyl ethyl ether	59		4.690					ND	
39 cis-1,2-Dichloroethene	96		4.821					ND	
41 2,2-Dichloropropane	97		4.832					ND	
42 Propionitrile	54		4.880					ND	
43 Ethyl acetate	43		4.880					ND	
44 Methacrylonitrile	41		5.010					ND	
45 Chlorobromomethane	128		5.034					ND	
46 Tetrahydrofuran	42		5.082					ND	
47 Chloroform	83		5.093					ND	
48 1,1,1-Trichloroethane	97		5.271					ND	
49 Cyclohexane	56		5.319					ND	
50 1,1-Dichloropropene	75		5.402					ND	
51 Carbon tetrachloride	117		5.414					ND	
52 Isobutyl alcohol	41		5.461					ND	
54 Benzene	78		5.580					ND	
53 1,2-Dichloroethane	62		5.591					ND	
55 Tert-amyl methyl ether	73		5.663					ND	
56 n-Heptane	57		5.793					ND	
57 n-Butanol	56		6.030					ND	
58 Trichloroethene	130		6.125					ND	
59 Ethyl acrylate	55		6.196					ND	
61 1,2-Dichloropropane	63		6.327					ND	
62 Methyl methacrylate	41		6.398					ND	
63 Dibromomethane	93		6.422					ND	
64 1,4-Dioxane	88		6.433					ND	
65 Dichlorobromomethane	83		6.552					ND	
66 2-Nitropropane	41		6.742					ND	
121 Epichlorohydrin	57		6.779					ND	
67 2-Chloroethyl vinyl ether	63		6.801					ND	
68 cis-1,3-Dichloropropene	75		6.943					ND	
69 4-Methyl-2-pentanone (MIBK	43		7.074					ND	
70 Toluene	91		7.252					ND	
71 trans-1,3-Dichloropropene	75		7.430					ND	
72 Ethyl methacrylate	69		7.489					ND	
73 1,1,2-Trichloroethane	97		7.596					ND	
75 Tetrachloroethene	164		7.750					ND	
74 1,3-Dichloropropane	76		7.750					ND	
76 2-Hexanone	43		7.809					ND	
77 n-Butyl acetate	43		7.916					ND	
79 Tetrahydrothiophene	60		7.921					ND	
78 Chlorodibromomethane	129		7.963					ND	
80 Ethylene Dibromide	107		8.082					ND	
81 1-Chlorohexane	91		8.485					ND	
82 Chlorobenzene	112		8.532					ND	
83 1,1,1,2-Tetrachloroethane	131		8.604					ND	
84 Ethylbenzene	106		8.627					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106		8.734					ND	
86 o-Xylene	106		9.113					ND	
87 Styrene	104		9.125					ND	
88 Bromoform	173		9.315					ND	
89 Isopropylbenzene	105		9.469					ND	
90 1,4-Dichlorobutane	55		9.510					ND	
91 Cyclohexanone	55		9.564					ND	
92 1,1,2,2-Tetrachloroethane	83		9.742					ND	
93 Bromobenzene	156		9.777					ND	
95 1,2,3-Trichloropropane	110		9.789					ND	
94 trans-1,4-Dichloro-2-buten	53		9.789					ND	
96 N-Propylbenzene	120		9.861					ND	
97 2-Chlorotoluene	126		9.955					ND	
99 1,3,5-Trimethylbenzene	105		10.027					ND	
100 4-Chlorotoluene	126		10.062					ND	
98 3-Ethyltoluene	105		10.190					ND	
102 tert-Butylbenzene	119		10.359					ND	
101 2-Ethyltoluene	105		10.368					ND	
103 Pentachloroethane	167		10.382					ND	
104 1,2,4-Trimethylbenzene	105		10.406					ND	
105 sec-Butylbenzene	105		10.572					ND	
106 1,3-Dichlorobenzene	146		10.691					ND	
107 4-Isopropyltoluene	119		10.714					ND	
108 1,4-Dichlorobenzene	146		10.774					ND	
109 1,2,3-Trimethylbenzene	105		10.821					ND	
110 Benzyl chloride	126		10.904					ND	
111 n-Butylbenzene	91		11.118					ND	
112 1,2-Dichlorobenzene	146		11.153					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.924					ND	
114 1,3,5-Trichlorobenzene	180		12.137					ND	
115 1,2,4-Trichlorobenzene	180		12.754					ND	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	83	4190		0.5916	
117 Naphthalene	128		13.015					ND	
118 1,2,3-Trichlorobenzene	180		13.288					ND	
119 2-Methylnaphthalene	142	14.402	14.414	-0.012	1	1044		1.24	
126 Butyl Methacrylate TIC	1		0.420					ND	
S 158 Total BTEX	1		0.420					ND	
S 134 Trihalomethanes, Total	1		0.420					ND	
S 131 1,2-Dichloroethene, Total	96		1.560					ND	
S 132 1,3-Dichloropropene, Total	75		7.180					ND	
S 133 Xylenes, Total	106		16.950					ND	
T 125 Chlorodifluoromethane TIC	51		1.995					ND	
T 129 Isobutylene TIC	56		2.120					ND	
T 159 1-Chloro-1-fluoroethane TI	47		2.437					ND	
T 135 Hexachloroethane TIC	1		11.770					ND	
T 127 1,3-Diethylbenzene TIC	119		11.800					ND	

Reagents:

vm100ss_stk_00027	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

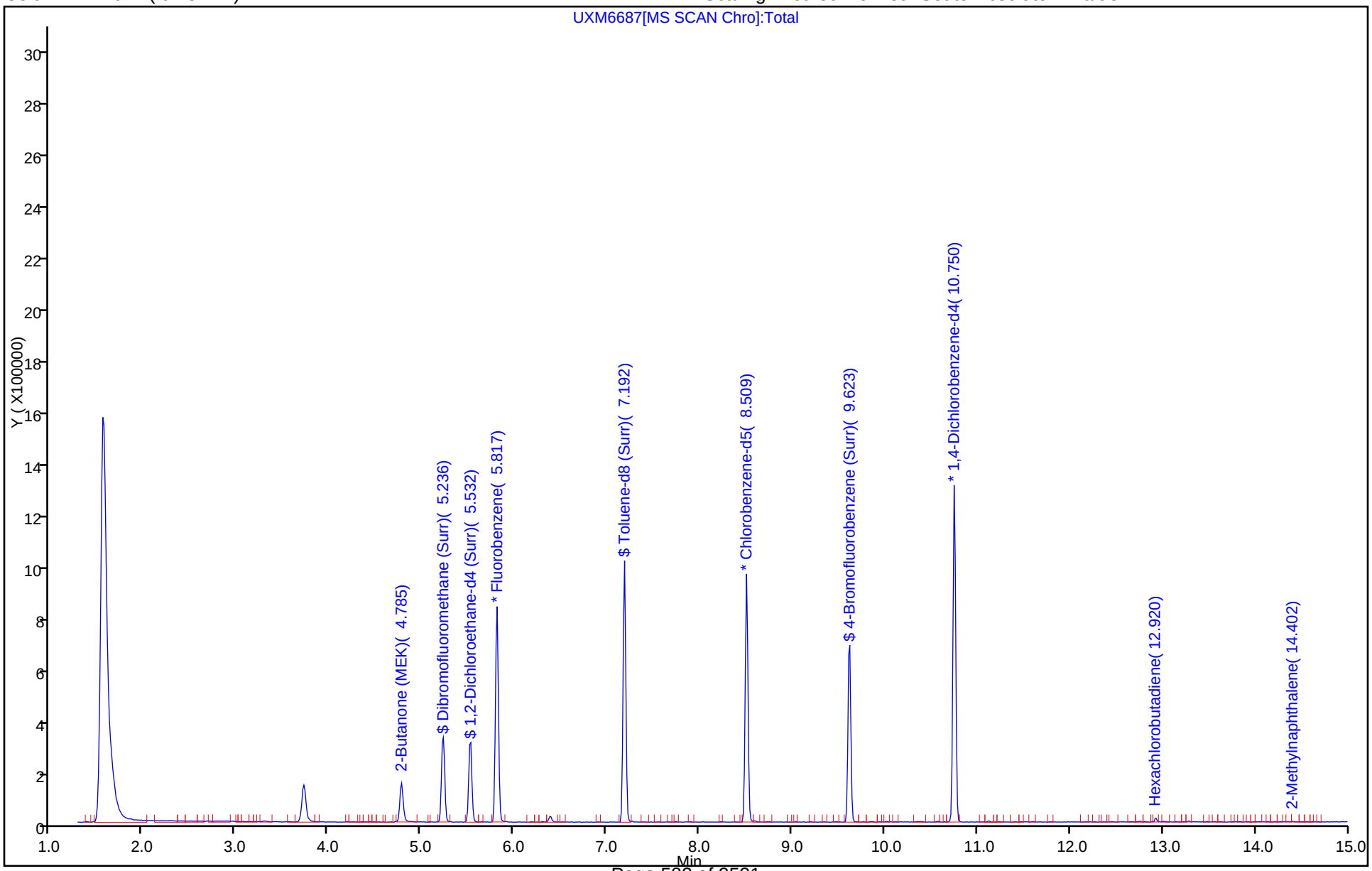
Report Date: 12-Oct-2017 09:58:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6687.D

Injection Date:	12-Oct-2017 09:34:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6687.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2017 09:34:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-007
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 09:58:02 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 09:58:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	104.91
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.2	101.17
$ 6 Toluene-d8 (Surr)	20.0	18.2	91.22
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.9	99.48

Report Date: 12-Oct-2017 09:58:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6687.D

Injection Date: 12-Oct-2017 09:34:30 Instrument ID: A3UX16

Lims ID: MB

Client ID:

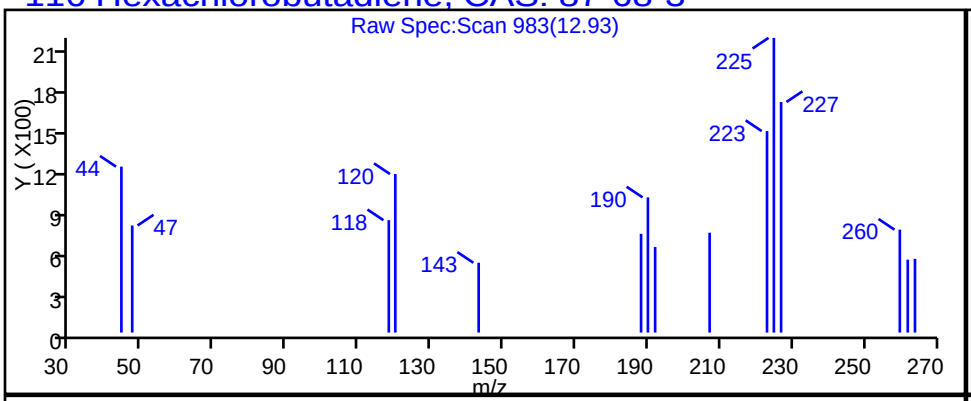
Operator ID: 001765 ALS Bottle#: 7 Worklist Smp#: 7

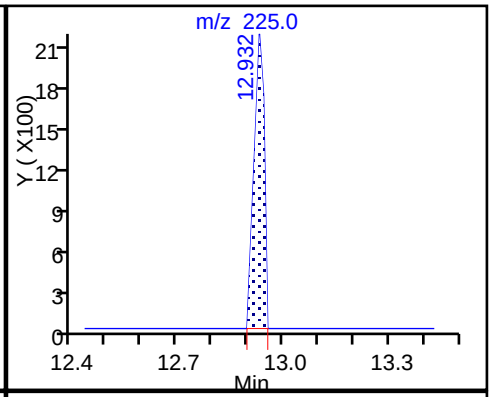
Purge Vol: 5.000 mL Dil. Factor: 1.0000

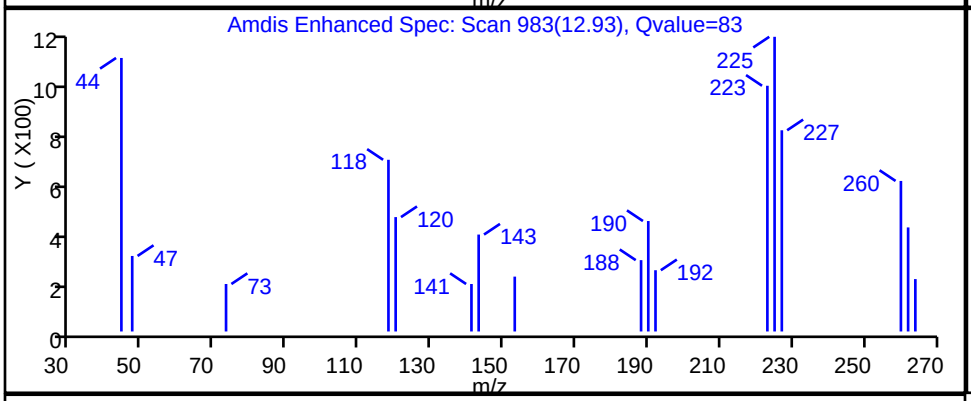
Method: 8260_16 Limit Group: MSV 8260C ICAL

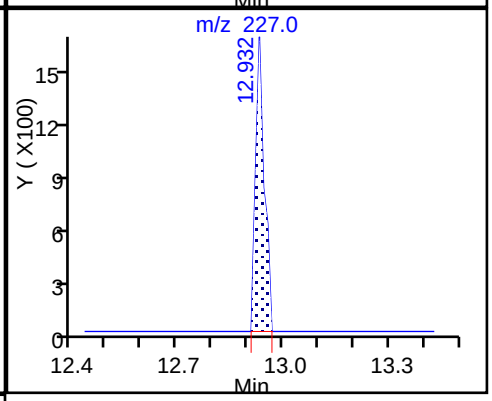
Column: DB-624 (0.18 mm) Detector MS SCAN

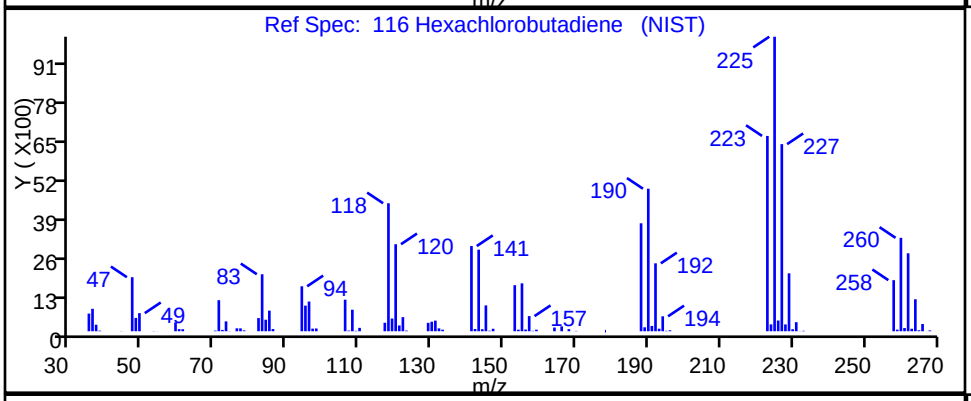
116 Hexachlorobutadiene, CAS: 87-68-3

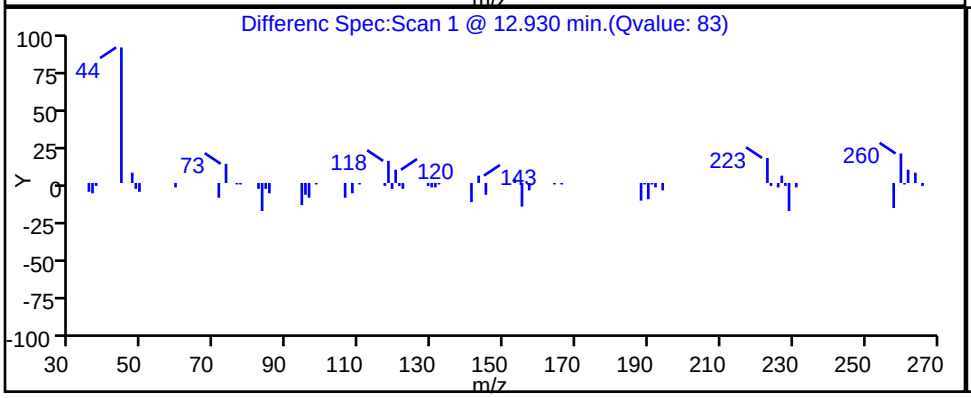


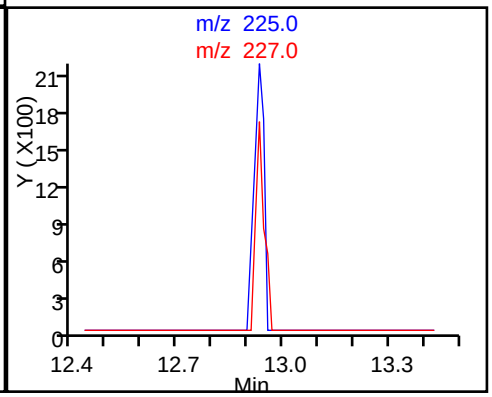












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-298471/6

Matrix: Solid | Lab File ID: UX83144.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/11/2017 01:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	53.7		5.0	0.36
71-55-6	1,1,1-Trichloroethane	50.9		5.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	53.7		5.0	0.26
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50.9		5.0	0.49
75-34-3	1,1-Dichloroethane	49.1		5.0	0.33
75-35-4	1,1-Dichloroethene	51.8		5.0	0.54
563-58-6	1,1-Dichloropropene	53.4		5.0	0.19
87-61-6	1,2,3-Trichlorobenzene	47.2		5.0	0.35
96-18-4	1,2,3-Trichloropropane	51.0		5.0	0.39
120-82-1	1,2,4-Trichlorobenzene	50.4		5.0	0.24
95-63-6	1,2,4-Trimethylbenzene	52.8		5.0	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	57.0		10	0.68
95-50-1	1,2-Dichlorobenzene	48.8		5.0	0.22
107-06-2	1,2-Dichloroethane	46.3		5.0	0.29
78-87-5	1,2-Dichloropropane	52.9		5.0	0.31
541-73-1	1,3-Dichlorobenzene	48.9		5.0	0.29
142-28-9	1,3-Dichloropropane	52.3		5.0	0.23
106-46-7	1,4-Dichlorobenzene	47.0		5.0	0.35
594-20-7	2,2-Dichloropropane	47.6		5.0	0.30
78-93-3	2-Butanone (MEK)	98.7		20	1.3
110-75-8	2-Chloroethyl vinyl ether	61.7		50	2.8
95-49-8	2-Chlorotoluene	52.3		5.0	0.37
591-78-6	2-Hexanone	117		20	0.58
106-43-4	4-Chlorotoluene	51.8		5.0	0.24
99-87-6	p-Isopropyltoluene	54.9		5.0	0.18
108-10-1	4-Methyl-2-pentanone (MIBK)	117		20	0.89
67-64-1	Acetone	101		20	3.1
71-43-2	Benzene	50.3		5.0	0.32
108-86-1	Bromobenzene	51.2		5.0	0.27
75-25-2	Bromoform	55.8		5.0	0.40
74-83-9	Bromomethane	52.5		5.0	0.59
75-15-0	Carbon disulfide	51.9		5.0	0.21
56-23-5	Carbon tetrachloride	52.4		5.0	0.25
108-90-7	Chlorobenzene	49.3		5.0	0.33
124-48-1	Dibromochloromethane	58.9		5.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-298471/6

Matrix: Solid | Lab File ID: UX83144.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/11/2017 01:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	39.1		5.0	0.38
67-66-3	Chloroform	47.5		5.0	0.23
74-87-3	Chloromethane	44.7		5.0	0.38
156-59-2	cis-1,2-Dichloroethene	49.6		5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	53.4		5.0	0.26
74-95-3	Dibromomethane	48.9		5.0	0.38
74-97-5	Bromochloromethane	50.1		5.0	0.36
75-71-8	Dichlorodifluoromethane	50.5		5.0	0.35
75-27-4	Bromodichloromethane	54.6		5.0	0.33
75-65-0	tert-Butyl alcohol (TBA)	583		200	2.4
100-41-4	Ethylbenzene	52.8		5.0	0.27
87-68-3	Hexachlorobutadiene	48.3		5.0	0.44
98-82-8	Isopropylbenzene	54.6		5.0	0.20
1634-04-4	Methyl tert-butyl ether	52.1		5.0	0.27
75-09-2	Methylene Chloride	45.8		5.0	0.24
179601-23-1	m-Xylene & p-Xylene	54.9		10	0.40
91-20-3	Naphthalene	54.9		5.0	0.33
104-51-8	n-Butylbenzene	53.0		5.0	0.25
103-65-1	N-Propylbenzene	54.4		5.0	0.28
95-47-6	o-Xylene	52.4		5.0	0.22
135-98-8	sec-Butylbenzene	53.1		5.0	0.19
100-42-5	Styrene	54.3		5.0	0.27
127-18-4	Tetrachloroethene	51.2		5.0	0.37
108-88-3	Toluene	51.8		5.0	0.34
156-60-5	trans-1,2-Dichloroethene	52.6		5.0	0.38
10061-02-6	trans-1,3-Dichloropropene	51.9		5.0	0.21
79-01-6	Trichloroethene	51.1		5.0	0.41
75-69-4	Trichlorofluoromethane	44.9		5.0	0.24
108-05-4	Vinyl acetate	55.6		10	0.87
75-01-4	Vinyl chloride	43.0		5.0	0.28
1330-20-7	Xylenes, Total	107		10	0.40
98-06-6	tert-Butylbenzene	50.9		5.0	0.21
106-93-4	1,2-Dibromoethane	55.6		5.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-298471/6

Matrix: Solid Lab File ID: UX83144.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 10/11/2017 01:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 298471 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		66-125
1868-53-7	Dibromofluoromethane (Surr)	93		43-131
460-00-4	4-Bromofluorobenzene (Surr)	106		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		61-127

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83144.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2017 01:12:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-006
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 02:28:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.157	0.000	99	1655846	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.689	0.000	97	1194629	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.878	0.000	98	662434	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.636	4.627	0.009	94	365319	50.0	46.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.896	4.887	0.009	98	518441	50.0	44.0	
$ 6 Toluene-d8 (Surr)	98	6.435	6.425	0.010	95	1459027	50.0	48.9	
$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	88	577905	50.0	53.0	
9 Dichlorodifluoromethane	85	1.583	1.586	-0.003	97	403799	50.0	50.5	
10 Chloromethane	50	1.761	1.751	0.010	100	553968	50.0	44.7	
11 Vinyl chloride	62	1.879	1.870	0.009	100	349445	50.0	43.0	
12 Butadiene	54	1.914	1.905	0.009	0	416894	50.0	39.3	
13 Bromomethane	94	2.187	2.189	-0.002	92	170691	50.0	52.5	
14 Chloroethane	64	2.293	2.284	0.009	96	203417	50.0	39.1	
15 Dichlorofluoromethane	67	2.459	2.461	-0.002	99	459321	50.0	39.1	
16 Trichlorofluoromethane	101	2.518	2.509	0.010	99	454594	50.0	44.9	
17 Ethyl ether	59	2.743	2.733	0.010	95	480151	50.0	55.1	
18 Acrolein	56	2.849	2.840	0.009	98	432982	250.0	431.9	
19 1,1-Dichloroethene	96	2.932	2.923	0.009	94	308115	50.0	51.8	
20 1,1,2-Trichloro-1,2,2-trif	151	2.956	2.946	0.010	93	263984	50.0	50.9	
21 Acetone	43	2.968	2.958	0.010	96	485072	100.0	101.3	
23 Iodomethane	142	3.062	3.053	0.009	99	551680	50.0	44.9	
24 Carbon disulfide	76	3.121	3.112	0.009	98	939583	50.0	51.9	
26 3-Chloro-1-propene	76	3.216	3.207	0.009	85	216821	50.0	57.4	
27 Methyl acetate	43	3.228	3.218	0.010	99	1187704	100.0	98.4	
28 Methylene Chloride	84	3.311	3.301	0.010	91	383773	50.0	45.8	
29 2-Methyl-2-propanol	59	3.394	3.384	0.010	92	597655	500.0	582.6	
30 Acrylonitrile	53	3.488	3.479	0.009	96	2430646	500.0	515.6	
31 trans-1,2-Dichloroethene	96	3.524	3.526	-0.002	66	391413	50.0	52.6	
32 Methyl tert-butyl ether	73	3.524	3.526	-0.002	94	1221087	50.0	52.1	
33 Hexane	86	3.737	3.727	0.010	94	114106	50.0	52.0	
34 1,1-Dichloroethane	63	3.843	3.834	0.009	98	754185	50.0	49.1	
35 Vinyl acetate	43	3.867	3.857	0.010	97	1337350	50.0	55.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Butanone (MEK)	43	4.281	4.272	0.009	97	757410	100.0	98.7	
39 cis-1,2-Dichloroethene	96	4.281	4.272	0.009	89	428970	50.0	49.6	
41 2,2-Dichloropropane	77	4.281	4.283	-0.002	77	348561	50.0	47.6	
45 Chlorobromomethane	128	4.459	4.461	-0.003	89	214645	50.0	50.1	
46 Tetrahydrofuran	42	4.506	4.496	0.010	91	504236	100.0	110.8	
47 Chloroform	83	4.506	4.508	-0.002	99	694538	50.0	47.5	
48 1,1,1-Trichloroethane	97	4.671	4.674	-0.003	97	557912	50.0	50.9	
49 Cyclohexane	56	4.731	4.721	0.010	97	872466	50.0	53.0	
50 1,1-Dichloropropene	75	4.790	4.792	-0.002	89	525089	50.0	53.4	
51 Carbon tetrachloride	117	4.802	4.804	-0.002	94	493978	50.0	52.4	
52 Isobutyl alcohol	41	4.825	4.828	-0.003	92	734986	1250.0	1321.6	
53 1,2-Dichloroethane	62	4.955	4.946	0.009	67	706542	50.0	46.3	
54 Benzene	78	4.955	4.958	-0.003	93	1518115	50.0	50.3	
56 n-Heptane	100	5.145	5.135	0.010	96	129009	50.0	59.5	
58 Trichloroethene	130	5.452	5.443	0.009	94	424443	50.0	51.1	
60 Methylcyclohexane	83	5.618	5.609	0.009	91	670366	50.0	52.0	
61 1,2-Dichloropropane	63	5.630	5.621	0.009	91	455133	50.0	52.9	
63 Dibromomethane	93	5.713	5.715	-0.002	93	236705	50.0	48.9	
64 1,4-Dioxane	88	5.725	5.715	0.010	46	85475	1000.0	994.0	
65 Dichlorobromomethane	83	5.831	5.834	-0.003	96	503540	50.0	54.6	
67 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	87	250284	50.0	61.7	
68 cis-1,3-Dichloropropene	75	6.198	6.189	0.010	83	608628	50.0	53.4	
69 4-Methyl-2-pentanone (MIBK	43	6.304	6.307	-0.003	98	1581590	100.0	116.6	
70 Toluene	91	6.494	6.484	0.010	97	1645847	50.0	51.8	
71 trans-1,3-Dichloropropene	75	6.648	6.650	-0.002	91	535747	50.0	51.9	
72 Ethyl methacrylate	69	6.707	6.709	-0.002	89	575925	50.0	60.9	
73 1,1,2-Trichloroethane	97	6.813	6.816	-0.003	96	368841	50.0	51.5	
74 1,3-Dichloropropane	76	6.967	6.958	0.009	93	628999	50.0	52.3	
75 Tetrachloroethene	164	6.967	6.969	-0.002	84	344425	50.0	51.2	
76 2-Hexanone	43	7.014	7.005	0.009	97	1123442	100.0	116.5	
78 Chlorodibromomethane	129	7.168	7.159	0.009	90	385347	50.0	58.9	
80 Ethylene Dibromide	107	7.275	7.277	-0.002	98	371819	50.0	55.6	
82 Chlorobenzene	112	7.713	7.715	-0.002	91	1109455	50.0	49.3	
83 1,1,1,2-Tetrachloroethane	131	7.784	7.774	0.010	93	407246	50.0	53.7	
84 Ethylbenzene	106	7.807	7.798	0.009	98	561410	50.0	52.8	
85 m-Xylene & p-Xylene	106	7.914	7.904	0.010	98	708253	50.0	54.9	
86 o-Xylene	106	8.280	8.271	0.009	97	682049	50.0	52.4	
87 Styrene	104	8.280	8.283	-0.003	94	1182614	50.0	54.3	
88 Bromoform	173	8.470	8.460	0.010	97	253199	50.0	55.8	
89 Isopropylbenzene	105	8.624	8.614	0.010	97	1823103	50.0	54.6	
92 1,1,2,2-Tetrachloroethane	83	8.872	8.875	-0.003	98	458957	50.0	53.7	
93 Bromobenzene	156	8.919	8.922	-0.003	92	489529	50.0	51.2	
94 1,2,3-Trichloropropane	110	8.931	8.934	-0.003	91	170519	50.0	51.0	
95 trans-1,4-Dichloro-2-buten	53	8.931	8.934	-0.003	75	197411	50.0	56.0	
96 N-Propylbenzene	120	9.014	9.005	0.009	99	521408	50.0	54.4	
97 2-Chlorotoluene	126	9.097	9.099	-0.002	95	450279	50.0	52.3	
98 1,3,5-Trimethylbenzene	105	9.168	9.170	-0.002	95	1519507	50.0	53.4	
99 4-Chlorotoluene	126	9.203	9.194	0.009	98	469630	50.0	51.8	
100 tert-Butylbenzene	119	9.487	9.490	-0.003	94	1422563	50.0	50.9	
102 1,2,4-Trimethylbenzene	105	9.535	9.537	-0.002	95	1565999	50.0	52.8	
103 sec-Butylbenzene	105	9.700	9.703	-0.003	96	1873863	50.0	53.1	
104 1,3-Dichlorobenzene	146	9.819	9.821	-0.002	97	914381	50.0	48.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 4-Isopropyltoluene	119	9.842	9.845	-0.003	98	1766763	50.0	54.9	
106 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	95	935610	50.0	47.0	
109 n-Butylbenzene	91	10.245	10.247	-0.002	97	1409470	50.0	53.0	
110 1,2-Dichlorobenzene	146	10.268	10.271	-0.003	97	892393	50.0	48.8	
111 1,2-Dibromo-3-Chloropropan	157	11.026	11.028	-0.002	95	91175	50.0	57.0	
113 1,2,4-Trichlorobenzene	180	11.866	11.856	0.010	95	573289	50.0	50.4	
114 Hexachlorobutadiene	225	12.031	12.034	-0.003	96	322633	50.0	48.3	
115 Naphthalene	128	12.114	12.105	0.009	97	1440263	50.0	54.9	
116 1,2,3-Trichlorobenzene	180	12.363	12.365	-0.002	95	545786	50.0	47.2	
S 128 Xylenes, Total	106				0		100.0	107.3	
S 129 Trihalomethanes, Total	1				0		200.0	216.8	

Reagents:

VMFASPW_00222	Amount Added:	5.00	Units: uL	
VMFASAW_00206	Amount Added:	5.00	Units: uL	
VMFASGW_00228	Amount Added:	5.00	Units: uL	
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

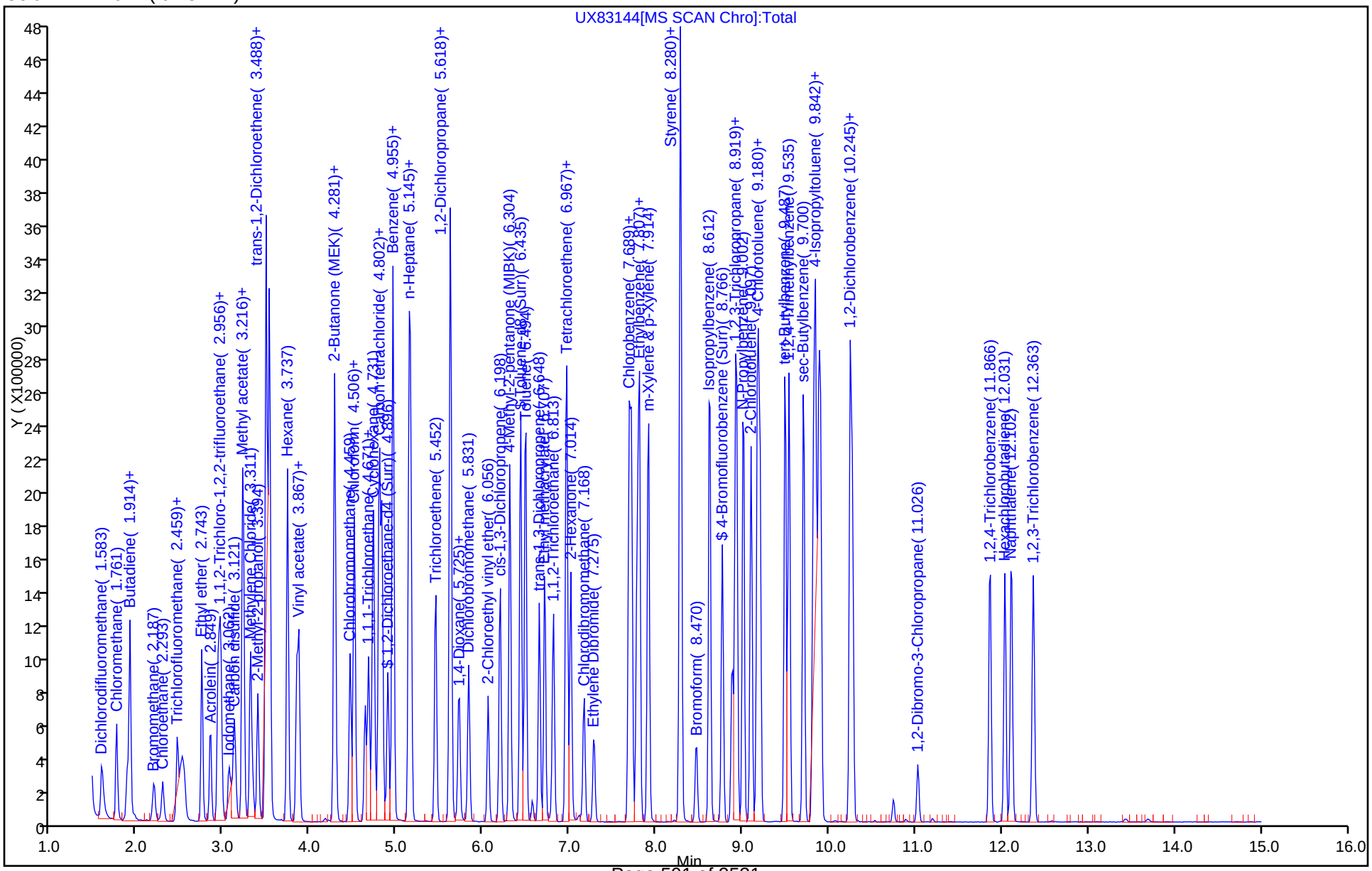
Report Date: 12-Oct-2017 01:07:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83144.D

Injection Date:	11-Oct-2017 01:12:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83144.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2017 01:12:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-006
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 02:28:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	46.3	92.54
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	44.0	87.90
$ 6 Toluene-d8 (Surr)	50.0	48.9	97.75
$ 7 4-Bromofluorobenzene (Surr)	50.0	53.0	106.04

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-298471/7

Matrix: Solid | Lab File ID: UX83145.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/11/2017 01:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
526-73-8	1,2,3-Trimethylbenzene	57.5		5.0	0.10
108-20-3	Diisopropyl ether	52.0		10	0.24
994-05-8	Tert-amyl methyl ether	52.0		5.0	0.21
637-92-3	Ethyl t-butyl ether	53.7		5.0	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		66-125
1868-53-7	Dibromofluoromethane (Surr)	89		43-131
460-00-4	4-Bromofluorobenzene (Surr)	99		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		61-127

Report Date: 12-Oct-2017 01:07:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83145.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2017 01:35:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-007
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 02:31:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.157	0.002	98	1649419	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.689	0.002	97	1210218	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.878	0.002	98	614910	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.639	4.627	0.012	94	351599	50.0	44.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.899	4.887	0.012	91	492930	50.0	42.0	
$ 6 Toluene-d8 (Surr)	98	6.437	6.425	0.012	95	1431949	50.0	47.3	
$ 7 4-Bromofluorobenzene (Surr	95	8.768	8.768	0.000	88	546728	50.0	49.3	
25 Acetonitrile	41	3.183	3.181	0.002	100	911315	500.0	560.6	
36 Isopropyl ether	87	3.893	3.891	0.002	95	357655	50.0	52.0	
37 2-Chloro-1,3-butadiene	53	3.917	3.914	0.003	94	897517	50.0	60.7	
38 Tert-butyl ethyl ether	59	4.165	4.163	0.002	96	1487648	50.0	53.7	
42 Ethyl acetate	43	4.319	4.317	0.002	99	1599987	100.0	108.3	
43 Propionitrile	54	4.319	4.317	0.002	70	934518	500.0	534.1	
44 Methacrylonitrile	41	4.437	4.435	0.002	98	5121861	500.0	555.0	
55 Tert-amyl methyl ether	73	5.029	5.027	0.002	85	1065811	50.0	52.0	
57 n-Butanol	56	5.337	5.334	0.003	96	389324	1250.0	1193.6	
59 Ethyl acrylate	55	5.491	5.500	-0.009	99	815341	50.0	55.4	
62 Methyl methacrylate	41	5.680	5.677	0.003	88	1455485	100.0	108.0	
66 2-Nitropropane	41	5.999	6.009	-0.010	99	363674	100.0	118.2	
77 n-Butyl acetate	43	7.112	7.109	0.003	97	1184629	50.0	53.9	
81 1-Chlorohexane	91	7.668	7.677	-0.009	74	503721	50.0	61.9	
91 Cyclohexanone	55	8.709	8.707	0.002	95	222372	500.0	565.8	
101 Pentachloroethane	167	9.514	9.511	0.003	0	270886	100.0	86.6	
107 1,2,3-Trimethylbenzene	105	9.951	9.949	0.002	98	1564325	50.0	57.5	
108 Benzyl chloride	126	10.034	10.032	0.002	98	114496	50.0	62.0	
112 1,3,5-Trichlorobenzene	180	11.253	11.251	0.002	97	632433	50.0	59.8	
117 2-Methylnaphthalene	142	13.430	13.428	0.002	93	1568207	100.0	86.4	

Reagents:

VMFASA9W_00159	Amount Added:	5.00	Units: uL	
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

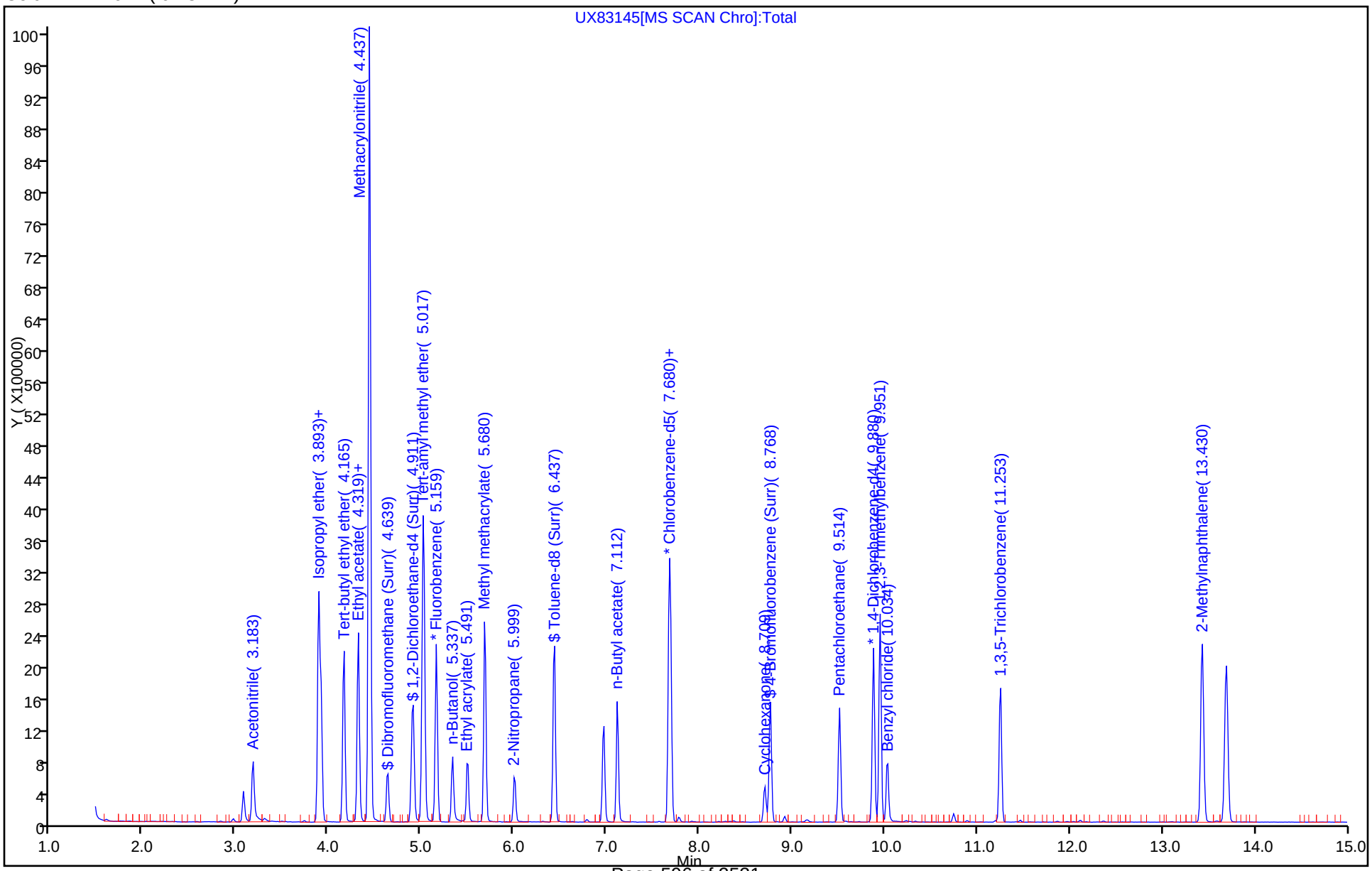
Report Date: 12-Oct-2017 01:07:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83145.D

Injection Date:	11-Oct-2017 01:35:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	LCS			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83145.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2017 01:35:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-007
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: latat Date: 11-Oct-2017 02:31:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	44.7	89.42
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	42.0	83.90
$ 6 Toluene-d8 (Surr)	50.0	47.3	94.70
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.3	98.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-298687/5

Matrix: Water | Lab File ID: UXM6685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 08:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	18.4		1.0	0.46
71-55-6	1,1,1-Trichloroethane	17.8		1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	21.5		1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18.1		1.0	0.41
75-34-3	1,1-Dichloroethane	17.9		1.0	0.25
75-35-4	1,1-Dichloroethene	17.7		1.0	0.27
563-58-6	1,1-Dichloropropene	19.4		1.0	0.28
87-61-6	1,2,3-Trichlorobenzene	18.1		1.0	0.35
96-18-4	1,2,3-Trichloropropane	21.3		1.0	0.54
120-82-1	1,2,4-Trichlorobenzene	17.6		1.0	0.27
95-63-6	1,2,4-Trimethylbenzene	18.2		1.0	0.24
96-12-8	1,2-Dibromo-3-Chloropropane	22.3		2.0	0.47
95-50-1	1,2-Dichlorobenzene	17.6		1.0	0.26
107-06-2	1,2-Dichloroethane	20.4		1.0	0.30
78-87-5	1,2-Dichloropropane	20.6		1.0	0.30
541-73-1	1,3-Dichlorobenzene	18.0		1.0	0.32
142-28-9	1,3-Dichloropropane	22.0		1.0	0.29
106-46-7	1,4-Dichlorobenzene	17.8		1.0	0.23
594-20-7	2,2-Dichloropropane	17.2		1.0	0.34
78-93-3	2-Butanone (MEK)	45.0		10	1.0
110-75-8	2-Chloroethyl vinyl ether	24.6		10	0.65
95-49-8	2-Chlorotoluene	18.0		1.0	0.28
591-78-6	2-Hexanone	48.5		10	1.2
106-43-4	4-Chlorotoluene	18.2		1.0	0.23
99-87-6	p-Isopropyltoluene	18.0		1.0	0.29
108-10-1	4-Methyl-2-pentanone (MIBK)	47.3		10	0.71
67-64-1	Acetone	40.0		10	1.8
71-43-2	Benzene	19.1		1.0	0.28
108-86-1	Bromobenzene	19.7		1.0	0.31
75-25-2	Bromoform	20.0		1.0	0.43
74-83-9	Bromomethane	18.0		1.0	0.42
75-15-0	Carbon disulfide	14.9		1.0	0.34
56-23-5	Carbon tetrachloride	16.7		1.0	0.35
108-90-7	Chlorobenzene	19.6		1.0	0.32
124-48-1	Dibromochloromethane	20.9		1.0	0.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-298687/5

Matrix: Water | Lab File ID: UXM6685.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 08:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	17.7		1.0	0.41
67-66-3	Chloroform	18.5		1.0	0.31
74-87-3	Chloromethane	19.6		1.0	0.43
156-59-2	cis-1,2-Dichloroethene	18.1		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	23.0		1.0	0.26
74-95-3	Dibromomethane	20.2		1.0	0.46
74-97-5	Bromochloromethane	17.4		1.0	0.47
75-71-8	Dichlorodifluoromethane	24.1		1.0	0.50
75-27-4	Bromodichloromethane	19.3		1.0	0.30
75-65-0	tert-Butyl alcohol (TBA)	251		50	4.6
100-41-4	Ethylbenzene	19.4		1.0	0.26
87-68-3	Hexachlorobutadiene	14.7		1.0	0.36
98-82-8	Isopropylbenzene	18.3		1.0	0.21
1634-04-4	Methyl tert-butyl ether	19.2		1.0	0.27
75-09-2	Methylene Chloride	17.1		1.0	0.53
179601-23-1	m-Xylene & p-Xylene	19.6		2.0	0.24
91-20-3	Naphthalene	21.3		1.0	0.25
104-51-8	n-Butylbenzene	15.9		1.0	0.21
103-65-1	N-Propylbenzene	18.3		1.0	0.45
95-47-6	o-Xylene	18.4		1.0	0.28
135-98-8	sec-Butylbenzene	17.6		1.0	0.27
100-42-5	Styrene	20.0		1.0	0.23
127-18-4	Tetrachloroethene	18.2		1.0	0.30
108-88-3	Toluene	19.7		1.0	0.23
156-60-5	trans-1,2-Dichloroethene	18.7		1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	20.5		1.0	0.31
79-01-6	Trichloroethene	19.9		1.0	0.33
75-69-4	Trichlorofluoromethane	17.3		1.0	0.50
108-05-4	Vinyl acetate	21.4		2.0	0.28
75-01-4	Vinyl chloride	19.9		1.0	0.45
1330-20-7	Xylenes, Total	38.0		2.0	0.24
98-06-6	tert-Butylbenzene	17.0		1.0	0.26
106-93-4	1,2-Dibromoethane	22.1		1.0	0.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-298687/5

Matrix: Water Lab File ID: UXM6685.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2017 08:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 298687 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	94		69-124
460-00-4	4-Bromofluorobenzene (Surr)	101		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		61-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6685.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Oct-2017 08:47:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-005
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 09:09:28 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 09:09:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	1199719	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.509	-0.001	86	837063	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	94	542725	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.235	5.236	-0.001	94	288133	20.0	18.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	98	360312	20.0	20.6	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	1102534	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	92	381959	20.0	20.2	
9 Dichlorodifluoromethane	85	1.785	1.773	0.012	98	380312	20.0	24.1	
10 Chloromethane	50	1.927	1.927	0.000	99	348036	20.0	19.6	
11 Vinyl chloride	62	2.057	2.058	-0.001	99	387956	20.0	19.9	
12 Butadiene	54	2.093	2.093	0.000	95	364472	20.0	18.3	
13 Bromomethane	94	2.401	2.402	-0.001	89	240634	20.0	18.0	
14 Chloroethane	64	2.508	2.508	0.000	99	233844	20.0	17.7	
15 Dichlorofluoromethane	67	2.710	2.710	0.000	97	505662	20.0	16.2	
16 Trichlorofluoromethane	101	2.793	2.781	0.012	98	384052	20.0	17.3	
17 Ethyl ether	59	3.030	3.030	0.000	88	282621	20.0	19.2	
18 Acrolein	56	3.160	3.160	0.000	99	237847	100.0	92.0	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	98	319587	20.0	17.7	
20 1,1,2-Trichloro-1,2,2-trif	151	3.279	3.291	-0.012	93	248778	20.0	18.1	
21 Acetone	43	3.303	3.303	0.000	100	158969	40.0	40.0	
23 Iodomethane	142	3.409	3.398	0.011	97	478639	20.0	16.2	
24 Carbon disulfide	76	3.480	3.469	0.011	99	866353	20.0	14.9	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	88	199617	20.0	17.4	
27 Methyl acetate	43	3.611	3.611	0.000	97	410299	40.0	41.6	
28 Methylene Chloride	84	3.706	3.706	0.000	89	331382	20.0	17.1	
29 2-Methyl-2-propanol	59	3.812	3.801	0.011	99	248078	200.0	250.7	
30 Acrylonitrile	53	3.919	3.919	0.000	99	1068477	200.0	215.7	
31 Methyl tert-butyl ether	73	3.955	3.955	0.000	95	909399	20.0	19.2	
32 trans-1,2-Dichloroethene	96	3.955	3.955	0.000	99	352355	20.0	18.7	
33 Hexane	57	4.192	4.192	0.000	91	324026	20.0	19.6	
34 1,1-Dichloroethane	63	4.322	4.323	-0.001	96	540831	20.0	17.9	
35 Vinyl acetate	43	4.358	4.358	0.000	97	490422	20.0	21.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.820	4.821	-0.001	81	375177	20.0	18.1	
41 2,2-Dichloropropane	97	4.832	4.832	0.000	89	77381	20.0	17.2	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	80	246910	40.0	45.0	
45 Chlorobromomethane	128	5.034	5.034	0.000	89	162353	20.0	17.4	
46 Tetrahydrofuran	42	5.081	5.082	-0.001	89	157770	40.0	46.5	
47 Chloroform	83	5.093	5.093	0.000	94	559958	20.0	18.5	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	97	446796	20.0	17.8	
49 Cyclohexane	56	5.318	5.319	-0.001	89	454505	20.0	17.2	
50 1,1-Dichloropropene	75	5.402	5.402	0.000	96	433875	20.0	19.4	
51 Carbon tetrachloride	117	5.413	5.414	-0.001	96	366072	20.0	16.7	
52 Isobutyl alcohol	41	5.461	5.461	0.000	92	204377	500.0	658.3	
54 Benzene	78	5.579	5.580	-0.001	95	1313585	20.0	19.1	
53 1,2-Dichloroethane	62	5.591	5.591	0.000	96	426924	20.0	20.4	
56 n-Heptane	57	5.793	5.793	0.000	86	166156	20.0	18.7	
58 Trichloroethene	130	6.125	6.125	0.000	97	339615	20.0	19.9	
60 Methylcyclohexane	83	6.303	6.303	0.000	90	406484	20.0	17.0	
61 1,2-Dichloropropane	63	6.326	6.327	-0.001	93	287497	20.0	20.6	
63 Dibromomethane	93	6.421	6.422	-0.001	95	182265	20.0	20.2	
64 1,4-Dioxane	88	6.433	6.433	0.000	40	59526	400.0	444.3	
65 Dichlorobromomethane	83	6.552	6.552	0.000	99	389699	20.0	19.3	
67 2-Chloroethyl vinyl ether	63	6.801	6.801	0.000	93	143758	20.0	24.6	
68 cis-1,3-Dichloropropene	75	6.943	6.943	0.000	95	433530	20.0	23.0	
69 4-Methyl-2-pentanone (MIBK	43	7.062	7.074	-0.012	95	453804	40.0	47.3	
70 Toluene	91	7.251	7.252	-0.001	98	1289294	20.0	19.7	
71 trans-1,3-Dichloropropene	75	7.429	7.430	-0.001	94	346673	20.0	20.5	
72 Ethyl methacrylate	69	7.489	7.489	0.000	87	301079	20.0	22.3	
73 1,1,2-Trichloroethane	97	7.595	7.596	-0.001	90	241947	20.0	21.8	
75 Tetrachloroethene	164	7.749	7.750	-0.001	96	222849	20.0	18.2	
74 1,3-Dichloropropane	76	7.749	7.750	-0.001	89	407776	20.0	22.0	
76 2-Hexanone	43	7.809	7.809	0.000	96	270207	40.0	48.5	
78 Chlorodibromomethane	129	7.963	7.963	0.000	90	256610	20.0	20.9	
80 Ethylene Dibromide	107	8.082	8.082	0.000	99	234774	20.0	22.1	
82 Chlorobenzene	112	8.532	8.532	0.000	95	787497	20.0	19.6	
83 1,1,1,2-Tetrachloroethane	131	8.603	8.604	-0.001	96	294112	20.0	18.4	
84 Ethylbenzene	106	8.627	8.627	0.000	98	412704	20.0	19.4	
85 m-Xylene & p-Xylene	106	8.734	8.734	0.000	97	515432	20.0	19.6	
86 o-Xylene	106	9.113	9.113	0.000	97	542179	20.0	18.4	
87 Styrene	104	9.125	9.125	0.000	93	879349	20.0	20.0	
88 Bromoform	173	9.315	9.315	0.000	96	160087	20.0	20.0	
89 Isopropylbenzene	105	9.469	9.469	0.000	95	1325096	20.0	18.3	
92 1,1,2,2-Tetrachloroethane	83	9.742	9.742	0.000	92	339846	20.0	21.5	
93 Bromobenzene	156	9.777	9.777	0.000	95	344259	20.0	19.7	
95 1,2,3-Trichloropropane	110	9.789	9.789	0.000	83	109245	20.0	21.3	
94 trans-1,4-Dichloro-2-buten	53	9.789	9.789	0.000	73	85625	20.0	25.0	
96 N-Propylbenzene	120	9.860	9.861	0.000	99	340179	20.0	18.3	
97 2-Chlorotoluene	126	9.955	9.955	0.000	96	314491	20.0	18.0	
99 1,3,5-Trimethylbenzene	105	10.026	10.027	-0.001	94	1050045	20.0	17.9	
100 4-Chlorotoluene	126	10.062	10.062	0.000	97	327587	20.0	18.2	
102 tert-Butylbenzene	119	10.358	10.359	-0.001	91	916867	20.0	17.0	
104 1,2,4-Trimethylbenzene	105	10.406	10.406	0.000	96	1154403	20.0	18.2	
105 sec-Butylbenzene	105	10.572	10.572	0.000	94	1154703	20.0	17.6	
106 1,3-Dichlorobenzene	146	10.690	10.691	-0.001	98	664418	20.0	18.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.714	10.714	0.000	97	1029042	20.0	18.0	
108 1,4-Dichlorobenzene	146	10.773	10.774	-0.001	94	691466	20.0	17.8	
111 n-Butylbenzene	91	11.117	11.118	-0.001	97	821148	20.0	15.9	
112 1,2-Dichlorobenzene	146	11.153	11.153	0.000	98	675072	20.0	17.6	
113 1,2-Dibromo-3-Chloropropan	157	11.924	11.924	0.000	87	74800	20.0	22.3	
115 1,2,4-Trichlorobenzene	180	12.754	12.754	0.000	93	350628	20.0	17.6	
116 Hexachlorobutadiene	225	12.932	12.932	0.000	95	125142	20.0	14.7	
117 Naphthalene	128	13.015	13.015	0.000	97	1112605	20.0	21.3	
118 1,2,3-Trichlorobenzene	180	13.287	13.288	-0.001	95	336700	20.0	18.1	
S 158 Total BTEX	1				0		100.0	96.2	
S 134 Trihalomethanes, Total	1				0		80.0	78.7	
S 133 Xylenes, Total	106				0		40.0	37.9	

Reagents:

vmfasaw_00206	Amount Added:	16.00	Units: uL	
vmfaspw_00222	Amount Added:	16.00	Units: uL	
vmfasgw_00229	Amount Added:	16.00	Units: uL	
vm100ss_stk_00027	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

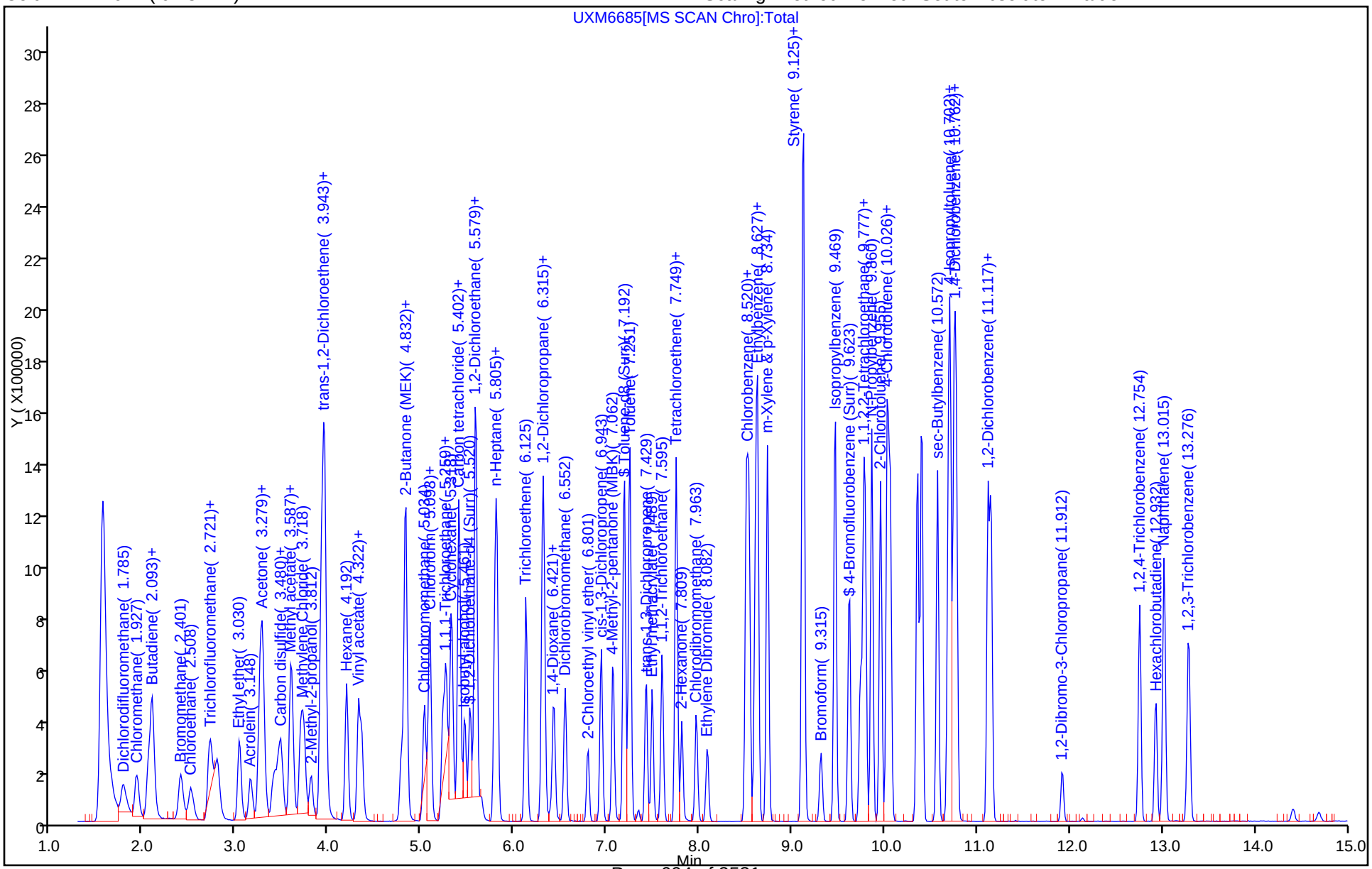
Report Date: 12-Oct-2017 09:09:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6685.D

Injection Date:	12-Oct-2017 08:47:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6685.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Oct-2017 08:47:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069583-005
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 09:09:28 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 09:09:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.9	94.34
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.6	103.23
$ 6 Toluene-d8 (Surr)	20.0	20.2	101.21
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.2	100.96

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MS | Lab Sample ID: 240-85941-2 MS

Matrix: Solid | Lab File ID: UX83165.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.26(g) | Date Analyzed: 10/11/2017 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	24.4		6.1	0.44
71-55-6	1,1,1-Trichloroethane	24.4		6.1	0.28
79-34-5	1,1,2,2-Tetrachloroethane	28.7		6.1	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22.6		6.1	0.60
75-34-3	1,1-Dichloroethane	24.3		6.1	0.41
75-35-4	1,1-Dichloroethene	24.7		6.1	0.66
563-58-6	1,1-Dichloropropene	25.1		6.1	0.23
87-61-6	1,2,3-Trichlorobenzene	15.1		6.1	0.43
96-18-4	1,2,3-Trichloropropane	26.1		6.1	0.48
526-73-8	1,2,3-Trimethylbenzene	26.3		6.1	0.12
120-82-1	1,2,4-Trichlorobenzene	16.2		6.1	0.29
95-63-6	1,2,4-Trimethylbenzene	24.2		6.1	0.31
96-12-8	1,2-Dibromo-3-Chloropropane	25.3		12	0.84
95-50-1	1,2-Dichlorobenzene	21.4		6.1	0.27
107-06-2	1,2-Dichloroethane	23.3		6.1	0.36
78-87-5	1,2-Dichloropropane	26.1		6.1	0.38
541-73-1	1,3-Dichlorobenzene	21.9		6.1	0.36
142-28-9	1,3-Dichloropropane	25.3		6.1	0.28
106-46-7	1,4-Dichlorobenzene	21.3		6.1	0.43
594-20-7	2,2-Dichloropropane	20.7		6.1	0.37
78-93-3	2-Butanone (MEK)	48.9		25	1.6
110-75-8	2-Chloroethyl vinyl ether	24.2	J	61	3.5
95-49-8	2-Chlorotoluene	25.1		6.1	0.45
591-78-6	2-Hexanone	54.7		25	0.71
106-43-4	4-Chlorotoluene	23.8		6.1	0.29
99-87-6	p-Isopropyltoluene	23.8		6.1	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	55.5		25	1.1
67-64-1	Acetone	70.5		25	3.8
71-43-2	Benzene	24.9		6.1	0.39
108-86-1	Bromobenzene	25.4		6.1	0.33
75-25-2	Bromoform	22.9		6.1	0.49
74-83-9	Bromomethane	24.1		6.1	0.72
75-15-0	Carbon disulfide	22.9		6.1	0.26
56-23-5	Carbon tetrachloride	22.9		6.1	0.31
108-90-7	Chlorobenzene	23.6		6.1	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MS | Lab Sample ID: 240-85941-2 MS

Matrix: Solid | Lab File ID: UX83165.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.26(g) | Date Analyzed: 10/11/2017 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	25.5		6.1	0.37
75-00-3	Chloroethane	19.7		6.1	0.47
67-66-3	Chloroform	23.5		6.1	0.28
74-87-3	Chloromethane	22.4		6.1	0.47
156-59-2	cis-1,2-Dichloroethene	24.6		6.1	0.34
10061-01-5	cis-1,3-Dichloropropene	23.9		6.1	0.32
74-95-3	Dibromomethane	23.6		6.1	0.47
74-97-5	Bromochloromethane	24.9		6.1	0.44
75-71-8	Dichlorodifluoromethane	19.6		6.1	0.43
75-27-4	Bromodichloromethane	25.4		6.1	0.41
75-65-0	tert-Butyl alcohol (TBA)	275		250	2.9
100-41-4	Ethylbenzene	25.4		6.1	0.33
87-68-3	Hexachlorobutadiene	16.4		6.1	0.54
108-20-3	Diisopropyl ether	26.2		12	0.29
98-82-8	Isopropylbenzene	24.2		6.1	0.25
1634-04-4	Methyl tert-butyl ether	24.6		6.1	0.33
75-09-2	Methylene Chloride	20.0		6.1	0.29
179601-23-1	m-Xylene & p-Xylene	24.8		12	0.49
91-20-3	Naphthalene	19.2		6.1	0.41
104-51-8	n-Butylbenzene	21.1		6.1	0.31
103-65-1	N-Propylbenzene	25.4		6.1	0.34
95-47-6	o-Xylene	25.0		6.1	0.27
135-98-8	sec-Butylbenzene	24.3		6.1	0.23
100-42-5	Styrene	22.9		6.1	0.33
994-05-8	Tert-amyl methyl ether	25.5		6.1	0.26
637-92-3	Ethyl t-butyl ether	25.2		6.1	0.16
127-18-4	Tetrachloroethene	26.2		6.1	0.45
108-88-3	Toluene	25.0		6.1	0.42
156-60-5	trans-1,2-Dichloroethene	24.9		6.1	0.47
10061-02-6	trans-1,3-Dichloropropene	21.8		6.1	0.26
79-01-6	Trichloroethene	24.1		6.1	0.50
75-69-4	Trichlorofluoromethane	20.7		6.1	0.29
108-05-4	Vinyl acetate	1.1	U	12	1.1
75-01-4	Vinyl chloride	21.1		6.1	0.34
1330-20-7	Xylenes, Total	49.8		12	0.49
98-06-6	tert-Butylbenzene	33.9		6.1	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MS | Lab Sample ID: 240-85941-2 MS

Matrix: Solid | Lab File ID: UX83165.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.26(g) | Date Analyzed: 10/11/2017 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	25.6		6.1	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		66-125
1868-53-7	Dibromofluoromethane (Surr)	87		43-131
460-00-4	4-Bromofluorobenzene (Surr)	98		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		61-127

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83165.D
Lims ID: 240-85941-B-2-B MS
Client ID:
Sample Type: MS
Inject. Date: 11-Oct-2017 08:51:30 ALS Bottle#: 25 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-027
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: macenczaks Date: 11-Oct-2017 15:47:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.156	5.157	-0.001	98	1655078	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.689	0.000	97	1181902	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.878	0.000	98	604713	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.636	4.627	0.009	93	342508	50.0	43.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.896	4.887	0.009	96	474751	50.0	40.3	
$ 6 Toluene-d8 (Surr)	98	6.434	6.425	0.009	96	1411173	50.0	47.8	
$ 7 4-Bromofluorobenzene (Surr	95	8.765	8.768	-0.003	88	528687	50.0	48.8	
9 Dichlorodifluoromethane	85	1.583	1.586	-0.003	97	127196	25.0	15.9	
10 Chloromethane	50	1.760	1.751	0.009	99	225815	25.0	18.2	
11 Vinyl chloride	62	1.879	1.870	0.009	99	139632	25.0	17.2	
13 Bromomethane	94	2.198	2.189	0.009	92	71420	25.0	19.6	
14 Chloroethane	64	2.293	2.284	0.009	96	83663	25.0	16.1	
16 Trichlorofluoromethane	101	2.518	2.509	0.010	99	170368	25.0	16.8	
19 1,1-Dichloroethene	96	2.932	2.923	0.009	93	119717	25.0	20.1	
20 1,1,2-Trichloro-1,2,2-trif	151	2.955	2.946	0.009	92	95398	25.0	18.4	
21 Acetone	43	2.967	2.958	0.009	96	291459	50.0	57.4	
24 Carbon disulfide	76	3.121	3.112	0.009	98	337499	25.0	18.6	
28 Methylene Chloride	84	3.310	3.301	0.009	92	164349	25.0	16.3	
29 2-Methyl-2-propanol	59	3.393	3.384	0.009	90	229322	250.0	223.7	
31 trans-1,2-Dichloroethene	96	3.523	3.526	-0.003	92	150876	25.0	20.3	
32 Methyl tert-butyl ether	73	3.523	3.526	-0.003	94	469996	25.0	20.1	
34 1,1-Dichloroethane	63	3.843	3.834	0.009	98	304275	25.0	19.8	
35 Vinyl acetate	43		3.857				ND	ND	
36 Isopropyl ether	87	3.890	3.891	-0.001	99	147128	25.0	21.3	
38 Tert-butyl ethyl ether	59	4.162	4.163	-0.001	94	569967	25.0	20.5	
40 2-Butanone (MEK)	43	4.281	4.272	0.009	65	305074	50.0	39.8	
39 cis-1,2-Dichloroethene	96	4.281	4.272	0.009	90	173138	25.0	20.0	
41 2,2-Dichloropropane	77	4.293	4.283	0.009	78	123586	25.0	16.9	
45 Chlorobromomethane	128	4.458	4.461	-0.003	88	86996	25.0	20.3	
47 Chloroform	83	4.506	4.508	-0.002	99	279818	25.0	19.1	
48 1,1,1-Trichloroethane	97	4.671	4.674	-0.003	96	217225	25.0	19.8	
50 1,1-Dichloropropene	75	4.789	4.792	-0.003	86	200750	25.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
51 Carbon tetrachloride	117	4.801	4.804	-0.003	96	175880	25.0	18.7	
53 1,2-Dichloroethane	62	4.955	4.946	0.009	67	289679	25.0	19.0	
54 Benzene	78	4.955	4.958	-0.003	93	611123	25.0	20.2	
55 Tert-amyl methyl ether	73	5.026	5.027	-0.001	88	427096	25.0	20.8	
58 Trichloroethene	130	5.452	5.443	0.009	93	162939	25.0	19.6	
61 1,2-Dichloropropane	63	5.630	5.621	0.009	93	182397	25.0	21.2	
63 Dibromomethane	93	5.712	5.715	-0.003	92	92958	25.0	19.2	
65 Dichlorobromomethane	83	5.831	5.834	-0.003	96	190740	25.0	20.7	
67 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	88	79906	25.0	19.7	
68 cis-1,3-Dichloropropene	75	6.198	6.189	0.010	83	212643	25.0	19.4	
69 4-Methyl-2-pentanone (MIBK	43	6.304	6.307	-0.003	98	613098	50.0	45.2	
70 Toluene	91	6.493	6.484	0.009	96	640517	25.0	20.4	
71 trans-1,3-Dichloropropene	75	6.647	6.650	-0.003	92	171596	25.0	17.7	
74 1,3-Dichloropropane	76	6.967	6.958	0.009	89	245069	25.0	20.6	
75 Tetrachloroethene	164	6.967	6.969	-0.002	87	141747	25.0	21.3	
76 2-Hexanone	43	7.014	7.005	0.009	97	424791	50.0	44.5	
78 Chlorodibromomethane	129	7.168	7.159	0.009	90	134331	25.0	20.8	
80 Ethylene Dibromide	107	7.286	7.277	0.009	98	138033	25.0	20.8	
82 Chlorobenzene	112	7.712	7.715	-0.003	94	428180	25.0	19.2	
83 1,1,1,2-Tetrachloroethane	131	7.783	7.774	0.009	91	149260	25.0	19.9	
84 Ethylbenzene	106	7.807	7.798	0.009	98	217964	25.0	20.7	
85 m-Xylene & p-Xylene	106	7.913	7.904	0.009	98	257575	25.0	20.2	
86 o-Xylene	106	8.280	8.271	0.009	95	262506	25.0	20.4	
87 Styrene	104	8.292	8.283	0.009	93	402372	25.0	18.7	
88 Bromoform	173	8.469	8.460	0.009	97	76418	25.0	18.7	
89 Isopropylbenzene	105	8.623	8.614	0.009	97	651915	25.0	19.7	
92 1,1,2,2-Tetrachloroethane	83	8.872	8.875	-0.003	98	182045	25.0	23.3	
93 Bromobenzene	156	8.919	8.922	-0.003	92	180697	25.0	20.7	
94 1,2,3-Trichloropropane	110	8.931	8.934	-0.003	89	64939	25.0	21.3	
96 N-Propylbenzene	120	9.014	9.005	0.009	99	181154	25.0	20.7	
97 2-Chlorotoluene	126	9.097	9.099	-0.002	95	160736	25.0	20.4	
99 4-Chlorotoluene	126	9.203	9.194	0.009	98	160130	25.0	19.3	
100 tert-Butylbenzene	119	9.499	9.490	0.009	95	703224	25.0	27.6	
102 1,2,4-Trimethylbenzene	105	9.534	9.537	-0.003	96	534120	25.0	19.7	
103 sec-Butylbenzene	105	9.700	9.703	-0.003	96	638216	25.0	19.8	
104 1,3-Dichlorobenzene	146	9.818	9.821	-0.003	97	303835	25.0	17.8	
105 4-Isopropyltoluene	119	9.842	9.845	-0.003	98	570260	25.0	19.4	
106 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	315055	25.0	17.3	
107 1,2,3-Trimethylbenzene	105	9.949	9.949	0.000	99	572215	25.0	21.4	
109 n-Butylbenzene	91	10.244	10.247	-0.003	98	417866	25.0	17.2	
110 1,2-Dichlorobenzene	146	10.268	10.271	-0.003	96	290220	25.0	17.4	
111 1,2-Dibromo-3-Chloropropan	157	11.037	11.028	0.009	72	28867	25.0	20.6	
113 1,2,4-Trichlorobenzene	180	11.866	11.856	0.010	94	136669	25.0	13.2	
114 Hexachlorobutadiene	225	12.031	12.034	-0.003	96	81619	25.0	13.4	
115 Naphthalene	128	12.114	12.105	0.009	97	373514	25.0	15.6	
116 1,2,3-Trichlorobenzene	180	12.362	12.365	-0.003	95	129553	25.0	12.3	
S 128 Xylenes, Total	106				0		50.0	40.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VMFASPW_00222	Amount Added:	2.50	Units: uL	
VMFASAW_00206	Amount Added:	2.50	Units: uL	
VMFASGW_00228	Amount Added:	2.50	Units: uL	
VMFASA9W_00159	Amount Added:	2.50	Units: uL	
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

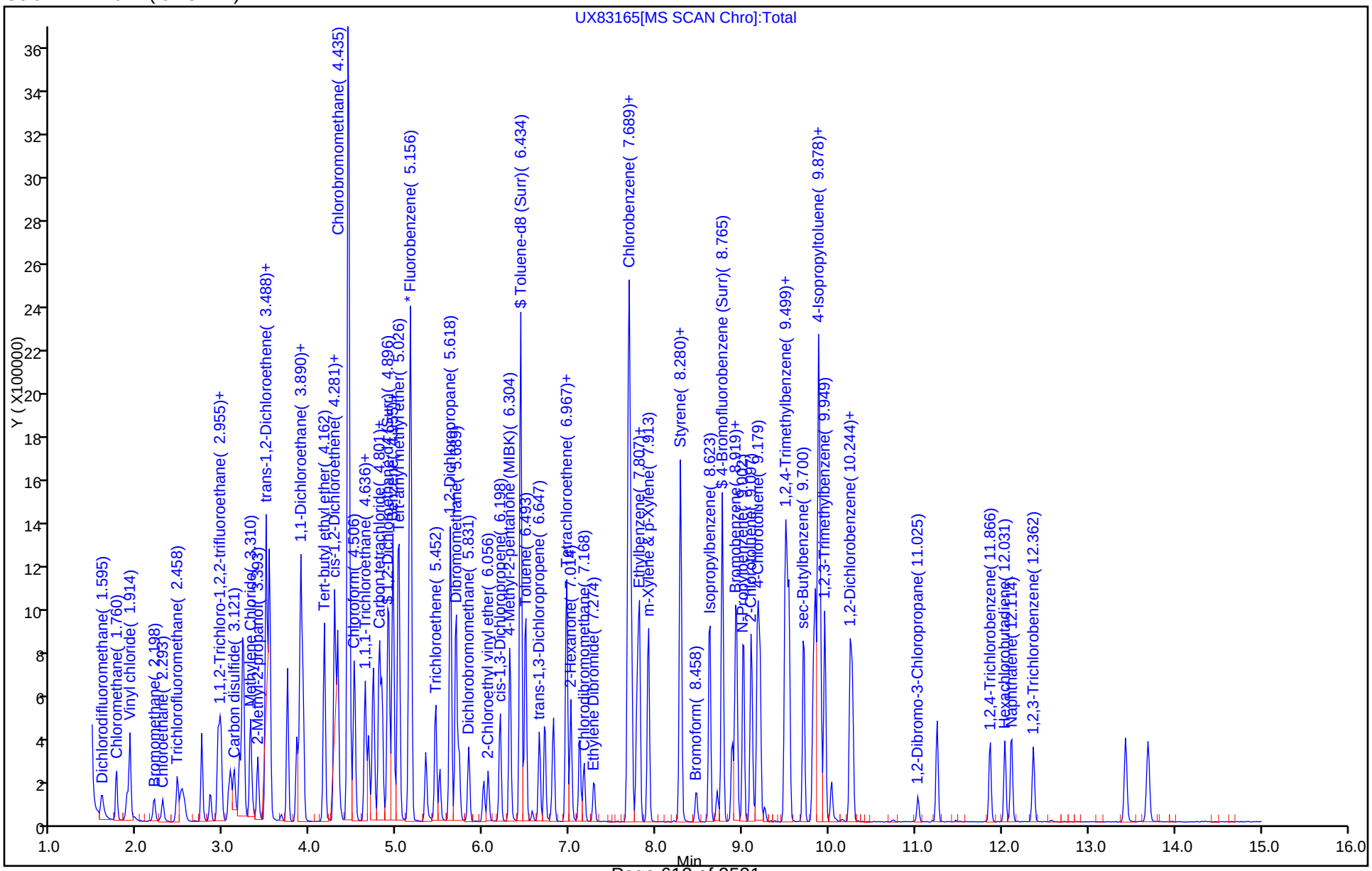
Report Date: 12-Oct-2017 01:07:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83165.D

Injection Date:	11-Oct-2017 08:51:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	240-85941-B-2-B MS			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83165.D
Lims ID: 240-85941-B-2-B MS
Client ID:
Sample Type: MS
Inject. Date: 11-Oct-2017 08:51:30 ALS Bottle#: 25 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-027
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: macenczaks Date: 11-Oct-2017 15:47:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	43.4	86.81
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	40.3	80.53
$ 6 Toluene-d8 (Surr)	50.0	47.8	95.56
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.8	97.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-86263-B-4 MS

Matrix: Water | Lab File ID: UXM6696.D

Analysis Method: 8260C | Date Collected: 10/10/2017 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 13:01

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	232		10	2.3
75-35-4	1,1-Dichloroethene	218		10	2.7
67-66-3	Chloroform	216		10	3.1
156-59-2	cis-1,2-Dichloroethene	229		10	3.0
127-18-4	Tetrachloroethene	181		10	3.0
79-01-6	Trichloroethene	523		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		69-124
460-00-4	4-Bromofluorobenzene (Surr)	99		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		61-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6696.D
Lims ID: 240-86263-B-4 MS
Client ID:
Sample Type: MS
Inject. Date: 12-Oct-2017 13:01:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 240-0069583-016
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 12:25:22 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 14:40:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	926875	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.508	8.509	-0.001	85	707916	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	94	486512	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	239766	20.0	20.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	98	260278	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	94	872844	20.0	18.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	93	316129	20.0	19.8	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	99	302906	20.0	21.8	
39 cis-1,2-Dichloroethene	96	4.832	4.821	0.011	83	366279	20.0	22.9	
47 Chloroform	83	5.093	5.093	0.000	94	505711	20.0	21.6	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	450360	20.0	23.2	
58 Trichloroethene	130	6.137	6.125	0.012	97	689953	20.0	52.3	
75 Tetrachloroethene	164	7.750	7.750	0.000	95	187455	20.0	18.1	

Reagents:

vmfasaw_00206	Amount Added: 16.00	Units: uL	
vmfaspw_00222	Amount Added: 16.00	Units: uL	
vmfasgw_00229	Amount Added: 16.00	Units: uL	
vm100ss_stk_00027	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added: 1.00	Units: uL	Run Reagent

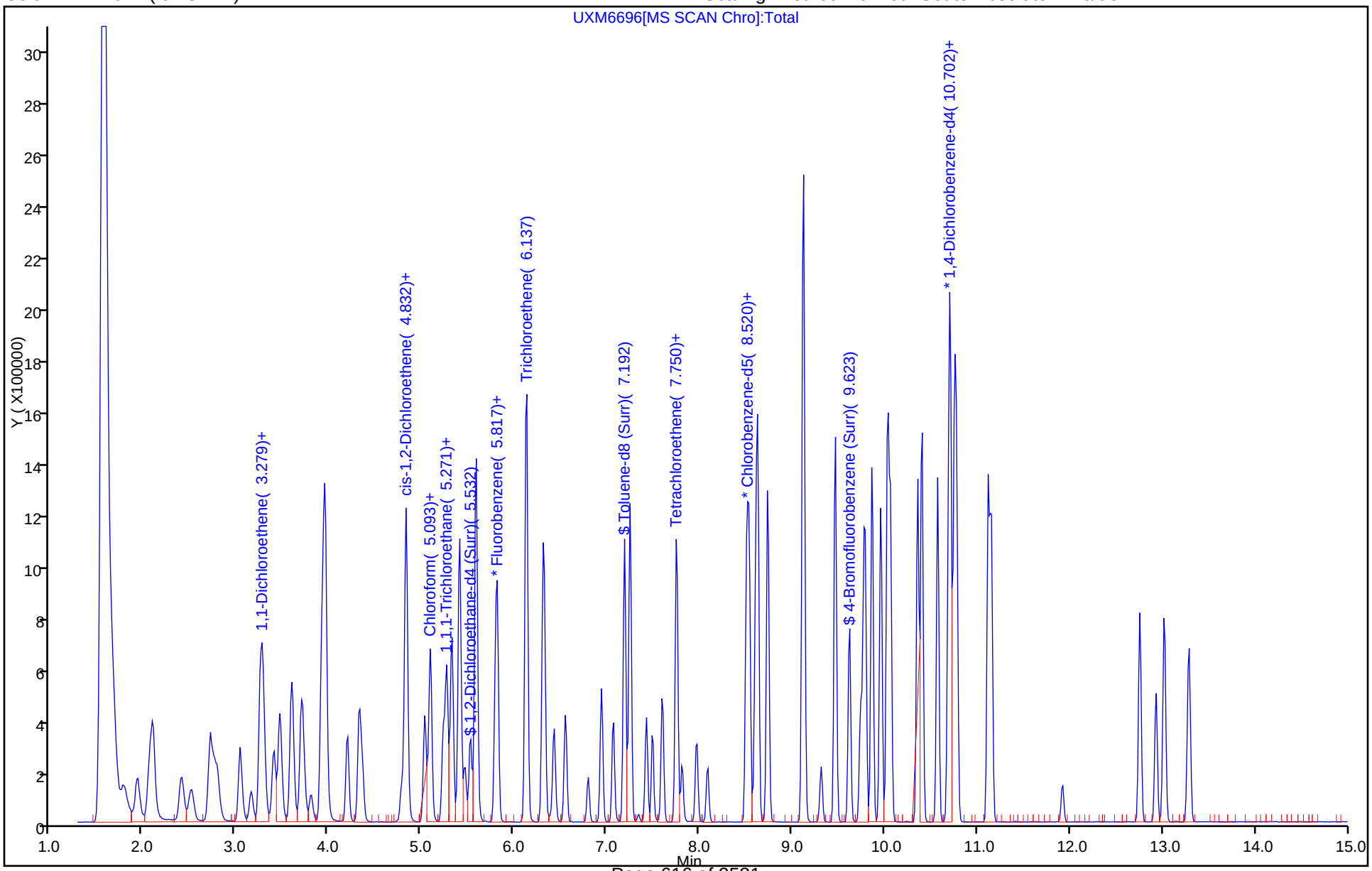
Report Date: 12-Oct-2017 14:40:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6696.D

Injection Date:	12-Oct-2017 13:01:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	240-86263-B-4 MS			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	16
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6696.D
Lims ID: 240-86263-B-4 MS
Client ID:
Sample Type: MS
Inject. Date: 12-Oct-2017 13:01:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 240-0069583-016
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 12:25:22 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 14:40:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.3	101.62
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.52
$ 6 Toluene-d8 (Surr)	20.0	18.9	94.74
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.8	98.81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MSD | Lab Sample ID: 240-85941-2 MSD

Matrix: Solid | Lab File ID: UX83166.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.02(g) | Date Analyzed: 10/11/2017 09:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	24.9		6.4	0.46
71-55-6	1,1,1-Trichloroethane	25.9		6.4	0.30
79-34-5	1,1,2,2-Tetrachloroethane	27.5		6.4	0.33
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.2		6.4	0.63
75-34-3	1,1-Dichloroethane	26.1		6.4	0.42
75-35-4	1,1-Dichloroethene	27.1		6.4	0.69
563-58-6	1,1-Dichloropropene	26.7		6.4	0.24
87-61-6	1,2,3-Trichlorobenzene	12.5		6.4	0.45
96-18-4	1,2,3-Trichloropropane	26.2		6.4	0.50
526-73-8	1,2,3-Trimethylbenzene	24.8		6.4	0.13
120-82-1	1,2,4-Trichlorobenzene	14.1		6.4	0.31
95-63-6	1,2,4-Trimethylbenzene	23.3		6.4	0.32
96-12-8	1,2-Dibromo-3-Chloropropane	27.8		13	0.88
95-50-1	1,2-Dichlorobenzene	19.8		6.4	0.28
107-06-2	1,2-Dichloroethane	23.7		6.4	0.37
78-87-5	1,2-Dichloropropane	27.3		6.4	0.40
541-73-1	1,3-Dichlorobenzene	20.2		6.4	0.37
142-28-9	1,3-Dichloropropane	26.5		6.4	0.30
106-46-7	1,4-Dichlorobenzene	19.6		6.4	0.45
594-20-7	2,2-Dichloropropane	22.5		6.4	0.39
78-93-3	2-Butanone (MEK)	58.1		26	1.6
110-75-8	2-Chloroethyl vinyl ether	26.8	J	64	3.6
95-49-8	2-Chlorotoluene	23.9		6.4	0.48
591-78-6	2-Hexanone	59.9		26	0.75
106-43-4	4-Chlorotoluene	22.1		6.4	0.31
99-87-6	p-Isopropyltoluene	22.5		6.4	0.23
108-10-1	4-Methyl-2-pentanone (MIBK)	60.5		26	1.1
67-64-1	Acetone	79.6		26	3.9
71-43-2	Benzene	26.5		6.4	0.41
108-86-1	Bromobenzene	24.5		6.4	0.35
75-25-2	Bromoform	23.0		6.4	0.51
74-83-9	Bromomethane	27.6		6.4	0.76
75-15-0	Carbon disulfide	23.7		6.4	0.27
56-23-5	Carbon tetrachloride	24.1		6.4	0.32
108-90-7	Chlorobenzene	23.5		6.4	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MSD | Lab Sample ID: 240-85941-2 MSD

Matrix: Solid | Lab File ID: UX83166.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.02(g) | Date Analyzed: 10/11/2017 09:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	25.1		6.4	0.39
75-00-3	Chloroethane	22.2		6.4	0.49
67-66-3	Chloroform	24.9		6.4	0.30
74-87-3	Chloromethane	24.2		6.4	0.49
156-59-2	cis-1,2-Dichloroethene	26.3		6.4	0.36
10061-01-5	cis-1,3-Dichloropropene	24.3		6.4	0.33
74-95-3	Dibromomethane	24.6		6.4	0.49
74-97-5	Bromochloromethane	25.8		6.4	0.46
75-71-8	Dichlorodifluoromethane	24.0		6.4	0.45
75-27-4	Bromodichloromethane	25.4		6.4	0.42
75-65-0	tert-Butyl alcohol (TBA)	318		260	3.1
100-41-4	Ethylbenzene	24.9		6.4	0.35
87-68-3	Hexachlorobutadiene	16.6		6.4	0.57
108-20-3	Diisopropyl ether	26.8		13	0.31
98-82-8	Isopropylbenzene	24.0		6.4	0.26
1634-04-4	Methyl tert-butyl ether	26.2		6.4	0.35
75-09-2	Methylene Chloride	20.4		6.4	0.31
179601-23-1	m-Xylene & p-Xylene	25.1		13	0.51
91-20-3	Naphthalene	16.9		6.4	0.42
104-51-8	n-Butylbenzene	19.9		6.4	0.32
103-65-1	N-Propylbenzene	24.3		6.4	0.36
95-47-6	o-Xylene	24.2		6.4	0.28
135-98-8	sec-Butylbenzene	23.4		6.4	0.24
100-42-5	Styrene	22.6		6.4	0.35
994-05-8	Tert-amyl methyl ether	26.1		6.4	0.27
637-92-3	Ethyl t-butyl ether	26.9		6.4	0.17
127-18-4	Tetrachloroethene	27.4		6.4	0.48
108-88-3	Toluene	25.5		6.4	0.44
156-60-5	trans-1,2-Dichloroethene	26.8		6.4	0.49
10061-02-6	trans-1,3-Dichloropropene	22.1		6.4	0.27
79-01-6	Trichloroethene	26.2		6.4	0.53
75-69-4	Trichlorofluoromethane	22.7		6.4	0.31
108-05-4	Vinyl acetate	1.1	U	13	1.1
75-01-4	Vinyl chloride	23.3		6.4	0.36
1330-20-7	Xylenes, Total	49.3		13	0.51
98-06-6	tert-Butylbenzene	32.8		6.4	0.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MSD | Lab Sample ID: 240-85941-2 MSD

Matrix: Solid | Lab File ID: UX83166.D

Analysis Method: 8260C | Date Collected: 10/03/2017 08:25

Sample wt/vol: 5.02(g) | Date Analyzed: 10/11/2017 09:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.6 | Level: (low/med) Low

Analysis Batch No.: 298471 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	26.4		6.4	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		66-125
1868-53-7	Dibromofluoromethane (Surr)	91		43-131
460-00-4	4-Bromofluorobenzene (Surr)	100		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		61-127

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83166.D
Lims ID: 240-85941-B-2-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 11-Oct-2017 09:14:30 ALS Bottle#: 26 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-028
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: macenczaks Date: 11-Oct-2017 15:47:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.157	0.002	98	1547427	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.689	0.002	98	1120827	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.878	0.002	97	581243	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.638	4.627	0.011	94	335529	50.0	45.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.899	4.887	0.012	94	469831	50.0	42.6	
$ 6 Toluene-d8 (Surr)	98	6.437	6.425	0.012	95	1350532	50.0	48.2	
$ 7 4-Bromofluorobenzene (Surr	95	8.768	8.768	0.000	90	513324	50.0	50.0	
9 Dichlorodifluoromethane	85	1.585	1.586	-0.001	97	139182	25.0	18.6	
10 Chloromethane	50	1.751	1.751	0.000	100	218074	25.0	18.8	
11 Vinyl chloride	62	1.881	1.870	0.011	99	137289	25.0	18.1	
13 Bromomethane	94	2.189	2.189	0.000	92	72007	25.0	21.5	
14 Chloroethane	64	2.295	2.284	0.011	96	84017	25.0	17.3	
16 Trichlorofluoromethane	101	2.508	2.509	0.000	99	167232	25.0	17.7	
19 1,1-Dichloroethene	96	2.934	2.923	0.011	93	117186	25.0	21.1	
20 1,1,2-Trichloro-1,2,2-trif	151	2.958	2.946	0.012	91	98651	25.0	20.4	
21 Acetone	43	2.970	2.958	0.012	96	290805	50.0	61.8	
24 Carbon disulfide	76	3.124	3.112	0.012	98	311202	25.0	18.4	
28 Methylene Chloride	84	3.313	3.301	0.012	91	150707	25.0	15.9	
29 2-Methyl-2-propanol	59	3.396	3.384	0.012	92	236955	250.0	247.2	
31 trans-1,2-Dichloroethene	96	3.526	3.526	0.000	66	145059	25.0	20.9	
32 Methyl tert-butyl ether	73	3.526	3.526	0.000	93	446002	25.0	20.4	
34 1,1-Dichloroethane	63	3.845	3.834	0.011	98	290565	25.0	20.2	
35 Vinyl acetate	43		3.857				ND	ND	
36 Isopropyl ether	87	3.893	3.891	0.002	98	134553	25.0	20.8	
38 Tert-butyl ethyl ether	59	4.165	4.163	0.002	95	541906	25.0	20.9	
40 2-Butanone (MEK)	43	4.283	4.272	0.011	53	323697	50.0	45.1	
39 cis-1,2-Dichloroethene	96	4.283	4.272	0.011	89	164845	25.0	20.4	
41 2,2-Dichloropropane	77	4.283	4.283	0.000	64	119712	25.0	17.5	
45 Chlorobromomethane	128	4.461	4.461	0.000	88	80376	25.0	20.1	
47 Chloroform	83	4.508	4.508	0.000	99	264855	25.0	19.4	
48 1,1,1-Trichloroethane	97	4.674	4.674	0.000	96	205926	25.0	20.1	
50 1,1-Dichloropropene	75	4.792	4.792	0.000	87	191111	25.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
51 Carbon tetrachloride	117	4.804	4.804	0.000	97	164697	25.0	18.7	
53 1,2-Dichloroethane	62	4.958	4.946	0.012	66	262646	25.0	18.4	
54 Benzene	78	4.958	4.958	0.000	94	581367	25.0	20.6	
55 Tert-amyl methyl ether	73	5.029	5.027	0.002	92	389861	25.0	20.3	
58 Trichloroethene	130	5.455	5.443	0.012	95	158227	25.0	20.4	
61 1,2-Dichloropropane	63	5.620	5.621	-0.001	89	170308	25.0	21.2	
63 Dibromomethane	93	5.715	5.715	0.000	92	86556	25.0	19.1	
65 Dichlorobromomethane	83	5.833	5.834	-0.001	96	169860	25.0	19.7	
67 2-Chloroethyl vinyl ether	63	6.058	6.058	0.000	87	78919	25.0	20.8	
68 cis-1,3-Dichloropropene	75	6.200	6.189	0.012	83	192695	25.0	18.9	
69 4-Methyl-2-pentanone (MIBK	43	6.307	6.307	0.000	98	595399	50.0	47.0	
70 Toluene	91	6.484	6.484	0.000	97	589756	25.0	19.8	
71 trans-1,3-Dichloropropene	75	6.650	6.650	0.000	94	157138	25.0	17.2	
74 1,3-Dichloropropane	76	6.957	6.958	-0.001	91	232551	25.0	20.6	
75 Tetrachloroethene	164	6.969	6.969	0.000	94	134465	25.0	21.3	
76 2-Hexanone	43	7.017	7.005	0.012	96	420740	50.0	46.5	
78 Chlorodibromomethane	129	7.170	7.159	0.011	91	119833	25.0	19.5	
80 Ethylene Dibromide	107	7.277	7.277	0.000	98	128568	25.0	20.5	
82 Chlorobenzene	112	7.715	7.715	0.000	93	386432	25.0	18.3	
83 1,1,1,2-Tetrachloroethane	131	7.786	7.774	0.012	92	137937	25.0	19.4	
84 Ethylbenzene	106	7.809	7.798	0.011	99	193145	25.0	19.4	
85 m-Xylene & p-Xylene	106	7.916	7.904	0.012	98	235988	25.0	19.5	
86 o-Xylene	106	8.283	8.271	0.012	97	229632	25.0	18.8	
87 Styrene	104	8.283	8.283	0.000	82	358912	25.0	17.6	
88 Bromoform	173	8.460	8.460	0.000	96	68910	25.0	17.9	
89 Isopropylbenzene	105	8.614	8.614	0.000	97	584476	25.0	18.6	
92 1,1,2,2-Tetrachloroethane	83	8.874	8.875	-0.001	98	160540	25.0	21.4	
93 Bromobenzene	156	8.922	8.922	0.000	93	159949	25.0	19.0	
94 1,2,3-Trichloropropane	110	8.934	8.934	0.000	90	59778	25.0	20.4	
96 N-Propylbenzene	120	9.005	9.005	0.000	99	159068	25.0	18.9	
97 2-Chlorotoluene	126	9.099	9.099	0.000	96	140264	25.0	18.6	
99 4-Chlorotoluene	126	9.206	9.194	0.012	98	136746	25.0	17.2	
100 tert-Butylbenzene	119	9.490	9.490	0.000	93	624674	25.0	25.5	
102 1,2,4-Trimethylbenzene	105	9.537	9.537	0.000	96	470629	25.0	18.1	
103 sec-Butylbenzene	105	9.703	9.703	0.000	95	564099	25.0	18.2	
104 1,3-Dichlorobenzene	146	9.821	9.821	0.000	97	257107	25.0	15.7	
105 4-Isopropyltoluene	119	9.845	9.845	0.000	97	494044	25.0	17.5	
106 1,4-Dichlorobenzene	146	9.904	9.904	0.000	95	266735	25.0	15.3	
107 1,2,3-Trimethylbenzene	105	9.951	9.949	0.002	98	495552	25.0	19.3	
109 n-Butylbenzene	91	10.247	10.247	0.000	97	360687	25.0	15.5	
110 1,2-Dichlorobenzene	146	10.271	10.271	0.000	97	246509	25.0	15.4	
111 1,2-Dibromo-3-Chloropropan	157	11.028	11.028	0.000	73	29136	25.0	21.6	
113 1,2,4-Trichlorobenzene	180	11.868	11.856	0.012	94	109614	25.0	11.0	
114 Hexachlorobutadiene	225	12.034	12.034	0.000	96	75478	25.0	12.9	
115 Naphthalene	128	12.117	12.105	0.012	97	301926	25.0	13.1	
116 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	94	98589	25.0	9.72	
S 128 Xylenes, Total	106				0		50.0	38.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VMFASPW_00222	Amount Added:	2.50	Units: uL	
VMFASAW_00206	Amount Added:	2.50	Units: uL	
VMFASGW_00228	Amount Added:	2.50	Units: uL	
VMFASA9W_00159	Amount Added:	2.50	Units: uL	
VM250-IS_00038	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00027	Amount Added:	1.15	Units: uL	Run Reagent
vm40ml_vials_00002	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00102	Amount Added:	0.00	Units:	Run Reagent

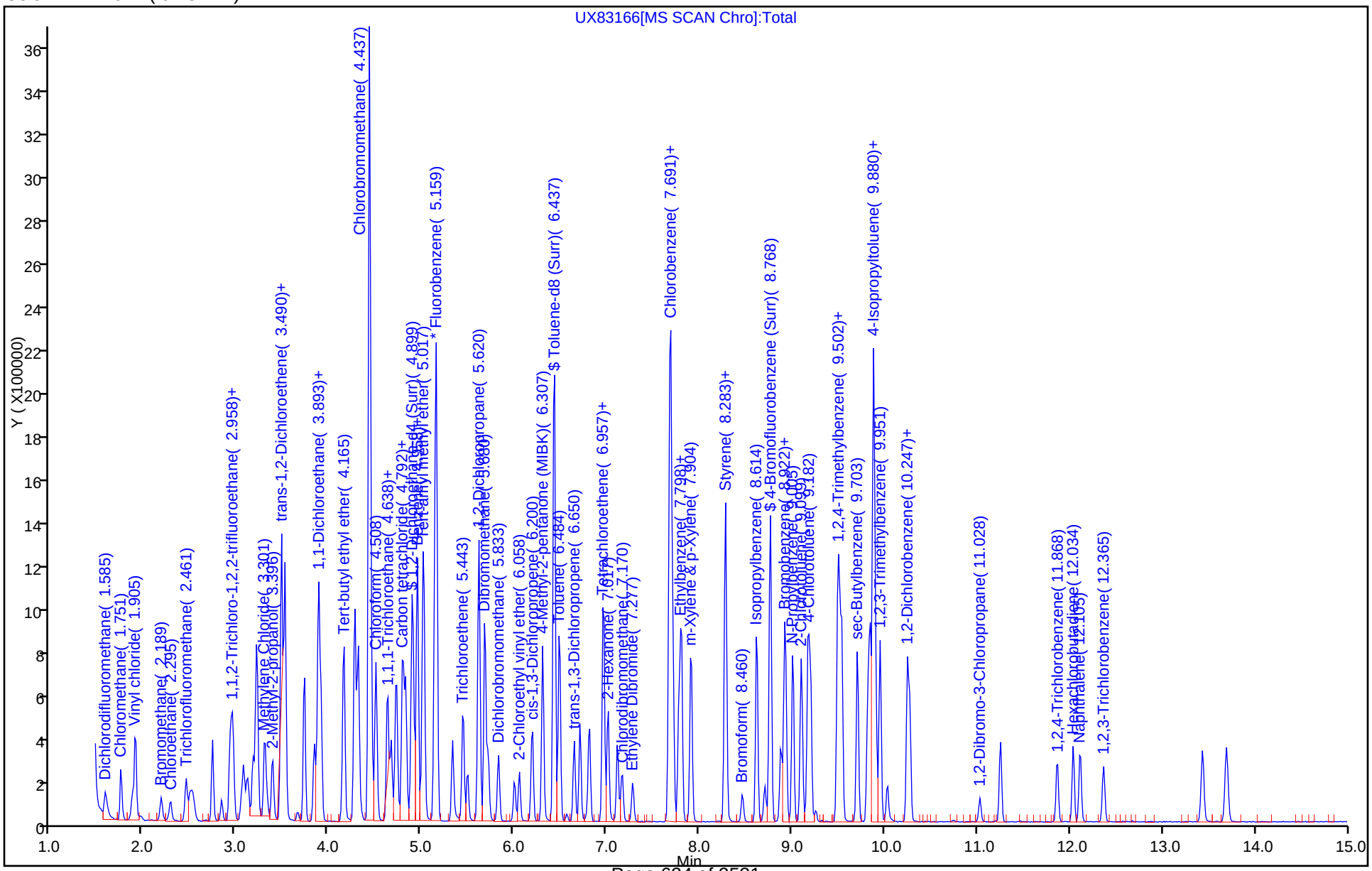
Report Date: 12-Oct-2017 01:07:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83166.D

Injection Date:	11-Oct-2017 09:14:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	240-85941-B-2-C MSD			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_8	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\UX83166.D
Lims ID: 240-85941-B-2-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 11-Oct-2017 09:14:30 ALS Bottle#: 26 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069531-028
Operator ID: 402279 Instrument ID: A3UX8

Method: \\ChromNA\Canton\ChromData\A3UX8\20171010-69531.b\8260_8.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 01:07:09 Calib Date: 20-Aug-2017 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20170820-68016.b\UX81909.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: macenczaks Date: 11-Oct-2017 15:47:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	45.5	90.95
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	42.6	85.24
$ 6 Toluene-d8 (Surr)	50.0	48.2	96.44
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.0	100.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-86263-B-4 MSD

Matrix: Water | Lab File ID: UXM6697.D

Analysis Method: 8260C | Date Collected: 10/10/2017 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/12/2017 13:23

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298687 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	229		10	2.3
75-35-4	1,1-Dichloroethene	223		10	2.7
67-66-3	Chloroform	217		10	3.1
156-59-2	cis-1,2-Dichloroethene	231		10	3.0
127-18-4	Tetrachloroethene	190		10	3.0
79-01-6	Trichloroethene	509		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		69-124
460-00-4	4-Bromofluorobenzene (Surr)	103		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		61-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6697.D
Lims ID: 240-86263-B-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 12-Oct-2017 13:23:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 240-0069583-017
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 12:25:22 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 14:40:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	924787	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	-0.001	85	671740	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	93	482636	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.236	0.000	93	241003	20.0	20.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.532	5.520	0.012	98	256196	20.0	19.0	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	864718	20.0	19.8	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	91	311942	20.0	20.6	
19 1,1-Dichloroethene	96	3.255	3.255	0.000	97	310289	20.0	22.3	
39 cis-1,2-Dichloroethene	96	4.832	4.821	0.011	83	368049	20.0	23.1	
47 Chloroform	83	5.093	5.093	0.000	93	506416	20.0	21.7	
48 1,1,1-Trichloroethane	97	5.271	5.271	0.000	98	442846	20.0	22.9	
58 Trichloroethene	130	6.125	6.125	0.000	97	670443	20.0	50.9	
75 Tetrachloroethene	164	7.750	7.750	0.000	94	187410	20.0	19.0	

Reagents:

vmfaspw_00222	Amount Added: 16.00	Units: uL	
vmfasgw_00229	Amount Added: 16.00	Units: uL	
vmfasaw_00206	Amount Added: 16.00	Units: uL	
vm100ss_stk_00027	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added: 1.00	Units: uL	Run Reagent

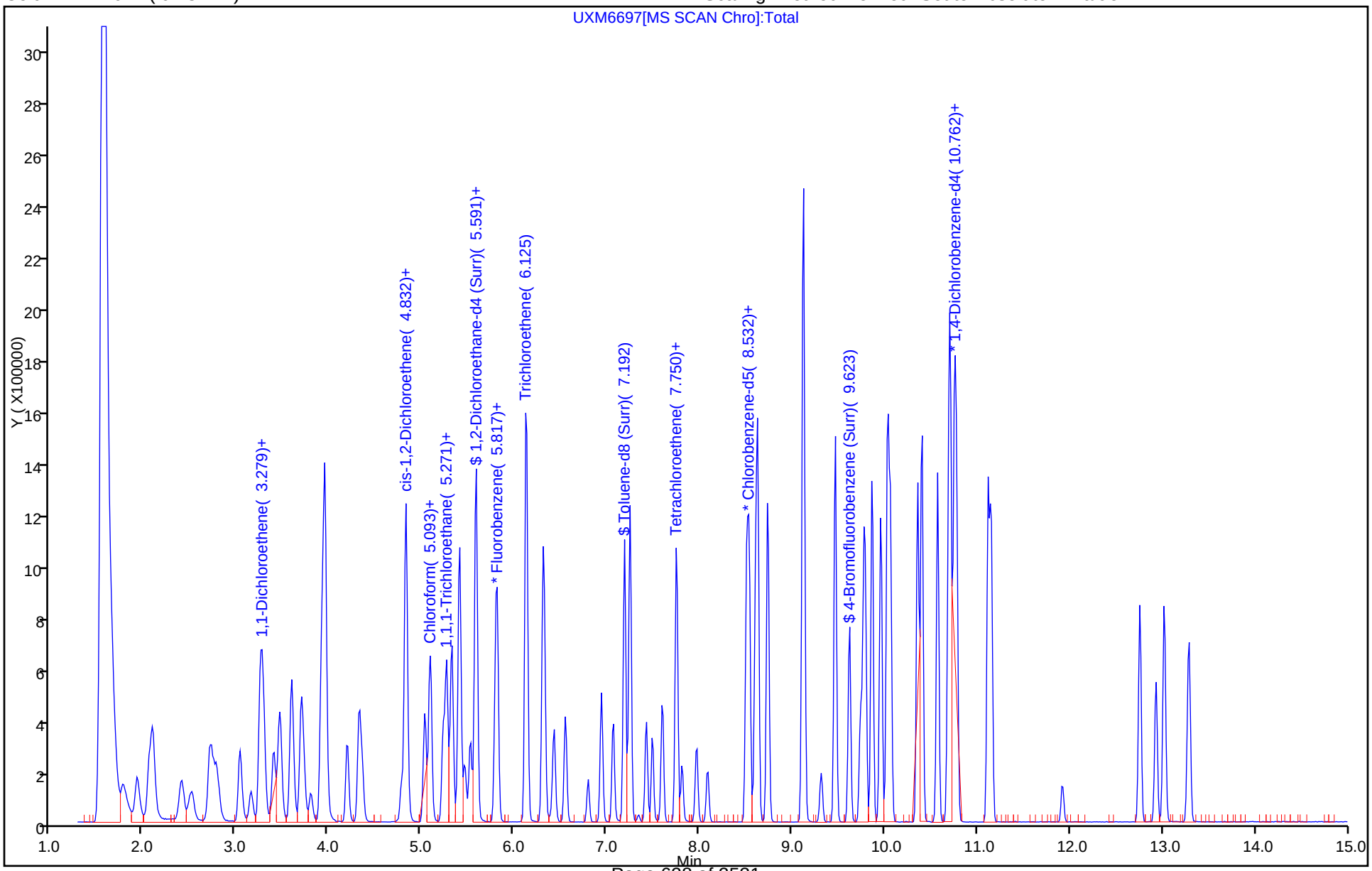
Report Date: 12-Oct-2017 14:40:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6697.D

Injection Date:	12-Oct-2017 13:23:30	Instrument ID:	A3UX16	Operator ID:	001765
Lims ID:	240-86263-B-4 MSD			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	17
Method:	8260_16	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\UXM6697.D
Lims ID: 240-86263-B-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 12-Oct-2017 13:23:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 240-0069583-017
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171012-69583.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 12-Oct-2017 12:25:22 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: bosworthh Date: 12-Oct-2017 14:40:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.5	102.37
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.0	95.23
$ 6 Toluene-d8 (Surr)	20.0	19.8	98.91
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.6	102.75

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A3UX8 Start Date: 07/02/2017 04:39

Analysis Batch Number: 285694 End Date: 07/02/2017 12:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-285694/1		07/02/2017 04:39	1	BFB8386.D	DB-624 0.18(mm)
STD8260 240-285694/3 IC		07/02/2017 05:21	1		DB-624 0.18(mm)
STD8260 240-285694/4 IC		07/02/2017 05:43	1		DB-624 0.18(mm)
STD8260 240-285694/5 IC		07/02/2017 06:04	1		DB-624 0.18(mm)
ICIS 240-285694/6		07/02/2017 06:26	1		DB-624 0.18(mm)
STD8260 240-285694/7 IC		07/02/2017 06:48	1		DB-624 0.18(mm)
STD8260 240-285694/8 IC		07/02/2017 07:09	1		DB-624 0.18(mm)
STD8260 240-285694/9 IC		07/02/2017 07:31	1		DB-624 0.18(mm)
STD8260 240-285694/10 IC		07/02/2017 07:53	1		DB-624 0.18(mm)
STDA9 240-285694/11 IC		07/02/2017 08:14	1	UX80991.D	DB-624 0.18(mm)
STDA9 240-285694/12 IC		07/02/2017 08:36	1	UX80992.D	DB-624 0.18(mm)
STDA9 240-285694/13 IC		07/02/2017 08:58	1	UX80993.D	DB-624 0.18(mm)
STDA9 240-285694/14 IC		07/02/2017 09:19	1	UX80994.D	DB-624 0.18(mm)
STDA9 240-285694/15 IC		07/02/2017 09:41	1	UX80995.D	DB-624 0.18(mm)
STDA9 240-285694/16 IC		07/02/2017 10:03	1	UX80996.D	DB-624 0.18(mm)
STDA9 240-285694/17 IC		07/02/2017 10:26	1	UX80997.D	DB-624 0.18(mm)
STDA9 240-285694/18 IC		07/02/2017 10:48	1	UX80998.D	DB-624 0.18(mm)
ICV 240-285694/19		07/02/2017 11:10	1		DB-624 0.18(mm)
ICV 240-285694/20		07/02/2017 11:32	1		DB-624 0.18(mm)
ZZZZZ		07/02/2017 12:38	1		DB-624 0.18(mm)
ZZZZZ		07/02/2017 12:59	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A3UX8 Start Date: 08/20/2017 00:19

Analysis Batch Number: 291805 End Date: 08/20/2017 04:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-291805/1		08/20/2017 00:19	1	BFB8425.D	DB-624 0.18(mm)
STD8260 240-291805/3 IC		08/20/2017 00:54	1	UX81902.D	DB-624 0.18(mm)
STD8260 240-291805/4 IC		08/20/2017 01:17	1	UX81903.D	DB-624 0.18(mm)
STD8260 240-291805/5 IC		08/20/2017 01:38	1	UX81904.D	DB-624 0.18(mm)
ICIS 240-291805/6		08/20/2017 02:00	1	UX81905.D	DB-624 0.18(mm)
STD8260 240-291805/7 IC		08/20/2017 02:21	1	UX81906.D	DB-624 0.18(mm)
STD8260 240-291805/8 IC		08/20/2017 02:42	1	UX81907.D	DB-624 0.18(mm)
STD8260 240-291805/9 IC		08/20/2017 03:03	1	UX81908.D	DB-624 0.18(mm)
STD8260 240-291805/10 IC		08/20/2017 03:24	1	UX81909.D	DB-624 0.18(mm)
CCV 240-291805/11		08/20/2017 03:47	1		DB-624 0.18(mm)
ICV 240-291805/12		08/20/2017 04:10	1	UX81911.D	DB-624 0.18(mm)
ZZZZZ		08/20/2017 04:53	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A3UX16 Start Date: 10/03/2017 15:09

Analysis Batch Number: 297419 End Date: 10/03/2017 22:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-297419/1		10/03/2017 15:09	1	BFB5411.D	DB-624 0.18(mm)
STD8260 240-297419/9 IC		10/03/2017 16:10	1	UXM6334.D	DB-624 0.18(mm)
STD8260 240-297419/10 IC		10/03/2017 16:33	1	UXM6335.D	DB-624 0.18(mm)
STD8260 240-297419/11 IC		10/03/2017 16:56	1	UXM6336.D	DB-624 0.18(mm)
STD8260 240-297419/12 IC		10/03/2017 17:19	1	UXM6337.D	DB-624 0.18(mm)
ICIS 240-297419/13		10/03/2017 17:42	1	UXM6338.D	DB-624 0.18(mm)
STD8260 240-297419/14 IC		10/03/2017 18:06	1	UXM6339.D	DB-624 0.18(mm)
STD8260L7 240-297419/15 IC		10/03/2017 18:29	1	UXM6340.D	DB-624 0.18(mm)
ICV 240-297419/16		10/03/2017 18:52	1	UXM6341.D	DB-624 0.18(mm)
MDLV 240-297419/17		10/03/2017 19:15	1		DB-624 0.18(mm)
MDLV 240-297419/18		10/03/2017 19:39	1		DB-624 0.18(mm)
STDA9 240-297419/19 IC		10/03/2017 20:03	1	UXM6344.D	DB-624 0.18(mm)
STDA9 240-297419/20 IC		10/03/2017 20:26	1	UXM6345.D	DB-624 0.18(mm)
STDA9 240-297419/21 IC		10/03/2017 20:49	1	UXM6346.D	DB-624 0.18(mm)
STDA9 240-297419/22 IC		10/03/2017 21:12	1	UXM6347.D	DB-624 0.18(mm)
STDA9 240-297419/23 IC		10/03/2017 21:35	1	UXM6348.D	DB-624 0.18(mm)
STDA9 240-297419/24 IC		10/03/2017 21:59	1	UXM6349.D	DB-624 0.18(mm)
ICV 240-297419/25		10/03/2017 22:22	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A3UX8 Start Date: 10/10/2017 23:54

Analysis Batch Number: 298471 End Date: 10/11/2017 11:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-298471/1		10/10/2017 23:54	1	BFB8465.D	DB-624 0.18(mm)
CCVIS 240-298471/4		10/11/2017 00:27	1	UX83142.D	DB-624 0.18(mm)
CCV 240-298471/5		10/11/2017 00:49	1	UX83143.D	DB-624 0.18(mm)
LCS 240-298471/6		10/11/2017 01:12	1	UX83144.D	DB-624 0.18(mm)
LCS 240-298471/7		10/11/2017 01:35	1	UX83145.D	DB-624 0.18(mm)
MB 240-298471/8		10/11/2017 01:56	1	UX83146.D	DB-624 0.18(mm)
ZZZZZ		10/11/2017 02:39	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 03:00	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 03:22	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 06:15	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 07:23	1		DB-624 0.18(mm)
240-85941-2		10/11/2017 08:28	1	UX83164.D	DB-624 0.18(mm)
240-85941-2 MS		10/11/2017 08:51	1	UX83165.D	DB-624 0.18(mm)
240-85941-2 MSD		10/11/2017 09:14	1	UX83166.D	DB-624 0.18(mm)
ZZZZZ		10/11/2017 10:38	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 10:59	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 11:20	1		DB-624 0.18(mm)
ZZZZZ		10/11/2017 11:41	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A3UX16 Start Date: 10/12/2017 07:34

Analysis Batch Number: 298687 End Date: 10/12/2017 17:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-298687/1		10/12/2017 07:34	1	BFB5423.D	DB-624 0.18(mm)
CCVIS 240-298687/3		10/12/2017 07:59	1	UXM6683.D	DB-624 0.18(mm)
CCV 240-298687/4		10/12/2017 08:24	1	UXM6684.D	DB-624 0.18(mm)
LCS 240-298687/5		10/12/2017 08:47	1	UXM6685.D	DB-624 0.18(mm)
MRL 240-298687/6 MDLV		10/12/2017 09:10	1		DB-624 0.18(mm)
MB 240-298687/7		10/12/2017 09:34	1	UXM6687.D	DB-624 0.18(mm)
ZZZZZ		10/12/2017 09:57	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 10:20	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 10:43	4		DB-624 0.18(mm)
ZZZZZ		10/12/2017 11:07	10		DB-624 0.18(mm)
ZZZZZ		10/12/2017 11:29	12.5		DB-624 0.18(mm)
ZZZZZ		10/12/2017 11:52	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 12:15	1000		DB-624 0.18(mm)
ZZZZZ		10/12/2017 12:38	1		DB-624 0.18(mm)
240-86263-B-4 MS		10/12/2017 13:01	10	UXM6696.D	DB-624 0.18(mm)
240-86263-B-4 MSD		10/12/2017 13:23	10	UXM6697.D	DB-624 0.18(mm)
240-85941-1		10/12/2017 14:09	1	UXM6699.D	DB-624 0.18(mm)
240-85941-3		10/12/2017 14:32	1	UXM6700.D	DB-624 0.18(mm)
ZZZZZ		10/12/2017 14:55	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 15:18	10		DB-624 0.18(mm)
ZZZZZ		10/12/2017 15:40	10		DB-624 0.18(mm)
ZZZZZ		10/12/2017 16:03	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 16:26	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 16:50	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 17:13	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 17:36	1		DB-624 0.18(mm)
ZZZZZ		10/12/2017 17:59	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 298472 Batch Start Date: 10/11/17 01:40 Batch Analyst: Lata, Todd

Batch Method: 5030C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
240-85941-B-2	WC-IS-100317	5030C, 8260C	T	5.24 g	5 mL				
240-85941-B-2 MS	WC-IS-100317	5030C, 8260C	T	5.26 g	5 mL				
240-85941-B-2 MSD	WC-IS-100317	5030C, 8260C	T	5.02 g	5 mL				

Batch Notes	
Balance ID	B035
Blank Matrix ID	170485

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8082A

Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 (0.53 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX1 #	DCBP1 #
WC-IS-100317	240-85941-2	56	69
	MB 240-297693/10-A	78	102
	LCS 240-297693/11-A	78	105
WC-IS-100317 MS	240-85941-2 MS	69	88
WC-IS-100317 MSD	240-85941-2 MSD	68	80

	QC LIMITS
TCX = Tetrachloro-m-xylene	14-128
DCBP = DCB Decachlorobiphenyl	10-132

Column to be used to flag recovery values

FORM II 8082A

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low

GC Column (2): CLP-1 (0.53 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX2 #	DCBP2 #
WC-IW-100317	240-85941-3	50	20
	MB 240-297775/21-A	58	73
	LCS 240-297775/22-A	60	69
	240-85882-BB-1-A MS	60	34
	240-85882-AU-1-A MSD	59	38

	QC LIMITS
TCX = Tetrachloro-m-xylene	21-120
DCBP = DCB Decachlorobiphenyl	10-120

Column to be used to flag recovery values

FORM II 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: SIG1100615.D

Lab ID: LCS 240-297693/11-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	1000	631	63	47-120	
Aroclor-1260	1000	735	74	46-120	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P12100728.D

Lab ID: LCS 240-297775/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	2.50	1.26	50	32-120	
Aroclor-1260	2.50	1.55	62	36-120	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: SIG1100623.D

Lab ID: 240-85941-2 MS Client ID: WC-IS-100317 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Aroclor-1016	1270	30 U	663	52	31-120	
Aroclor-1260	1270	22 U	769	60	21-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P12100710.D

Lab ID: 240-85882-BB-1-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Aroclor-1016	2.38	0.050 U	1.08	45	24-121	
Aroclor-1260	2.38	0.040 U	1.15	48	10-120	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: SIG1100624.D

Lab ID: 240-85941-2 MSD Client ID: WC-IS-100317 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Aroclor-1016	1250	630	50	12	30	31-120	
Aroclor-1260	1250	747	60	3	30	21-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P12100711.D

Lab ID: 240-85882-AU-1-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Aroclor-1016	2.38	1.20	50	10	30	24-121	
Aroclor-1260	2.38	1.29	54	12	30	10-120	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: MB 240-297693/10-A

Matrix: Solid Date Extracted: 10/05/2017 08:47

Lab File ID:(1) SIG1100614.D Lab File ID:(2) SIG1100614.D

Date Analyzed:(1) 10/06/2017 18:07 Date Analyzed:(2) 10/06/2017 18:07

Instrument ID:(1) A2HP13 Instrument ID:(2) A2HP13

GC Column:(1) CLP-2 (0.53m ID: 0.53(mm) GC Column:(2) CLP-1 (0.53m ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-297693/11-A	10/06/2017 18:25	10/06/2017 18:25
WC-IS-100317	240-85941-2	10/06/2017 20:33	10/06/2017 20:33
WC-IS-100317 MS	240-85941-2 MS	10/06/2017 20:52	10/06/2017 20:52
WC-IS-100317 MSD	240-85941-2 MSD	10/06/2017 21:10	10/06/2017 21:10

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: MB 240-297775/21-A

Matrix: Water Date Extracted: 10/05/2017 12:53

Lab File ID:(1) P12100727.D Lab File ID:(2) P12100727.D

Date Analyzed:(1) 10/07/2017 18:45 Date Analyzed:(2) 10/07/2017 18:45

Instrument ID:(1) A2HP12 Instrument ID:(2) A2HP12

GC Column:(1) CLP-2 (0.53m ID: 0.53(mm) GC Column:(2) CLP-1 (0.53m ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	240-85882-BB-1-A MS	10/07/2017 13:44	10/07/2017 13:44
	240-85882-AU-1-A MSD	10/07/2017 14:02	10/07/2017 14:02
	LCS 240-297775/22-A	10/07/2017 19:02	10/07/2017 19:02
WC-IW-100317	240-85941-3	10/07/2017 19:56	10/07/2017 19:56

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: STD05 240-297285/31 Date Analyzed: 10/03/2017 22:29

Instrument ID: A2HP12 GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): P12100331.D Heated Purge: (Y/N) N

Calibration ID: 41739

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		89331333	3.08				
UPPER LIMIT		178662666	3.58				
LOWER LIMIT		44665667	2.58				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297285/34		80540984	3.08				
ICV 240-297285/35		83427304	3.07				
ICV 240-297285/36		80791677	3.07				
ICV 240-297285/37		79394599	3.08				
ICV 240-297285/38		79182687	3.07				
ICV 240-297285/39		80135371	3.07				
ICV 240-297285/40		73770130	3.07				
ICV 240-297285/41		84667751	3.08				
CCV 240-298032/3 CCVIS		98223979	3.07				
CCVIS 240-298032/29		94909182	3.08				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: STD05 240-297285/31 Date Analyzed: 10/03/2017 22:29

Instrument ID: A2HP12 GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): P12100331.D Heated Purge: (Y/N) N

Calibration ID: 41740

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		274925471	3.62				
UPPER LIMIT		549850942	4.12				
LOWER LIMIT		137462736	3.12				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297285/34		251892265	3.62				
ICV 240-297285/35		260594323	3.62				
ICV 240-297285/36		259044692	3.62				
ICV 240-297285/37		253426991	3.62				
ICV 240-297285/38		245245279	3.62				
ICV 240-297285/39		243434235	3.62				
ICV 240-297285/40		235175765	3.61				
ICV 240-297285/41		261533455	3.62				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: CCV 240-298032/3 Date Analyzed: 10/07/2017 11:40

Instrument ID: A2HP12 GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): P12100703.D Heated Purge: (Y/N) N

Calibration ID: 41739

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		98223979	3.07				
UPPER LIMIT		196447958	3.57				
LOWER LIMIT		49111990	2.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-298032/4		94265623	3.07				
CCV 240-298032/5		82367034	3.06				
CCV 240-298032/6		90354733	3.07				
CCV 240-298032/7		93644847	3.07				
240-85882-BB-1-A MS		98347375	3.07				
240-85882-AU-1-A MSD		93879777	3.07				
MB 240-297775/21-A		97648418	3.07				
LCS 240-297775/22-A		91798150	3.06				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: CCVIS 240-298032/29 Date Analyzed: 10/07/2017 19:20

Instrument ID: A2HP12 GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): P12100729.D Heated Purge: (Y/N) N

Calibration ID: 41739

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		94909182	3.08				
UPPER LIMIT		189818364	3.58				
LOWER LIMIT		47454591	2.58				
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-85941-3	WC-IW-100317	98046157	3.07				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: STD05 240-297169/31 Date Analyzed: 10/02/2017 21:51

Instrument ID: A2HP13 GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): SIG10100231.D Heated Purge: (Y/N) N

Calibration ID: 41683

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		205572400	1.95				
UPPER LIMIT		411144800	2.45				
LOWER LIMIT		102786200	1.45				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297169/34		198385170	1.95				
ICV 240-297169/35		193587984	1.95				
ICV 240-297169/36		196514658	1.95				
ICV 240-297169/37		189139688	1.95				
ICV 240-297169/38		191929965	1.95				
ICV 240-297169/39		192332641	1.95				
ICV 240-297169/40		191533559	1.95				
ICV 240-297169/41		191484477	1.95				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: STD05 240-297169/31 Date Analyzed: 10/02/2017 21:51

Instrument ID: A2HP13 GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): SIG10100231.D Heated Purge: (Y/N) N

Calibration ID: 41684

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		37848291	2.39				
UPPER LIMIT		75696582	2.89				
LOWER LIMIT		18924146	1.89				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297169/34		36757559	2.39				
ICV 240-297169/35		35525050	2.39				
ICV 240-297169/36		36024053	2.39				
ICV 240-297169/37		35134827	2.39				
ICV 240-297169/38		35289265	2.39				
ICV 240-297169/39		35517767	2.39				
ICV 240-297169/40		35155393	2.39				
ICV 240-297169/41		35000211	2.39				
CCV 240-297980/3 CCVIS		40139093	2.39				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Sample No.: CCV 240-297980/3 Date Analyzed: 10/06/2017 14:45

Instrument ID: A2HP13 GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

Lab File ID (Standard): SIG1100603.D Heated Purge: (Y/N) N

Calibration ID: 41684

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		40139093	2.39				
UPPER LIMIT		80278186	2.89				
LOWER LIMIT		20069547	1.89				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-297980/4		39377137	2.39				
CCV 240-297980/5		39074067	2.39				
CCV 240-297980/6		37721215	2.39				
CCV 240-297980/7		39166657	2.39				
MB 240-297693/10-A		36598160	2.39				
LCS 240-297693/11-A		36323539	2.39				
240-85941-2	WC-IS-100317	41356106	2.39				
240-85941-2 MS	WC-IS-100317 MS	40072259	2.39				
240-85941-2 MSD	WC-IS-100317 MSD	42186467	2.39				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MS Lab Sample ID: 240-85941-2 MS

Instrument ID (1): A2HP13 Instrument ID (2): A2HP13

Date Analyzed (1): 10/06/2017 20:52 Date Analyzed (2): 10/06/2017 20:52

GC Column (1): CLP-2 (0.53mm ID: 0.53(mm) GC Column (2): CLP-1 (0.53mm ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	4.94	4.93	4.97	619	663	16.7
		2	5.63	5.61	5.65	569		
		3	6.33	6.32	6.35	771		
		4	6.52	6.50	6.54	713		
		5	6.89	6.87	6.91	642		
	2	1	3.74	3.73	3.77	627	561	
		2	4.35	4.33	4.37	662		
		3	5.10	5.08	5.12	424		
		4	5.30	5.28	5.32	587		
		5	5.67	5.66	5.70	505		
Aroclor-1260	1	1	8.43	8.41	8.45	766	769	1.1
		2	8.62	8.61	8.64	796		
		3	9.02	9.00	9.04	687		
		4	9.48	9.46	9.50	777		
		5	9.78	9.77	9.80	820		
	2	1	7.43	7.42	7.46	760	761	
		2	7.72	7.71	7.74	801		
		3	7.99	7.98	8.01	798		
		4	8.61	8.59	8.63	705		
		5	8.85	8.84	8.88	741		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MSD Lab Sample ID: 240-85941-2 MSD

Instrument ID (1): A2HP13 Instrument ID (2): A2HP13

Date Analyzed (1): 10/06/2017 21:10 Date Analyzed (2): 10/06/2017 21:10

GC Column (1): CLP-2 (0.53mm ID: 0.53(mm) GC Column (2): CLP-1 (0.53mm ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	4.94	4.93	4.97	606	630	4.2
		2	5.63	5.61	5.65	516		
		3	6.33	6.32	6.35	738		
		4	6.52	6.50	6.54	681		
		5	6.89	6.87	6.91	610		
	2	1	3.74	3.73	3.77	586	657	
		2	4.35	4.33	4.37	656		
		3	5.10	5.08	5.12	501		
		4	5.30	5.28	5.32	746		
		5	5.67	5.66	5.70	796		
Aroclor-1260	1	1	8.43	8.41	8.45	749	747	1.7
		2	8.62	8.61	8.64	779		
		3	9.02	9.00	9.04	671		
		4	9.48	9.46	9.50	750		
		5	9.78	9.77	9.80	788		
	2	1	7.43	7.42	7.46	723	734	
		2	7.72	7.71	7.74	776		
		3	7.99	7.98	8.01	770		
		4	8.61	8.59	8.63	684		
		5	8.85	8.84	8.88	719		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-297693/11-A

Instrument ID (1): A2HP13 Instrument ID (2): A2HP13

Date Analyzed (1): 10/06/2017 18:25 Date Analyzed (2): 10/06/2017 18:25

GC Column (1): CLP-2 (0.53mm ID: 0.53(mm) GC Column (2): CLP-1 (0.53mm ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	4.94	4.93	4.97	538	631	21.8
		2	5.63	5.61	5.65	594		
		3	6.33	6.32	6.35	704		
		4	6.52	6.50	6.54	698		
		5	6.89	6.87	6.91	621		
	2	1	3.74	3.73	3.77	530	507	
		2	4.35	4.33	4.37	543		
		3	5.10	5.08	5.12	546		
		4	5.30	5.28	5.32	489		
		5	5.67	5.66	5.70	426		
Aroclor-1260	1	1	8.43	8.41	8.45	750	735	1.6
		2	8.62	8.61	8.64	765		
		3	9.02	9.00	9.04	667		
		4	9.48	9.46	9.50	738		
		5	9.78	9.77	9.80	756		
	2	1	7.43	7.42	7.46	693	723	
		2	7.72	7.71	7.74	750		
		3	7.99	7.98	8.01	763		
		4	8.61	8.59	8.63	690		
		5	8.85	8.84	8.88	721		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-85882-BB-1-A MS

Instrument ID (1): A2HP12 Instrument ID (2): A2HP12

Date Analyzed (1): 10/07/2017 13:44 Date Analyzed (2): 10/07/2017 13:44

GC Column (1): CLP-2 (0.53mm ID: 0.53(mm) GC Column (2): CLP-1 (0.53mm ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	5.81	5.79	5.83	1.17	1.13	4.4
		2	6.40	6.38	6.41	0.790		
		3	7.01	6.99	7.03	1.25		
		4	7.19	7.17	7.21	1.23		
		5	7.55	7.53	7.57	1.21		
	2	1	4.89	4.87	4.91	1.09	1.08	
		2	5.40	5.38	5.42	1.12		
		3	6.04	6.02	6.05	0.947		
		4	6.21	6.19	6.23	1.14		
		5	6.75	6.73	6.76	1.11		
Aroclor-1260	1	1	9.34	9.32	9.36	1.23	1.10	4.9
		2	10.01	9.99	10.03	1.29		
		3	10.45	10.43	10.47	0.924		
		4	10.72	10.70	10.74	1.02		
		5	11.09	11.07	11.11	1.02		
	2	1	8.25	8.23	8.27	1.14	1.15	
		2	8.59	8.57	8.61	1.20		
		3	8.91	8.89	8.93	1.29		
		4	9.70	9.68	9.72	1.01		
		5	10.02	10.00	10.04	1.11		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-85882-AU-1-A MSD

Instrument ID (1): A2HP12 Instrument ID (2): A2HP12

Date Analyzed (1): 10/07/2017 14:02 Date Analyzed (2): 10/07/2017 14:02

GC Column (1): CLP-2 (0.53mm ID: 0.53(mm) GC Column (2): CLP-1 (0.53mm ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	5.81	5.79	5.83	1.36	1.34	11.0
		2	6.40	6.38	6.41	0.898		
		3	7.01	6.99	7.03	1.48		
		4	7.19	7.17	7.21	1.48		
		5	7.55	7.53	7.57	1.46		
	2	1	4.89	4.87	4.91	1.24	1.20	
		2	5.40	5.38	5.42	1.21		
		3	6.04	6.02	6.05	1.06		
		4	6.21	6.19	6.23	1.23		
		5	6.75	6.73	6.76	1.25		
Aroclor-1260	1	1	9.34	9.32	9.36	1.50	1.28	1.2
		2	10.01	9.99	10.03	1.48		
		3	10.45	10.43	10.47	1.08		
		4	10.72	10.70	10.74	1.17		
		5	11.09	11.07	11.11	1.16		
	2	1	8.25	8.23	8.27	1.29	1.29	
		2	8.58	8.57	8.61	1.36		
		3	8.91	8.89	8.93	1.45		
		4	9.70	9.68	9.72	1.12		
		5	10.02	10.00	10.04	1.24		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-297775/22-A

Instrument ID (1): A2HP12 Instrument ID (2): A2HP12

Date Analyzed (1): 10/07/2017 19:02 Date Analyzed (2): 10/07/2017 19:02

GC Column (1): CLP-2 (0.53mm ID: 0.53(mm) GC Column (2): CLP-1 (0.53mm ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	5.81	5.79	5.83	1.24	1.33	5.8
		2	6.40	6.38	6.41	1.04		
		3	7.01	6.99	7.03	1.42		
		4	7.19	7.17	7.21	1.49		
		5	7.55	7.53	7.57	1.48		
	2	1	4.89	4.87	4.91	1.16	1.26	
		2	5.40	5.38	5.42	1.21		
		3	6.04	6.02	6.05	1.14		
		4	6.21	6.19	6.23	1.43		
		5	6.74	6.73	6.76	1.36		
Aroclor-1260	1	1	9.34	9.32	9.36	1.50	1.34	14.1
		2	10.01	9.99	10.03	1.50		
		3	10.45	10.43	10.47	1.25		
		4	10.72	10.70	10.74	1.21		
		5	11.09	11.07	11.11	1.26		
	2	1	8.25	8.23	8.27	1.50	1.55	
		2	8.59	8.57	8.61	1.60		
		3	8.91	8.89	8.93	1.74		
		4	9.70	9.68	9.72	1.37		
		5	10.02	10.00	10.04	1.53		

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 | Lab Sample ID: 240-85941-2

Matrix: Solid | Lab File ID: SIG1100622.D

Analysis Method: 8082A | Date Collected: 10/03/2017 08:25

Extraction Method: 3540C | Date Extracted: 10/05/2017 08:47

Sample wt/vol: 10.35(g) | Date Analyzed: 10/06/2017 20:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

% Moisture: 22.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 297980 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	30	U	62	30
11104-28-2	Aroclor-1221	29	U	62	29
11141-16-5	Aroclor-1232	20	U	62	20
53469-21-9	Aroclor-1242	25	U	62	25
12672-29-6	Aroclor-1248	21	U	62	21
11097-69-1	Aroclor-1254	17	U	62	17
11096-82-5	Aroclor-1260	22	U	62	22

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	56		14-128
2051-24-3	DCB Decachlorobiphenyl	69		10-132

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100622.D
Lims ID: 240-85941-C-2-A
Client ID: WC-IS-100317
Sample Type: Client
Inject. Date: 06-Oct-2017 20:33:54 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-022
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:21:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total						
1		1.000			ND	
* 14 1-Bromo-2-nitrobenzene						
1	1.949	1.949	0.000	229203866	0.0500	
2	2.389	2.390	-0.001	41356106	0.0500	
$ 2 Tetrachloro-m-xylene						
1	3.068	3.069	-0.001	63201571	0.0118	
2	4.013	4.016	-0.003	9874349	0.0112	
					RPD = 4.88	
3 PCB-1221						
1		3.418			ND	
1		3.675				
1		3.744				
2		4.594				
2		4.844				
2		4.946				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
4 PCB-1232						
1		3.743			ND	
1		4.349				
1		5.096				
1		5.297				
1		5.674				
2		4.945				
2		5.626				
2		6.334				
2		6.521				
2		7.119				
5 PCB-1242						
1		3.745			ND	
1		4.350				
1		5.095				
1		5.298				
1		5.676				
2		4.946				
2		5.628				
2		6.335				
2		6.522				
2		7.120				
6 PCB-1016						
1		3.746			ND	
1		4.352				
1		5.097				
1		5.299				
1		5.676				
2		4.947				
2		5.628				
2		6.334				
2		6.522				
2		6.893				
7 PCB-1248						
1		4.349			ND	
1		5.916				
1		6.540				
1		6.783				
1		7.236				
2		5.627				
2		6.798				
2		7.261				
2		7.596				
2		8.248				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
8 PCB-1254						
1		6.787			ND	
1		7.236				
1		7.533				
1		7.724				
1		7.995				
2		7.591				
2		7.795				
2		8.248				
2		8.461				
2		8.941				
10 PCB-1260						
1		7.437			ND	
1		7.725				
1		7.994				
1		8.611				
1		8.856				
2		8.432				
2		8.624				
2		9.020				
2		9.481				
2		9.784				
9 PCB-1262						
1		7.724			ND	
1		8.106				
1		8.332				
1		8.611				
1		8.887				
2		8.623				
2		9.019				
2		9.273				
2		9.480				
2		9.780				
11 PCB-1268						
1		8.888			ND	
1		8.921				
1		9.083				
1		9.378				
1		9.611				
2		9.777				
2		9.816				
2		10.024				
2		10.248				
2		10.515				
$ 12 DCB Decachlorobiphenyl						
1	9.760	9.763	-0.003	45997539	0.0116	
2	10.741	10.743	-0.002	11196303	0.0139	
					RPD = 17.69	
16 1260 Res 1						
1		8.856			ND	
2		9.979				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
13 1260 Res 2						
1		8.887			ND	
2		9.818				
15 1260 Res 3						
1	8.925	8.925	0.000	16579090		NR
2	0.780	0.793	-0.013	767092		NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

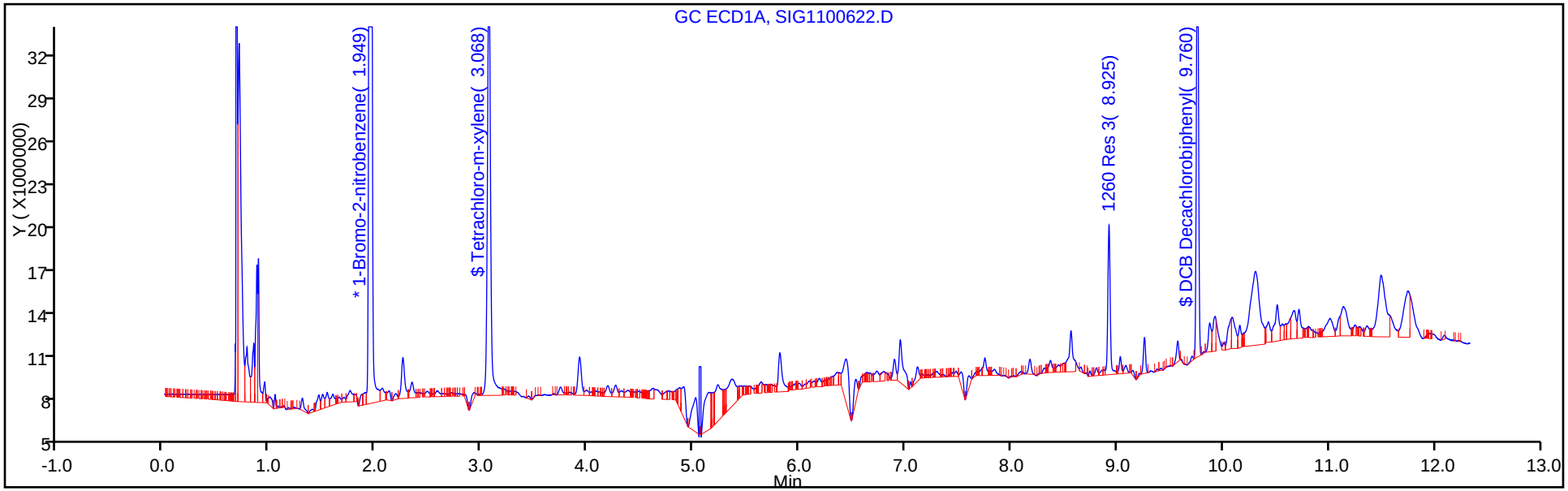
Report Date: 09-Oct-2017 08:31:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

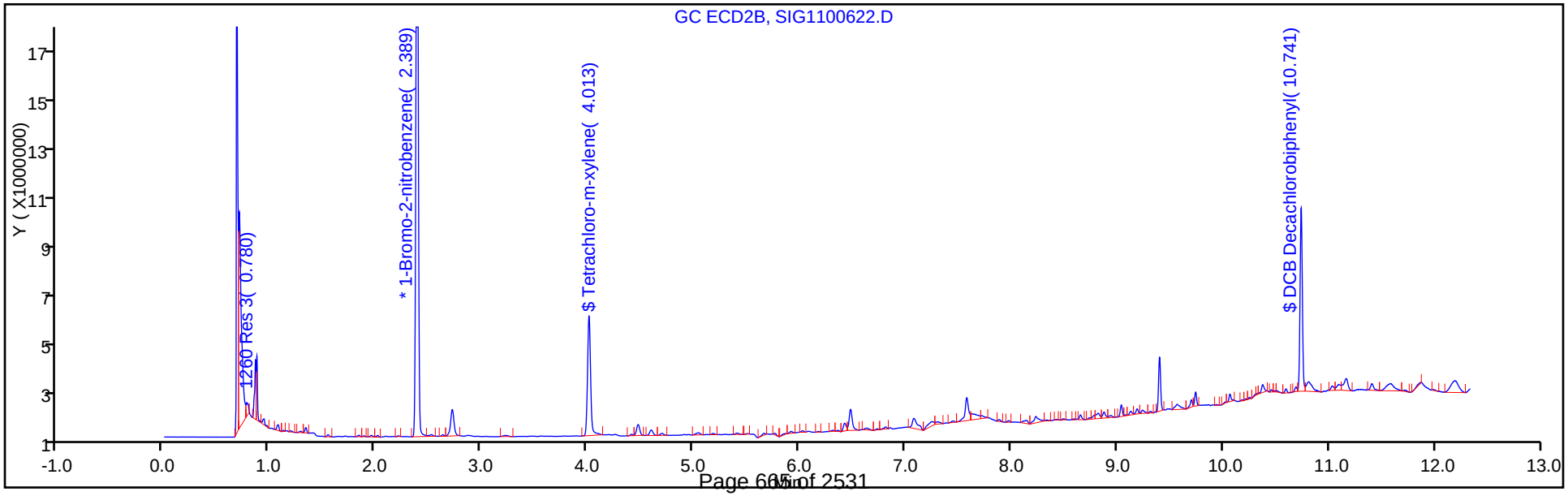
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100622.D

Injection Date:	06-Oct-2017 20:33:54	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	240-85941-C-2-A	Lab Sample ID:	240-85941-2	Worklist Smp#:	22
Client ID:	WC-IS-100317				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100622.D
Lims ID: 240-85941-C-2-A
Client ID: WC-IS-100317
Sample Type: Client
Inject. Date: 06-Oct-2017 20:33:54 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-022
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:21:45

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0118	58.87
$ 12 DCB Decachlorobiphenyl	0.0200	0.0116	58.19

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0112	56.07
$ 12 DCB Decachlorobiphenyl	0.0200	0.0139	69.48

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IW-100317 | Lab Sample ID: 240-85941-3

Matrix: Water | Lab File ID: P12100731.D

Analysis Method: 8082A | Date Collected: 10/03/2017 08:00

Extraction Method: 3520C | Date Extracted: 10/05/2017 12:53

Sample wt/vol: 1040(mL) | Date Analyzed: 10/07/2017 19:56

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	0.048	U	0.096	0.048
11104-28-2	Aroclor-1221	0.087	U	0.096	0.087
11141-16-5	Aroclor-1232	0.067	U	0.096	0.067
53469-21-9	Aroclor-1242	0.058	U	0.096	0.058
12672-29-6	Aroclor-1248	0.048	U	0.096	0.048
11097-69-1	Aroclor-1254	0.029	U	0.096	0.029
11096-82-5	Aroclor-1260	0.038	U	0.096	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	50		21-120
2051-24-3	DCB Decachlorobiphenyl	20		10-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100731.D
Lims ID: 240-85941-H-3-A
Client ID: WC-IW-100317
Sample Type: Client
Inject. Date: 07-Oct-2017 19:56:08 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-031
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:35:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene						
1	3.069	3.075	-0.006	98046157	0.0500	
2	3.614	3.617	-0.003	266051218	0.0500	
$ 2 Tetrachloro-m-xylene						
1	4.316	4.317	-0.001	96738408	0.0505	
2	5.024	5.025	-0.001	252986995	0.0494	
					RPD = 2.14	
3 PCB-1221						
1		4.620			ND	
1		4.836				
1		4.893				
2		5.515				
2		5.725				
2		5.812				
5 PCB-1242						
1		4.892			ND	
1		5.402				
1		6.033				
1		6.209				
1		6.745				
2		5.810				
2		6.393				
2		7.008				
2		7.185				
2		7.552				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
4 PCB-1232						
1		4.892			ND	
1		5.403				
1		6.034				
1		6.210				
1		6.746				
2		5.811				
2		6.396				
2		7.008				
2		7.186				
2		7.555				
6 PCB-1016						
1		4.895			ND	
1		5.404				
1		6.035				
1		6.211				
1		6.746				
2		5.812				
2		6.396				
2		7.008				
2		7.186				
2		7.555				
7 PCB-1248						
1		5.401			ND	
1		6.744				
1		7.280				
1		7.550				
1		8.029				
2		6.394				
2		7.003				
2		7.790				
2		8.318				
2		9.103				
8 PCB-1254						
1		7.553			ND	
1		8.028				
1		8.362				
1		8.585				
1		8.910				
2		8.313				
2		8.553				
2		9.102				
2		9.374				
2		10.011				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		8.253			ND	
1		8.586				
1		8.910				
1		9.699				
1		10.023				
2		9.336				
2		10.010				
2		10.451				
2		10.721				
2		11.092				
$ 12 DCB Decachlorobiphenyl						
1	11.181	11.181	0.000	41169759	0.0200	
2	12.171	12.170	0.001	83682459	0.0232	
					RPD = 14.87	

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

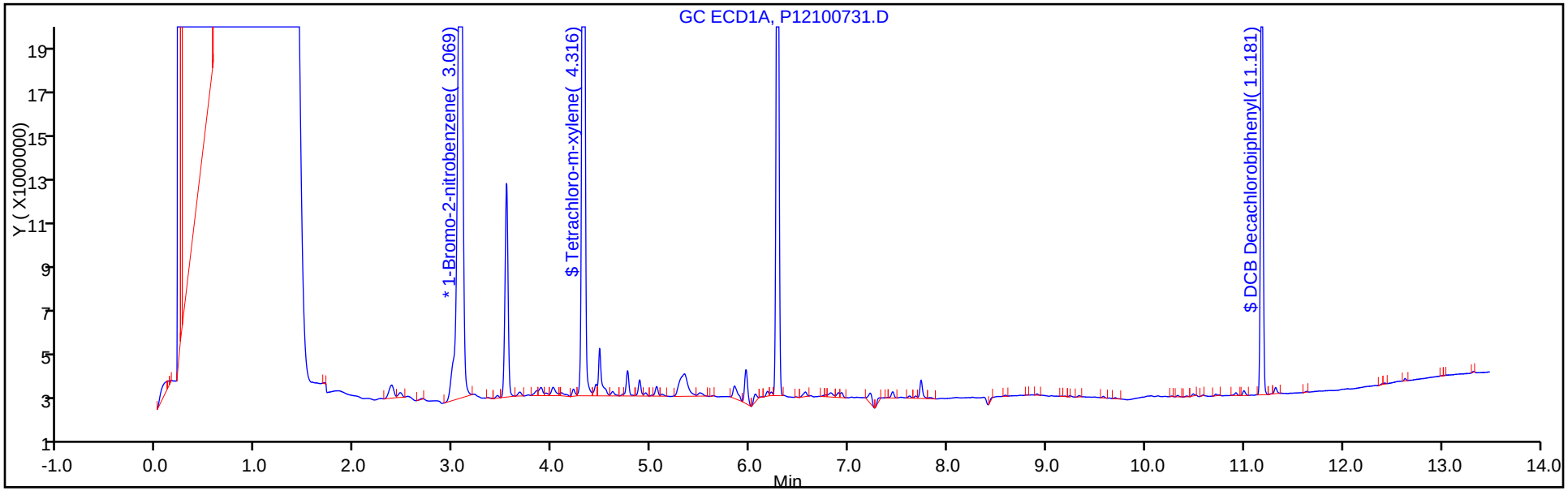
Report Date: 09-Oct-2017 11:20:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

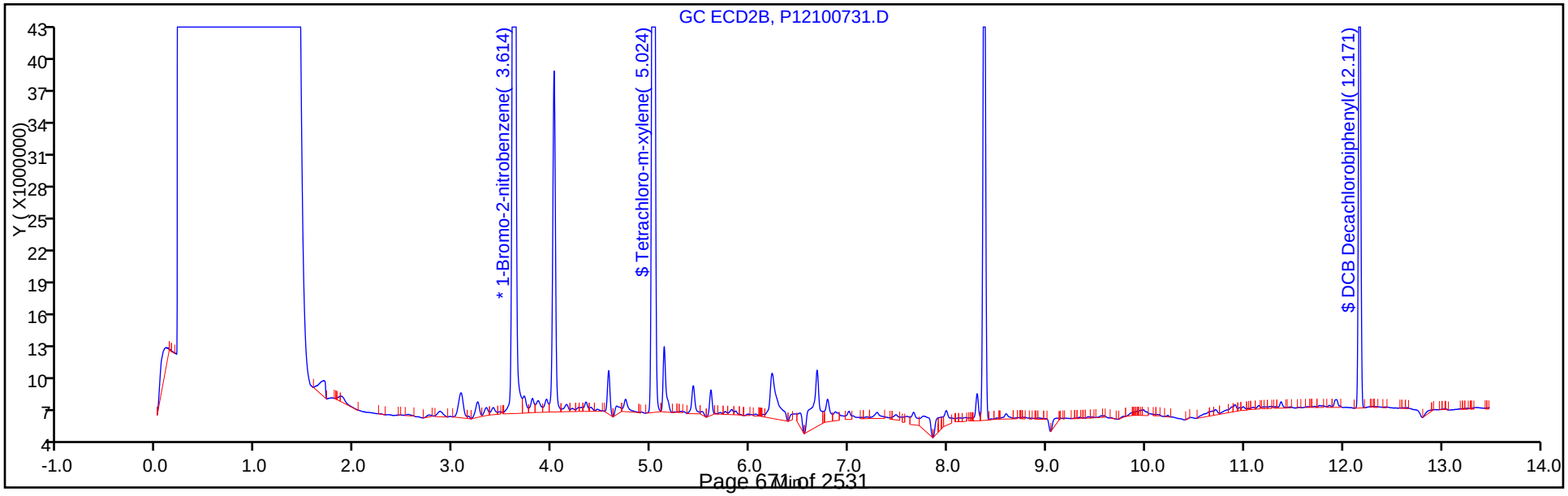
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100731.D

Injection Date:	07-Oct-2017 19:56:08	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	240-85941-H-3-A	Lab Sample ID:	240-85941-3	Worklist Smp#:	31
Client ID:	WC-IW-100317				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100731.D
Lims ID: 240-85941-H-3-A
Client ID: WC-IW-100317
Sample Type: Client
Inject. Date: 07-Oct-2017 19:56:08 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-031
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:35:36

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0505	50.46
$ 12 DCB Decachlorobiphenyl	0.1000	0.0200	19.97

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0494	49.40
$ 12 DCB Decachlorobiphenyl	0.1000	0.0232	23.18

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 14:33 Calibration End Date: 10/03/2017 16:01 Calibration ID: 41715

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/4	P12100304.D
Level 2	STD01 240-297285/5	P12100305.D
Level 3	STD02 240-297285/6	P12100306.D
Level 4	STD05 240-297285/7	P12100307.D
Level 5	STD1 240-297285/8	P12100308.D
Level 6	STD15 240-297285/9	P12100309.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	0.0223 0.0184	0.0231	0.0215	0.0187	0.0184	Ave		0.0204				10.6		20.0			
PCB-1232 Peak 2	0.0172 0.0139	0.0171	0.0160	0.0143	0.0141	Ave		0.0154				10.0		20.0			
PCB-1232 Peak 3	0.0368 0.0326	0.0367	0.0347	0.0321	0.0324	Ave		0.0342				6.4		20.0			
PCB-1232 Peak 4	0.0159 0.0134	0.0156	0.0152	0.0136	0.0135	Ave		0.0145				7.9		20.0			
PCB-1232 Peak 5	0.0161 0.0124	0.0156	0.0149	0.0130	0.0127	Ave		0.0141				11.2		20.0			
PCB-1262 Peak 1	0.0558 0.0506	0.0548	0.0528	0.0489	0.0502	Ave		0.0522				5.2		20.0			
PCB-1262 Peak 2	0.0701 0.0654	0.0685	0.0676	0.0632	0.0642	Ave		0.0665				4.0		20.0			
PCB-1262 Peak 3	0.0627 0.0594	0.0614	0.0606	0.0573	0.0584	Ave		0.0600				3.3		20.0			
PCB-1262 Peak 4	0.1274 0.1334	0.1290	0.1309	0.1260	0.1298	Ave		0.1294				2.0		20.0			
PCB-1262 Peak 5	0.0565 0.0528	0.0553	0.0542	0.0505	0.0515	Ave		0.0535				4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 14:33 Calibration End Date: 10/03/2017 16:01 Calibration ID: 41715

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/4	P12100304.D
Level 2	STD01 240-297285/5	P12100305.D
Level 3	STD02 240-297285/6	P12100306.D
Level 4	STD05 240-297285/7	P12100307.D
Level 5	STD1 240-297285/8	P12100308.D
Level 6	STD15 240-297285/9	P12100309.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Ave	1888784 43592455	3940479	6685279	16515236	31022672	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 2	BNB	Ave	1462830 32969253	2916982	4990861	12642015	23831789	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 3	BNB	Ave	3125695 77288359	6250089	10813004	28376305	54845662	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 4	BNB	Ave	1349331 31698408	2648622	4738323	12054342	22816721	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 5	BNB	Ave	1365459 29530883	2652182	4648316	11522445	21544167	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 1	BNB	Ave	4734020 120112760	9331031	16446638	43242620	84916906	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 2	BNB	Ave	5950694 155185984	11661159	21041403	55937491	108605559	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 3	BNB	Ave	5319241 141075440	10445308	18859126	50731062	98659742	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 4	BNB	Ave	10812206 316594532	21959354	40746255	111517067	219493474	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 5	BNB	Ave	4794708 125251939	9414238	16864647	44714225	86978416	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100304.D
Lims ID: std005 1232 1262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 14:33:12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-004
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:26 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:41:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	84889002	0.0500	0.0500	
2	3.621	3.619	0.002	219411292	0.0500	0.0500	
4 PCB-1232							
1	4.896	4.896	0.000	1888784	0.0500	0.0546	
1	5.405	5.405	0.000	1462830	0.0500	0.0558	
1	6.036	6.036	0.000	3125695	0.0500	0.0538	
1	6.211	6.211	0.000	1349331	0.0500	0.0547	
1	6.748	6.748	0.000	1365459	0.0500	0.0569	
		Average of Peak Amounts =				0.0552	
2	5.815	5.815	0.000	5291287	0.0500	0.0603	
2	6.397	6.397	0.000	4493288	0.0500	0.0604	
2	7.011	7.011	0.000	8445890	0.0500	0.0581	
2	7.188	7.188	0.000	3624587	0.0500	0.0590	
2	7.557	7.557	0.000	1307360	0.0500	0.0579	
		Average of Peak Amounts =				0.0592	
						RPD = 6.99	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.591	8.591	0.000	4734020	0.0500	0.0534	
1	9.055	9.055	0.000	5950694	0.0500	0.0527	
1	9.338	9.338	0.000	5319241	0.0500	0.0523	
1	9.702	9.702	0.000	10812206	0.0500	0.0492	
1	10.075	10.075	0.000	4794708	0.0500	0.0528	
		Average of Peak Amounts =				0.0521	
2	9.591	9.591	0.000	9230897	0.0500	0.0579	
2	10.123	10.123	0.000	13107948	0.0500	0.0586	
2	10.455	10.455	0.000	11658979	0.0500	0.0569	
2	10.725	10.725	0.000	22137727	0.0500	0.0550	
2	11.092	11.092	0.000	16194804	0.0500	0.0559	
		Average of Peak Amounts =				0.0569	
						RPD = 8.76	

Reagents:

SG3262@.05PPM_00009 Amount Added: 1.00 Units: mL

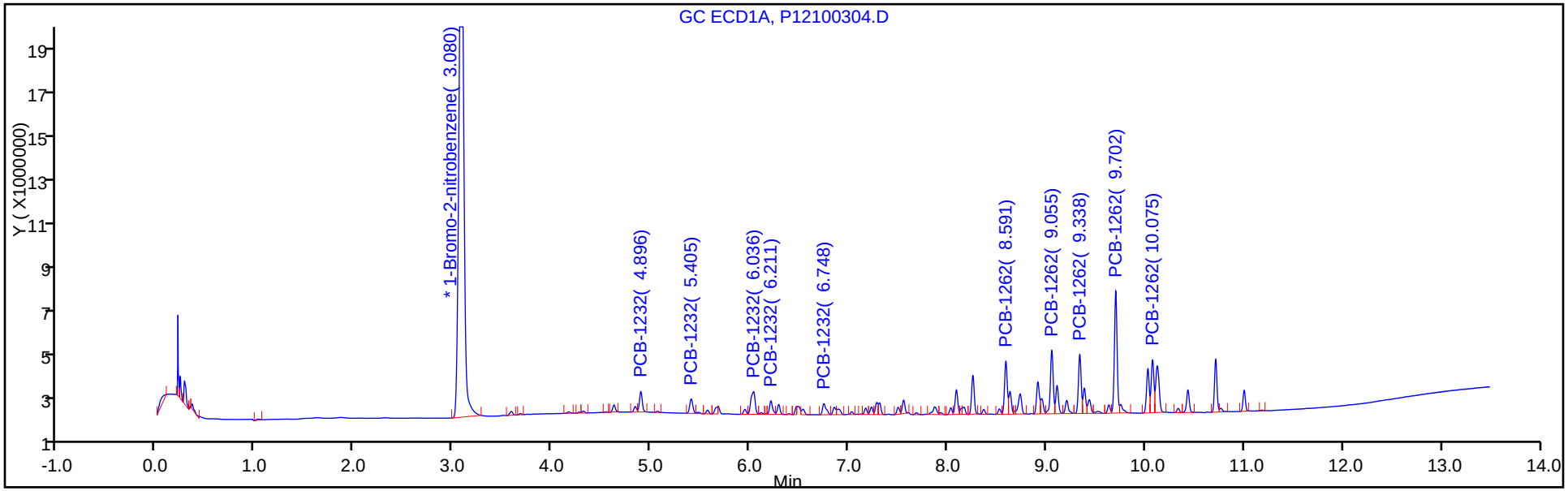
Report Date: 04-Oct-2017 08:16:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

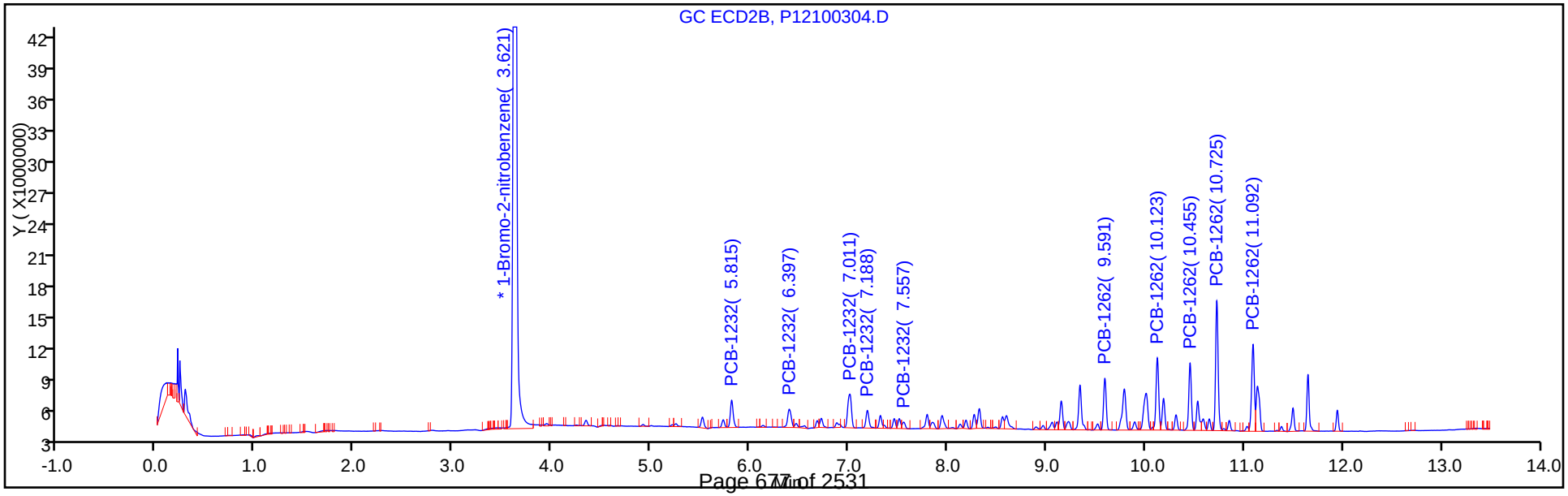
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100304.D

Injection Date:	03-Oct-2017 14:33:12	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1232 1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100305.D
Lims ID: std01 1232 1262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 14:50:55 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-005
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:33 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:58:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.082	3.076	0.006	85128398	0.0500	0.0500	
2	3.623	3.619	0.004	235587601	0.0500	0.0500	
4 PCB-1232							M
1	4.897	4.896	0.001	3940479	0.1000	0.1136	
1	5.407	5.405	0.002	2916982	0.1000	0.1109	
1	6.037	6.036	0.001	6250089	0.1000	0.1073	M
1	6.213	6.211	0.002	2648622	0.1000	0.1071	M
1	6.749	6.748	0.001	2652182	0.1000	0.1102	
		Average of Peak Amounts =				0.1098	
2	5.817	5.815	0.002	10704927	0.1000	0.1137	
2	6.398	6.397	0.001	8693287	0.1000	0.1088	
2	7.012	7.011	0.001	16435799	0.1000	0.1053	
2	7.191	7.188	0.003	7291160	0.1000	0.1106	
2	7.555	7.557	-0.002	2587261	0.1000	0.1067	
		Average of Peak Amounts =				0.1090	
						RPD = 0.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.591	8.591	0.000	9331031	0.1000	0.1050	
1	9.056	9.055	0.001	11661159	0.1000	0.1030	
1	9.339	9.338	0.001	10445308	0.1000	0.1023	
1	9.702	9.702	0.000	21959354	0.1000	0.0997	
1	10.075	10.075	0.000	9414238	0.1000	0.1034	
		Average of Peak Amounts =				0.1027	
2	9.593	9.591	0.002	18133536	0.1000	0.1060	
2	10.124	10.123	0.001	25414620	0.1000	0.1058	
2	10.455	10.455	0.000	23695509	0.1000	0.1077	
2	10.725	10.725	0.000	44449575	0.1000	0.1028	
2	11.092	11.092	0.000	32333306	0.1000	0.1040	
		Average of Peak Amounts =				0.1052	
						RPD = 2.46	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG3262@0.1PPM_00010 Amount Added: 1.00 Units: mL

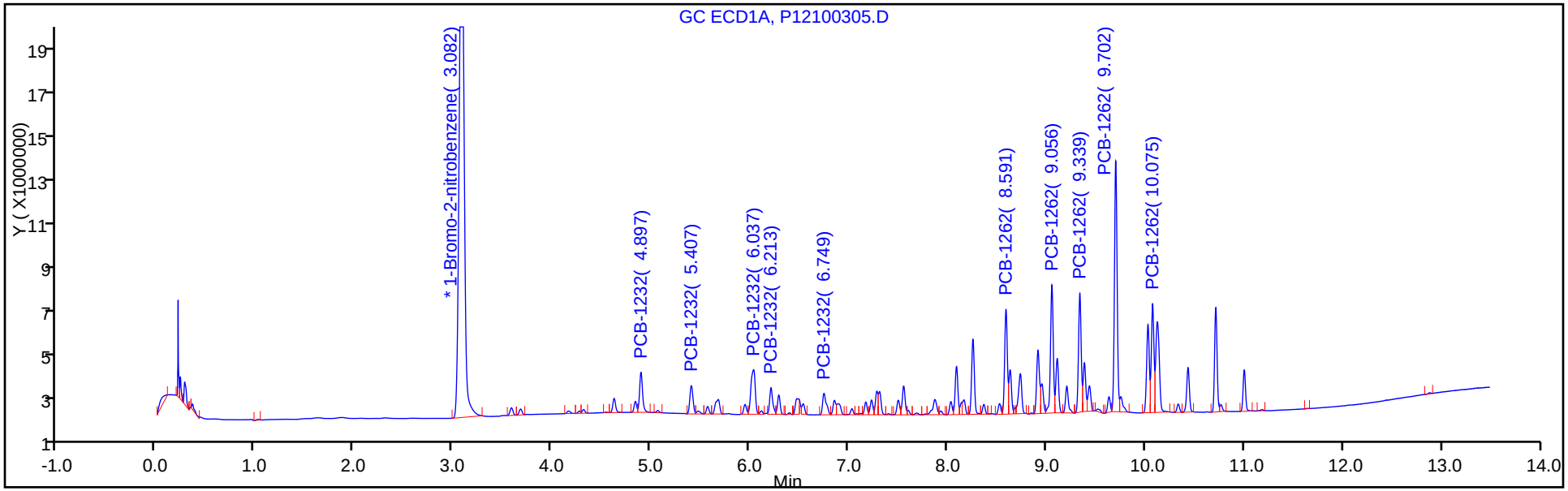
Report Date: 04-Oct-2017 08:16:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

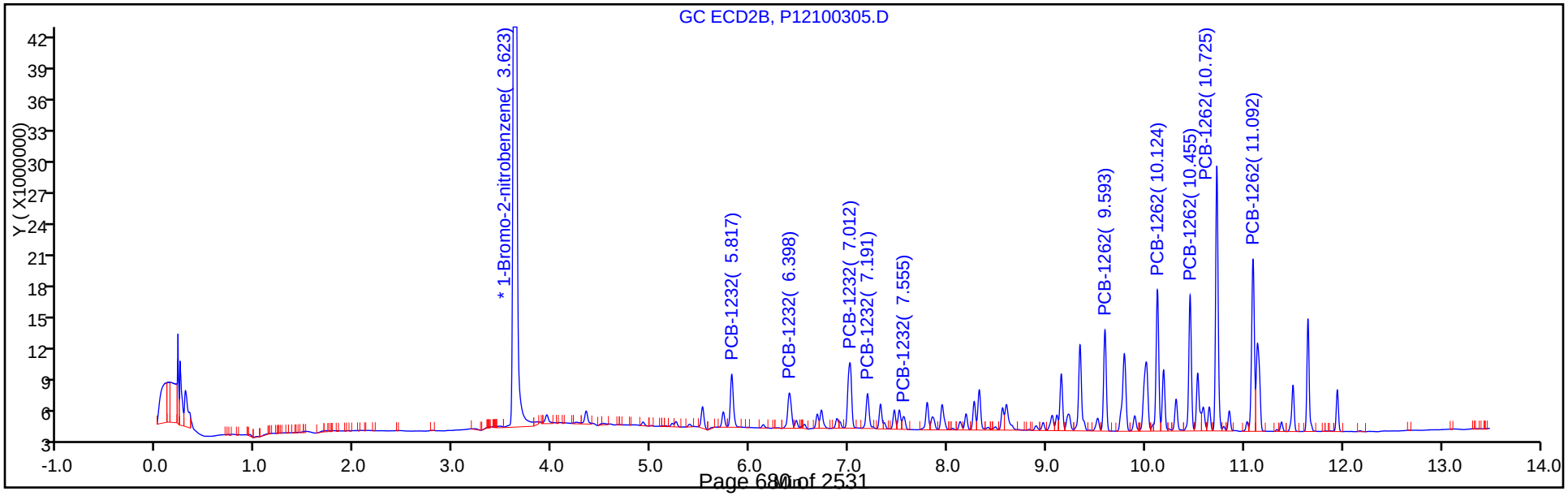
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100305.D

Injection Date:	03-Oct-2017 14:50:55	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1232 1262			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:16:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100305.D

Injection Date: 03-Oct-2017 14:50:55 Instrument ID: A2HP12

Lims ID: std01 1232 1262

Client ID:

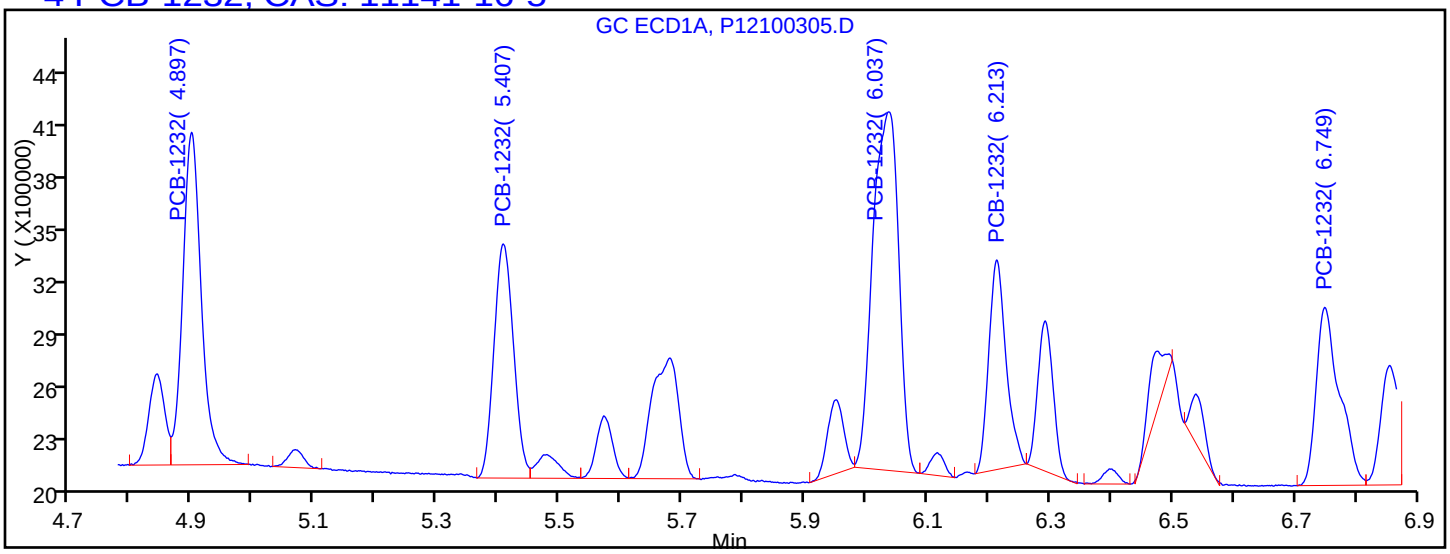
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

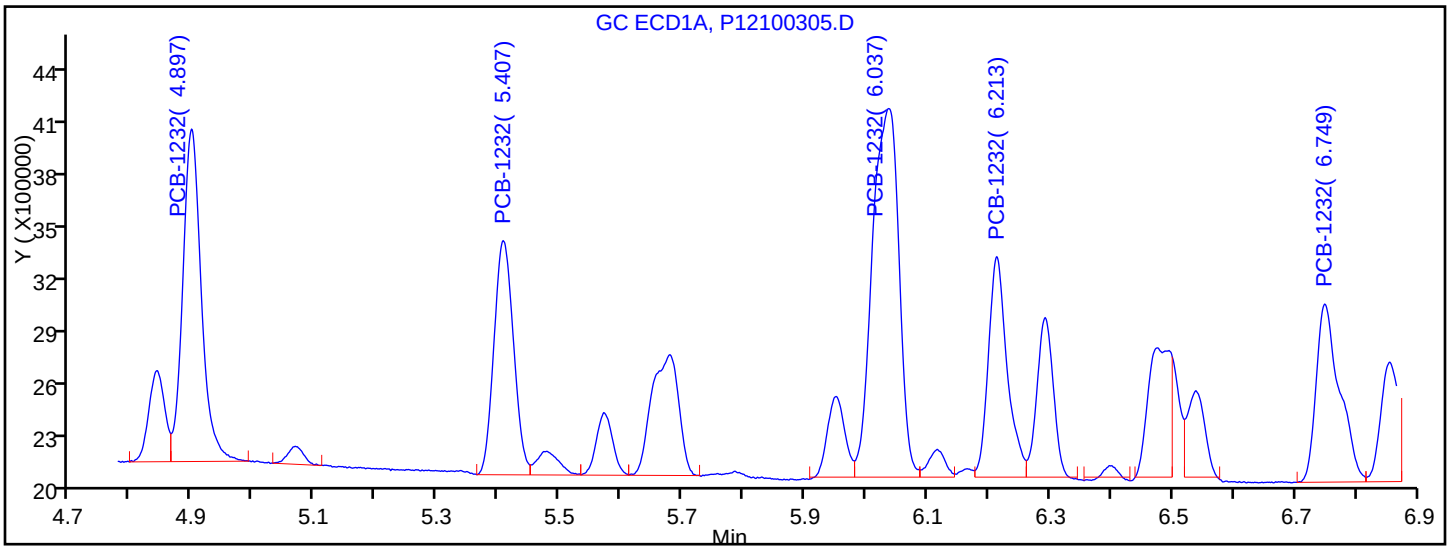
Column: Detector GC ECD1A

4 PCB-1232, CAS: 11141-16-5



Processing Integration Results

4.897	Response = 3940479
5.407	Response = 2916982
6.037	Response = 5888409
6.213	Response = 2319685
6.749	Response = 2652182



Manual Integration Results

4.897	Response = 3940479	
5.407	Response = 2916982	
6.037	Response = 6250089	M
6.213	Response = 2648622	M
6.749	Response = 2652182	

Reviewer: hassl, 04-Oct-2017 05:58:13

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100306.D
Lims ID: std02 1232 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 15:08:34 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-006
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:38 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:58:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.068	3.076	-0.008	77836365	0.0500	0.0500	
2	3.616	3.619	-0.003	209532291	0.0500	0.0500	
4 PCB-1232							
1	4.894	4.896	-0.002	6685279	0.2000	0.2108	
1	5.404	5.405	-0.001	4990861	0.2000	0.2076	
1	6.036	6.036	0.000	10813004	0.2000	0.2030	
1	6.212	6.211	0.001	4738323	0.2000	0.2096	
1	6.749	6.748	0.001	4648316	0.2000	0.2113	
		Average of Peak Amounts =				0.2084	
2	5.814	5.815	-0.001	17167115	0.2000	0.2049	
2	6.397	6.397	0.000	14938543	0.2000	0.2102	
2	7.011	7.011	0.000	29470988	0.2000	0.2123	
2	7.189	7.188	0.001	12699932	0.2000	0.2166	
2	7.556	7.557	-0.001	4701032	0.2000	0.2180	
		Average of Peak Amounts =				0.2124	
						RPD = 1.91	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.592	8.591	0.001	16446638	0.2000	0.2025	
1	9.057	9.055	0.002	21041403	0.2000	0.2032	
1	9.339	9.338	0.001	18859126	0.2000	0.2021	
1	9.704	9.702	0.002	40746255	0.2000	0.2023	
1	10.077	10.075	0.002	16864647	0.2000	0.2027	
		Average of Peak Amounts =				0.2025	
2	9.593	9.591	0.002	32072699	0.2000	0.2107	
2	10.124	10.123	0.001	44587201	0.2000	0.2088	
2	10.454	10.455	-0.001	39650628	0.2000	0.2026	
2	10.724	10.725	-0.001	78782259	0.2000	0.2048	
2	11.092	11.092	0.000	57463477	0.2000	0.2077	
		Average of Peak Amounts =				0.2069	
						RPD = 2.15	

Reagents:

SG3262@.2PPM_00012 Amount Added: 1.00 Units: mL

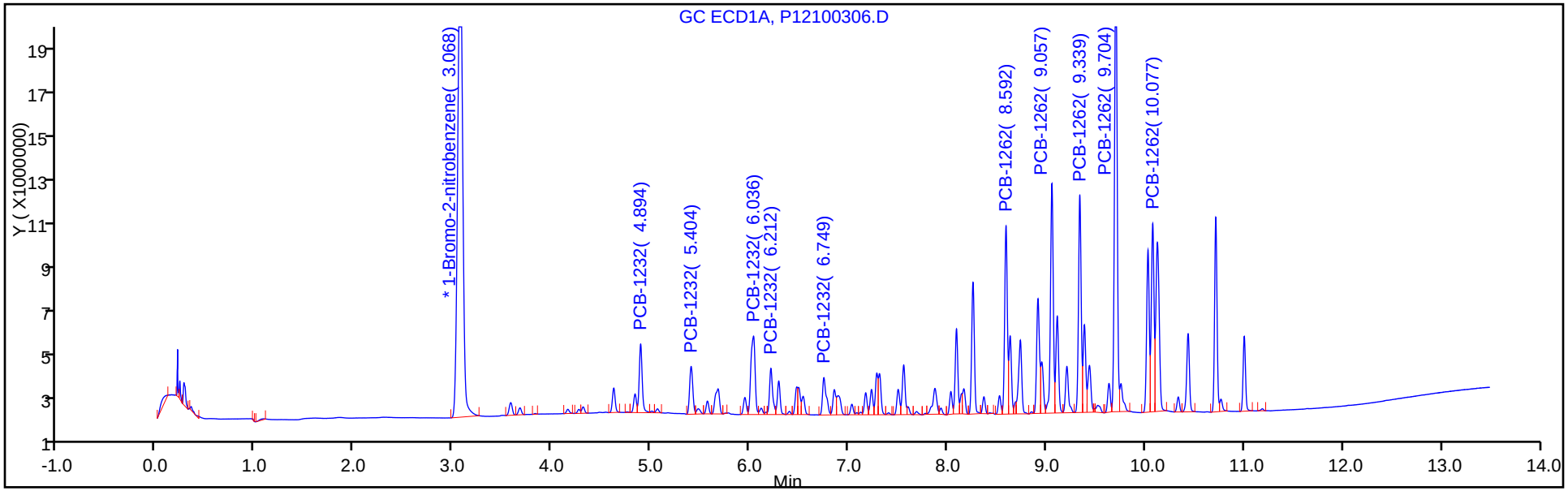
Report Date: 04-Oct-2017 08:16:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

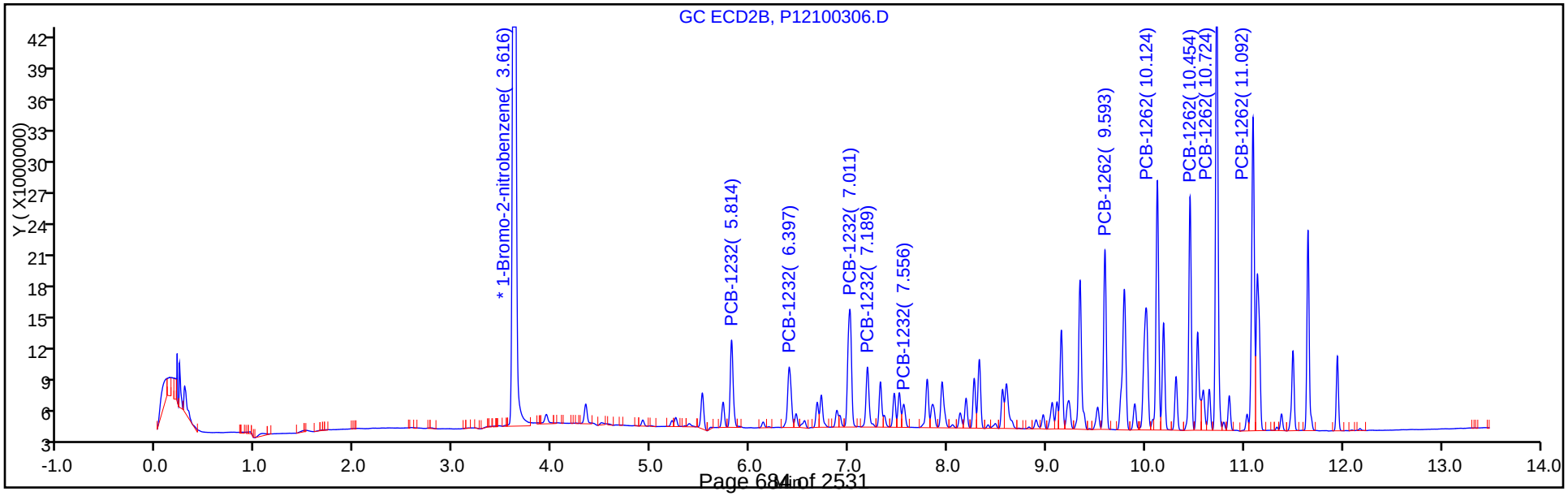
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100306.D

Injection Date:	03-Oct-2017 15:08:34	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1232 1262			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100307.D
Lims ID: std05 1232 1262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 15:26:13 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-007
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:43 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:00:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.078	3.076	0.003	88477848	0.0500	0.0500	
2	3.620	3.619	0.001	243885393	0.0500	0.0500	
4 PCB-1232							
1	4.894	4.896	-0.002	16515236	0.5000	0.4581	
1	5.404	5.405	-0.001	12642015	0.5000	0.4625	
1	6.036	6.036	0.000	28376305	0.5000	0.4686	
1	6.212	6.211	0.001	12054342	0.5000	0.4690	
1	6.748	6.748	0.000	11522445	0.5000	0.4607	
		Average of Peak Amounts =				0.4638	
2	5.814	5.815	-0.001	43137541	0.5000	0.4424	
2	6.398	6.397	0.001	36443785	0.5000	0.4406	
2	7.010	7.011	-0.001	72473050	0.5000	0.4486	
2	7.188	7.188	0.000	29907210	0.5000	0.4383	
2	7.556	7.557	-0.001	11359125	0.5000	0.4526	
		Average of Peak Amounts =				0.4445	
						RPD = 4.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.589	8.591	-0.002	43242620	0.5000	0.4683	
1	9.054	9.055	-0.001	55937491	0.5000	0.4753	
1	9.338	9.338	0.000	50731062	0.5000	0.4782	
1	9.701	9.702	-0.001	111517067	0.5000	0.4870	
1	10.074	10.075	-0.001	44714225	0.5000	0.4727	
		Average of Peak Amounts =				0.4763	
2	9.592	9.591	0.001	83171627	0.5000	0.4695	
2	10.123	10.123	0.000	117269894	0.5000	0.4718	
2	10.454	10.455	-0.001	109090596	0.5000	0.4789	
2	10.724	10.725	-0.001	216198587	0.5000	0.4829	
2	11.091	11.092	-0.001	152268330	0.5000	0.4729	
		Average of Peak Amounts =				0.4752	
						RPD = 0.23	

Reagents:

SG3262@0.5PPM_00019 Amount Added: 1.00 Units: mL

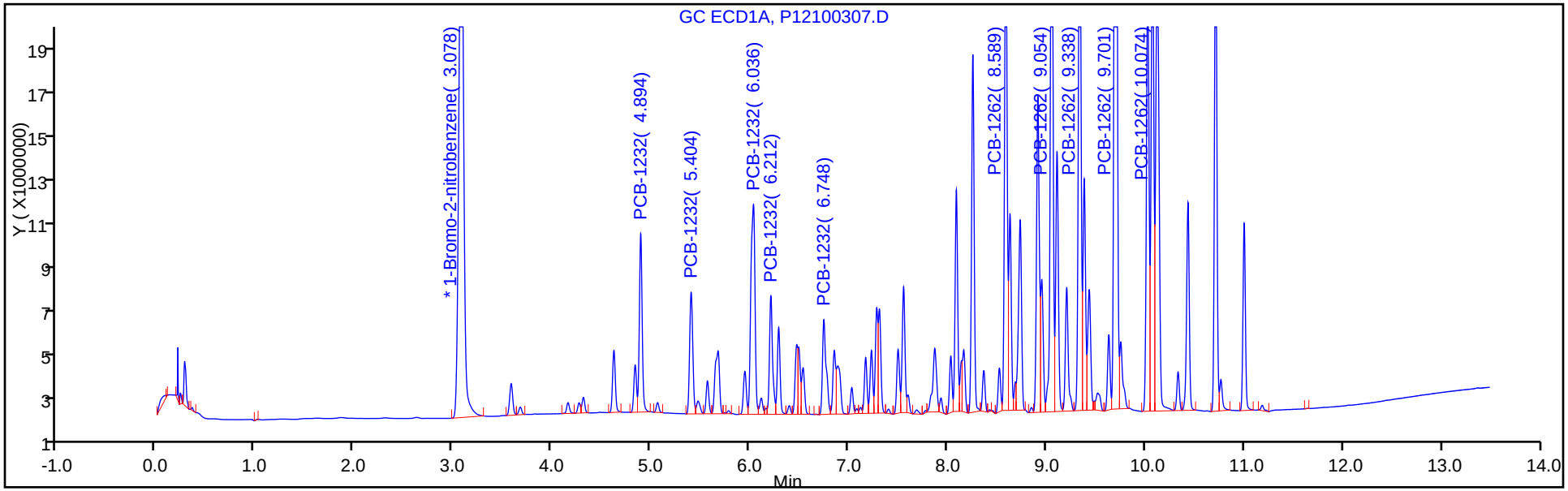
Report Date: 04-Oct-2017 08:16:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

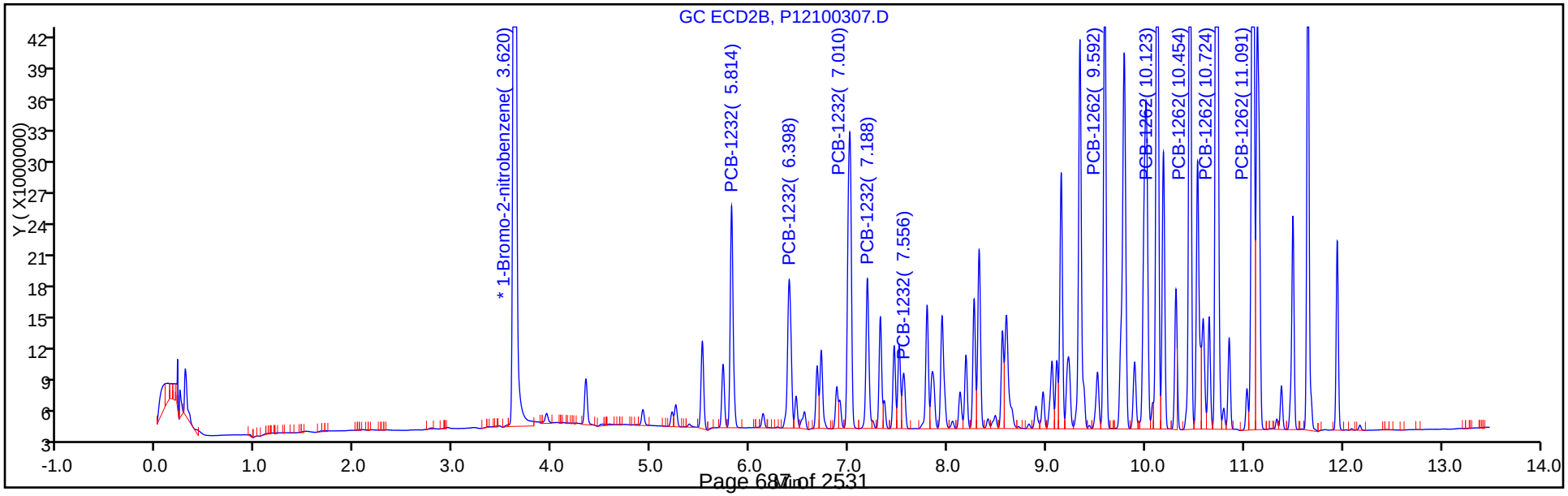
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100307.D

Injection Date:	03-Oct-2017 15:26:13	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1232 1262			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100308.D
Lims ID: std1 1232 1262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 15:43:51 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-008
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:03:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.078	3.076	0.003	84521313	0.0500	0.0500	
2	3.621	3.619	0.002	235119723	0.0500	0.0500	
4 PCB-1232							
1	4.896	4.896	0.000	31022672	1.00	0.9007	
1	5.405	5.405	0.000	23831789	1.00	0.9128	
1	6.037	6.036	0.001	54845662	1.00	0.9480	
1	6.212	6.211	0.001	22816721	1.00	0.9293	
1	6.748	6.748	0.000	21544167	1.00	0.9017	
		Average of Peak Amounts =				0.9185	
2	5.815	5.815	0.000	86051087	1.00	0.9154	
2	6.399	6.397	0.002	72243456	1.00	0.9061	
2	7.012	7.011	0.001	146202953	1.00	0.9388	
2	7.189	7.188	0.001	59217327	1.00	0.9002	
2	7.556	7.557	-0.001	22418079	1.00	0.9266	
		Average of Peak Amounts =				0.9174	
						RPD = 0.12	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.591	8.591	0.000	84916906	1.00	0.9626	
1	9.055	9.055	0.000	108605559	1.00	0.9661	
1	9.337	9.338	-0.001	98659742	1.00	0.9735	
1	9.702	9.702	0.000	219493474	1.00	1.00	
1	10.075	10.075	0.000	86978416	1.00	0.9626	
		Average of Peak Amounts =				0.9736	
2	9.592	9.591	0.001	153213502	1.00	0.8970	
2	10.123	10.123	0.000	212557357	1.00	0.8870	
2	10.453	10.455	-0.002	199270684	1.00	0.9075	
2	10.724	10.725	-0.001	402726688	1.00	0.9331	
2	11.092	11.092	0.000	286021430	1.00	0.9214	
		Average of Peak Amounts =				0.9092	
						RPD = 6.84	

Reagents:

SG3262@1.0PPM_00012 Amount Added: 1.00 Units: mL

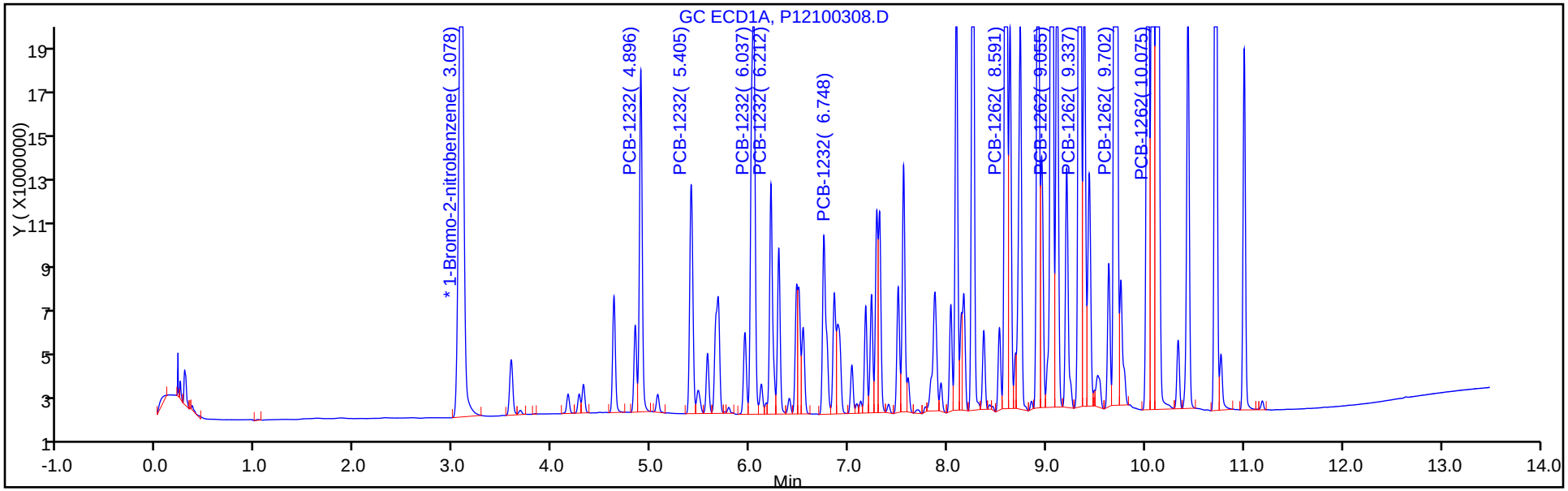
Report Date: 04-Oct-2017 08:16:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

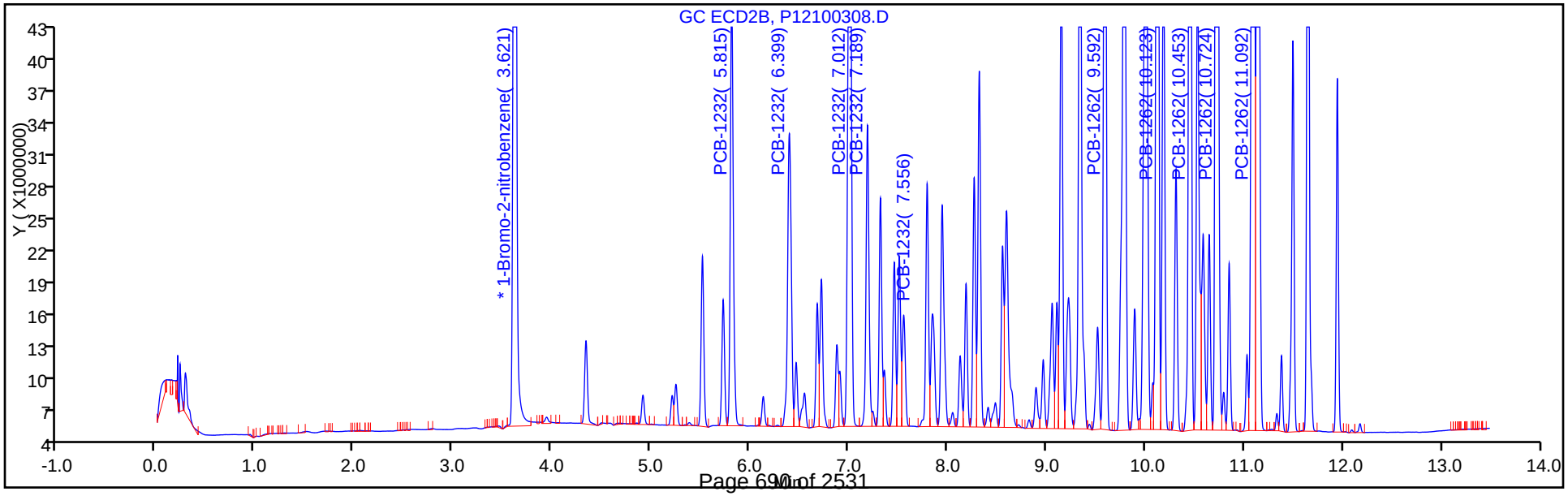
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100308.D

Injection Date:	03-Oct-2017 15:43:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1232 1262			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100309.D
Lims ID: std15 1232 1262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 16:01:34 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-009
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:52 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:23:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.070	3.076	-0.005	79118525	0.0500	0.0500	
2	3.615	3.619	-0.004	225469573	0.0500	0.0500	
4 PCB-1232							
1	4.895	4.896	-0.001	43592455	1.50	1.35	
1	5.405	5.405	0.000	32969253	1.50	1.35	
1	6.037	6.036	0.001	77288359	1.50	1.43	
1	6.212	6.211	0.001	31698408	1.50	1.38	
1	6.748	6.748	0.000	29530883	1.50	1.32	
		Average of Peak Amounts =				1.37	
2	5.815	5.815	0.000	112506340	1.50	1.25	
2	6.398	6.397	0.001	99273345	1.50	1.30	
2	7.010	7.011	-0.001	198627600	1.50	1.33	
2	7.189	7.188	0.001	80711579	1.50	1.28	
2	7.556	7.557	-0.001	29681521	1.50	1.28	
		Average of Peak Amounts =				1.29	
						RPD = 5.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.589	8.591	-0.002	120112760	1.50	1.45	
1	9.055	9.055	0.000	155185984	1.50	1.47	
1	9.336	9.338	-0.002	141075440	1.50	1.49	
1	9.701	9.702	-0.001	316594532	1.50	1.55	
1	10.074	10.075	-0.001	125251939	1.50	1.48	
		Average of Peak Amounts =				1.49	
2	9.592	9.591	0.001	219304124	1.50	1.34	
2	10.121	10.123	-0.002	308430770	1.50	1.34	
2	10.453	10.455	-0.002	286363620	1.50	1.36	
2	10.724	10.725	-0.001	589533125	1.50	1.42	
2	11.091	11.092	-0.001	418169019	1.50	1.40	
		Average of Peak Amounts =				1.37	
						RPD = 8.01	

Reagents:

SG3262@1.5PPM_00001 Amount Added: 1.00 Units: mL

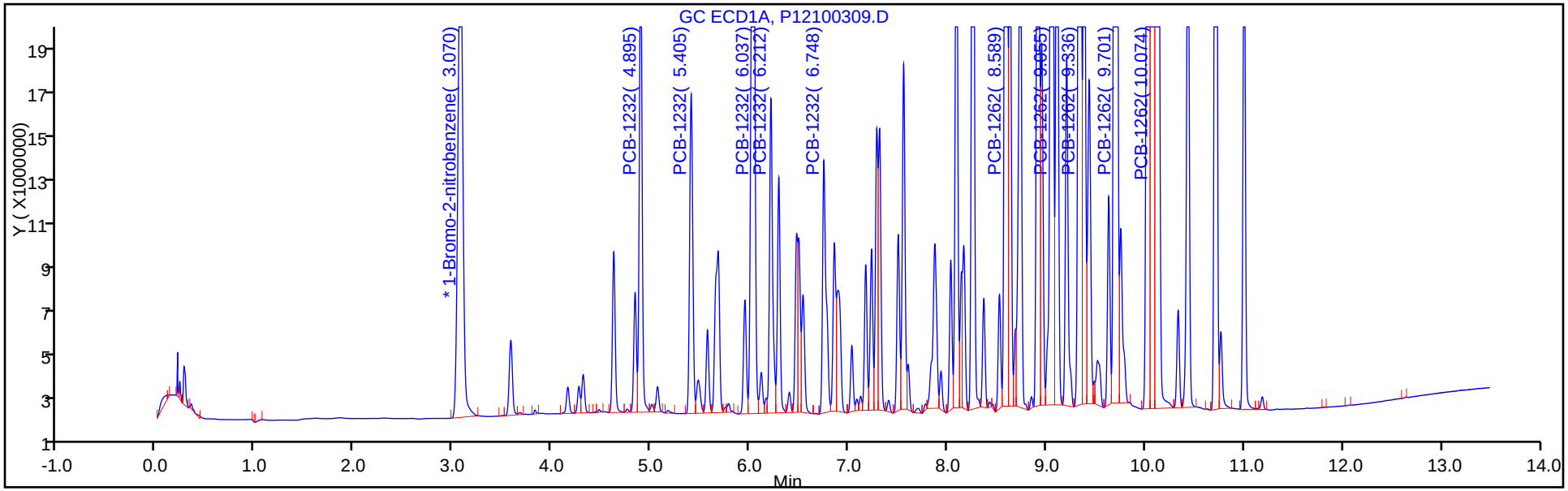
Report Date: 04-Oct-2017 08:16:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

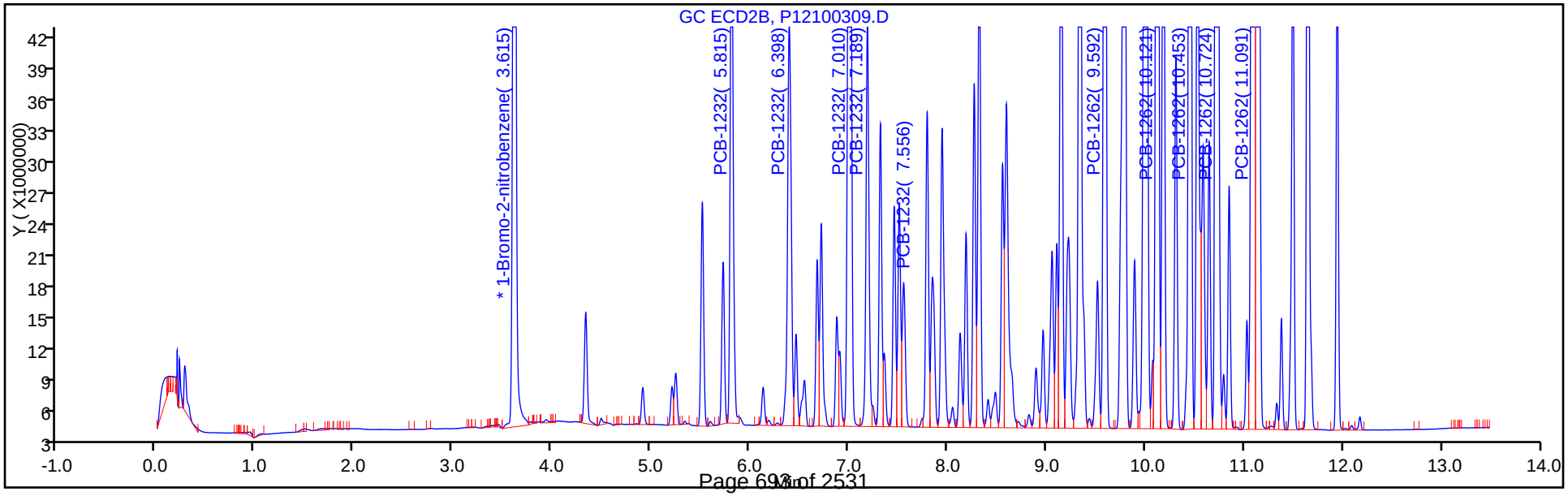
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100309.D

Injection Date:	03-Oct-2017 16:01:34	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std15 1232 1262			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 14:33 Calibration End Date: 10/03/2017 16:01 Calibration ID: 41716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/4	P12100304.D
Level 2	STD01 240-297285/5	P12100305.D
Level 3	STD02 240-297285/6	P12100306.D
Level 4	STD05 240-297285/7	P12100307.D
Level 5	STD1 240-297285/8	P12100308.D
Level 6	STD15 240-297285/9	P12100309.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	0.0241 0.0166	0.0227	0.0205	0.0177	0.0183	Ave		0.0200				14.9		20.0			
PCB-1232 Peak 2	0.0205 0.0147	0.0185	0.0178	0.0149	0.0154	Ave		0.0170				13.8		20.0			
PCB-1232 Peak 3	0.0385 0.0294	0.0349	0.0352	0.0297	0.0311	Ave		0.0331				11.0		20.0			
PCB-1232 Peak 4	0.0165 0.0119	0.0155	0.0152	0.0123	0.0126	Ave		0.0140				14.0		20.0			
PCB-1232 Peak 5	0.0060 0.0044	0.0055	0.0056	0.0047	0.0048	Ave		0.0051				12.1		20.0			
PCB-1262 Peak 1	0.0421 0.0324	0.0385	0.0383	0.0341	0.0326	Ave		0.0363				10.7		20.0			
PCB-1262 Peak 2	0.0597 0.0456	0.0539	0.0532	0.0481	0.0452	Ave		0.0510				11.1		20.0			
PCB-1262 Peak 3	0.0531 0.0423	0.0503	0.0473	0.0447	0.0424	Ave		0.0467				9.4		20.0			
PCB-1262 Peak 4	0.1009 0.0872	0.0943	0.0940	0.0886	0.0856	Ave		0.0918				6.2		20.0			
PCB-1262 Peak 5	0.0738 0.0618	0.0686	0.0686	0.0624	0.0608	Ave		0.0660				7.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 14:33 Calibration End Date: 10/03/2017 16:01 Calibration ID: 41716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/4	P12100304.D
Level 2	STD01 240-297285/5	P12100305.D
Level 3	STD02 240-297285/6	P12100306.D
Level 4	STD05 240-297285/7	P12100307.D
Level 5	STD1 240-297285/8	P12100308.D
Level 6	STD15 240-297285/9	P12100309.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Ave	5291287 112506340	10704927	17167115	43137541	86051087	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 2	BNB	Ave	4493288 99273345	8693287	14938543	36443785	72243456	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 3	BNB	Ave	8445890 198627600	16435799	29470988	72473050	146202953	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 4	BNB	Ave	3624587 80711579	7291160	12699932	29907210	59217327	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1232 Peak 5	BNB	Ave	1307360 29681521	2587261	4701032	11359125	22418079	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 1	BNB	Ave	9230897 219304124	18133536	32072699	83171627	153213502	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 2	BNB	Ave	13107948 308430770	25414620	44587201	117269894	212557357	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 3	BNB	Ave	11658979 286363620	23695509	39650628	109090596	199270684	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 4	BNB	Ave	22137727 589533125	44449575	78782259	216198587	402726688	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1262 Peak 5	BNB	Ave	16194804 418169019	32333306	57463477	152268330	286021430	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100304.D
Lims ID: std005 1232 1262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 14:33:12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-004
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:26 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:41:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	84889002	0.0500	0.0500	
2	3.621	3.619	0.002	219411292	0.0500	0.0500	
4 PCB-1232							
1	4.896	4.896	0.000	1888784	0.0500	0.0546	
1	5.405	5.405	0.000	1462830	0.0500	0.0558	
1	6.036	6.036	0.000	3125695	0.0500	0.0538	
1	6.211	6.211	0.000	1349331	0.0500	0.0547	
1	6.748	6.748	0.000	1365459	0.0500	0.0569	
		Average of Peak Amounts =				0.0552	
2	5.815	5.815	0.000	5291287	0.0500	0.0603	
2	6.397	6.397	0.000	4493288	0.0500	0.0604	
2	7.011	7.011	0.000	8445890	0.0500	0.0581	
2	7.188	7.188	0.000	3624587	0.0500	0.0590	
2	7.557	7.557	0.000	1307360	0.0500	0.0579	
		Average of Peak Amounts =				0.0592	
						RPD = 6.99	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.591	8.591	0.000	4734020	0.0500	0.0534	
1	9.055	9.055	0.000	5950694	0.0500	0.0527	
1	9.338	9.338	0.000	5319241	0.0500	0.0523	
1	9.702	9.702	0.000	10812206	0.0500	0.0492	
1	10.075	10.075	0.000	4794708	0.0500	0.0528	
		Average of Peak Amounts =				0.0521	
2	9.591	9.591	0.000	9230897	0.0500	0.0579	
2	10.123	10.123	0.000	13107948	0.0500	0.0586	
2	10.455	10.455	0.000	11658979	0.0500	0.0569	
2	10.725	10.725	0.000	22137727	0.0500	0.0550	
2	11.092	11.092	0.000	16194804	0.0500	0.0559	
		Average of Peak Amounts =				0.0569	
						RPD = 8.76	

Reagents:

SG3262@.05PPM_00009 Amount Added: 1.00 Units: mL

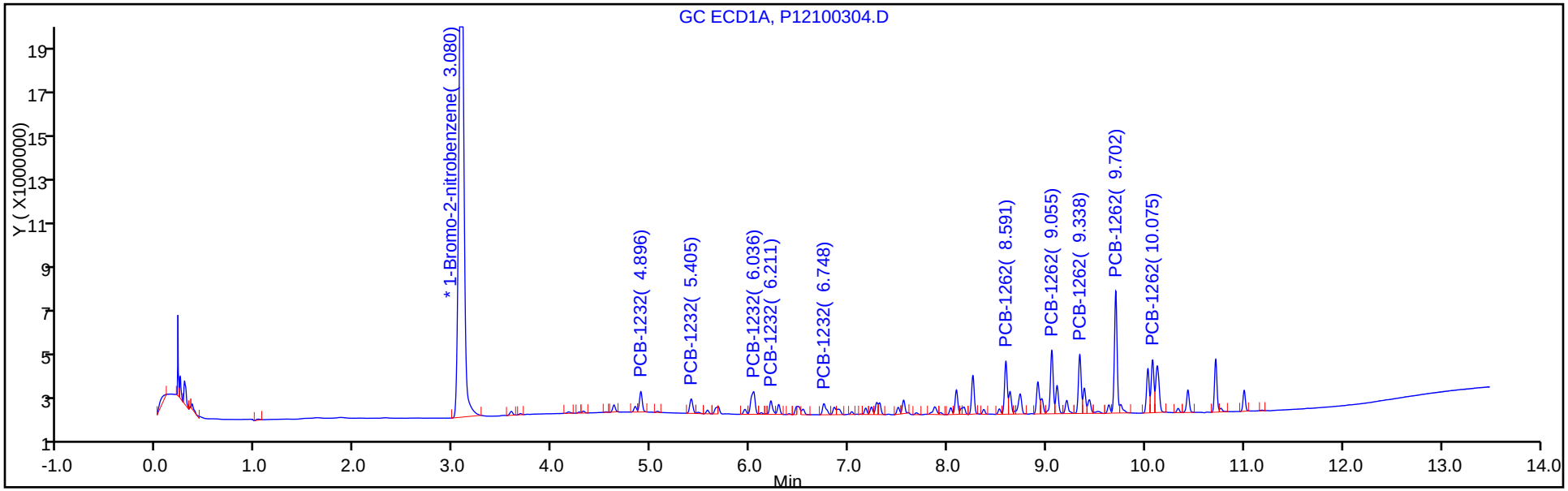
Report Date: 04-Oct-2017 08:16:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

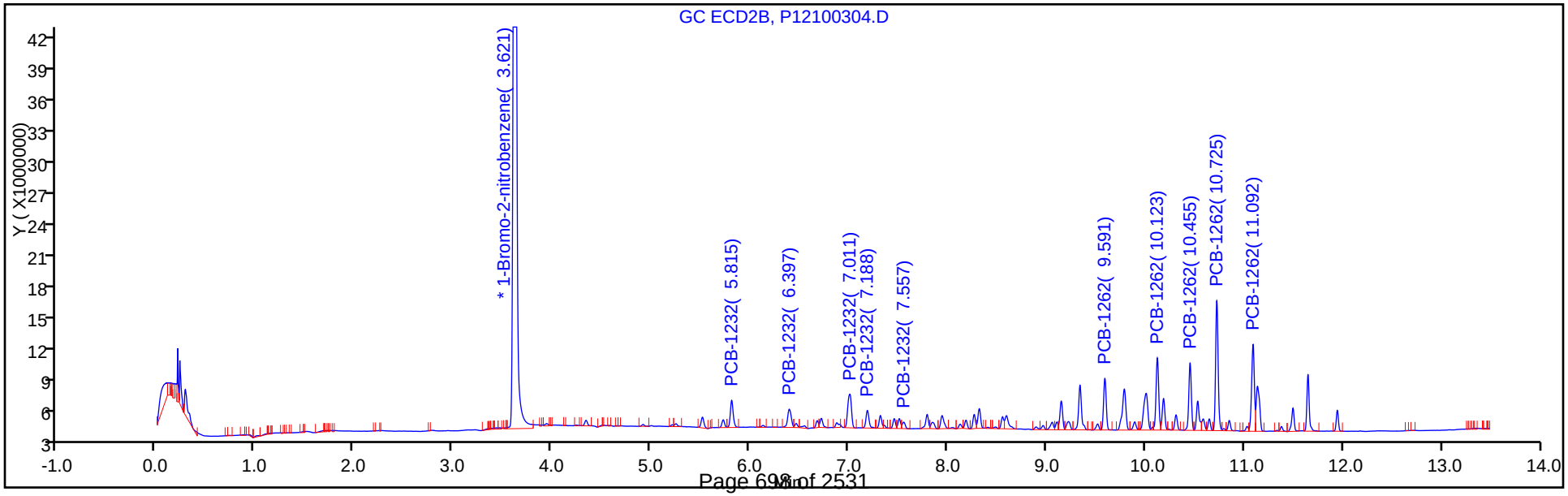
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100304.D

Injection Date:	03-Oct-2017 14:33:12	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1232 1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100305.D
Lims ID: std01 1232 1262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 14:50:55 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-005
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:33 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:58:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.082	3.076	0.006	85128398	0.0500	0.0500	
2	3.623	3.619	0.004	235587601	0.0500	0.0500	
4 PCB-1232							M
1	4.897	4.896	0.001	3940479	0.1000	0.1136	
1	5.407	5.405	0.002	2916982	0.1000	0.1109	
1	6.037	6.036	0.001	6250089	0.1000	0.1073	M
1	6.213	6.211	0.002	2648622	0.1000	0.1071	M
1	6.749	6.748	0.001	2652182	0.1000	0.1102	
		Average of Peak Amounts =				0.1098	
2	5.817	5.815	0.002	10704927	0.1000	0.1137	
2	6.398	6.397	0.001	8693287	0.1000	0.1088	
2	7.012	7.011	0.001	16435799	0.1000	0.1053	
2	7.191	7.188	0.003	7291160	0.1000	0.1106	
2	7.555	7.557	-0.002	2587261	0.1000	0.1067	
		Average of Peak Amounts =				0.1090	
						RPD = 0.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.591	8.591	0.000	9331031	0.1000	0.1050	
1	9.056	9.055	0.001	11661159	0.1000	0.1030	
1	9.339	9.338	0.001	10445308	0.1000	0.1023	
1	9.702	9.702	0.000	21959354	0.1000	0.0997	
1	10.075	10.075	0.000	9414238	0.1000	0.1034	
		Average of Peak Amounts =				0.1027	
2	9.593	9.591	0.002	18133536	0.1000	0.1060	
2	10.124	10.123	0.001	25414620	0.1000	0.1058	
2	10.455	10.455	0.000	23695509	0.1000	0.1077	
2	10.725	10.725	0.000	44449575	0.1000	0.1028	
2	11.092	11.092	0.000	32333306	0.1000	0.1040	
		Average of Peak Amounts =				0.1052	
						RPD = 2.46	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG3262@0.1PPM_00010 Amount Added: 1.00 Units: mL

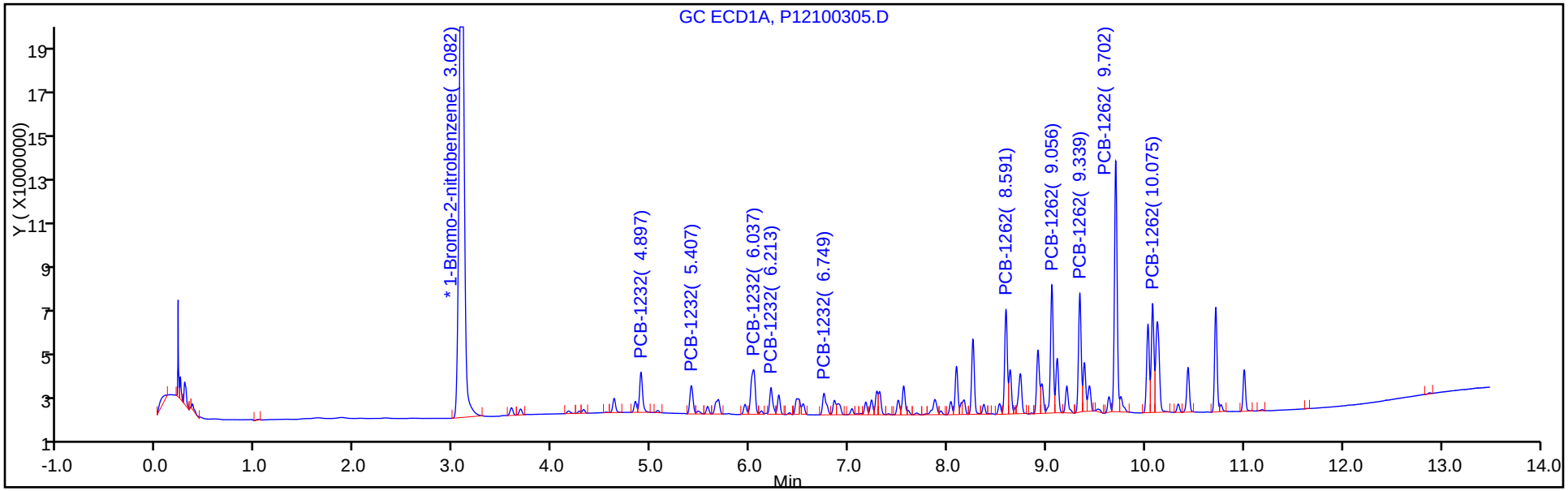
Report Date: 04-Oct-2017 08:16:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

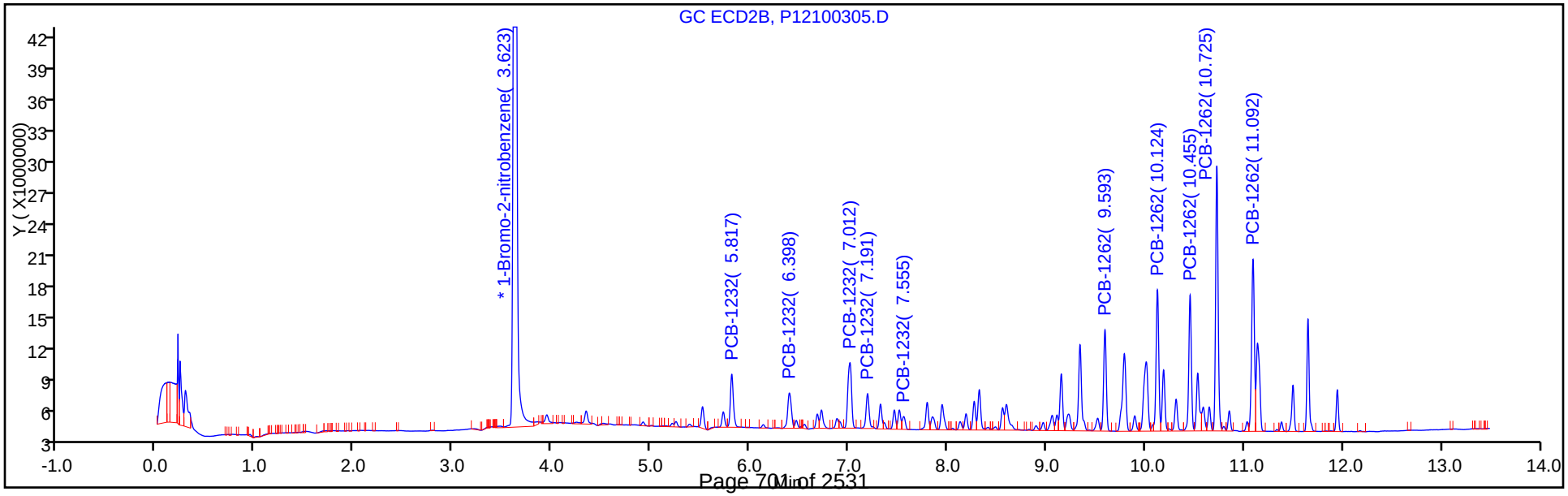
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100305.D

Injection Date:	03-Oct-2017 14:50:55	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1232 1262			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100306.D
Lims ID: std02 1232 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 15:08:34 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-006
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:38 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:58:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.068	3.076	-0.008	77836365	0.0500	0.0500	
2	3.616	3.619	-0.003	209532291	0.0500	0.0500	
4 PCB-1232							
1	4.894	4.896	-0.002	6685279	0.2000	0.2108	
1	5.404	5.405	-0.001	4990861	0.2000	0.2076	
1	6.036	6.036	0.000	10813004	0.2000	0.2030	
1	6.212	6.211	0.001	4738323	0.2000	0.2096	
1	6.749	6.748	0.001	4648316	0.2000	0.2113	
		Average of Peak Amounts =				0.2084	
2	5.814	5.815	-0.001	17167115	0.2000	0.2049	
2	6.397	6.397	0.000	14938543	0.2000	0.2102	
2	7.011	7.011	0.000	29470988	0.2000	0.2123	
2	7.189	7.188	0.001	12699932	0.2000	0.2166	
2	7.556	7.557	-0.001	4701032	0.2000	0.2180	
		Average of Peak Amounts =				0.2124	
						RPD = 1.91	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.592	8.591	0.001	16446638	0.2000	0.2025	
1	9.057	9.055	0.002	21041403	0.2000	0.2032	
1	9.339	9.338	0.001	18859126	0.2000	0.2021	
1	9.704	9.702	0.002	40746255	0.2000	0.2023	
1	10.077	10.075	0.002	16864647	0.2000	0.2027	
		Average of Peak Amounts =				0.2025	
2	9.593	9.591	0.002	32072699	0.2000	0.2107	
2	10.124	10.123	0.001	44587201	0.2000	0.2088	
2	10.454	10.455	-0.001	39650628	0.2000	0.2026	
2	10.724	10.725	-0.001	78782259	0.2000	0.2048	
2	11.092	11.092	0.000	57463477	0.2000	0.2077	
		Average of Peak Amounts =				0.2069	
						RPD = 2.15	

Reagents:

SG3262@.2PPM_00012 Amount Added: 1.00 Units: mL

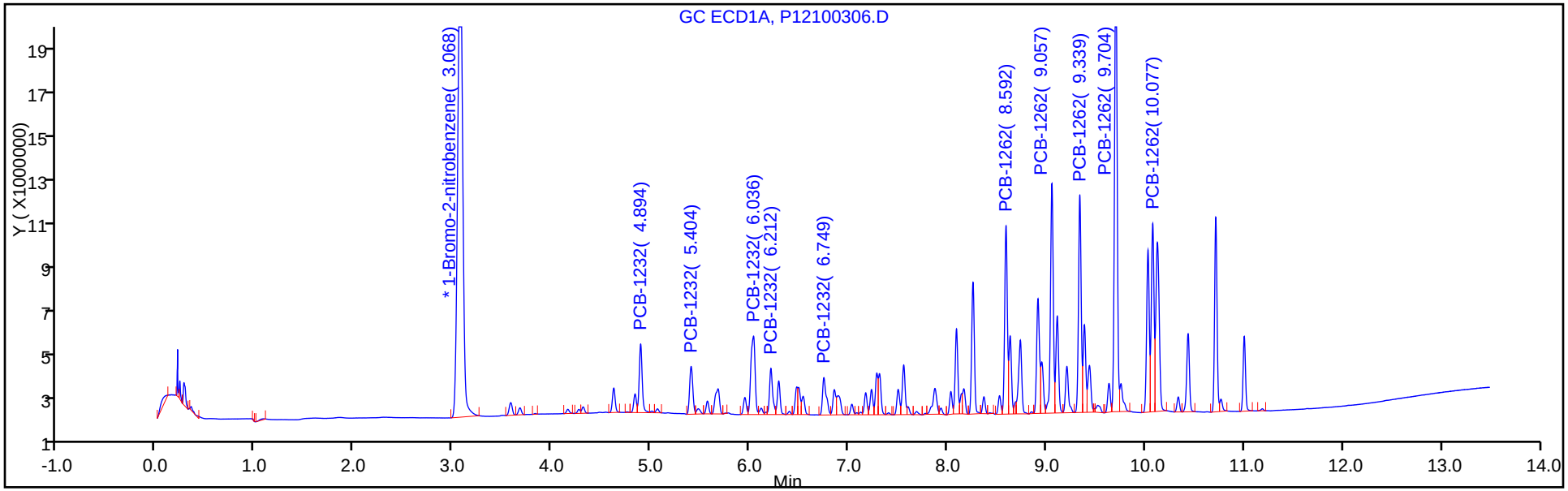
Report Date: 04-Oct-2017 08:16:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

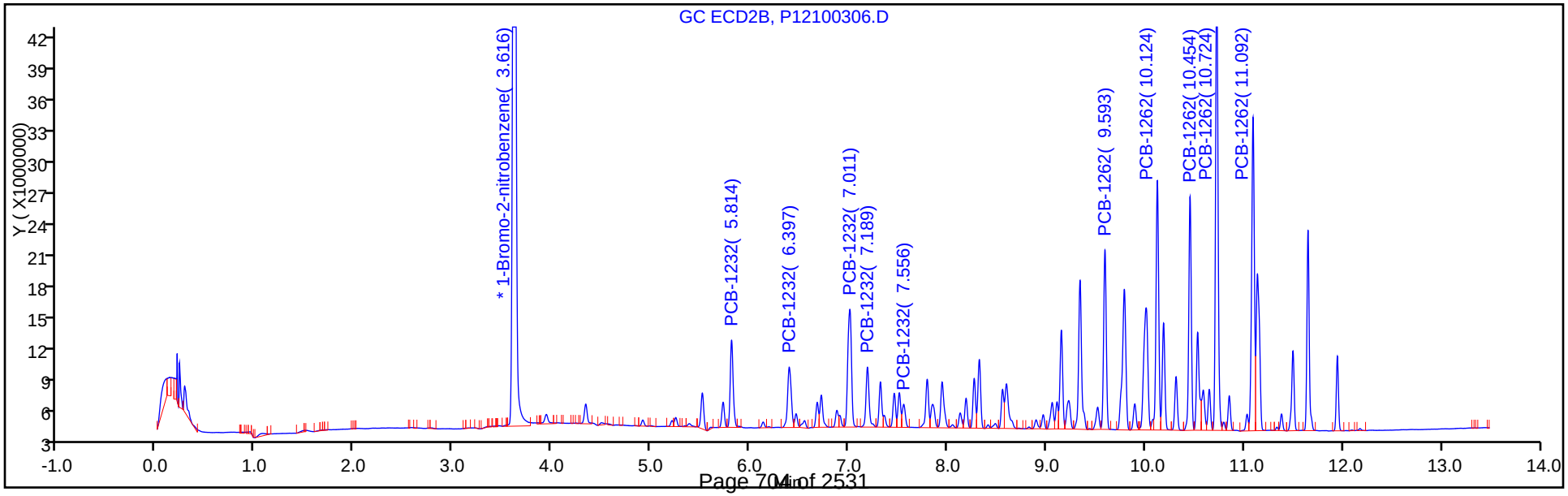
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100306.D

Injection Date:	03-Oct-2017 15:08:34	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1232 1262			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100307.D
Lims ID: std05 1232 1262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 15:26:13 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-007
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:43 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:00:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.078	3.076	0.003	88477848	0.0500	0.0500	
2	3.620	3.619	0.001	243885393	0.0500	0.0500	
4 PCB-1232							
1	4.894	4.896	-0.002	16515236	0.5000	0.4581	
1	5.404	5.405	-0.001	12642015	0.5000	0.4625	
1	6.036	6.036	0.000	28376305	0.5000	0.4686	
1	6.212	6.211	0.001	12054342	0.5000	0.4690	
1	6.748	6.748	0.000	11522445	0.5000	0.4607	
		Average of Peak Amounts =				0.4638	
2	5.814	5.815	-0.001	43137541	0.5000	0.4424	
2	6.398	6.397	0.001	36443785	0.5000	0.4406	
2	7.010	7.011	-0.001	72473050	0.5000	0.4486	
2	7.188	7.188	0.000	29907210	0.5000	0.4383	
2	7.556	7.557	-0.001	11359125	0.5000	0.4526	
		Average of Peak Amounts =				0.4445	
						RPD = 4.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.589	8.591	-0.002	43242620	0.5000	0.4683	
1	9.054	9.055	-0.001	55937491	0.5000	0.4753	
1	9.338	9.338	0.000	50731062	0.5000	0.4782	
1	9.701	9.702	-0.001	111517067	0.5000	0.4870	
1	10.074	10.075	-0.001	44714225	0.5000	0.4727	
		Average of Peak Amounts =				0.4763	
2	9.592	9.591	0.001	83171627	0.5000	0.4695	
2	10.123	10.123	0.000	117269894	0.5000	0.4718	
2	10.454	10.455	-0.001	109090596	0.5000	0.4789	
2	10.724	10.725	-0.001	216198587	0.5000	0.4829	
2	11.091	11.092	-0.001	152268330	0.5000	0.4729	
		Average of Peak Amounts =				0.4752	
						RPD = 0.23	

Reagents:

SG3262@0.5PPM_00019 Amount Added: 1.00 Units: mL

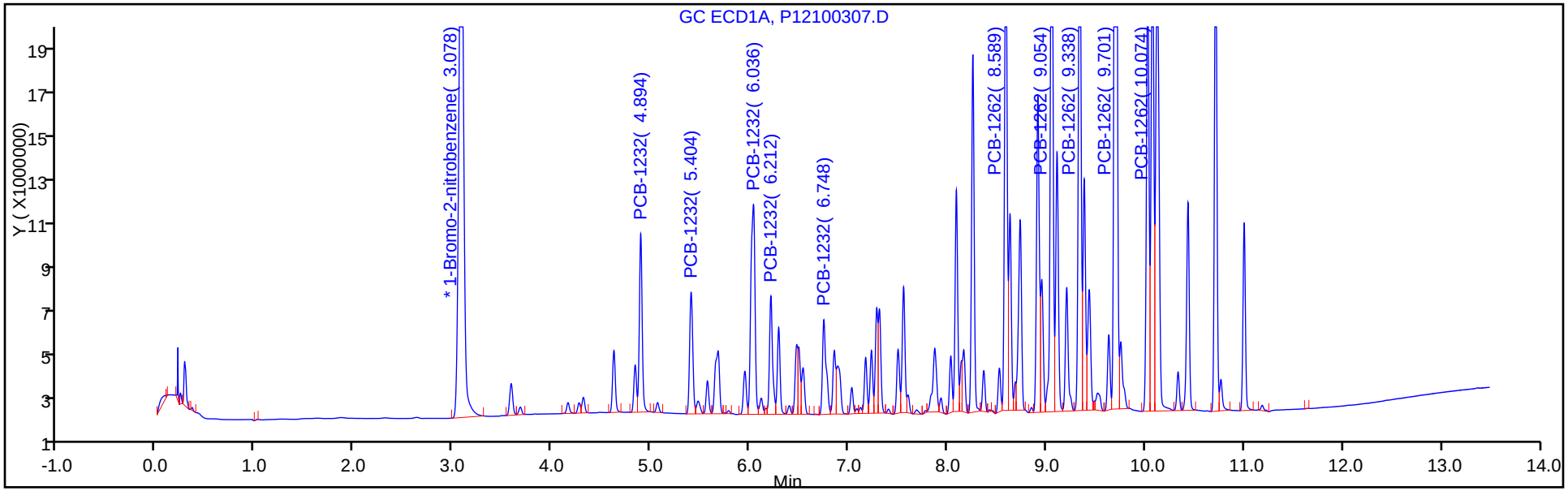
Report Date: 04-Oct-2017 08:16:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

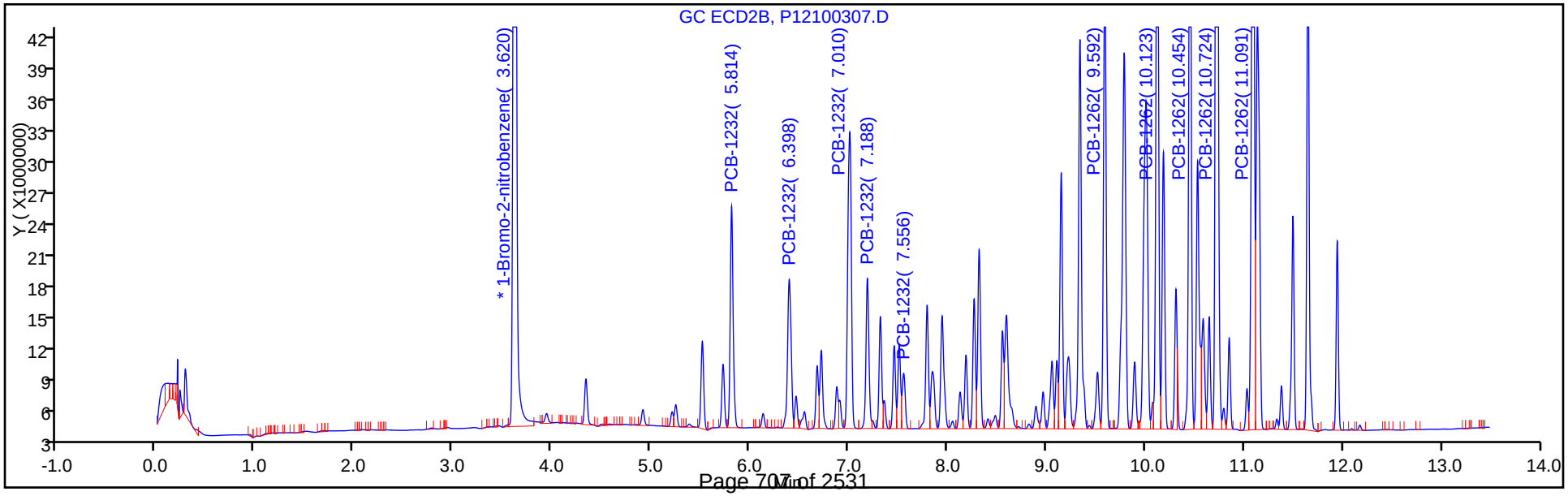
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100307.D

Injection Date:	03-Oct-2017 15:26:13	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1232 1262			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100308.D
Lims ID: std1 1232 1262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 15:43:51 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-008
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:03:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.078	3.076	0.003	84521313	0.0500	0.0500	
2	3.621	3.619	0.002	235119723	0.0500	0.0500	
4 PCB-1232							
1	4.896	4.896	0.000	31022672	1.00	0.9007	
1	5.405	5.405	0.000	23831789	1.00	0.9128	
1	6.037	6.036	0.001	54845662	1.00	0.9480	
1	6.212	6.211	0.001	22816721	1.00	0.9293	
1	6.748	6.748	0.000	21544167	1.00	0.9017	
		Average of Peak Amounts =				0.9185	
2	5.815	5.815	0.000	86051087	1.00	0.9154	
2	6.399	6.397	0.002	72243456	1.00	0.9061	
2	7.012	7.011	0.001	146202953	1.00	0.9388	
2	7.189	7.188	0.001	59217327	1.00	0.9002	
2	7.556	7.557	-0.001	22418079	1.00	0.9266	
		Average of Peak Amounts =				0.9174	
						RPD = 0.12	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.591	8.591	0.000	84916906	1.00	0.9626	
1	9.055	9.055	0.000	108605559	1.00	0.9661	
1	9.337	9.338	-0.001	98659742	1.00	0.9735	
1	9.702	9.702	0.000	219493474	1.00	1.00	
1	10.075	10.075	0.000	86978416	1.00	0.9626	
		Average of Peak Amounts =				0.9736	
2	9.592	9.591	0.001	153213502	1.00	0.8970	
2	10.123	10.123	0.000	212557357	1.00	0.8870	
2	10.453	10.455	-0.002	199270684	1.00	0.9075	
2	10.724	10.725	-0.001	402726688	1.00	0.9331	
2	11.092	11.092	0.000	286021430	1.00	0.9214	
		Average of Peak Amounts =				0.9092	
						RPD = 6.84	

Reagents:

SG3262@1.0PPM_00012 Amount Added: 1.00 Units: mL

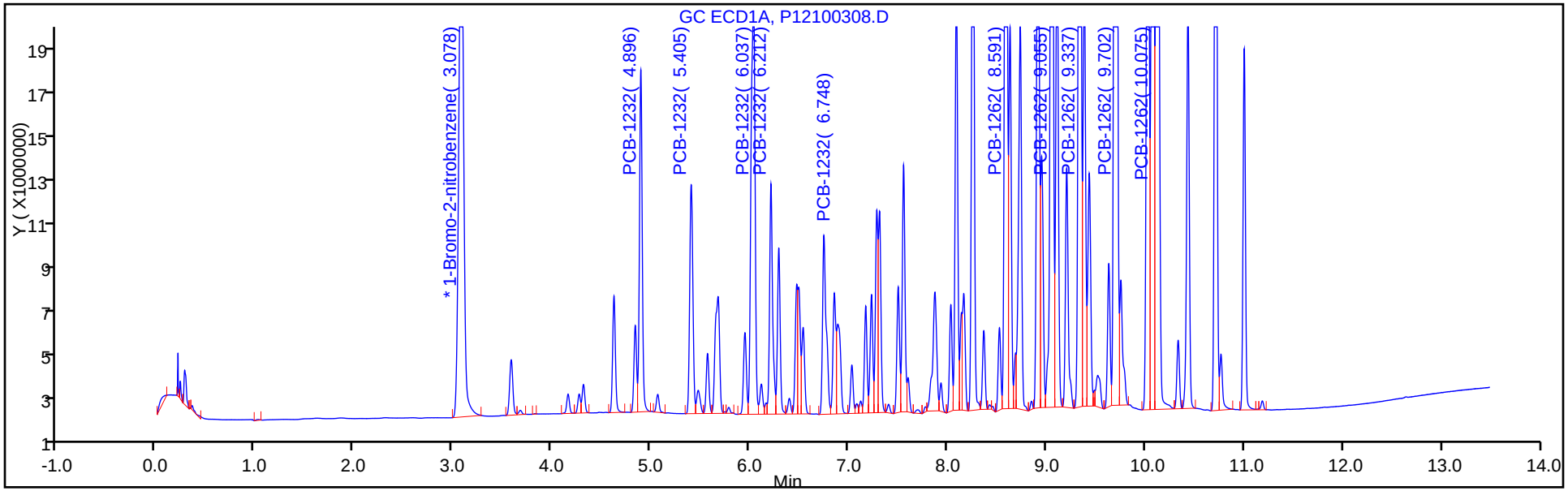
Report Date: 04-Oct-2017 08:16:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

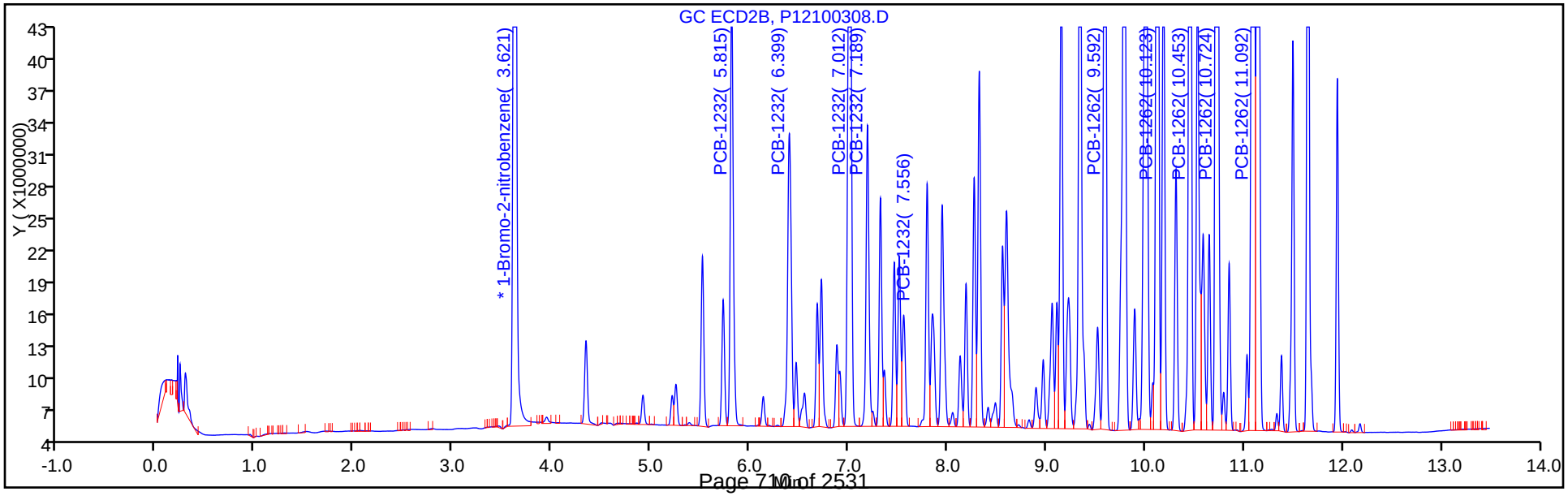
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100308.D

Injection Date:	03-Oct-2017 15:43:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1232 1262			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100309.D
Lims ID: std15 1232 1262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 16:01:34 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-009
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:52 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:23:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.070	3.076	-0.005	79118525	0.0500	0.0500	
2	3.615	3.619	-0.004	225469573	0.0500	0.0500	
4 PCB-1232							
1	4.895	4.896	-0.001	43592455	1.50	1.35	
1	5.405	5.405	0.000	32969253	1.50	1.35	
1	6.037	6.036	0.001	77288359	1.50	1.43	
1	6.212	6.211	0.001	31698408	1.50	1.38	
1	6.748	6.748	0.000	29530883	1.50	1.32	
		Average of Peak Amounts =				1.37	
2	5.815	5.815	0.000	112506340	1.50	1.25	
2	6.398	6.397	0.001	99273345	1.50	1.30	
2	7.010	7.011	-0.001	198627600	1.50	1.33	
2	7.189	7.188	0.001	80711579	1.50	1.28	
2	7.556	7.557	-0.001	29681521	1.50	1.28	
		Average of Peak Amounts =				1.29	
						RPD = 5.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.589	8.591	-0.002	120112760	1.50	1.45	
1	9.055	9.055	0.000	155185984	1.50	1.47	
1	9.336	9.338	-0.002	141075440	1.50	1.49	
1	9.701	9.702	-0.001	316594532	1.50	1.55	
1	10.074	10.075	-0.001	125251939	1.50	1.48	
		Average of Peak Amounts =				1.49	
2	9.592	9.591	0.001	219304124	1.50	1.34	
2	10.121	10.123	-0.002	308430770	1.50	1.34	
2	10.453	10.455	-0.002	286363620	1.50	1.36	
2	10.724	10.725	-0.001	589533125	1.50	1.42	
2	11.091	11.092	-0.001	418169019	1.50	1.40	
		Average of Peak Amounts =				1.37	
						RPD = 8.01	

Reagents:

SG3262@1.5PPM_00001 Amount Added: 1.00 Units: mL

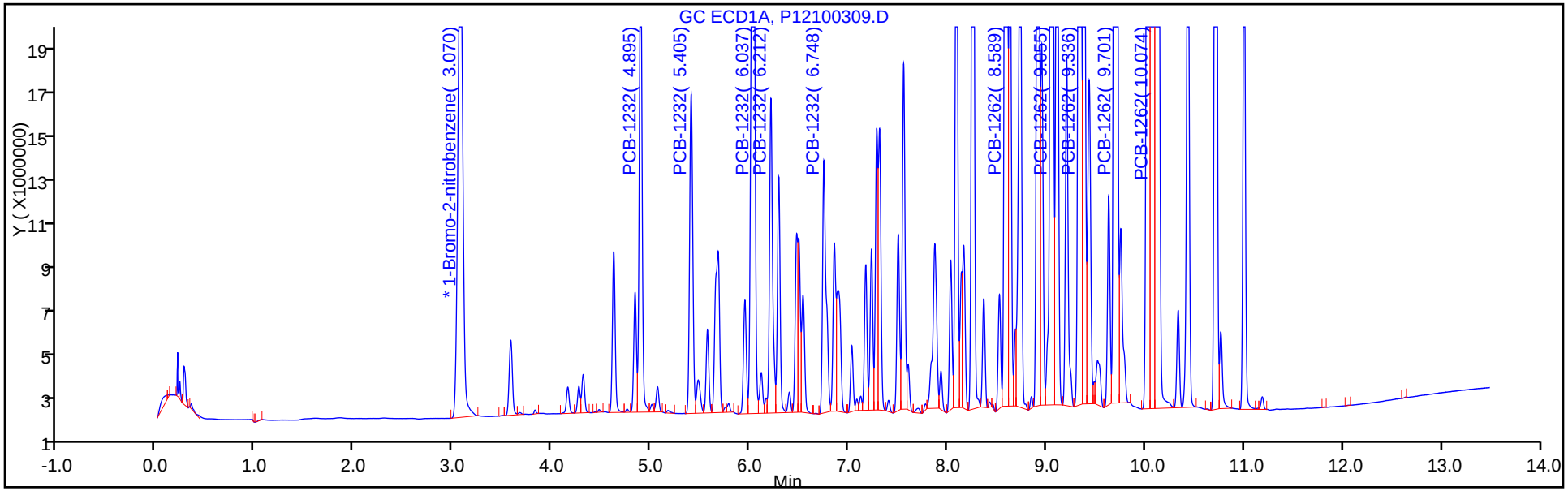
Report Date: 04-Oct-2017 08:16:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

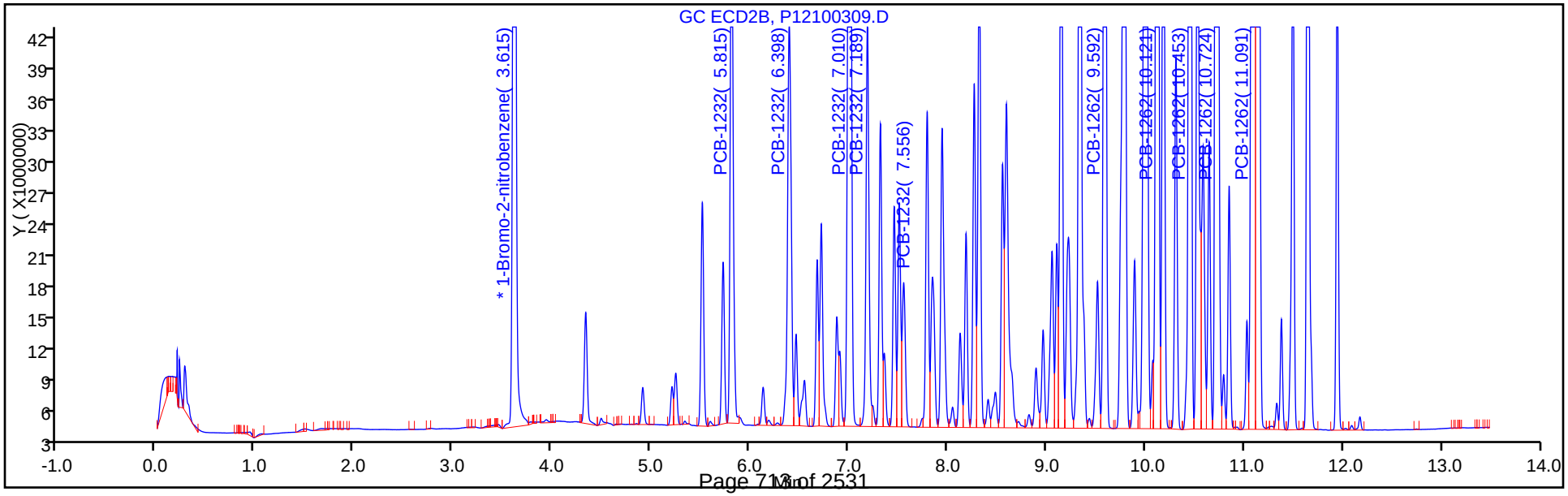
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100309.D

Injection Date:	03-Oct-2017 16:01:34	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std15 1232 1262			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:19 Calibration End Date: 10/03/2017 17:47 Calibration ID: 41721

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/10	P12100310.D
Level 2	STD01 240-297285/11	P12100311.D
Level 3	STD02 240-297285/12	P12100312.D
Level 4	STD05 240-297285/13	P12100313.D
Level 5	STD1 240-297285/14	P12100314.D
Level 6	STD151242 240-297285/15	P12100315.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.0203 0.0123	0.0151	0.0152	0.0137	0.0128	Ave		0.0149				19.3		20.0			
PCB-1242 Peak 2	0.0302 0.0237	0.0290	0.0269	0.0252	0.0240	Ave		0.0265				10.2		20.0			
PCB-1242 Peak 3	0.0672 0.0572	0.0625	0.0592	0.0585	0.0574	Ave		0.0603				6.4		20.0			
PCB-1242 Peak 4	0.0291 0.0232	0.0278	0.0256	0.0245	0.0235	Ave		0.0256				9.2		20.0			
PCB-1242 Peak 5	0.0307 0.0238	0.0278	0.0259	0.0253	0.0242	Ave		0.0263				9.8		20.0			
PCB-1268 Peak 1	0.1589 0.1512	0.1554	0.1502	0.1504	0.1510	Ave		0.1529				2.3		20.0			
PCB-1268 Peak 2	0.1537 0.1441	0.1490	0.1473	0.1464	0.1445	Ave		0.1475				2.4		20.0			
PCB-1268 Peak 3	0.1343 0.1248	0.1293	0.1255	0.1251	0.1249	Ave		0.1273				3.0		20.0			
PCB-1268 Peak 4	0.0593 0.0528	0.0565	0.0542	0.0533	0.0530	Ave		0.0548				4.6		20.0			
PCB-1268 Peak 5	0.4289 0.4211	0.4200	0.4127	0.4135	0.4194	Ave		0.4193				1.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:19 Calibration End Date: 10/03/2017 17:47 Calibration ID: 41721

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/10	P12100310.D
Level 2	STD01 240-297285/11	P12100311.D
Level 3	STD02 240-297285/12	P12100312.D
Level 4	STD05 240-297285/13	P12100313.D
Level 5	STD1 240-297285/14	P12100314.D
Level 6	STD151242 240-297285/15	P12100315.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Ave	1680158 31666617	2489228	5113123	11827958	21110690	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	BNB	Ave	2508609 60883097	4787022	9060030	21811351	39525352	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	BNB	Ave	5573637 147191262	10315652	19915026	50640475	94724984	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	BNB	Ave	2409719 59734934	4587892	8622134	21194377	38818289	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	BNB	Ave	2548336 61287903	4586239	8721222	21926645	39994243	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 1	BNB	Ave	13182579 388986587	25636477	50534279	130134380	249060594	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 2	BNB	Ave	12747679 370871825	24575277	49543787	126631526	238443563	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 3	BNB	Ave	11140391 321164060	21324393	42210987	108222884	206143663	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 4	BNB	Ave	4914484 135866290	9313195	18215539	46150822	87451153	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 5	BNB	Ave	35573151 1083649518	69286979	138819490	357730630	691891271	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100310.D
Lims ID: std005 1242 1268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 16:19:09 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-010
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:56 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:08:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.073	3.076	-0.003	82944845	0.0500	0.0500	
2	3.617	3.619	-0.002	236016847	0.0500	0.0500	
5 PCB-1242							
1	4.896	4.896	0.000	1680158	0.0500	0.0680	
1	5.406	5.406	0.000	2508609	0.0500	0.0571	
1	6.036	6.036	0.000	5573637	0.0500	0.0557	
1	6.213	6.213	0.000	2409719	0.0500	0.0567	
1	6.750	6.750	0.000	2548336	0.0500	0.0584	
		Average of Peak Amounts =				0.0592	
2	5.816	5.816	0.000	4012175	0.0500	0.0607	
2	6.399	6.399	0.000	8016100	0.0500	0.0613	
2	7.011	7.011	0.000	15905140	0.0500	0.0586	
2	7.189	7.189	0.000	7009267	0.0500	0.0625	
2	7.557	7.557	0.000	2884574	0.0500	0.0611	
		Average of Peak Amounts =				0.0608	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.076	10.076	0.000	13182579	0.0500	0.0520	
1	10.119	10.119	0.000	12747679	0.0500	0.0521	
1	10.335	10.335	0.000	11140391	0.0500	0.0527	
1	10.716	10.716	0.000	4914484	0.0500	0.0540	
1	11.003	11.003	0.000	35573151	0.0500	0.0511	
		Average of Peak Amounts =				0.0524	
2	11.089	11.089	0.000	28579899	0.0500	0.0569	
2	11.135	11.135	0.000	26838826	0.0500	0.0569	
2	11.380	11.380	0.000	22462161	0.0500	0.0560	
2	11.648	11.648	0.000	10157624	0.0500	0.0576	
2	11.945	11.945	0.000	64069234	0.0500	0.0528	
		Average of Peak Amounts =				0.0560	
						RPD = 6.69	

Reagents:

SG4268@.05PPM_00011 Amount Added: 1.00 Units: mL

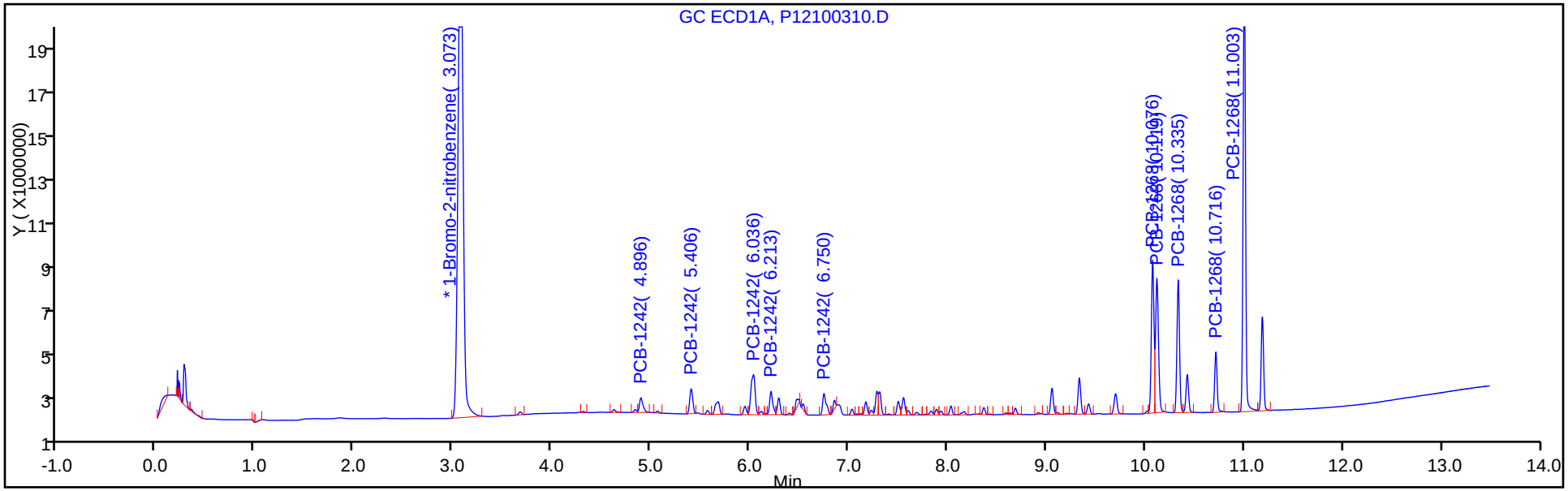
Report Date: 04-Oct-2017 08:16:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

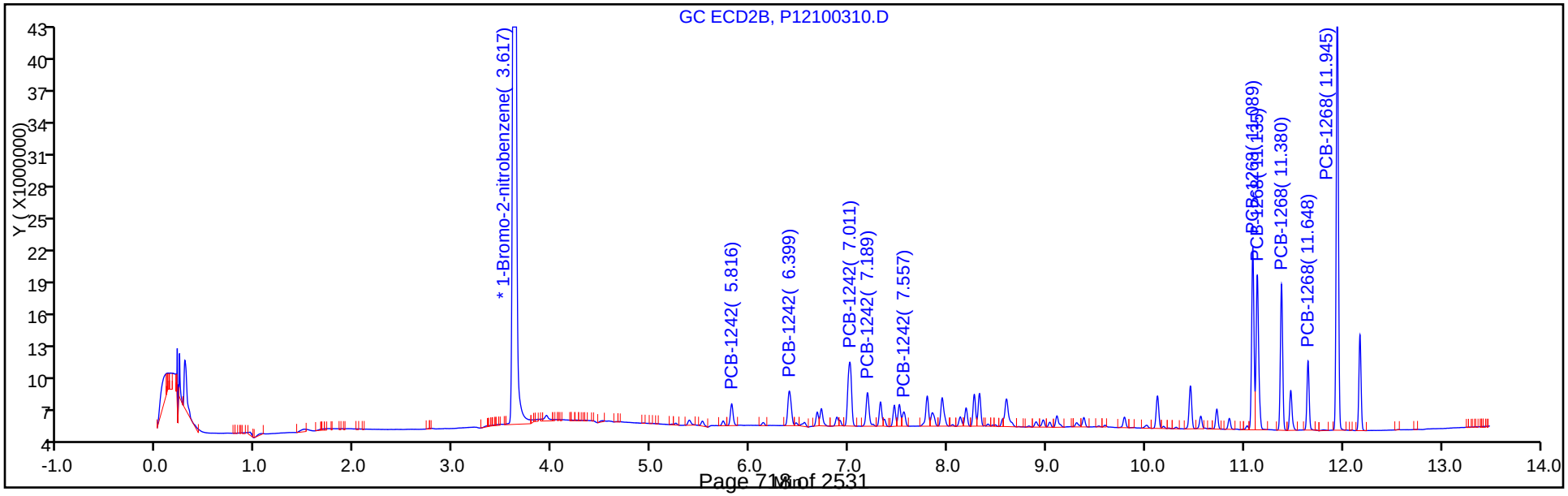
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100310.D

Injection Date:	03-Oct-2017 16:19:09	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1242 1268			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100311.D
Lims ID: std01 1242 1268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 16:36:45 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-011
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:05 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:08:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.069	3.076	-0.006	82478440	0.0500	0.0500	
2	3.615	3.619	-0.004	233105202	0.0500	0.0500	
5 PCB-1242							M
1	4.894	4.896	-0.002	2489228	0.1000	0.1014	
1	5.404	5.406	-0.002	4787022	0.1000	0.1095	
1	6.035	6.036	-0.001	10315652	0.1000	0.1036	
1	6.212	6.213	-0.001	4587892	0.1000	0.1085	
1	6.749	6.750	-0.001	4586239	0.1000	0.1057	M
		Average of Peak Amounts =				0.1057	
2	5.814	5.816	-0.002	7354664	0.1000	0.1127	
2	6.398	6.399	-0.001	14698224	0.1000	0.1139	
2	7.011	7.011	0.000	29177024	0.1000	0.1088	
2	7.189	7.189	0.000	12507058	0.1000	0.1128	
2	7.557	7.557	0.000	5285556	0.1000	0.1133	
		Average of Peak Amounts =				0.1123	
						RPD = 6.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	25636477	0.1000	0.1017	
1	10.119	10.119	0.000	24575277	0.1000	0.1010	
1	10.333	10.335	-0.002	21324393	0.1000	0.1015	
1	10.715	10.716	-0.001	9313195	0.1000	0.1030	
1	11.002	11.003	-0.001	69286979	0.1000	0.1002	
		Average of Peak Amounts =				0.1015	
2	11.088	11.089	-0.001	52504851	0.1000	0.1058	
2	11.134	11.135	-0.001	49166425	0.1000	0.1055	
2	11.379	11.380	-0.001	42122292	0.1000	0.1063	
2	11.648	11.648	0.000	19102022	0.1000	0.1097	
2	11.944	11.945	-0.001	125428260	0.1000	0.1046	
		Average of Peak Amounts =				0.1064	
						RPD = 4.72	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@.1PPM_00012 Amount Added: 1.00 Units: mL

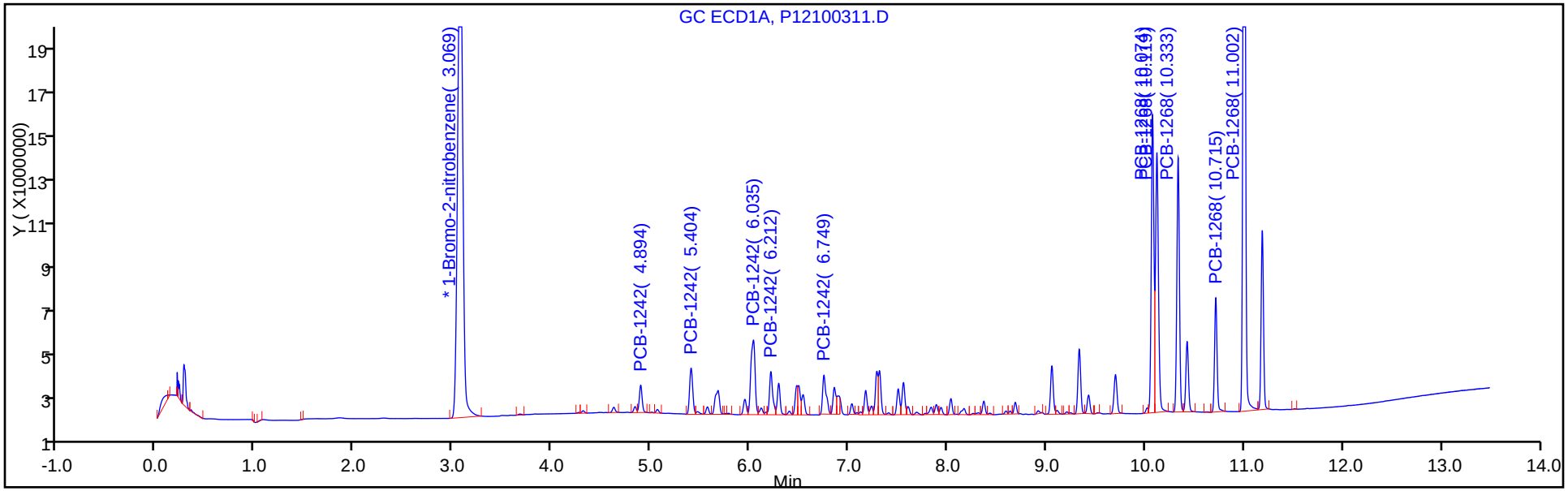
Report Date: 04-Oct-2017 08:17:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

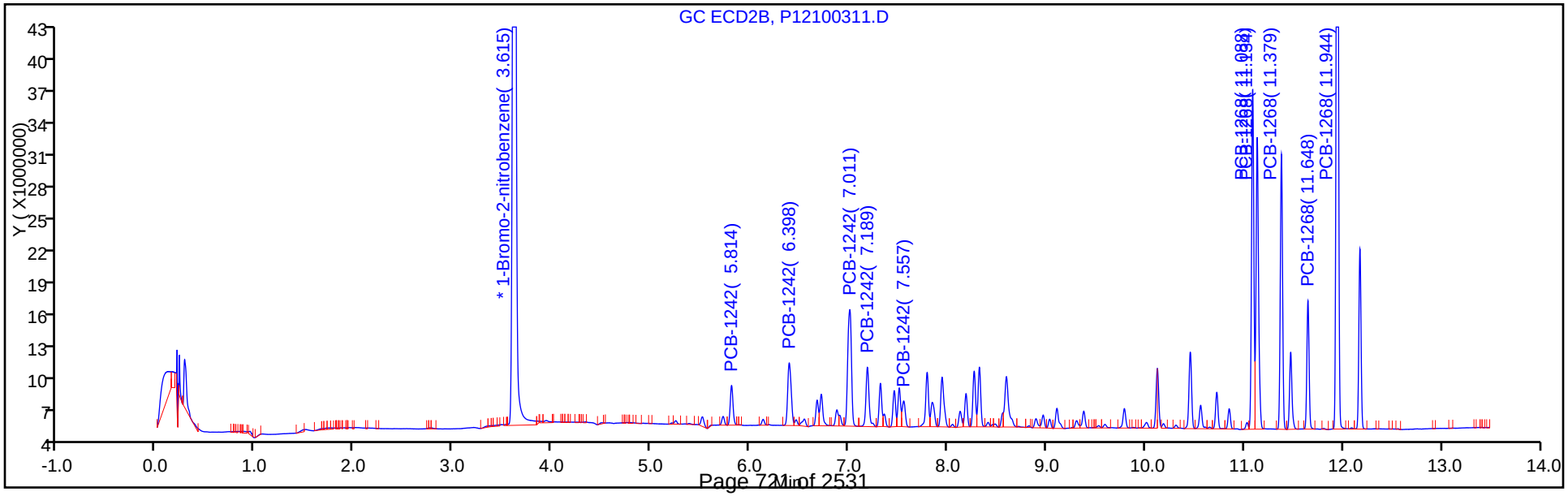
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100311.D

Injection Date:	03-Oct-2017 16:36:45	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1242 1268			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:17:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100311.D

Injection Date: 03-Oct-2017 16:36:45 Instrument ID: A2HP12

Lims ID: std01 1242 1268

Client ID:

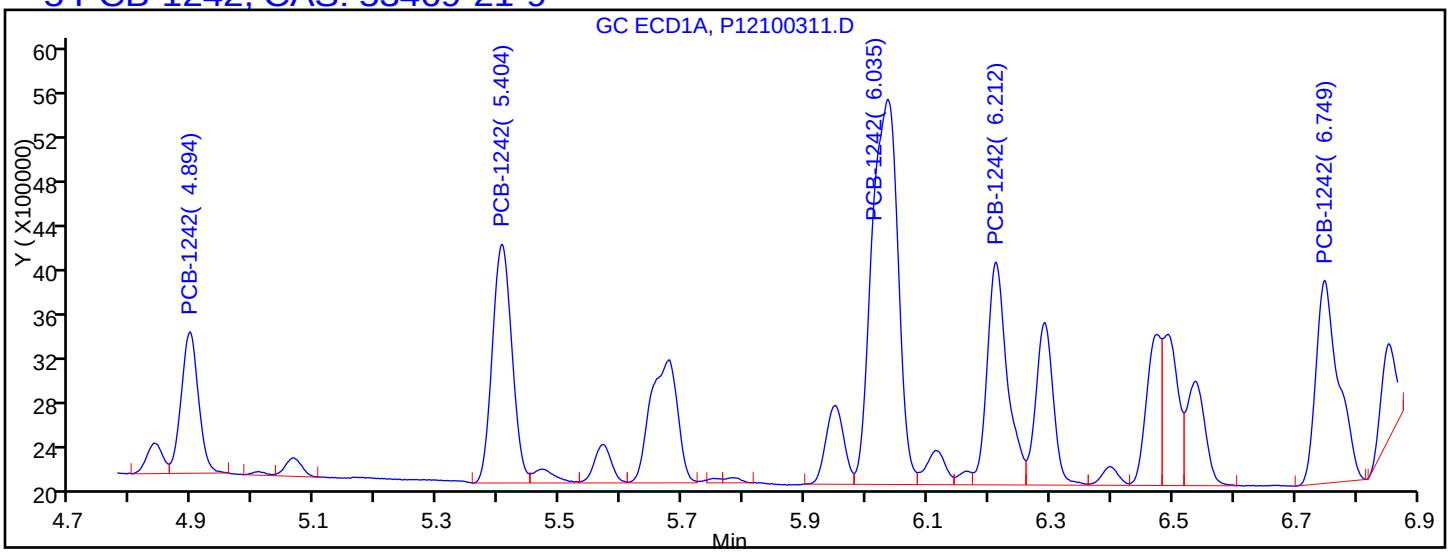
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

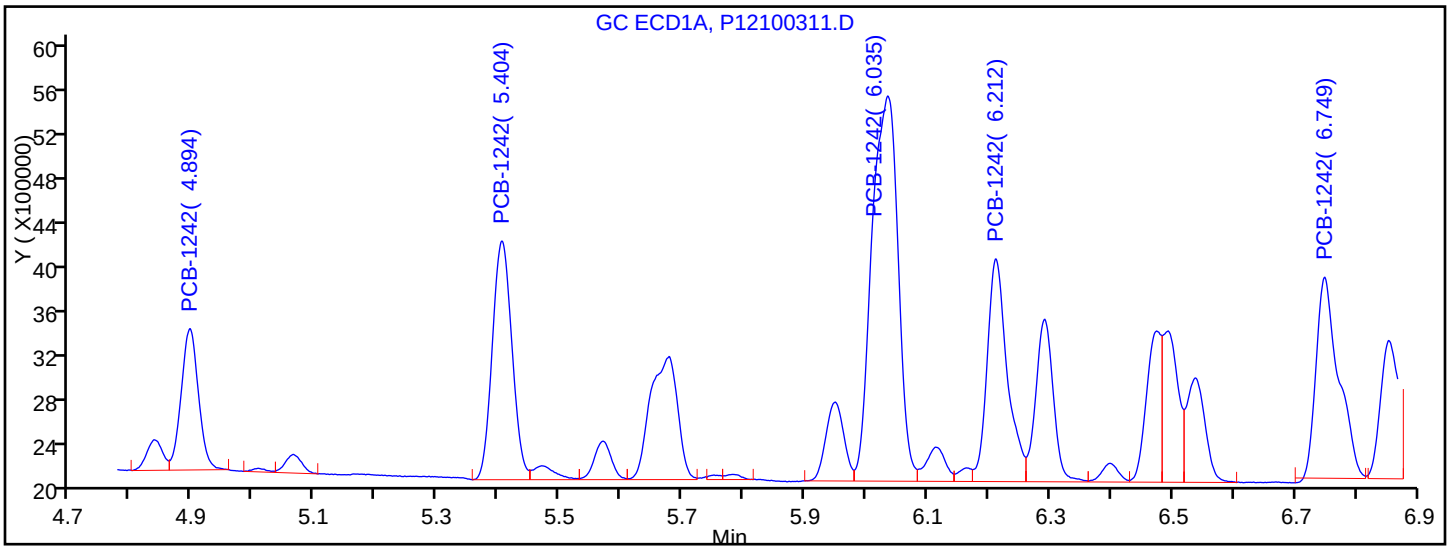
Column: Detector GC ECD1A

5 PCB-1242, CAS: 53469-21-9



Processing Integration Results

4.894	Response = 2489228
5.404	Response = 4787022
6.035	Response = 10315652
6.212	Response = 4587892
6.749	Response = 4663895



Manual Integration Results

4.894	Response = 2489228	
5.404	Response = 4787022	
6.035	Response = 10315652	
6.212	Response = 4587892	
6.749	Response = 4586239	M

Reviewer: hassl, 04-Oct-2017 06:08:21

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100312.D
Lims ID: std02 1242 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 16:54:22 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-012
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:12 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:32:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.076	-0.004	84085973	0.0500	0.0500	
2	3.616	3.619	-0.003	243428453	0.0500	0.0500	
5 PCB-1242							
1	4.895	4.896	-0.001	5113123	0.2000	0.2042	
1	5.405	5.406	-0.001	9060030	0.2000	0.2033	
1	6.036	6.036	0.000	19915026	0.2000	0.1962	
1	6.212	6.213	-0.001	8622134	0.2000	0.2001	
1	6.750	6.750	0.000	8721222	0.2000	0.1971	
		Average of Peak Amounts =				0.2002	
2	5.814	5.816	-0.002	13487920	0.2000	0.1979	
2	6.398	6.399	-0.001	26798242	0.2000	0.1988	
2	7.010	7.011	-0.001	54801601	0.2000	0.1957	
2	7.189	7.189	0.000	22399974	0.2000	0.1935	
2	7.556	7.557	-0.001	9777782	0.2000	0.2007	
		Average of Peak Amounts =				0.1973	
						RPD = 1.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.075	10.076	-0.001	50534279	0.2000	0.1966	
1	10.118	10.119	-0.001	49543787	0.2000	0.1997	
1	10.334	10.335	-0.001	42210987	0.2000	0.1971	
1	10.715	10.716	-0.001	18215539	0.2000	0.1975	
1	11.002	11.003	-0.001	138819490	0.2000	0.1969	
		Average of Peak Amounts =				0.1976	
2	11.089	11.089	0.000	99220741	0.2000	0.1915	
2	11.134	11.135	-0.001	93846510	0.2000	0.1928	
2	11.380	11.380	0.000	80083744	0.2000	0.1936	
2	11.647	11.648	-0.001	35590136	0.2000	0.1956	
2	11.944	11.945	-0.001	242022669	0.2000	0.1932	
		Average of Peak Amounts =				0.1934	
						RPD = 2.15	

Reagents:

SG4268@.2PPM_00012 Amount Added: 1.00 Units: mL

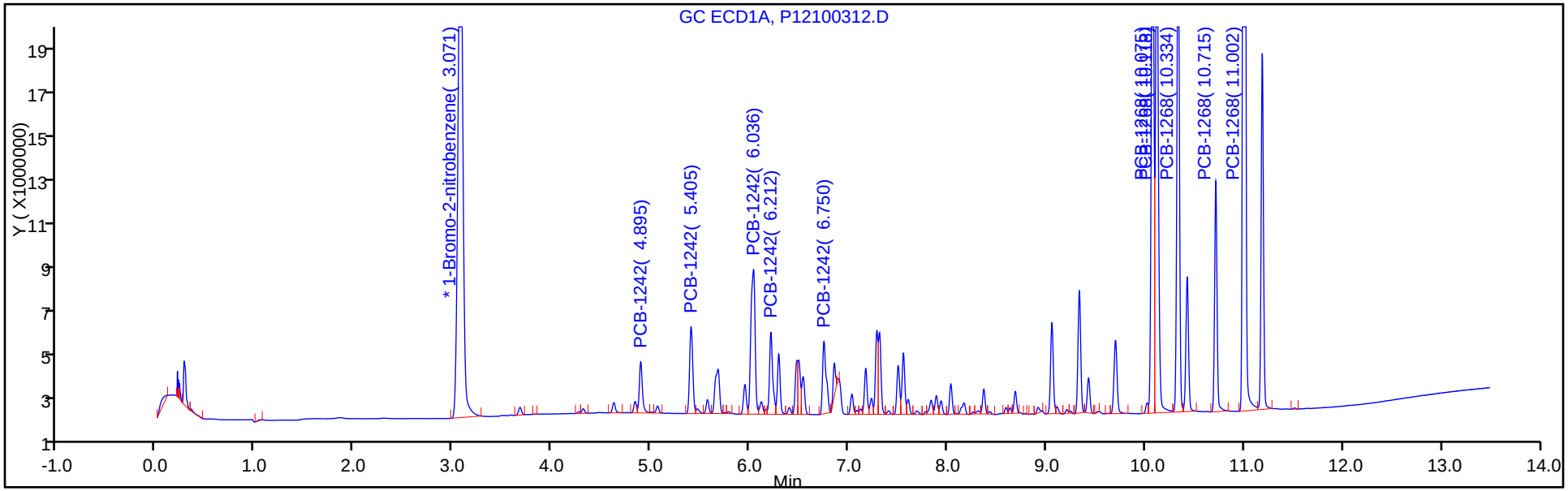
Report Date: 04-Oct-2017 08:17:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

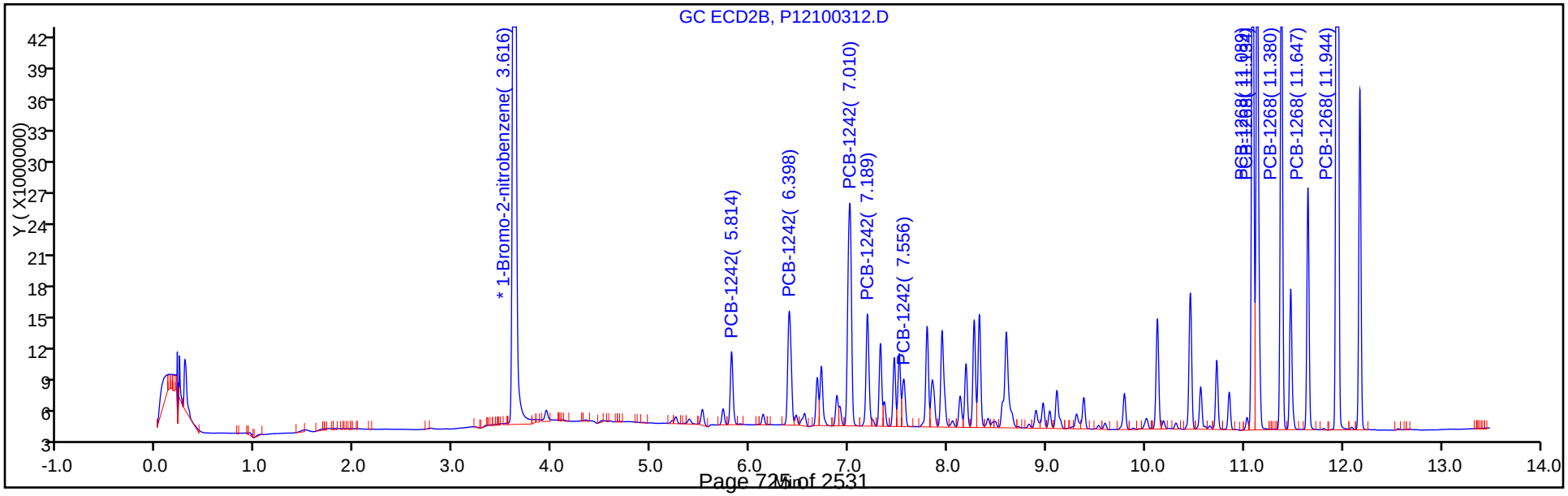
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100312.D

Injection Date:	03-Oct-2017 16:54:22	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1242 1268			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100313.D
Lims ID: std05 1242 1268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 17:12:07 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-013
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:16 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.079	3.076	0.004	86509511	0.0500	0.0500	
2	3.619	3.619	0.000	237070517	0.0500	0.0500	
5 PCB-1242							
1	4.896	4.896	0.000	11827958	0.5000	0.4592	
1	5.406	5.406	0.000	21811351	0.5000	0.4756	
1	6.037	6.036	0.001	50640475	0.5000	0.4850	
1	6.212	6.213	-0.001	21194377	0.5000	0.4781	
1	6.749	6.750	-0.001	21926645	0.5000	0.4817	
		Average of Peak Amounts =				0.4759	
2	5.814	5.816	-0.002	32408465	0.5000	0.4884	
2	6.399	6.399	0.000	62822330	0.5000	0.4785	
2	7.009	7.011	-0.002	133801945	0.5000	0.4906	
2	7.189	7.189	0.000	53437249	0.5000	0.4741	
2	7.555	7.557	-0.002	22545793	0.5000	0.4753	
		Average of Peak Amounts =				0.4814	
						RPD = 1.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	130134380	0.5000	0.4921	
1	10.118	10.119	-0.001	126631526	0.5000	0.4962	
1	10.333	10.335	-0.002	108222884	0.5000	0.4913	
1	10.714	10.716	-0.002	46150822	0.5000	0.4864	
1	11.001	11.003	-0.002	357730630	0.5000	0.4931	
		Average of Peak Amounts =				0.4918	
2	11.088	11.089	-0.001	250153738	0.5000	0.4959	
2	11.134	11.135	-0.001	235153614	0.5000	0.4961	
2	11.379	11.380	-0.001	200632898	0.5000	0.4981	
2	11.647	11.648	-0.001	87221170	0.5000	0.4923	
2	11.944	11.945	-0.001	602262473	0.5000	0.4937	
		Average of Peak Amounts =				0.4952	
						RPD = 0.69	

Reagents:

SG4268@0.5PPM_00025 Amount Added: 1.00 Units: mL

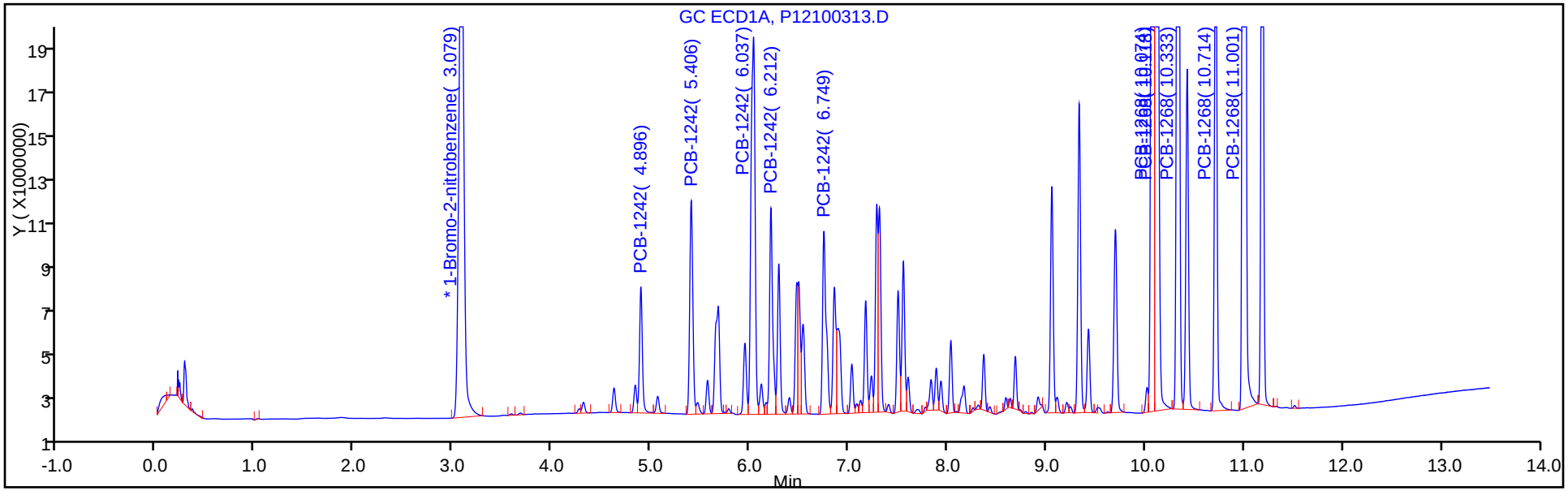
Report Date: 04-Oct-2017 08:17:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

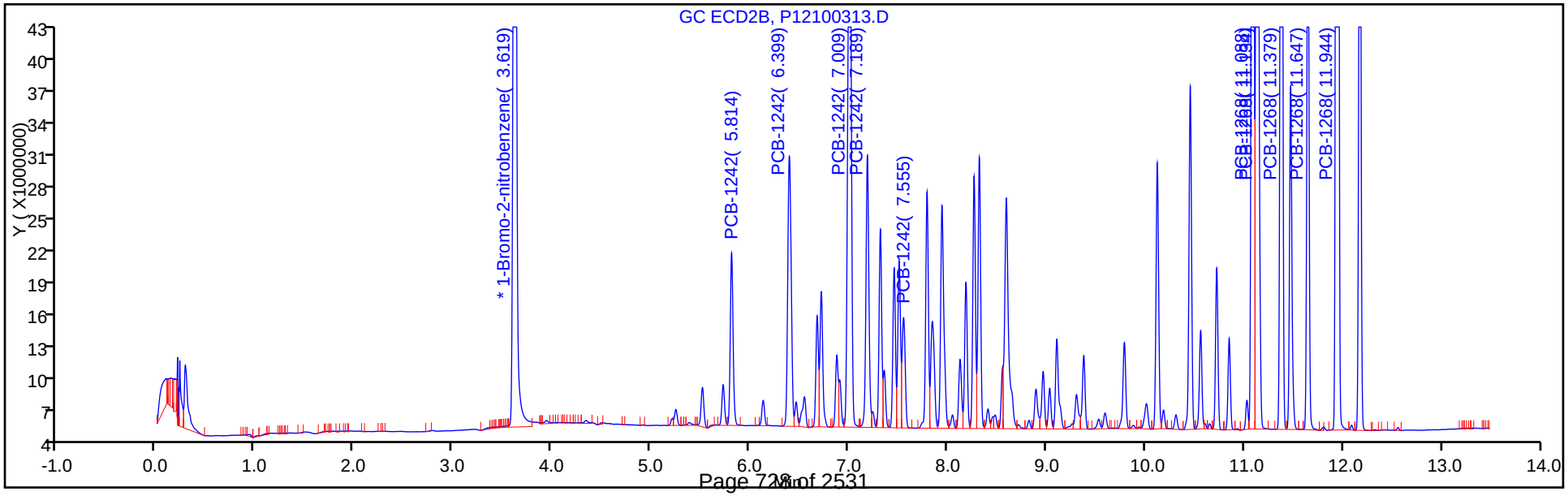
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100313.D

Injection Date:	03-Oct-2017 17:12:07	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1242 1268			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100314.D
Lims ID: std1 1242 1268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 17:29:42 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-014
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:22 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:34:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.076	-0.005	82491590	0.0500	0.0500	
2	3.617	3.619	-0.002	227333430	0.0500	0.0500	
5 PCB-1242							
1	4.895	4.896	-0.001	21110690	1.00	0.8595	
1	5.405	5.406	-0.001	39525352	1.00	0.9039	
1	6.038	6.036	0.002	94724984	1.00	0.9514	
1	6.212	6.213	-0.001	38818289	1.00	0.9182	
1	6.748	6.750	-0.002	39994243	1.00	0.9214	
		Average of Peak Amounts =				0.9109	
2	5.814	5.816	-0.002	54892216	1.00	0.8626	
2	6.398	6.399	-0.001	107328767	1.00	0.8525	
2	7.010	7.011	-0.001	237253047	1.00	0.9071	
2	7.189	7.189	0.000	92986643	1.00	0.8602	
2	7.556	7.557	-0.001	38792868	1.00	0.8528	
		Average of Peak Amounts =				0.8671	
						RPD = 4.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	249060594	1.00	0.9876	
1	10.117	10.119	-0.002	238443563	1.00	0.9798	
1	10.333	10.335	-0.002	206143663	1.00	0.9814	
1	10.714	10.716	-0.002	87451153	1.00	0.9666	
1	11.002	11.003	-0.001	691891271	1.00	1.00	
		Average of Peak Amounts =				0.9831	
2	11.088	11.089	-0.001	457349400	1.00	0.9454	
2	11.133	11.135	-0.002	425790865	1.00	0.9367	
2	11.379	11.380	-0.001	361245759	1.00	0.9352	
2	11.647	11.648	-0.001	153074903	1.00	0.9011	
2	11.944	11.945	-0.001	1147206924	1.00	0.9806	
		Average of Peak Amounts =				0.9398	
						RPD = 4.51	

Reagents:

SG42/68@1.0PP_00018 Amount Added: 1.00 Units: mL

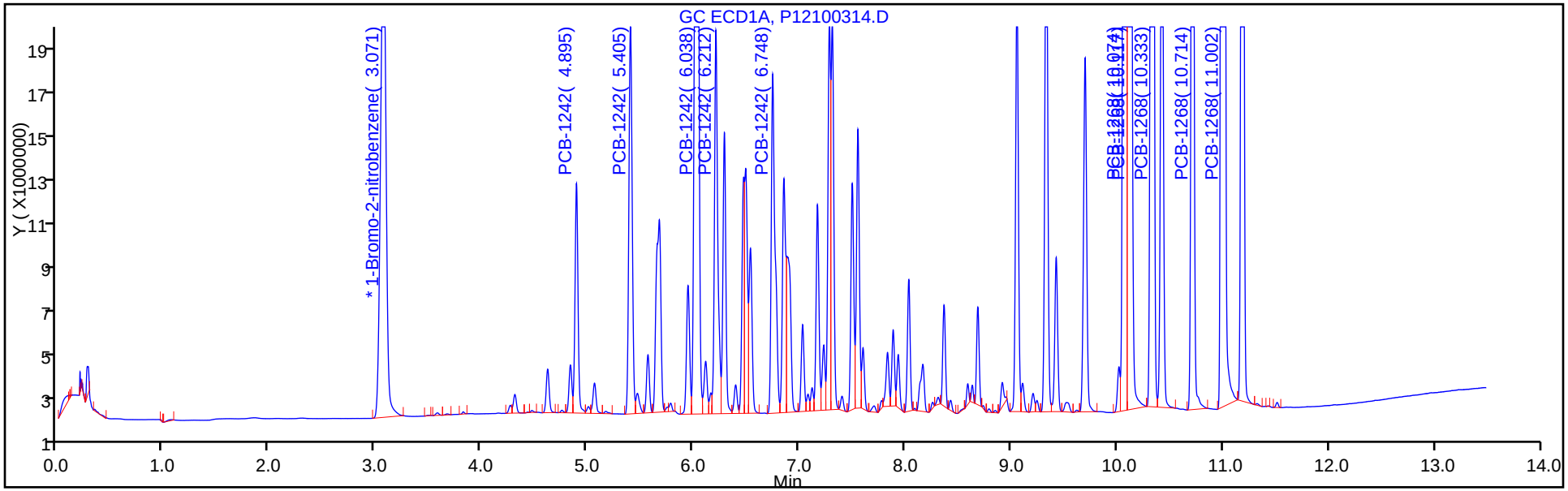
Report Date: 04-Oct-2017 08:17:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

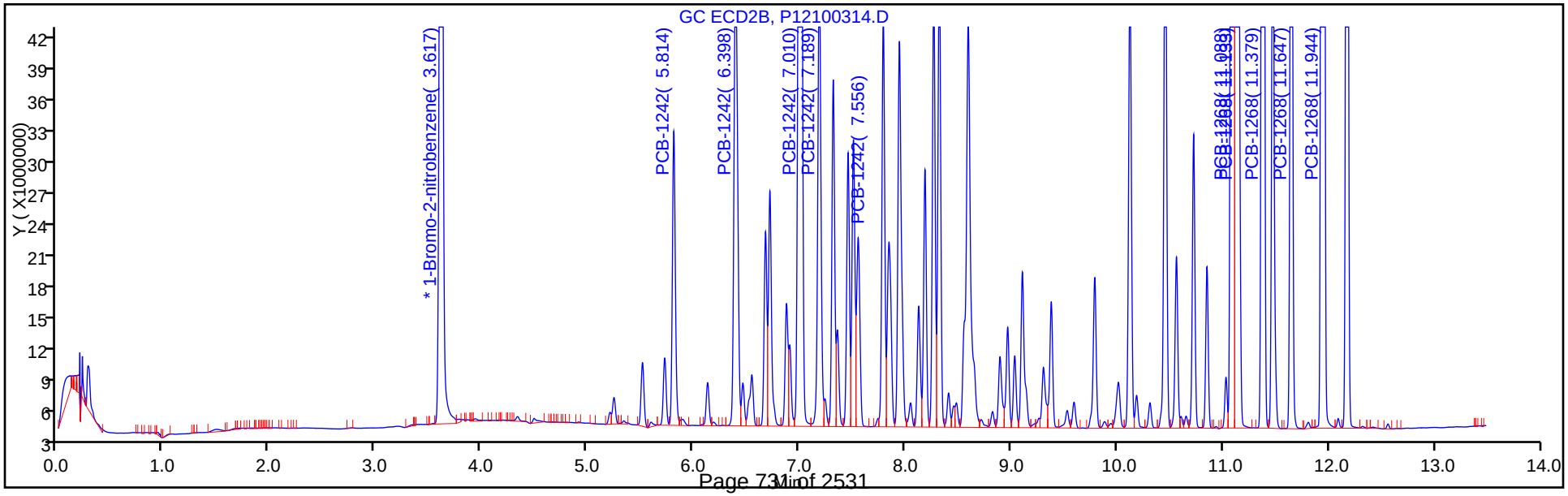
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100314.D

Injection Date:	03-Oct-2017 17:29:42	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1242 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100315.D
Lims ID: std151242 1268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 17:47:18 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-015
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:26 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:11:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	85779865	0.0500	0.0500	
2	3.620	3.619	0.001	250095880	0.0500	0.0500	
5 PCB-1242							
1	4.896	4.896	0.000	31666617	1.50	1.24	
1	5.406	5.406	0.000	60883097	1.50	1.34	
1	6.038	6.036	0.002	147191262	1.50	1.42	
1	6.212	6.213	-0.001	59734934	1.50	1.36	
1	6.749	6.750	-0.001	61287903	1.50	1.36	
		Average of Peak Amounts =				1.34	
2	5.816	5.816	0.000	87094580	1.50	1.24	
2	6.399	6.399	0.000	172681072	1.50	1.25	
2	7.012	7.011	0.001	377142234	1.50	1.31	
2	7.189	7.189	0.000	150985421	1.50	1.27	
2	7.556	7.557	-0.001	62931632	1.50	1.26	
		Average of Peak Amounts =				1.27	
						RPD = 5.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	388986587	1.50	1.48	
1	10.117	10.119	-0.002	370871825	1.50	1.47	
1	10.333	10.335	-0.002	321164060	1.50	1.47	
1	10.714	10.716	-0.002	135866290	1.50	1.44	
1	11.002	11.003	-0.001	1083649518	1.50	1.51	
		Average of Peak Amounts =				1.47	
2	11.089	11.089	0.000	725248730	1.50	1.36	
2	11.134	11.135	-0.001	686249602	1.50	1.37	
2	11.380	11.380	0.000	584460536	1.50	1.38	
2	11.647	11.648	-0.001	248843409	1.50	1.33	
2	11.945	11.945	0.000	1863646108	1.50	1.45	
		Average of Peak Amounts =				1.38	
						RPD = 6.73	

Reagents:

SG4268@1.5PPM_00003 Amount Added: 1.00 Units: mL

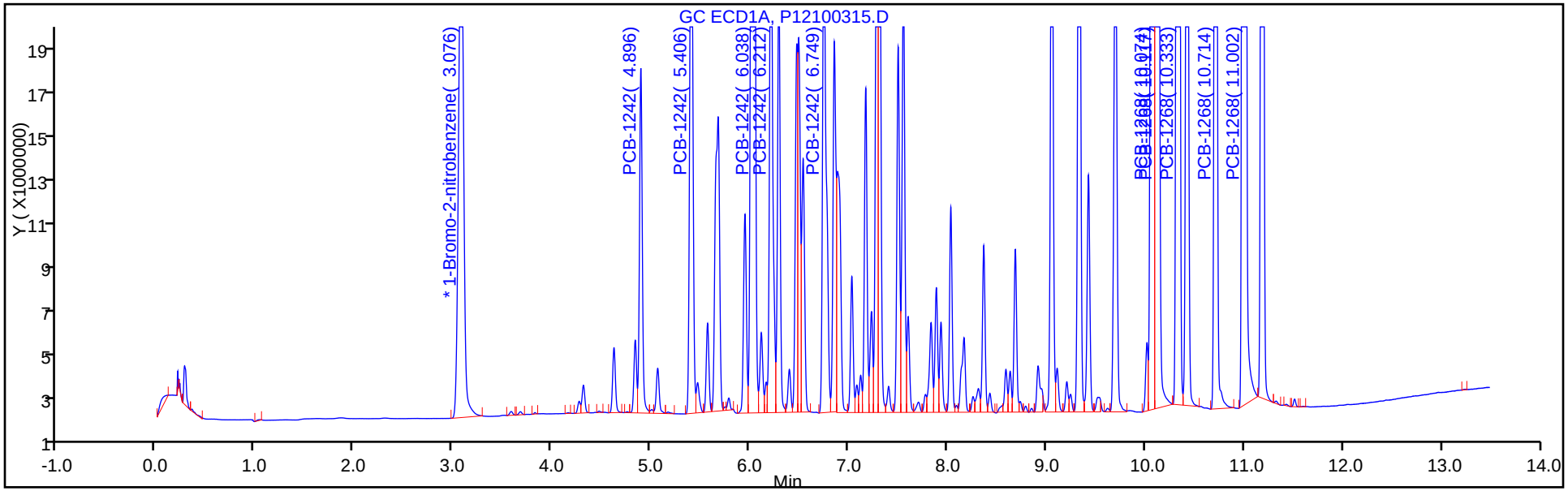
Report Date: 04-Oct-2017 08:17:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

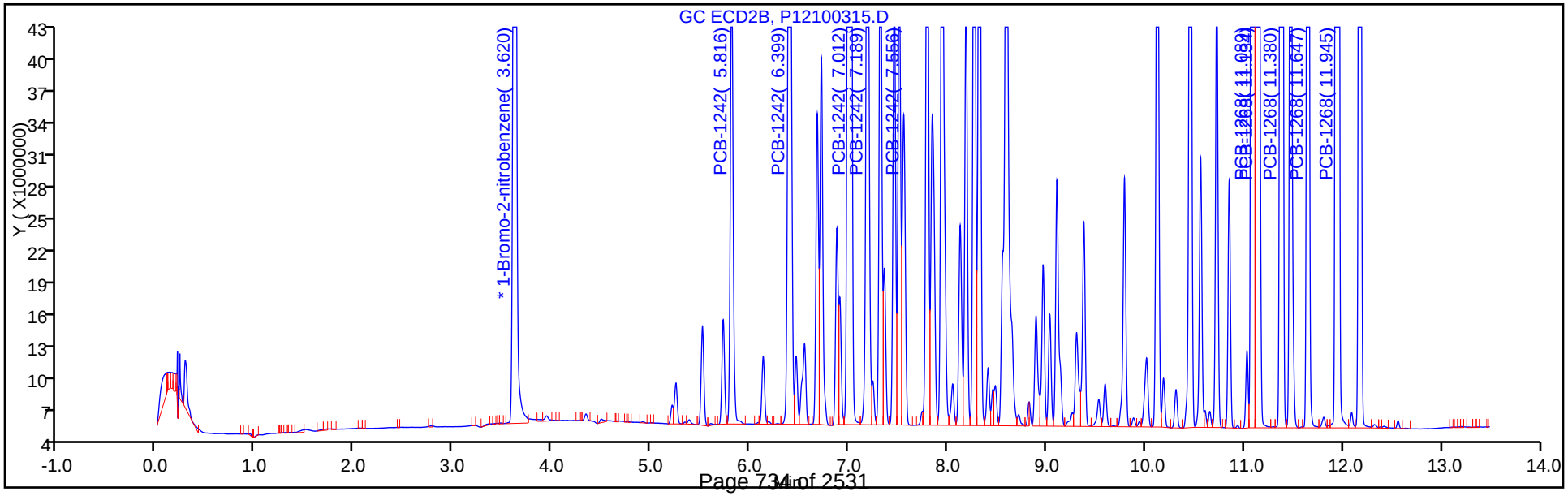
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100315.D

Injection Date:	03-Oct-2017 17:47:18	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std151242 1268			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 | GC Column: CLP-2 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:19 | Calibration End Date: 10/03/2017 17:47 | Calibration ID: 41722

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/10	P12100310.D
Level 2	STD01 240-297285/11	P12100311.D
Level 3	STD02 240-297285/12	P12100312.D
Level 4	STD05 240-297285/13	P12100313.D
Level 5	STD1 240-297285/14	P12100314.D
Level 6	STD151242 240-297285/15	P12100315.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.0170 0.0116	0.0158	0.0139	0.0137	0.0121	Ave		0.0140				14.9		20.0			
PCB-1242 Peak 2	0.0340 0.0230	0.0315	0.0275	0.0265	0.0236	Ave		0.0277				15.7		20.0			
PCB-1242 Peak 3	0.0674 0.0503	0.0626	0.0563	0.0564	0.0522	Ave		0.0575				11.2		20.0			
PCB-1242 Peak 4	0.0297 0.0201	0.0268	0.0230	0.0225	0.0205	Ave		0.0238				15.8		20.0			
PCB-1242 Peak 5	0.0122 0.0084	0.0113	0.0100	0.0095	0.0085	Ave		0.0100				15.3		20.0			
PCB-1268 Peak 1	0.1211 0.0967	0.1126	0.1019	0.1055	0.1006	Ave		0.1064				8.5		20.0			
PCB-1268 Peak 2	0.1137 0.0915	0.1055	0.0964	0.0992	0.0936	Ave		0.1000				8.3		20.0			
PCB-1268 Peak 3	0.0952 0.0779	0.0904	0.0822	0.0846	0.0795	Ave		0.0850				7.8		20.0			
PCB-1268 Peak 4	0.0430 0.0332	0.0410	0.0366	0.0368	0.0337	Ave		0.0374				10.5		20.0			
PCB-1268 Peak 5	0.2715 0.2484	0.2690	0.2486	0.2540	0.2523	Ave		0.2573				4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:19 Calibration End Date: 10/03/2017 17:47 Calibration ID: 41722

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/10	P12100310.D
Level 2	STD01 240-297285/11	P12100311.D
Level 3	STD02 240-297285/12	P12100312.D
Level 4	STD05 240-297285/13	P12100313.D
Level 5	STD1 240-297285/14	P12100314.D
Level 6	STD151242 240-297285/15	P12100315.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Ave	4012175 87094580	7354664	13487920	32408465	54892216	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	BNB	Ave	8016100 172681072	14698224	26798242	62822330	107328767	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	BNB	Ave	15905140 377142234	29177024	54801601	133801945	237253047	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	BNB	Ave	7009267 150985421	12507058	22399974	53437249	92986643	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	BNB	Ave	2884574 62931632	5285556	9777782	22545793	38792868	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 1	BNB	Ave	28579899 725248730	52504851	99220741	250153738	457349400	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 2	BNB	Ave	26838826 686249602	49166425	93846510	235153614	425790865	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 3	BNB	Ave	22462161 584460536	42122292	80083744	200632898	361245759	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 4	BNB	Ave	10157624 248843409	19102022	35590136	87221170	153074903	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 5	BNB	Ave	64069234 1863646108	125428260	242022669	602262473	1147206924	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100310.D
Lims ID: std005 1242 1268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 16:19:09 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-010
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:16:56 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:08:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.073	3.076	-0.003	82944845	0.0500	0.0500	
2	3.617	3.619	-0.002	236016847	0.0500	0.0500	
5 PCB-1242							
1	4.896	4.896	0.000	1680158	0.0500	0.0680	
1	5.406	5.406	0.000	2508609	0.0500	0.0571	
1	6.036	6.036	0.000	5573637	0.0500	0.0557	
1	6.213	6.213	0.000	2409719	0.0500	0.0567	
1	6.750	6.750	0.000	2548336	0.0500	0.0584	
		Average of Peak Amounts =				0.0592	
2	5.816	5.816	0.000	4012175	0.0500	0.0607	
2	6.399	6.399	0.000	8016100	0.0500	0.0613	
2	7.011	7.011	0.000	15905140	0.0500	0.0586	
2	7.189	7.189	0.000	7009267	0.0500	0.0625	
2	7.557	7.557	0.000	2884574	0.0500	0.0611	
		Average of Peak Amounts =				0.0608	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.076	10.076	0.000	13182579	0.0500	0.0520	
1	10.119	10.119	0.000	12747679	0.0500	0.0521	
1	10.335	10.335	0.000	11140391	0.0500	0.0527	
1	10.716	10.716	0.000	4914484	0.0500	0.0540	
1	11.003	11.003	0.000	35573151	0.0500	0.0511	
		Average of Peak Amounts =				0.0524	
2	11.089	11.089	0.000	28579899	0.0500	0.0569	
2	11.135	11.135	0.000	26838826	0.0500	0.0569	
2	11.380	11.380	0.000	22462161	0.0500	0.0560	
2	11.648	11.648	0.000	10157624	0.0500	0.0576	
2	11.945	11.945	0.000	64069234	0.0500	0.0528	
		Average of Peak Amounts =				0.0560	
						RPD = 6.69	

Reagents:

SG4268@.05PPM_00011 Amount Added: 1.00 Units: mL

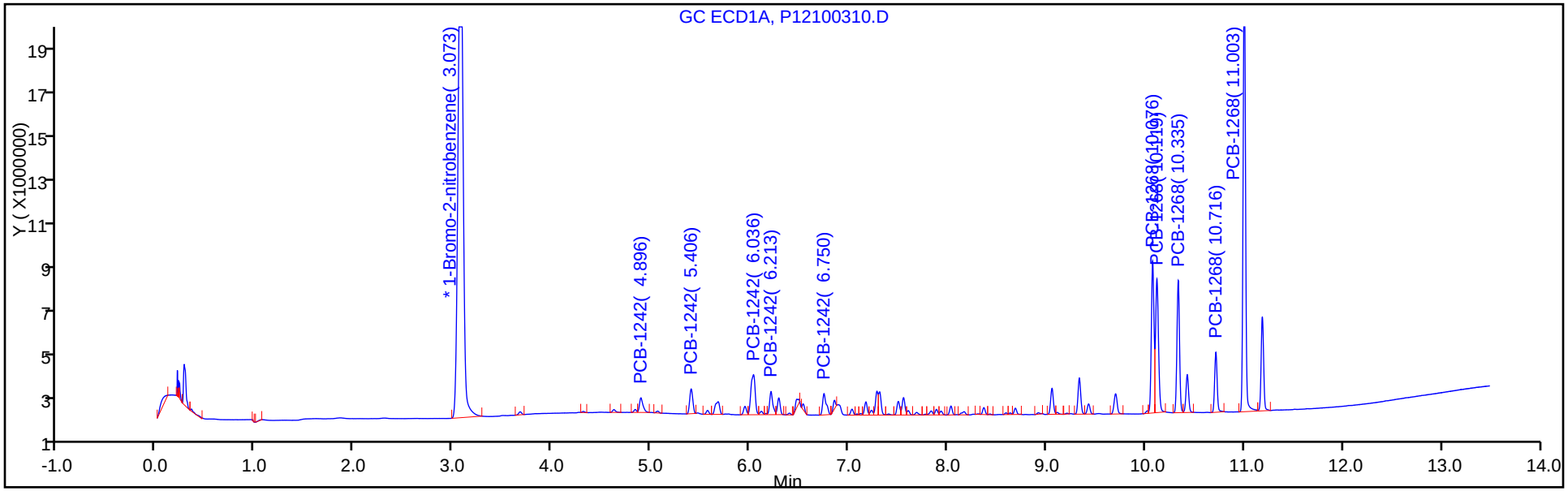
Report Date: 04-Oct-2017 08:16:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

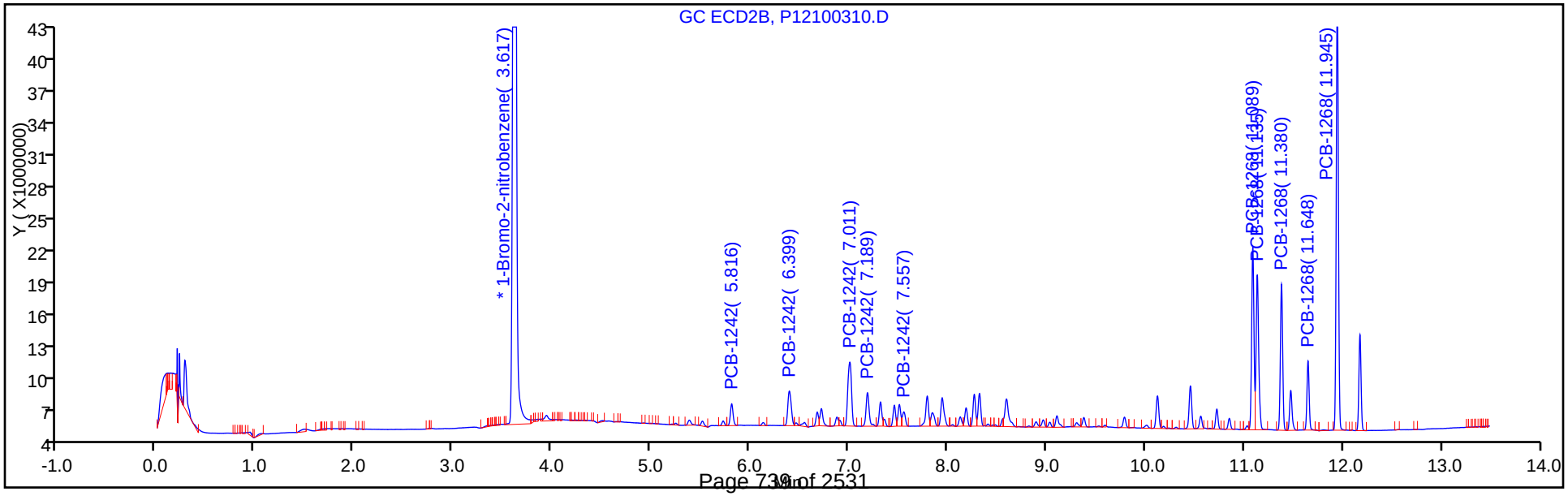
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100310.D

Injection Date:	03-Oct-2017 16:19:09	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1242 1268			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100311.D
Lims ID: std01 1242 1268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 16:36:45 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-011
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:05 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:08:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.069	3.076	-0.006	82478440	0.0500	0.0500	
2	3.615	3.619	-0.004	233105202	0.0500	0.0500	
5 PCB-1242							M
1	4.894	4.896	-0.002	2489228	0.1000	0.1014	
1	5.404	5.406	-0.002	4787022	0.1000	0.1095	
1	6.035	6.036	-0.001	10315652	0.1000	0.1036	
1	6.212	6.213	-0.001	4587892	0.1000	0.1085	
1	6.749	6.750	-0.001	4586239	0.1000	0.1057	M
		Average of Peak Amounts =				0.1057	
2	5.814	5.816	-0.002	7354664	0.1000	0.1127	
2	6.398	6.399	-0.001	14698224	0.1000	0.1139	
2	7.011	7.011	0.000	29177024	0.1000	0.1088	
2	7.189	7.189	0.000	12507058	0.1000	0.1128	
2	7.557	7.557	0.000	5285556	0.1000	0.1133	
		Average of Peak Amounts =				0.1123	
						RPD = 6.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	25636477	0.1000	0.1017	
1	10.119	10.119	0.000	24575277	0.1000	0.1010	
1	10.333	10.335	-0.002	21324393	0.1000	0.1015	
1	10.715	10.716	-0.001	9313195	0.1000	0.1030	
1	11.002	11.003	-0.001	69286979	0.1000	0.1002	
		Average of Peak Amounts =				0.1015	
2	11.088	11.089	-0.001	52504851	0.1000	0.1058	
2	11.134	11.135	-0.001	49166425	0.1000	0.1055	
2	11.379	11.380	-0.001	42122292	0.1000	0.1063	
2	11.648	11.648	0.000	19102022	0.1000	0.1097	
2	11.944	11.945	-0.001	125428260	0.1000	0.1046	
		Average of Peak Amounts =				0.1064	
						RPD = 4.72	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@.1PPM_00012 Amount Added: 1.00 Units: mL

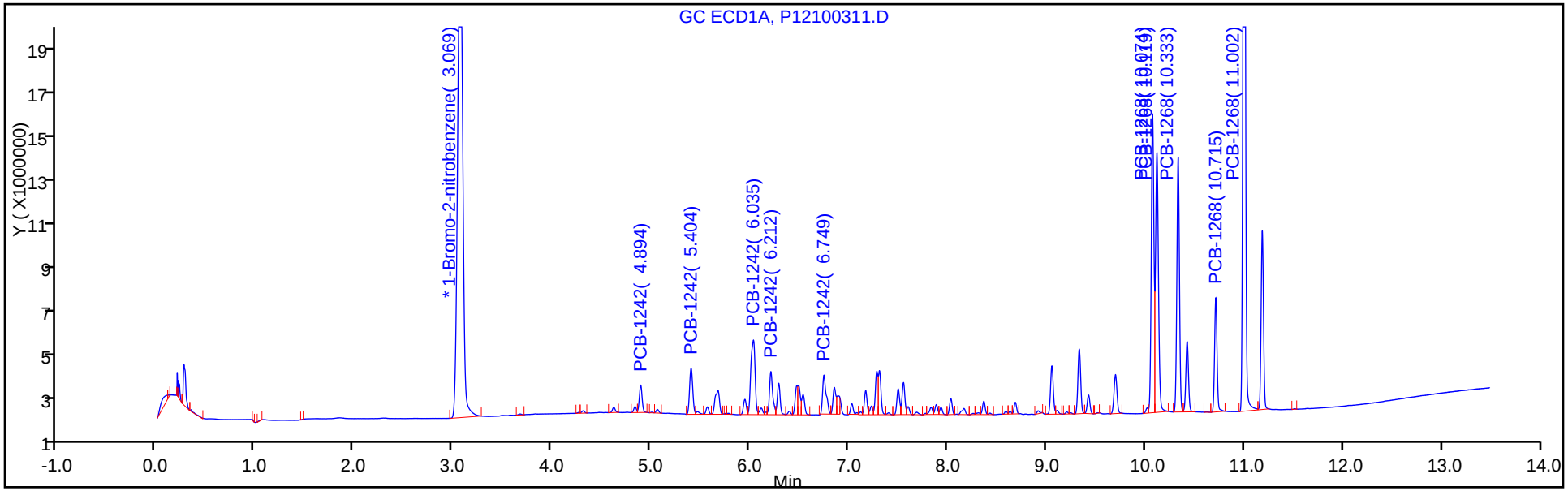
Report Date: 04-Oct-2017 08:17:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

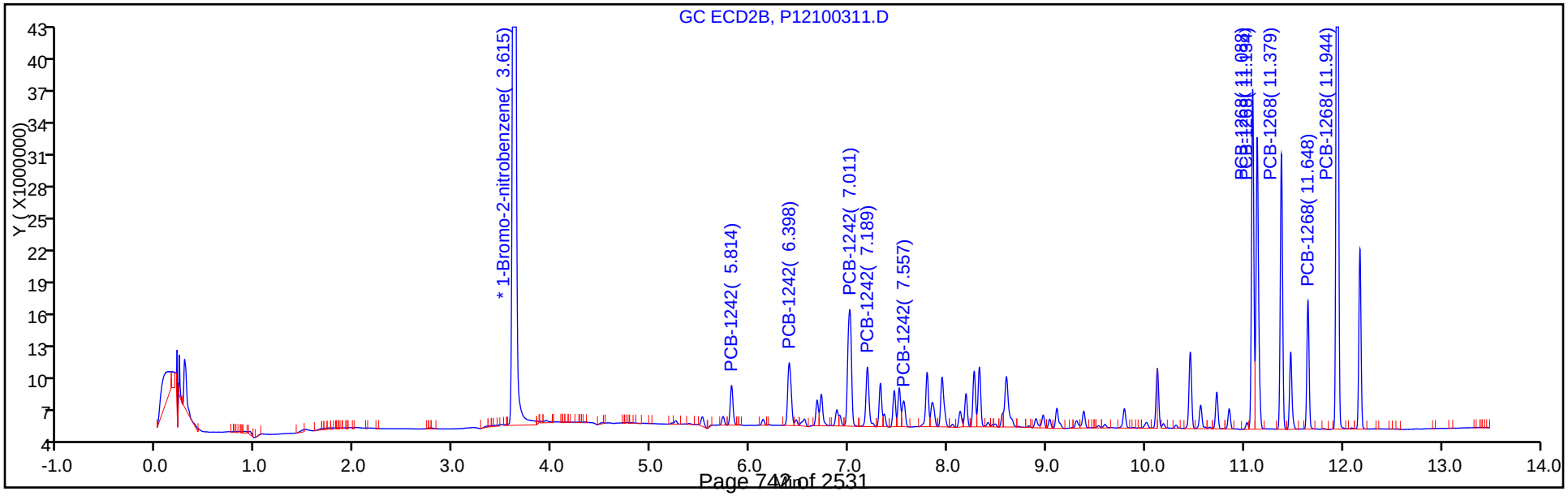
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100311.D

Injection Date:	03-Oct-2017 16:36:45	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1242 1268			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100312.D
Lims ID: std02 1242 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 16:54:22 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-012
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:12 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:32:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.076	-0.004	84085973	0.0500	0.0500	
2	3.616	3.619	-0.003	243428453	0.0500	0.0500	
5 PCB-1242							
1	4.895	4.896	-0.001	5113123	0.2000	0.2042	
1	5.405	5.406	-0.001	9060030	0.2000	0.2033	
1	6.036	6.036	0.000	19915026	0.2000	0.1962	
1	6.212	6.213	-0.001	8622134	0.2000	0.2001	
1	6.750	6.750	0.000	8721222	0.2000	0.1971	
		Average of Peak Amounts =				0.2002	
2	5.814	5.816	-0.002	13487920	0.2000	0.1979	
2	6.398	6.399	-0.001	26798242	0.2000	0.1988	
2	7.010	7.011	-0.001	54801601	0.2000	0.1957	
2	7.189	7.189	0.000	22399974	0.2000	0.1935	
2	7.556	7.557	-0.001	9777782	0.2000	0.2007	
		Average of Peak Amounts =				0.1973	
						RPD = 1.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.075	10.076	-0.001	50534279	0.2000	0.1966	
1	10.118	10.119	-0.001	49543787	0.2000	0.1997	
1	10.334	10.335	-0.001	42210987	0.2000	0.1971	
1	10.715	10.716	-0.001	18215539	0.2000	0.1975	
1	11.002	11.003	-0.001	138819490	0.2000	0.1969	
		Average of Peak Amounts =				0.1976	
2	11.089	11.089	0.000	99220741	0.2000	0.1915	
2	11.134	11.135	-0.001	93846510	0.2000	0.1928	
2	11.380	11.380	0.000	80083744	0.2000	0.1936	
2	11.647	11.648	-0.001	35590136	0.2000	0.1956	
2	11.944	11.945	-0.001	242022669	0.2000	0.1932	
		Average of Peak Amounts =				0.1934	
						RPD = 2.15	

Reagents:

SG4268@.2PPM_00012 Amount Added: 1.00 Units: mL

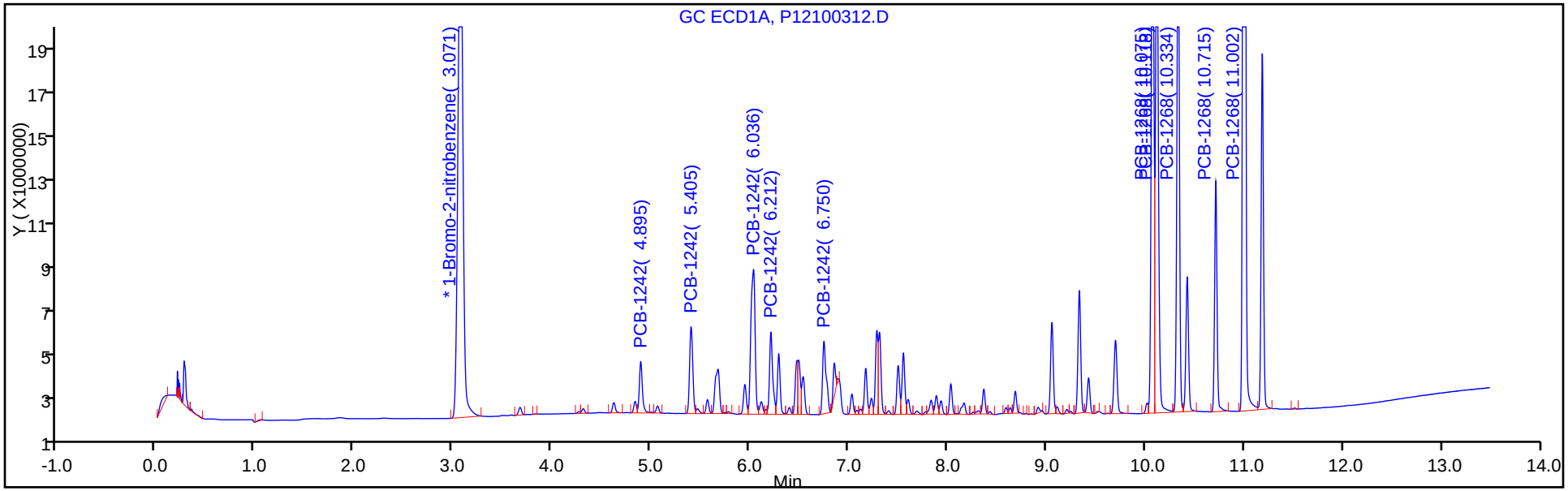
Report Date: 04-Oct-2017 08:17:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

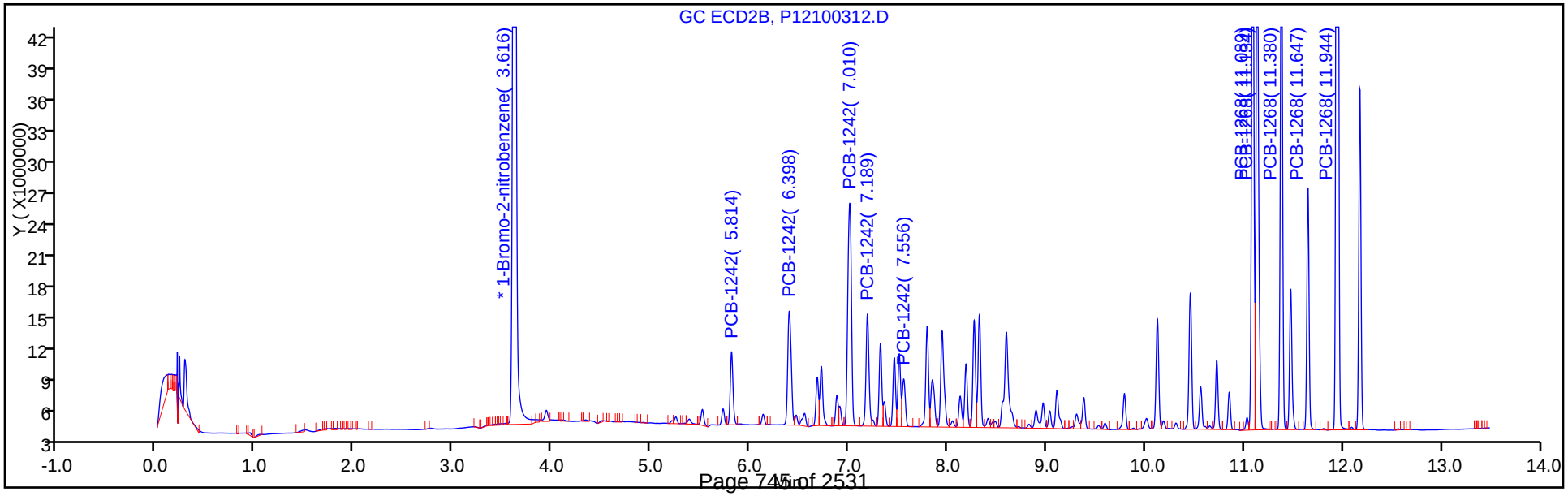
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100312.D

Injection Date:	03-Oct-2017 16:54:22	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1242 1268			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100313.D
Lims ID: std05 1242 1268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 17:12:07 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-013
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:16 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.079	3.076	0.004	86509511	0.0500	0.0500	
2	3.619	3.619	0.000	237070517	0.0500	0.0500	
5 PCB-1242							
1	4.896	4.896	0.000	11827958	0.5000	0.4592	
1	5.406	5.406	0.000	21811351	0.5000	0.4756	
1	6.037	6.036	0.001	50640475	0.5000	0.4850	
1	6.212	6.213	-0.001	21194377	0.5000	0.4781	
1	6.749	6.750	-0.001	21926645	0.5000	0.4817	
		Average of Peak Amounts =				0.4759	
2	5.814	5.816	-0.002	32408465	0.5000	0.4884	
2	6.399	6.399	0.000	62822330	0.5000	0.4785	
2	7.009	7.011	-0.002	133801945	0.5000	0.4906	
2	7.189	7.189	0.000	53437249	0.5000	0.4741	
2	7.555	7.557	-0.002	22545793	0.5000	0.4753	
		Average of Peak Amounts =				0.4814	
						RPD = 1.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	130134380	0.5000	0.4921	
1	10.118	10.119	-0.001	126631526	0.5000	0.4962	
1	10.333	10.335	-0.002	108222884	0.5000	0.4913	
1	10.714	10.716	-0.002	46150822	0.5000	0.4864	
1	11.001	11.003	-0.002	357730630	0.5000	0.4931	
		Average of Peak Amounts =				0.4918	
2	11.088	11.089	-0.001	250153738	0.5000	0.4959	
2	11.134	11.135	-0.001	235153614	0.5000	0.4961	
2	11.379	11.380	-0.001	200632898	0.5000	0.4981	
2	11.647	11.648	-0.001	87221170	0.5000	0.4923	
2	11.944	11.945	-0.001	602262473	0.5000	0.4937	
		Average of Peak Amounts =				0.4952	
						RPD = 0.69	

Reagents:

SG4268@0.5PPM_00025 Amount Added: 1.00 Units: mL

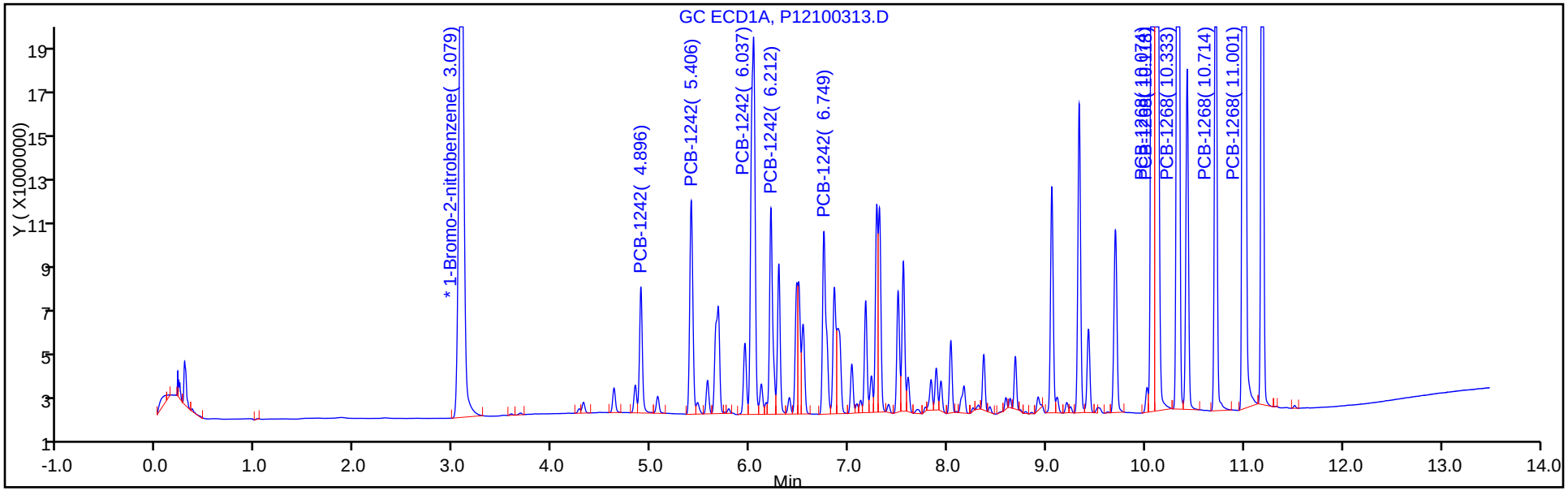
Report Date: 04-Oct-2017 08:17:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

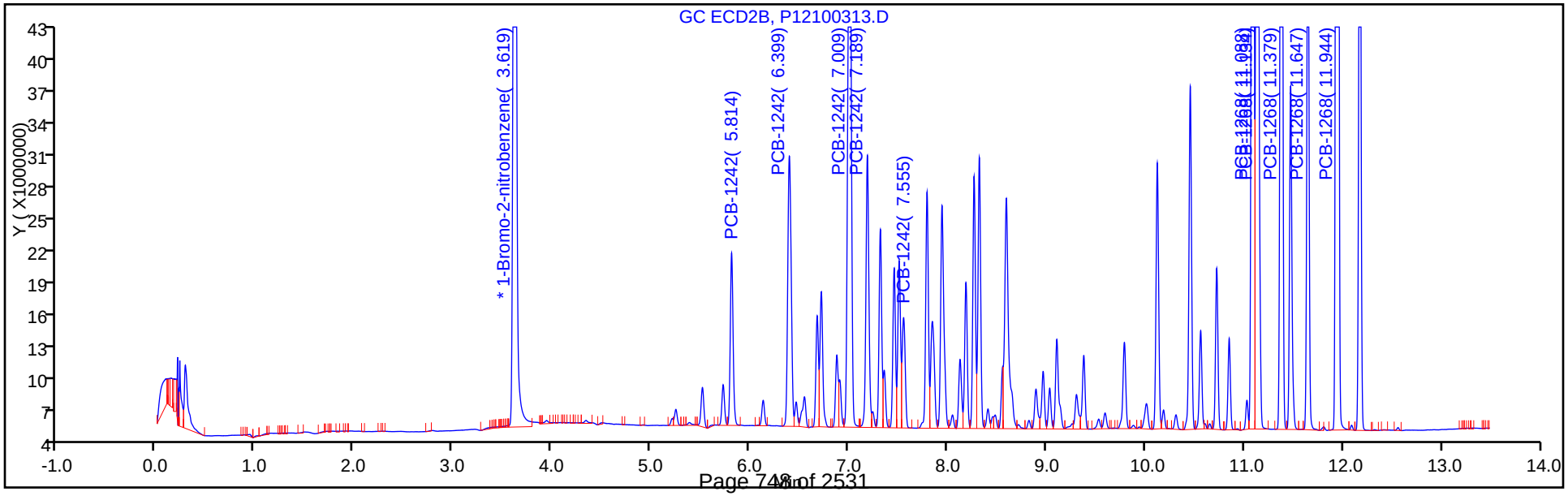
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100313.D

Injection Date:	03-Oct-2017 17:12:07	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1242 1268			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100314.D
Lims ID: std1 1242 1268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 17:29:42 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-014
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:22 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: grantk Date: 04-Oct-2017 07:34:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.076	-0.005	82491590	0.0500	0.0500	
2	3.617	3.619	-0.002	227333430	0.0500	0.0500	
5 PCB-1242							
1	4.895	4.896	-0.001	21110690	1.00	0.8595	
1	5.405	5.406	-0.001	39525352	1.00	0.9039	
1	6.038	6.036	0.002	94724984	1.00	0.9514	
1	6.212	6.213	-0.001	38818289	1.00	0.9182	
1	6.748	6.750	-0.002	39994243	1.00	0.9214	
		Average of Peak Amounts =				0.9109	
2	5.814	5.816	-0.002	54892216	1.00	0.8626	
2	6.398	6.399	-0.001	107328767	1.00	0.8525	
2	7.010	7.011	-0.001	237253047	1.00	0.9071	
2	7.189	7.189	0.000	92986643	1.00	0.8602	
2	7.556	7.557	-0.001	38792868	1.00	0.8528	
		Average of Peak Amounts =				0.8671	
						RPD = 4.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	249060594	1.00	0.9876	
1	10.117	10.119	-0.002	238443563	1.00	0.9798	
1	10.333	10.335	-0.002	206143663	1.00	0.9814	
1	10.714	10.716	-0.002	87451153	1.00	0.9666	
1	11.002	11.003	-0.001	691891271	1.00	1.00	
		Average of Peak Amounts =				0.9831	
2	11.088	11.089	-0.001	457349400	1.00	0.9454	
2	11.133	11.135	-0.002	425790865	1.00	0.9367	
2	11.379	11.380	-0.001	361245759	1.00	0.9352	
2	11.647	11.648	-0.001	153074903	1.00	0.9011	
2	11.944	11.945	-0.001	1147206924	1.00	0.9806	
		Average of Peak Amounts =				0.9398	
						RPD = 4.51	

Reagents:

SG42/68@1.0PP_00018 Amount Added: 1.00 Units: mL

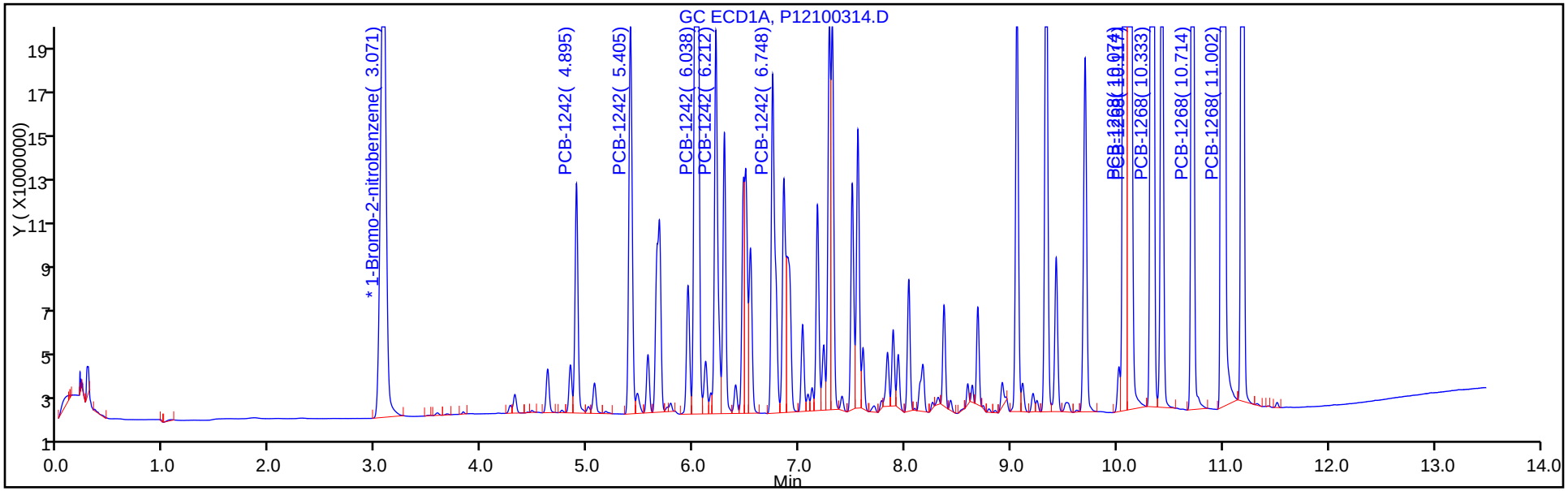
Report Date: 04-Oct-2017 08:17:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

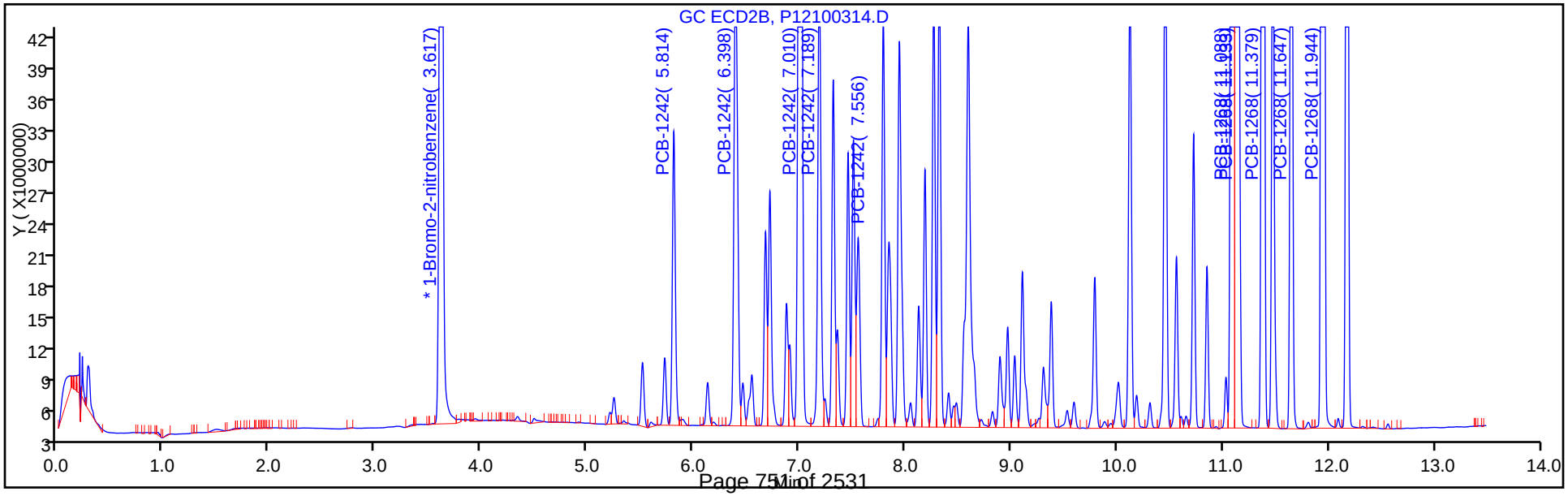
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100314.D

Injection Date:	03-Oct-2017 17:29:42	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1242 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100315.D
Lims ID: std151242 1268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 17:47:18 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-015
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:26 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:11:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	85779865	0.0500	0.0500	
2	3.620	3.619	0.001	250095880	0.0500	0.0500	
5 PCB-1242							
1	4.896	4.896	0.000	31666617	1.50	1.24	
1	5.406	5.406	0.000	60883097	1.50	1.34	
1	6.038	6.036	0.002	147191262	1.50	1.42	
1	6.212	6.213	-0.001	59734934	1.50	1.36	
1	6.749	6.750	-0.001	61287903	1.50	1.36	
		Average of Peak Amounts =				1.34	
2	5.816	5.816	0.000	87094580	1.50	1.24	
2	6.399	6.399	0.000	172681072	1.50	1.25	
2	7.012	7.011	0.001	377142234	1.50	1.31	
2	7.189	7.189	0.000	150985421	1.50	1.27	
2	7.556	7.557	-0.001	62931632	1.50	1.26	
		Average of Peak Amounts =				1.27	
						RPD = 5.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.074	10.076	-0.002	388986587	1.50	1.48	
1	10.117	10.119	-0.002	370871825	1.50	1.47	
1	10.333	10.335	-0.002	321164060	1.50	1.47	
1	10.714	10.716	-0.002	135866290	1.50	1.44	
1	11.002	11.003	-0.001	1083649518	1.50	1.51	
		Average of Peak Amounts =				1.47	
2	11.089	11.089	0.000	725248730	1.50	1.36	
2	11.134	11.135	-0.001	686249602	1.50	1.37	
2	11.380	11.380	0.000	584460536	1.50	1.38	
2	11.647	11.648	-0.001	248843409	1.50	1.33	
2	11.945	11.945	0.000	1863646108	1.50	1.45	
		Average of Peak Amounts =				1.38	
						RPD = 6.73	

Reagents:

SG4268@1.5PPM_00003 Amount Added: 1.00 Units: mL

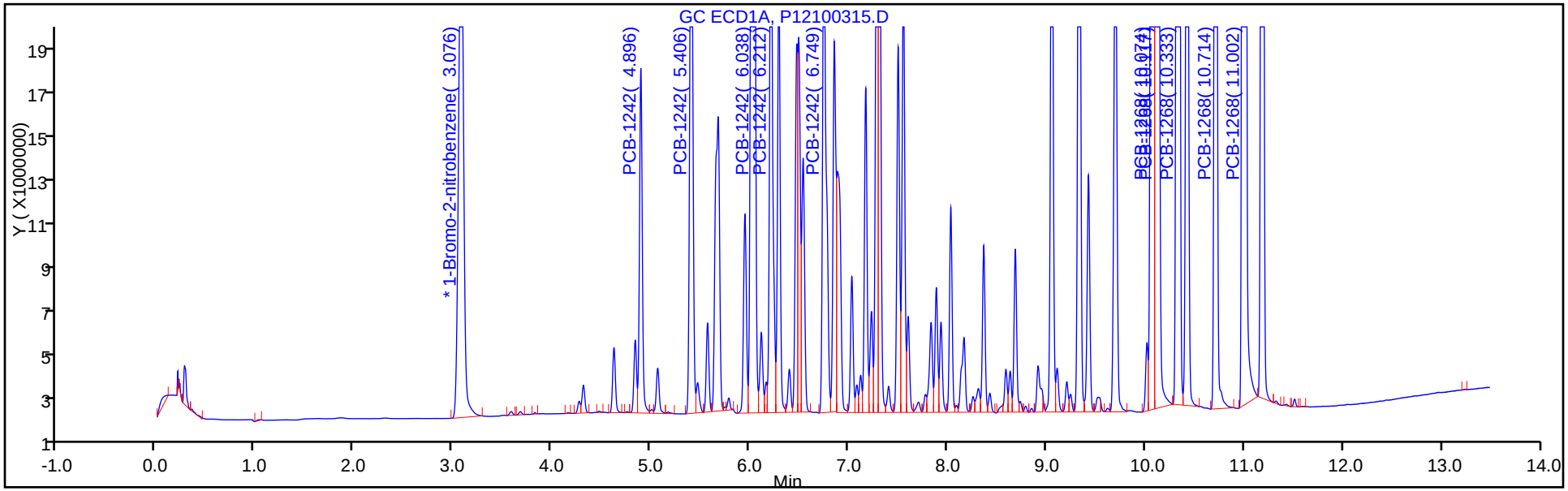
Report Date: 04-Oct-2017 08:17:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

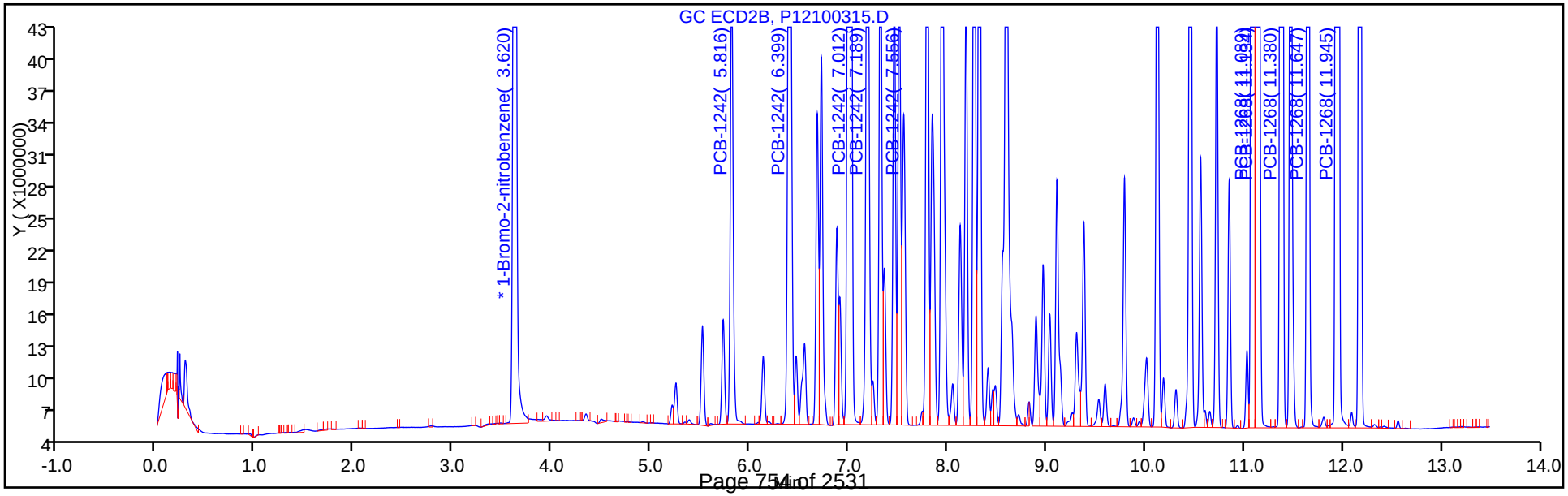
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100315.D

Injection Date:	03-Oct-2017 17:47:18	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std151242 1268			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 18:04 Calibration End Date: 10/03/2017 19:33 Calibration ID: 41727

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/16	P12100316.D
Level 2	STD01 240-297285/17	P12100317.D
Level 3	STD02 240-297285/18	P12100318.D
Level 4	STD05 240-297285/19	P12100319.D
Level 5	STD1 240-297285/20	P12100320.D
Level 6	STD15 240-297285/21	P12100321.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.0170 0.0131	0.0157	0.0150	0.0141	0.0136	Ave		0.0147				9.8		20.0			
PCB-1248 Peak 2	0.0470 0.0384	0.0440	0.0424	0.0404	0.0390	Ave		0.0418				7.8		20.0			
PCB-1248 Peak 3	0.0399 0.0377	0.0395	0.0390	0.0377	0.0378	Ave		0.0386				2.6		20.0			
PCB-1248 Peak 4	0.0340 0.0297	0.0321	0.0316	0.0302	0.0298	Ave		0.0312				5.4		20.0			
PCB-1248 Peak 5	0.0221 0.0193	0.0213	0.0211	0.0200	0.0196	Ave		0.0206				5.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 | GC Column: CLP-1 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 18:04 | Calibration End Date: 10/03/2017 19:33 | Calibration ID: 41727

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/16	P12100316.D
Level 2	STD01 240-297285/17	P12100317.D
Level 3	STD02 240-297285/18	P12100318.D
Level 4	STD05 240-297285/19	P12100319.D
Level 5	STD1 240-297285/20	P12100320.D
Level 6	STD15 240-297285/21	P12100321.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Ave	1406522 30917473	2649346	4924573	10320530	21242324	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	BNB	Ave	3891522 90481622	7446378	13881508	29598440	61046280	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	BNB	Ave	3308746 88880285	6684380	12779949	27642673	59213244	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	BNB	Ave	2814019 69932033	5432811	10333223	22133133	46680712	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	BNB	Ave	1828438 45540671	3599780	6914208	14631254	30662216	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100316.D
Lims ID: std005 1248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 18:04:55 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-016
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:31 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:18:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.086	3.076	0.010	82853260	0.0500	0.0500	
2	3.624	3.619	0.005	242366287	0.0500	0.0500	
7 PCB-1248							
1	5.406	5.406	0.000	1406522	0.0500	0.0576	
1	6.750	6.750	0.000	3891522	0.0500	0.0561	
1	7.285	7.285	0.000	3308746	0.0500	0.0517	
1	7.555	7.555	0.000	2814019	0.0500	0.0544	
1	8.034	8.034	0.000	1828438	0.0500	0.0537	
		Average of Peak Amounts =				0.0547	
2	6.399	6.399	0.000	2068829	0.0500	0.0292	
2	7.007	7.007	0.000	11138961	0.0500	0.0577	
2	7.794	7.794	0.000	9075400	0.0500	0.0603	
2	8.322	8.322	0.000	9146146	0.0500	0.0529	
2	9.107	9.107	0.000	5612081	0.0500	0.0571	
		Average of Peak Amounts =				0.0514	
						RPD = 6.15	

Reagents:

SG1248@.05ppm_00023 Amount Added: 1.00 Units: mL

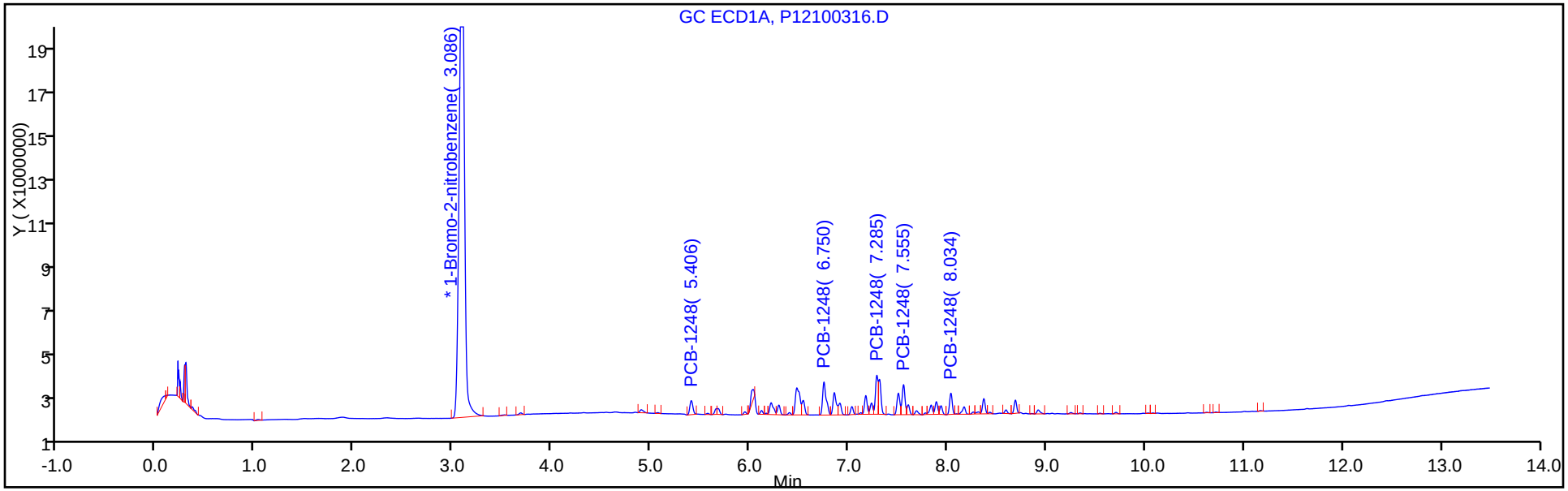
Report Date: 04-Oct-2017 08:17:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

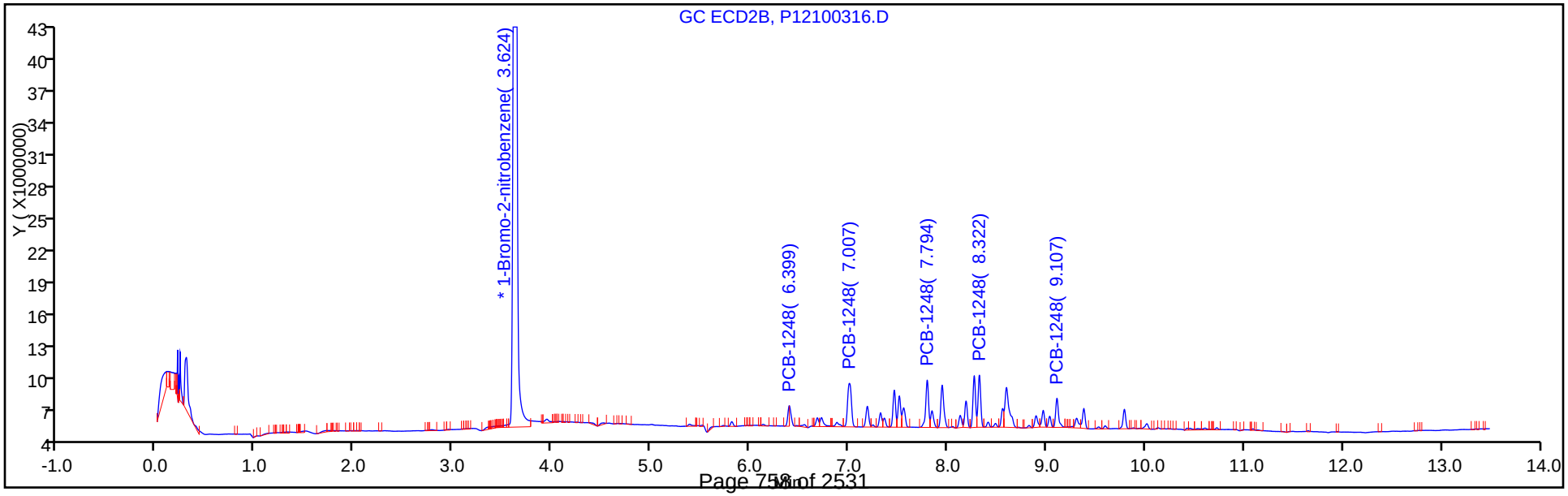
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100316.D

Injection Date:	03-Oct-2017 18:04:55	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1248			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100317.D
Lims ID: std01 1248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 18:22:41 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-017
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:35 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:19:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.084	3.076	0.009	84604762	0.0500	0.0500	
2	3.622	3.619	0.003	244784040	0.0500	0.0500	
7 PCB-1248							
1	5.405	5.406	-0.001	2649346	0.1000	0.1062	
1	6.749	6.750	-0.001	7446378	0.1000	0.1052	
1	7.284	7.285	-0.001	6684380	0.1000	0.1023	
1	7.554	7.555	-0.001	5432811	0.1000	0.1029	
1	8.034	8.034	0.000	3599780	0.1000	0.1035	
		Average of Peak Amounts =				0.1040	
2	6.398	6.399	-0.001	8479201	0.1000	0.1236	
2	7.008	7.007	0.001	21669603	0.1000	0.1112	
2	7.794	7.794	0.000	17140886	0.1000	0.1127	
2	8.322	8.322	0.000	19575510	0.1000	0.1121	
2	9.107	9.107	0.000	10906999	0.1000	0.1099	
		Average of Peak Amounts =				0.1139	
						RPD = 9.07	

Reagents:

SG1248@0.1PPM_00025 Amount Added: 1.00 Units: mL

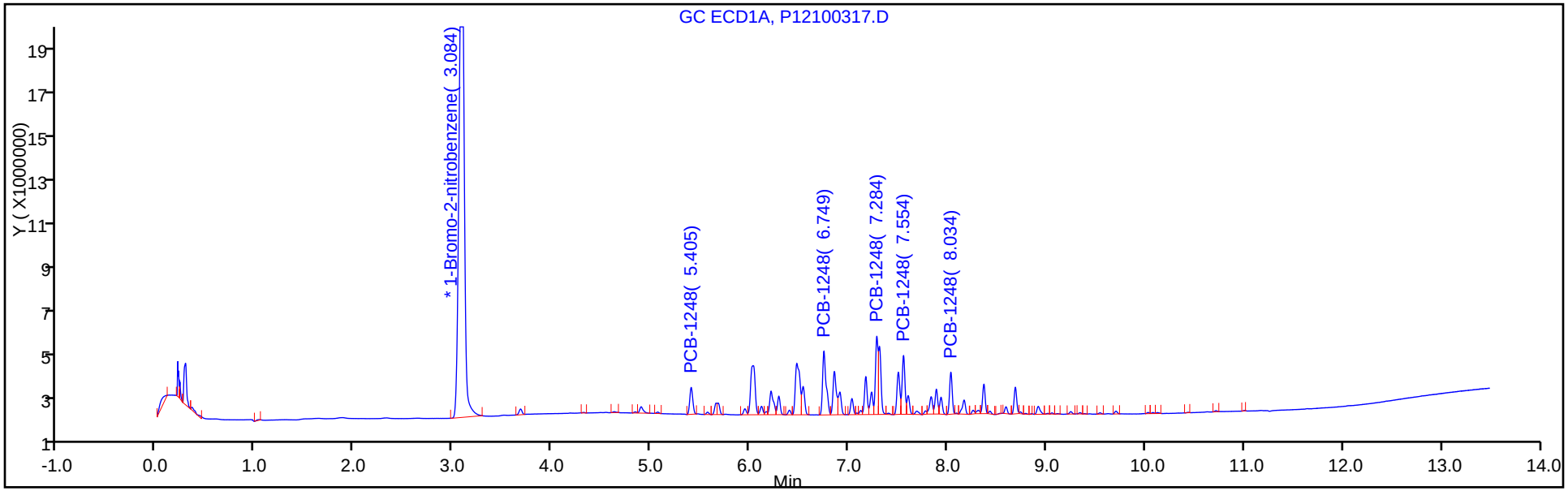
Report Date: 04-Oct-2017 08:17:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

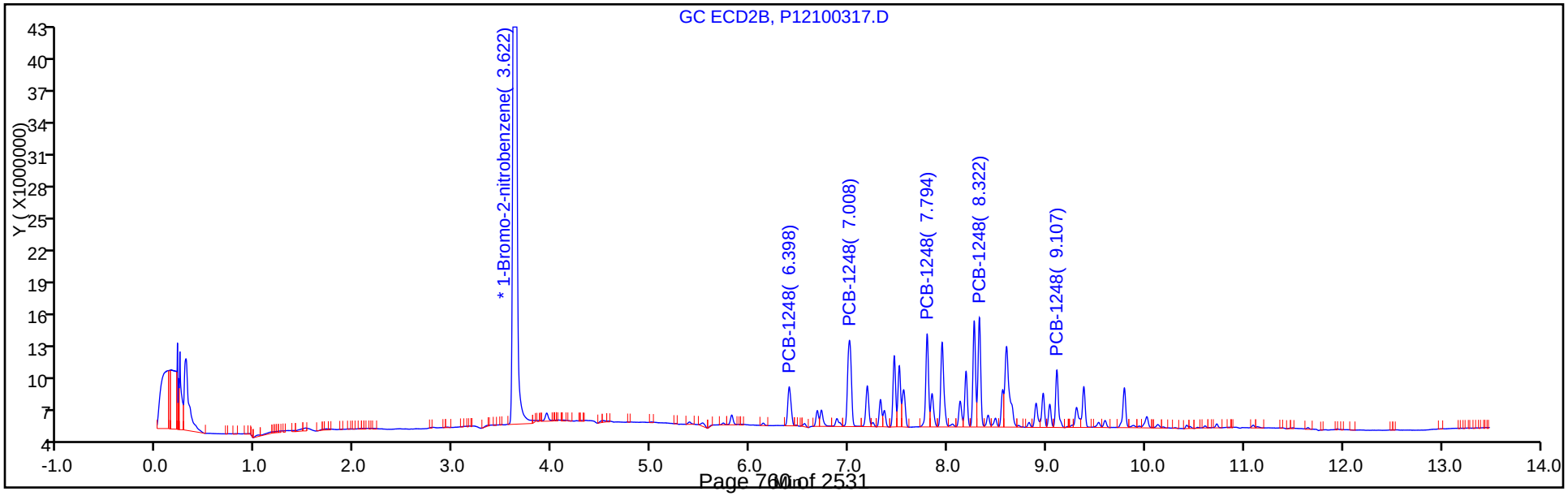
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100317.D

Injection Date:	03-Oct-2017 18:22:41	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1248			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100318.D
Lims ID: std02 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 18:40:16 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-018
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:39 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:19:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.079	3.076	0.003	81841448	0.0500	0.0500	
2	3.621	3.619	0.002	250316499	0.0500	0.0500	
7 PCB-1248							
1	5.405	5.406	-0.001	4924573	0.2000	0.2042	
1	6.749	6.750	-0.001	13881508	0.2000	0.2027	
1	7.285	7.285	0.000	12779949	0.2000	0.2022	
1	7.555	7.555	0.000	10333223	0.2000	0.2023	
1	8.034	8.034	0.000	6914208	0.2000	0.2055	
		Average of Peak Amounts =				0.2034	
2	6.397	6.399	-0.002	16009894	0.2000	0.2297	
2	7.007	7.007	0.000	40465463	0.2000	0.2030	
2	7.794	7.794	0.000	31632285	0.2000	0.2035	
2	8.322	8.322	0.000	35917086	0.2000	0.2012	
2	9.107	9.107	0.000	20817940	0.2000	0.2051	
		Average of Peak Amounts =				0.2085	
						RPD = 2.49	

Reagents:

SG1248@0.2ppm_00021 Amount Added: 1.00 Units: mL

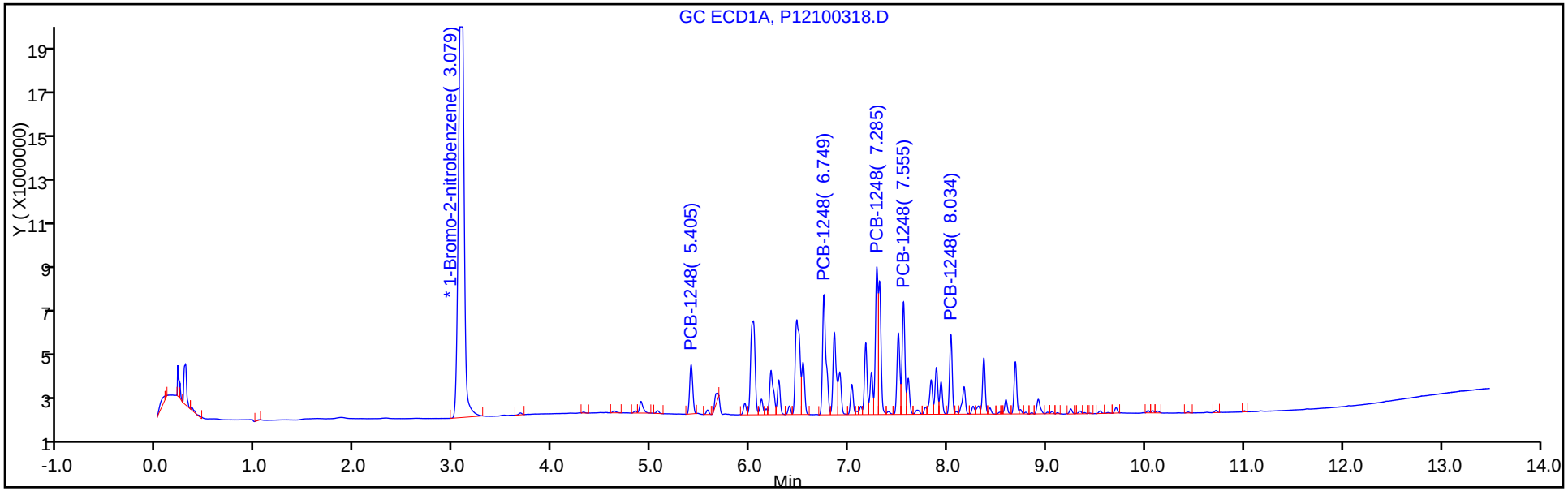
Report Date: 04-Oct-2017 08:17:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

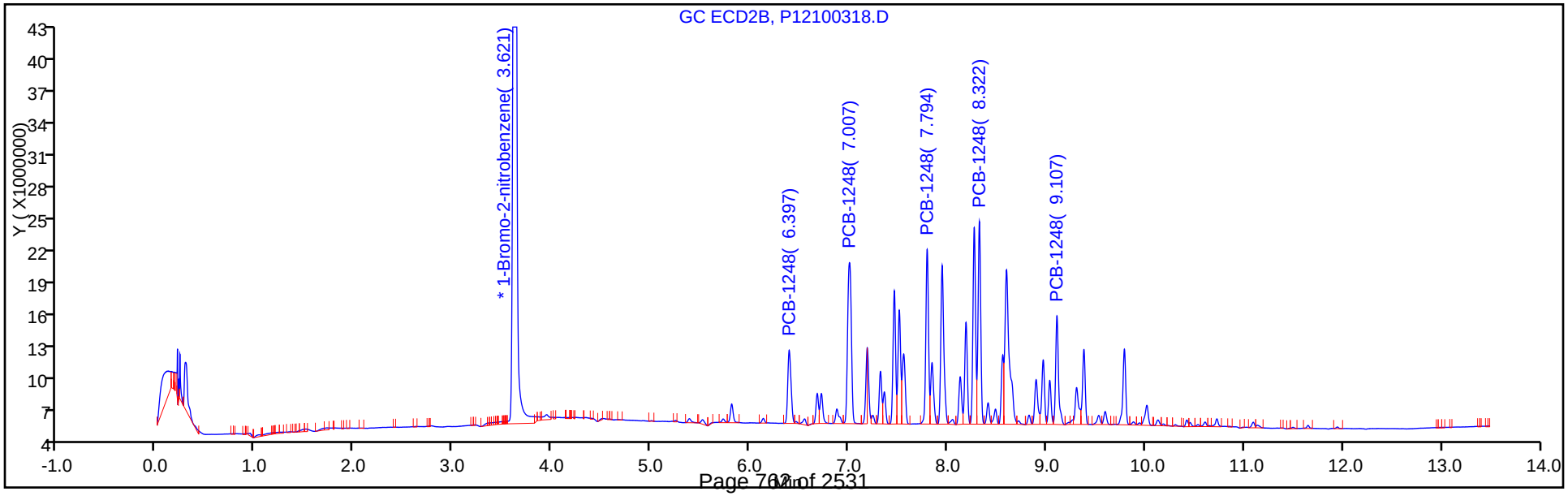
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100318.D

Injection Date:	03-Oct-2017 18:40:16	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1248			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100319.D
Lims ID: std05 1248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 18:57:51 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-019
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:44 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:42:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.064	3.076	-0.011	73339388	0.0500	0.0500	
2	3.613	3.619	-0.006	218599343	0.0500	0.0500	
7 PCB-1248							M
1	5.402	5.406	-0.004	10320530	0.5000	0.4774	
1	6.748	6.750	-0.002	29598440	0.5000	0.4822	M
1	7.283	7.285	-0.002	27642673	0.5000	0.4881	
1	7.553	7.555	-0.002	22133133	0.5000	0.4834	
1	8.033	8.034	-0.001	14631254	0.5000	0.4854	
		Average of Peak Amounts =				0.4833	
2	6.396	6.399	-0.003	33093874	0.5000	0.5459	
2	7.005	7.007	-0.002	81954640	0.5000	0.4708	
2	7.793	7.794	-0.001	63550234	0.5000	0.4681	
2	8.321	8.322	-0.001	74531261	0.5000	0.4780	
2	9.106	9.107	-0.001	42989923	0.5000	0.4850	
		Average of Peak Amounts =				0.4896	
						RPD = 1.28	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248@0.5ppm_00031 Amount Added: 1.00 Units: mL

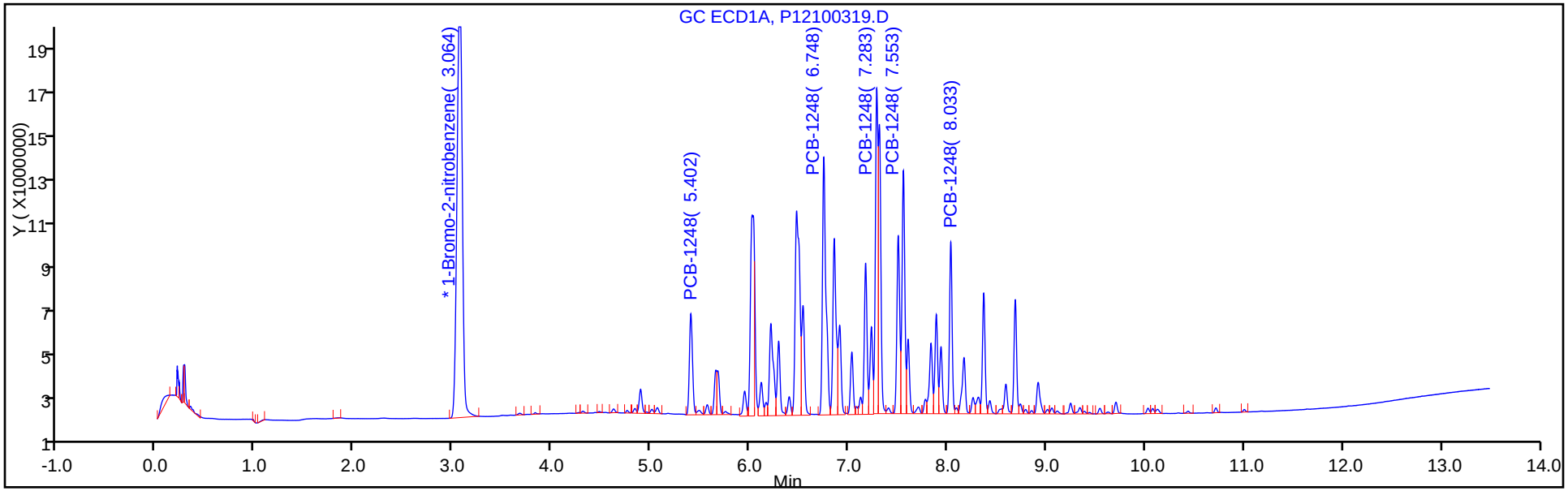
Report Date: 04-Oct-2017 08:17:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

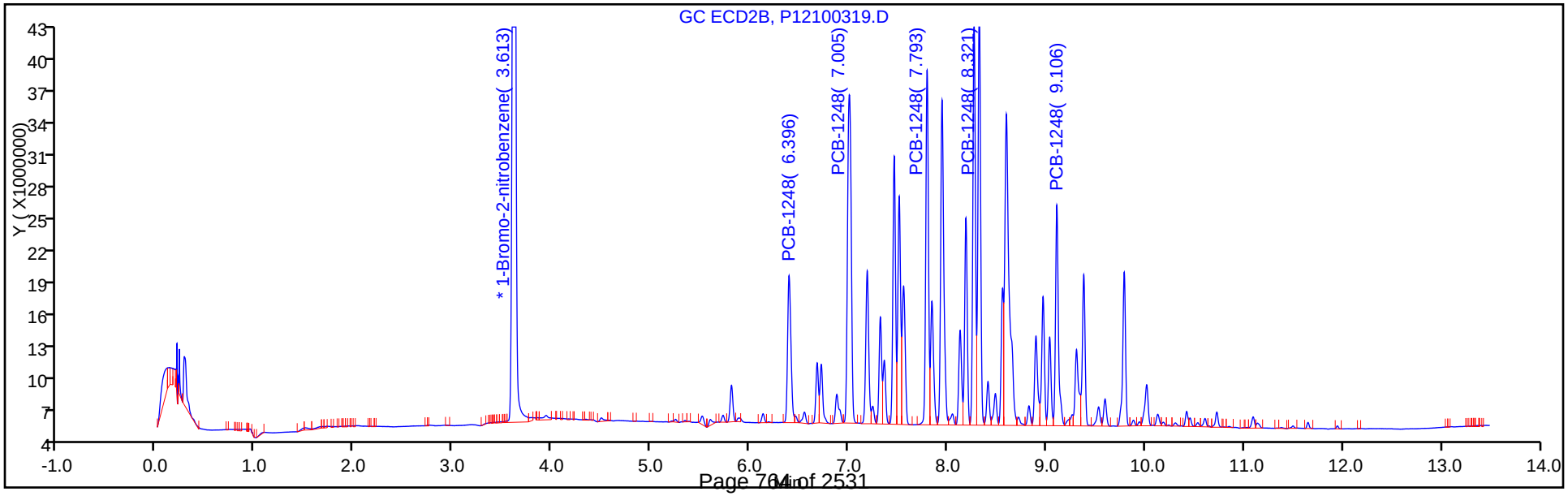
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100319.D

Injection Date:	03-Oct-2017 18:57:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1248			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:17:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100319.D

Injection Date: 03-Oct-2017 18:57:51 Instrument ID: A2HP12

Lims ID: std05 1248

Client ID:

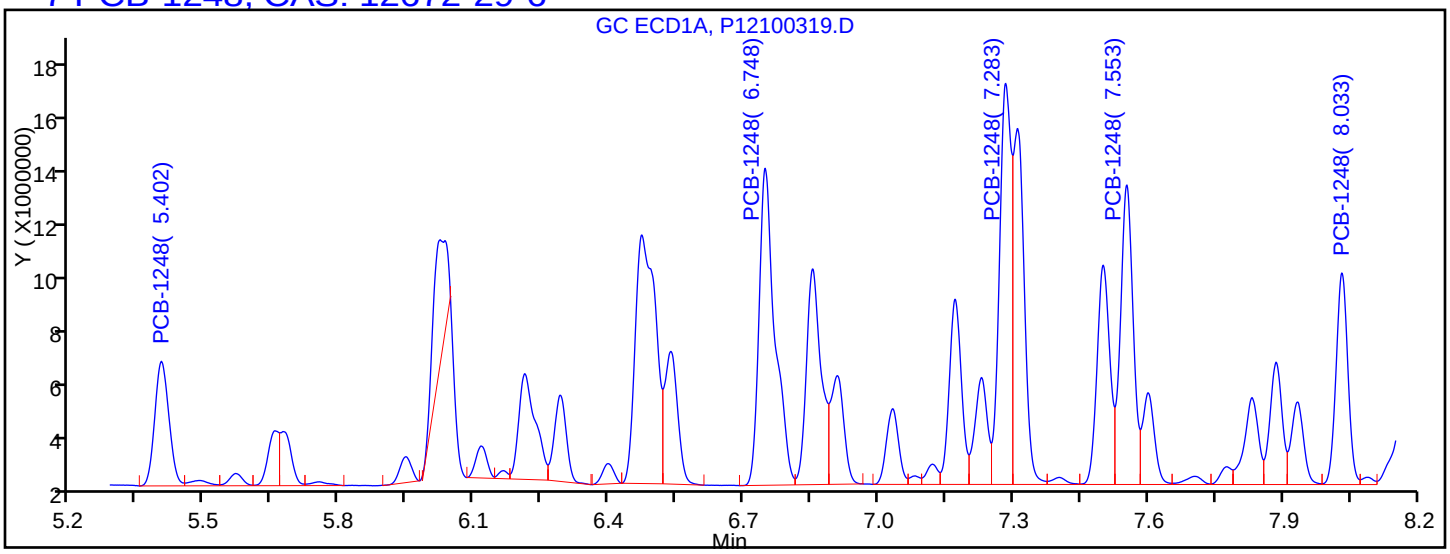
Operator ID: ALS Bottle#: 19 Worklist Smp#: 19

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

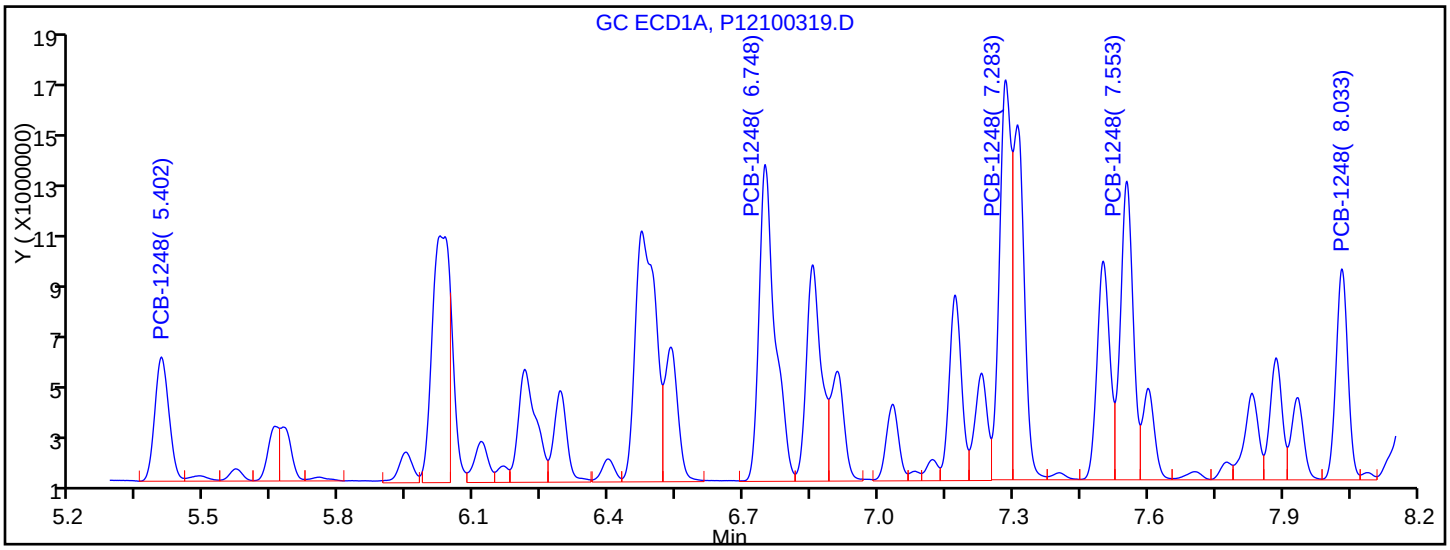
Column: Detector GC ECD1A

7 PCB-1248, CAS: 12672-29-6



Processing Integration Results

5.402	Response = 10320530
6.748	Response = 29375584
7.283	Response = 27642673
7.553	Response = 22133133
8.033	Response = 14631254



Manual Integration Results

5.402	Response = 10320530	
6.748	Response = 29598440	M
7.283	Response = 27642673	
7.553	Response = 22133133	
8.033	Response = 14631254	

Reviewer: hassl, 04-Oct-2017 06:20:09

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100320.D
Lims ID: std1 1248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 19:15:29 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-020
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:49 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:20:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.076	-0.001	78333533	0.0500	0.0500	
2	3.619	3.619	0.000	232131436	0.0500	0.0500	
7 PCB-1248							
1	5.404	5.406	-0.002	21242324	1.00	0.9201	
1	6.749	6.750	-0.001	61046280	1.00	0.9311	
1	7.284	7.285	-0.001	59213244	1.00	0.9789	
1	7.554	7.555	-0.001	46680712	1.00	0.9546	
1	8.034	8.034	0.000	30662216	1.00	0.9524	
		Average of Peak Amounts =				0.9474	
2	6.397	6.399	-0.002	62757724	1.00	0.9762	
2	7.006	7.007	-0.001	163705097	1.00	0.8856	
2	7.794	7.794	0.000	124009867	1.00	0.8602	
2	8.321	8.322	-0.001	151819912	1.00	0.9170	
2	9.105	9.107	-0.002	80729302	1.00	0.8577	
		Average of Peak Amounts =				0.8993	
						RPD = 5.21	

Reagents:

SG1248@1.0ppm_00021 Amount Added: 1.00 Units: mL

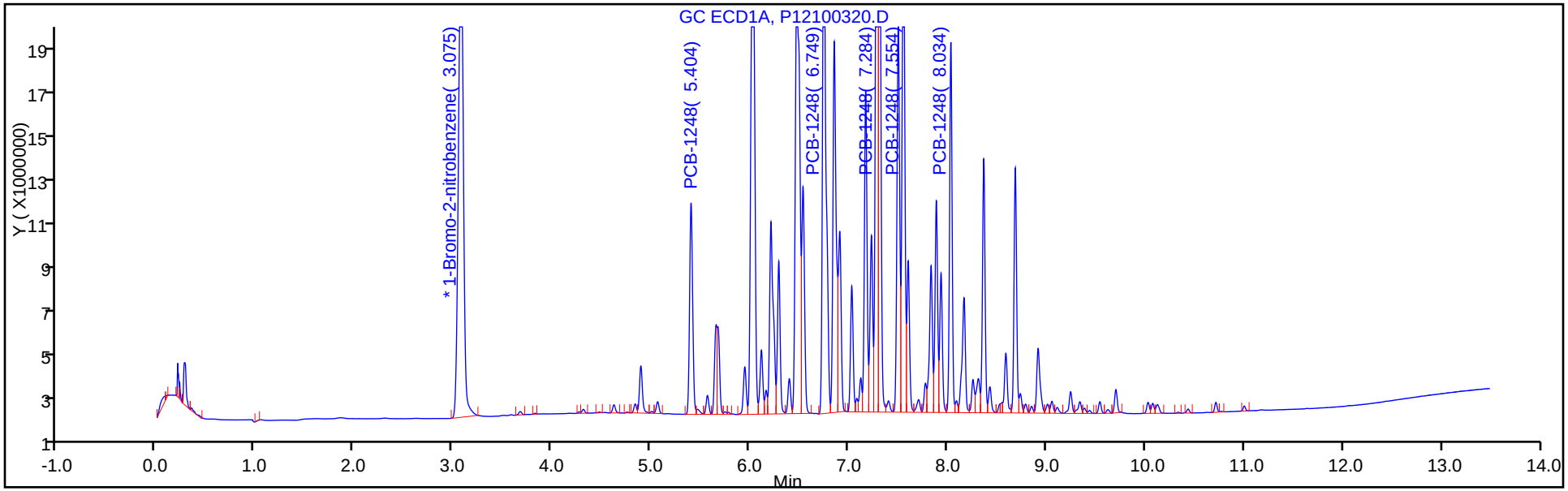
Report Date: 04-Oct-2017 08:17:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

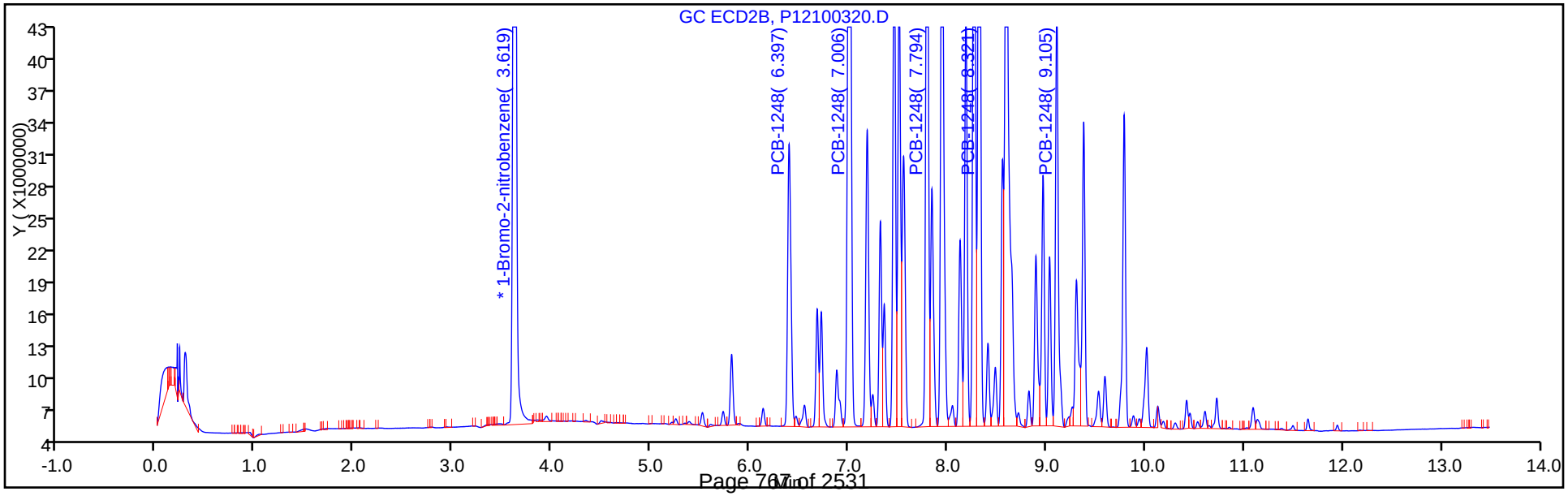
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100320.D

Injection Date:	03-Oct-2017 19:15:29	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1248			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100321.D
Lims ID: std15 1248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 19:33:11 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-021
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:53 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:20:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.074	3.076	-0.001	78579098	0.0500	0.0500	
2	3.617	3.619	-0.002	220741741	0.0500	0.0500	
7 PCB-1248							
1	5.404	5.406	-0.002	30917473	1.50	1.33	
1	6.748	6.750	-0.002	90481622	1.50	1.38	
1	7.284	7.285	-0.001	88880285	1.50	1.46	
1	7.553	7.555	-0.002	69932033	1.50	1.43	
1	8.033	8.034	-0.001	45540671	1.50	1.41	
		Average of Peak Amounts =				1.40	
2	6.395	6.399	-0.004	88320116	1.50	1.45	
2	7.009	7.007	0.002	235105863	1.50	1.34	
2	7.794	7.794	0.000	175423171	1.50	1.28	
2	8.322	8.322	0.000	222384663	1.50	1.41	
2	9.106	9.107	-0.001	121614722	1.50	1.36	
		Average of Peak Amounts =				1.37	
						RPD = 2.56	

Reagents:

SG1248@1.5ppm_00002 Amount Added: 1.00 Units: mL

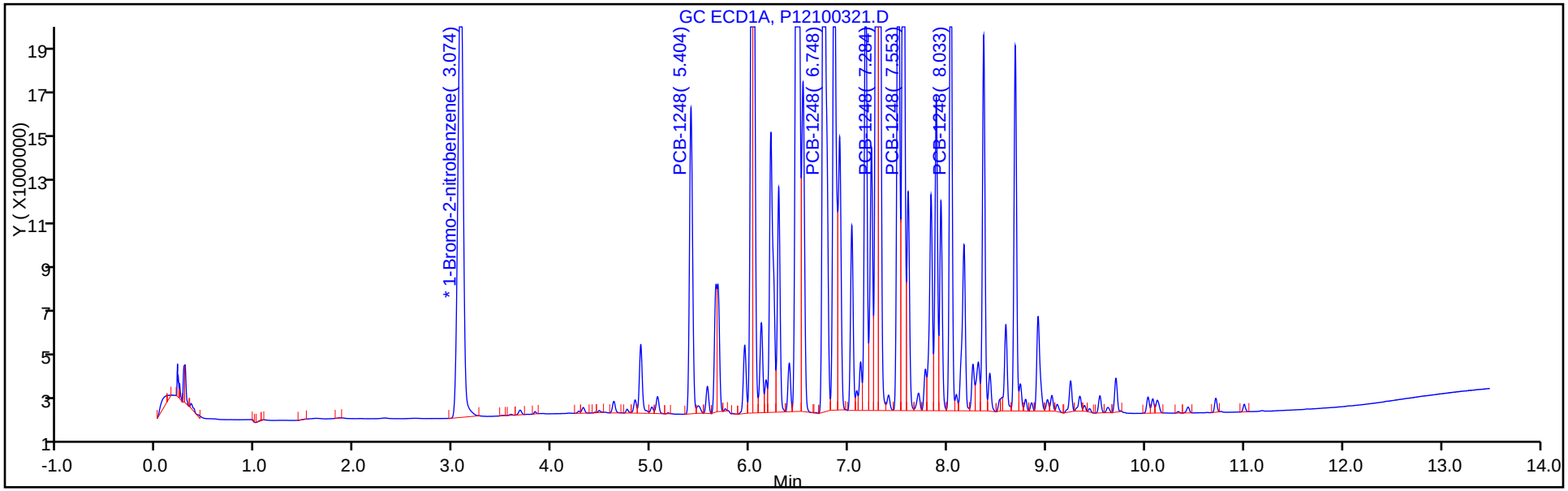
Report Date: 04-Oct-2017 08:17:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

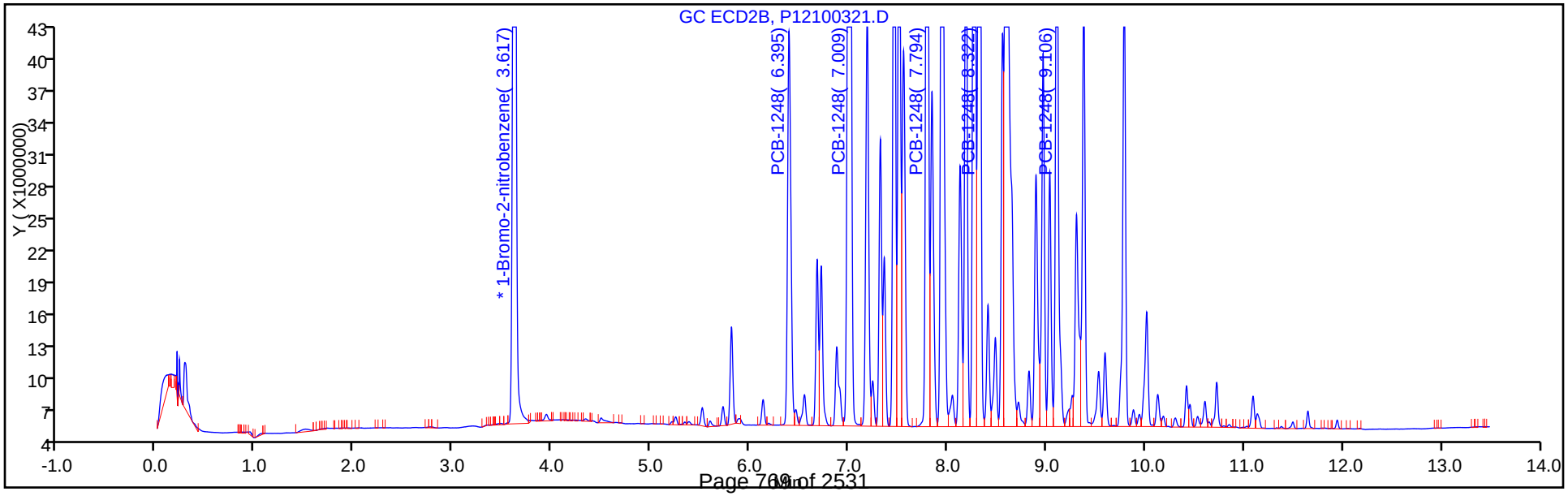
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100321.D

Injection Date:	03-Oct-2017 19:33:11	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std15 1248			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 | GC Column: CLP-2 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 18:04 | Calibration End Date: 10/03/2017 19:33 | Calibration ID: 41728

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/16	P12100316.D
Level 2	STD01 240-297285/17	P12100317.D
Level 3	STD02 240-297285/18	P12100318.D
Level 4	STD05 240-297285/19	P12100319.D
Level 5	STD1 240-297285/20	P12100320.D
Level 6	STD15 240-297285/21	P12100321.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.0085 0.0133	0.0173	0.0160	0.0151	0.0135	Lin1	0	0.0138							0.9900		0.9900
PCB-1248 Peak 2	0.0460 0.0355	0.0443	0.0404	0.0375	0.0353	Ave		0.0398				11.4		20.0			
PCB-1248 Peak 3	0.0374 0.0265	0.0350	0.0316	0.0291	0.0267	Ave		0.0311				14.4		20.0			
PCB-1248 Peak 4	0.0377 0.0336	0.0400	0.0359	0.0341	0.0327	Ave		0.0357				7.8		20.0			
PCB-1248 Peak 5	0.0232 0.0184	0.0223	0.0208	0.0197	0.0174	Ave		0.0203				11.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 | GC Column: CLP-2 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 18:04 | Calibration End Date: 10/03/2017 19:33 | Calibration ID: 41728

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/16	P12100316.D
Level 2	STD01 240-297285/17	P12100317.D
Level 3	STD02 240-297285/18	P12100318.D
Level 4	STD05 240-297285/19	P12100319.D
Level 5	STD1 240-297285/20	P12100320.D
Level 6	STD15 240-297285/21	P12100321.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Lin1	2068829 88320116	8479201	16009894	33093874	62757724	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	BNB	Ave	11138961 235105863	21669603	40465463	81954640	163705097	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	BNB	Ave	9075400 175423171	17140886	31632285	63550234	124009867	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	BNB	Ave	9146146 222384663	19575510	35917086	74531261	151819912	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	BNB	Ave	5612081 121614722	10906999	20817940	42989923	80729302	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100316.D
Lims ID: std005 1248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 18:04:55 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-016
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:31 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:18:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.086	3.076	0.010	82853260	0.0500	0.0500	
2	3.624	3.619	0.005	242366287	0.0500	0.0500	
7 PCB-1248							
1	5.406	5.406	0.000	1406522	0.0500	0.0576	
1	6.750	6.750	0.000	3891522	0.0500	0.0561	
1	7.285	7.285	0.000	3308746	0.0500	0.0517	
1	7.555	7.555	0.000	2814019	0.0500	0.0544	
1	8.034	8.034	0.000	1828438	0.0500	0.0537	
		Average of Peak Amounts =				0.0547	
2	6.399	6.399	0.000	2068829	0.0500	0.0292	
2	7.007	7.007	0.000	11138961	0.0500	0.0577	
2	7.794	7.794	0.000	9075400	0.0500	0.0603	
2	8.322	8.322	0.000	9146146	0.0500	0.0529	
2	9.107	9.107	0.000	5612081	0.0500	0.0571	
		Average of Peak Amounts =				0.0514	
						RPD = 6.15	

Reagents:

SG1248@.05ppm_00023 Amount Added: 1.00 Units: mL

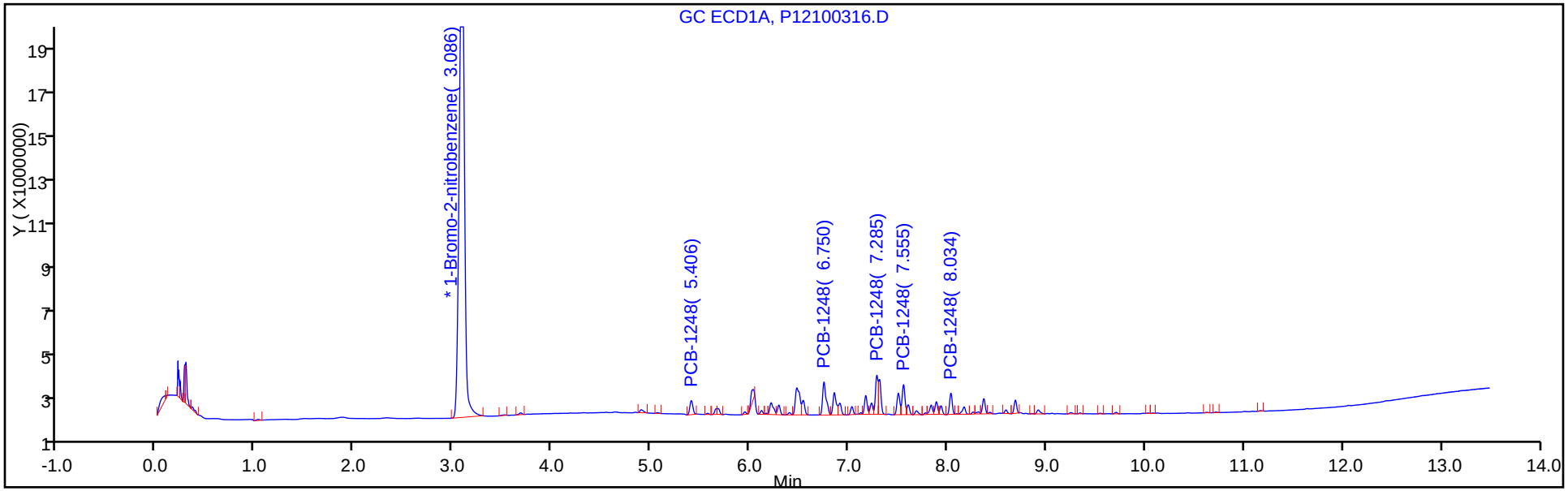
Report Date: 04-Oct-2017 08:17:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

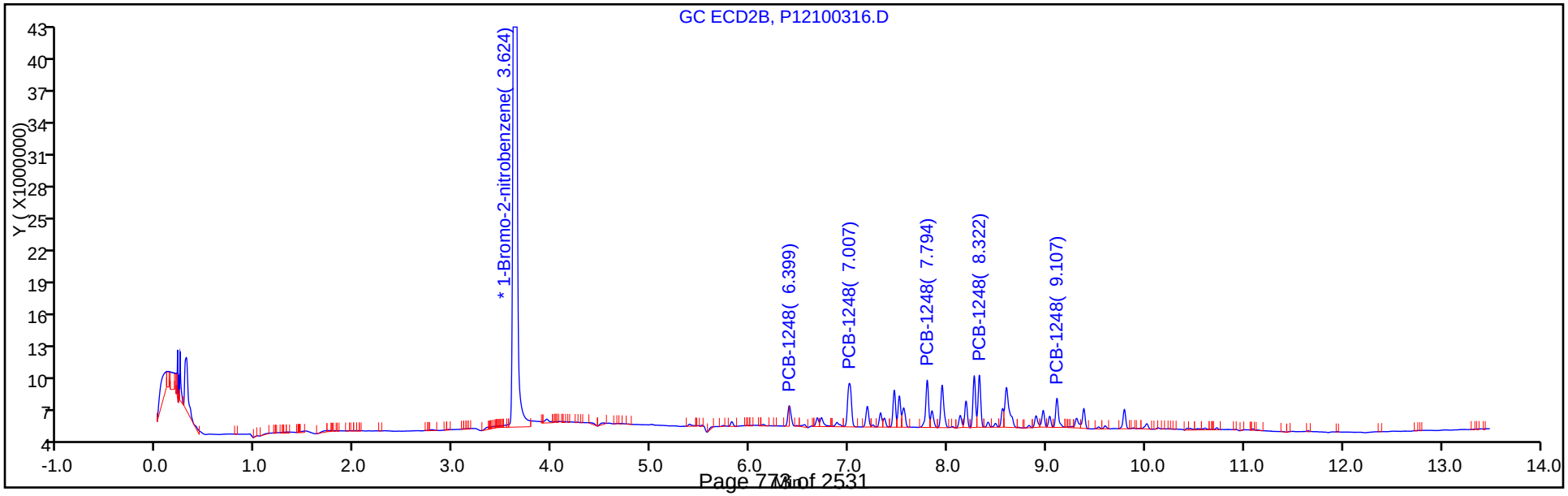
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100316.D

Injection Date:	03-Oct-2017 18:04:55	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1248			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100317.D
Lims ID: std01 1248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 18:22:41 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-017
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:35 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:19:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.084	3.076	0.009	84604762	0.0500	0.0500	
2	3.622	3.619	0.003	244784040	0.0500	0.0500	
7 PCB-1248							
1	5.405	5.406	-0.001	2649346	0.1000	0.1062	
1	6.749	6.750	-0.001	7446378	0.1000	0.1052	
1	7.284	7.285	-0.001	6684380	0.1000	0.1023	
1	7.554	7.555	-0.001	5432811	0.1000	0.1029	
1	8.034	8.034	0.000	3599780	0.1000	0.1035	
		Average of Peak Amounts =				0.1040	
2	6.398	6.399	-0.001	8479201	0.1000	0.1236	
2	7.008	7.007	0.001	21669603	0.1000	0.1112	
2	7.794	7.794	0.000	17140886	0.1000	0.1127	
2	8.322	8.322	0.000	19575510	0.1000	0.1121	
2	9.107	9.107	0.000	10906999	0.1000	0.1099	
		Average of Peak Amounts =				0.1139	
						RPD = 9.07	

Reagents:

SG1248@0.1PPM_00025 Amount Added: 1.00 Units: mL

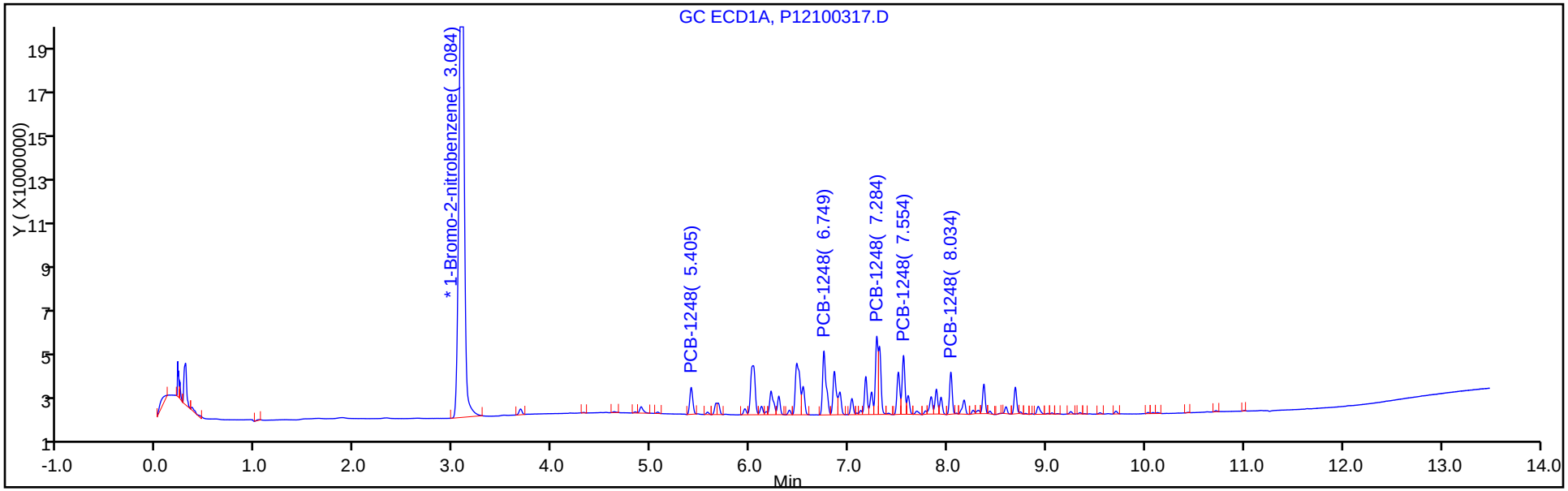
Report Date: 04-Oct-2017 08:17:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

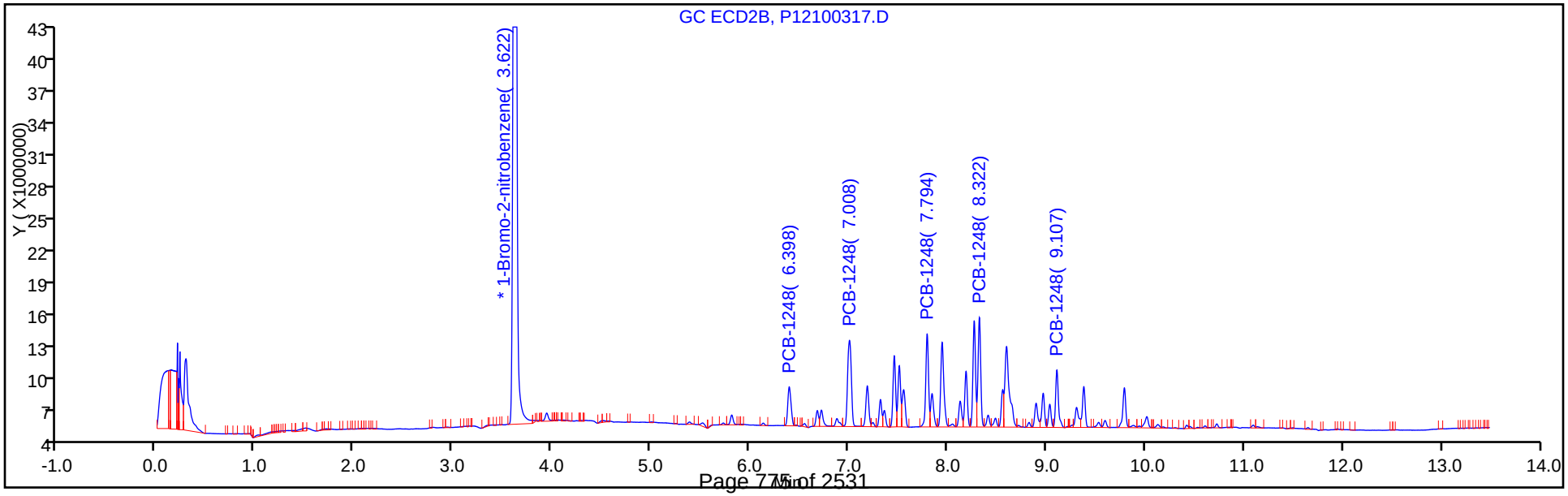
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100317.D

Injection Date:	03-Oct-2017 18:22:41	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1248			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100318.D
Lims ID: std02 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 18:40:16 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-018
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:39 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:19:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.079	3.076	0.003	81841448	0.0500	0.0500	
2	3.621	3.619	0.002	250316499	0.0500	0.0500	
7 PCB-1248							
1	5.405	5.406	-0.001	4924573	0.2000	0.2042	
1	6.749	6.750	-0.001	13881508	0.2000	0.2027	
1	7.285	7.285	0.000	12779949	0.2000	0.2022	
1	7.555	7.555	0.000	10333223	0.2000	0.2023	
1	8.034	8.034	0.000	6914208	0.2000	0.2055	
		Average of Peak Amounts =				0.2034	
2	6.397	6.399	-0.002	16009894	0.2000	0.2297	
2	7.007	7.007	0.000	40465463	0.2000	0.2030	
2	7.794	7.794	0.000	31632285	0.2000	0.2035	
2	8.322	8.322	0.000	35917086	0.2000	0.2012	
2	9.107	9.107	0.000	20817940	0.2000	0.2051	
		Average of Peak Amounts =				0.2085	
						RPD = 2.49	

Reagents:

SG1248@0.2ppm_00021 Amount Added: 1.00 Units: mL

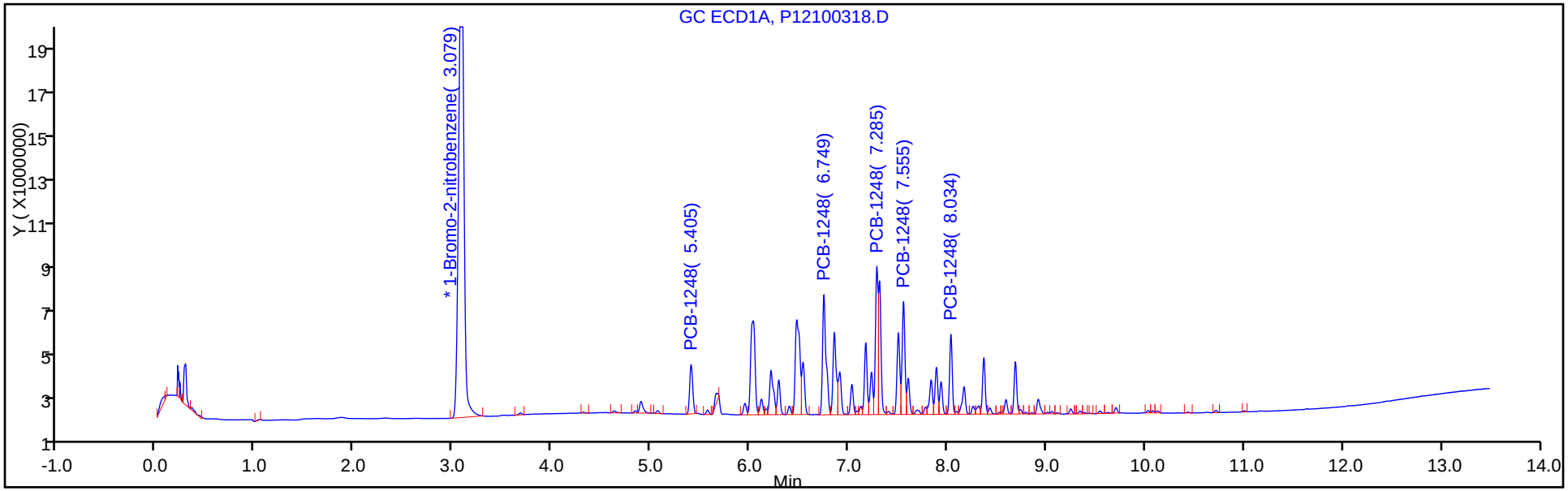
Report Date: 04-Oct-2017 08:17:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

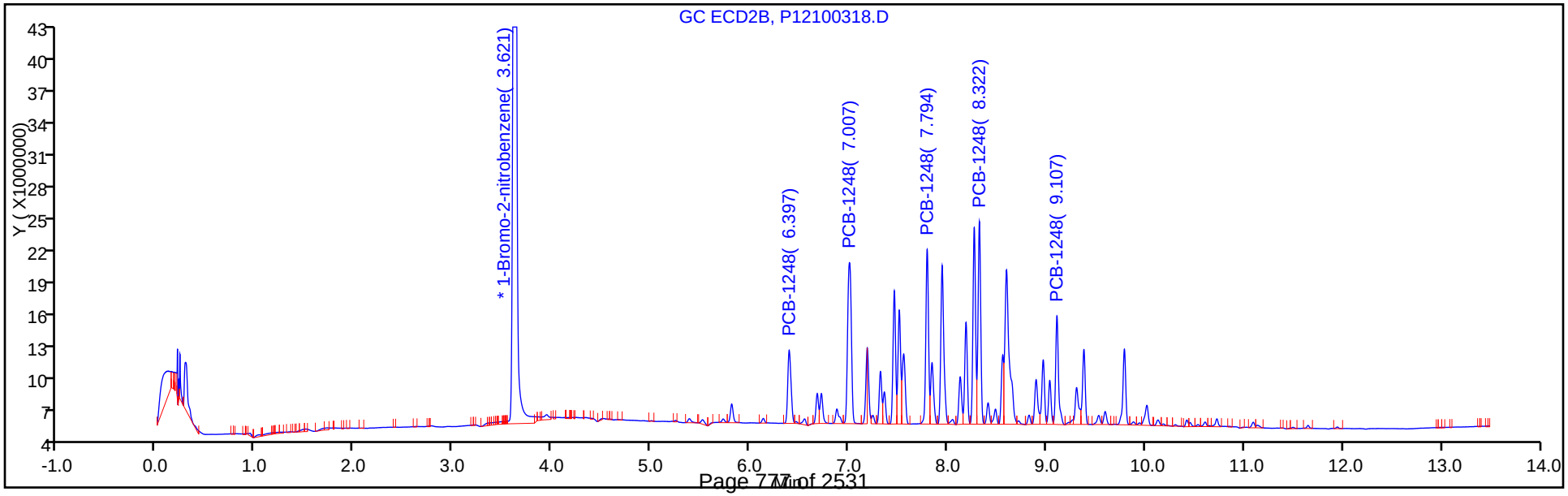
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100318.D

Injection Date:	03-Oct-2017 18:40:16	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1248			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100319.D
Lims ID: std05 1248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 18:57:51 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-019
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:44 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:42:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.064	3.076	-0.011	73339388	0.0500	0.0500	
2	3.613	3.619	-0.006	218599343	0.0500	0.0500	
7 PCB-1248							M
1	5.402	5.406	-0.004	10320530	0.5000	0.4774	
1	6.748	6.750	-0.002	29598440	0.5000	0.4822	M
1	7.283	7.285	-0.002	27642673	0.5000	0.4881	
1	7.553	7.555	-0.002	22133133	0.5000	0.4834	
1	8.033	8.034	-0.001	14631254	0.5000	0.4854	
		Average of Peak Amounts =				0.4833	
2	6.396	6.399	-0.003	33093874	0.5000	0.5459	
2	7.005	7.007	-0.002	81954640	0.5000	0.4708	
2	7.793	7.794	-0.001	63550234	0.5000	0.4681	
2	8.321	8.322	-0.001	74531261	0.5000	0.4780	
2	9.106	9.107	-0.001	42989923	0.5000	0.4850	
		Average of Peak Amounts =				0.4896	
						RPD = 1.28	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248@0.5ppm_00031 Amount Added: 1.00 Units: mL

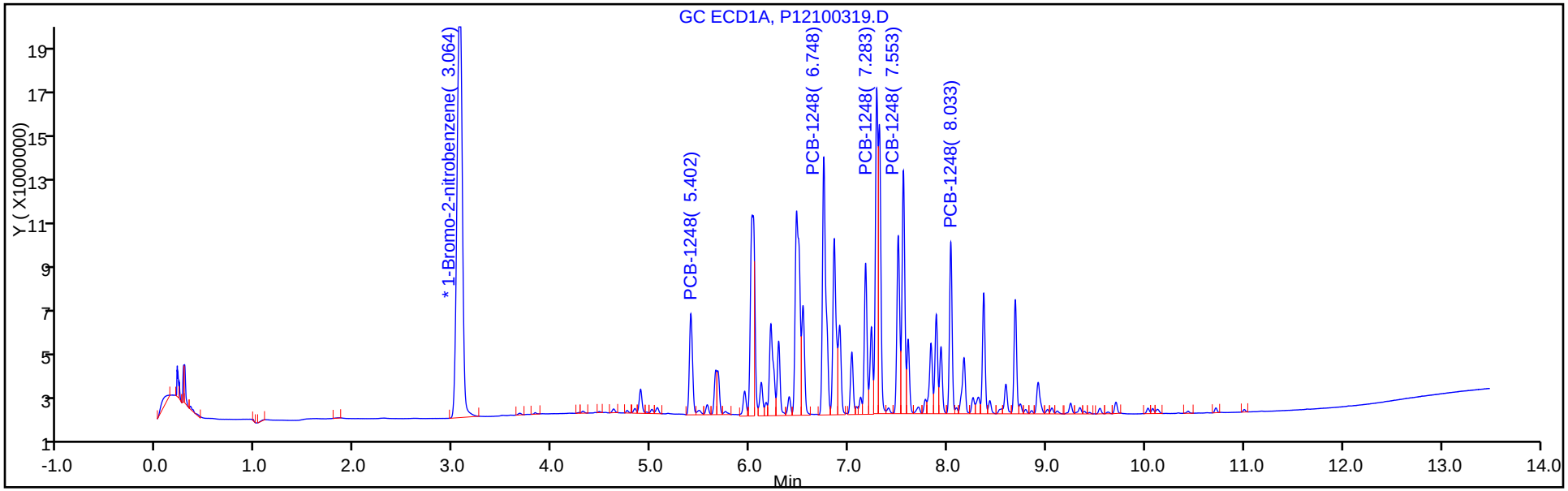
Report Date: 04-Oct-2017 08:17:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

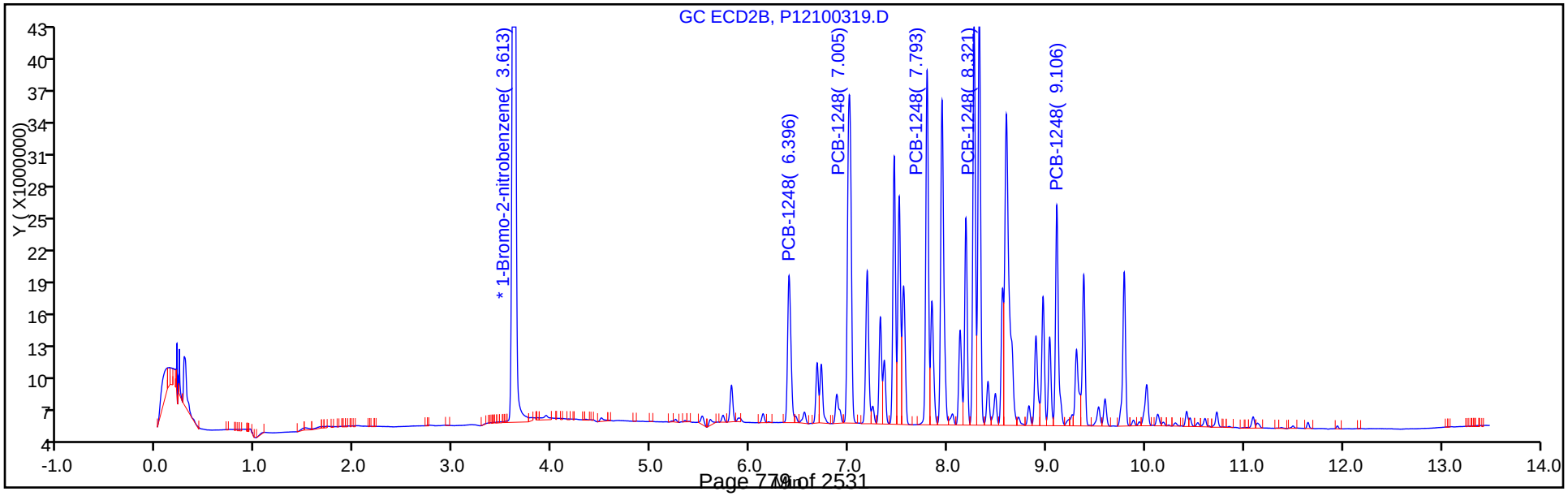
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100319.D

Injection Date:	03-Oct-2017 18:57:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1248			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100320.D
Lims ID: std1 1248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 19:15:29 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-020
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:49 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:20:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.076	-0.001	78333533	0.0500	0.0500	
2	3.619	3.619	0.000	232131436	0.0500	0.0500	
7 PCB-1248							
1	5.404	5.406	-0.002	21242324	1.00	0.9201	
1	6.749	6.750	-0.001	61046280	1.00	0.9311	
1	7.284	7.285	-0.001	59213244	1.00	0.9789	
1	7.554	7.555	-0.001	46680712	1.00	0.9546	
1	8.034	8.034	0.000	30662216	1.00	0.9524	
		Average of Peak Amounts =				0.9474	
2	6.397	6.399	-0.002	62757724	1.00	0.9762	
2	7.006	7.007	-0.001	163705097	1.00	0.8856	
2	7.794	7.794	0.000	124009867	1.00	0.8602	
2	8.321	8.322	-0.001	151819912	1.00	0.9170	
2	9.105	9.107	-0.002	80729302	1.00	0.8577	
		Average of Peak Amounts =				0.8993	
						RPD = 5.21	

Reagents:

SG1248@1.0ppm_00021 Amount Added: 1.00 Units: mL

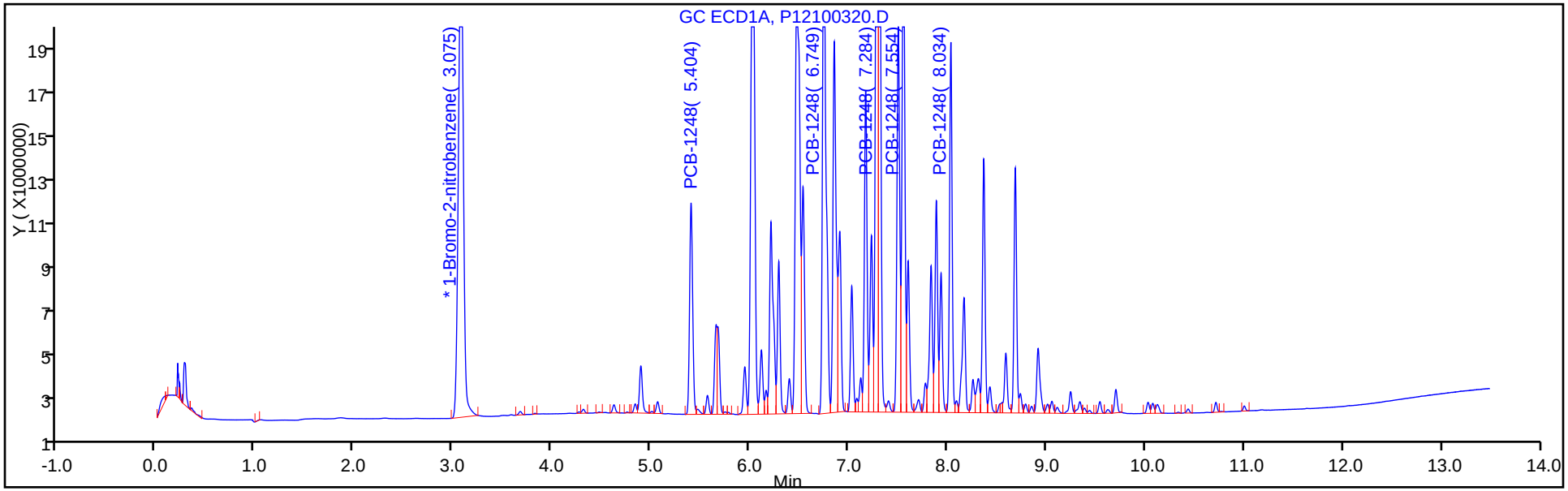
Report Date: 04-Oct-2017 08:17:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

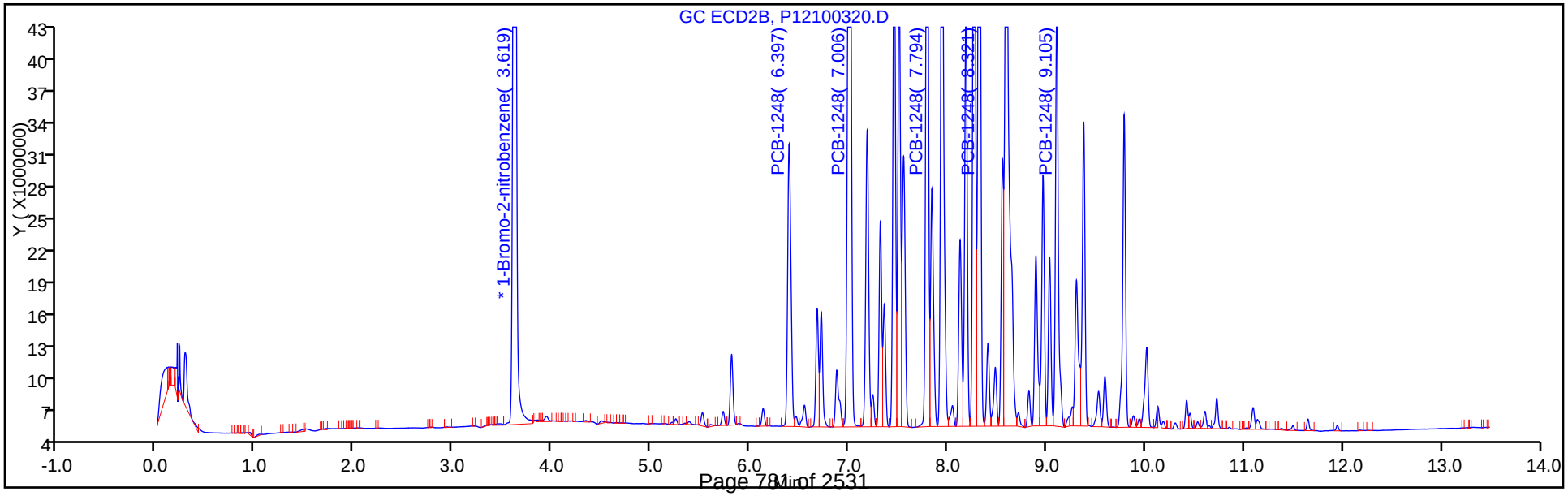
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100320.D

Injection Date:	03-Oct-2017 19:15:29	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1248			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100321.D
Lims ID: std15 1248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 19:33:11 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-021
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:17:53 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:20:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.074	3.076	-0.001	78579098	0.0500	0.0500	
2	3.617	3.619	-0.002	220741741	0.0500	0.0500	
7 PCB-1248							
1	5.404	5.406	-0.002	30917473	1.50	1.33	
1	6.748	6.750	-0.002	90481622	1.50	1.38	
1	7.284	7.285	-0.001	88880285	1.50	1.46	
1	7.553	7.555	-0.002	69932033	1.50	1.43	
1	8.033	8.034	-0.001	45540671	1.50	1.41	
		Average of Peak Amounts =				1.40	
2	6.395	6.399	-0.004	88320116	1.50	1.45	
2	7.009	7.007	0.002	235105863	1.50	1.34	
2	7.794	7.794	0.000	175423171	1.50	1.28	
2	8.322	8.322	0.000	222384663	1.50	1.41	
2	9.106	9.107	-0.001	121614722	1.50	1.36	
		Average of Peak Amounts =				1.37	
						RPD = 2.56	

Reagents:

SG1248@1.5ppm_00002 Amount Added: 1.00 Units: mL

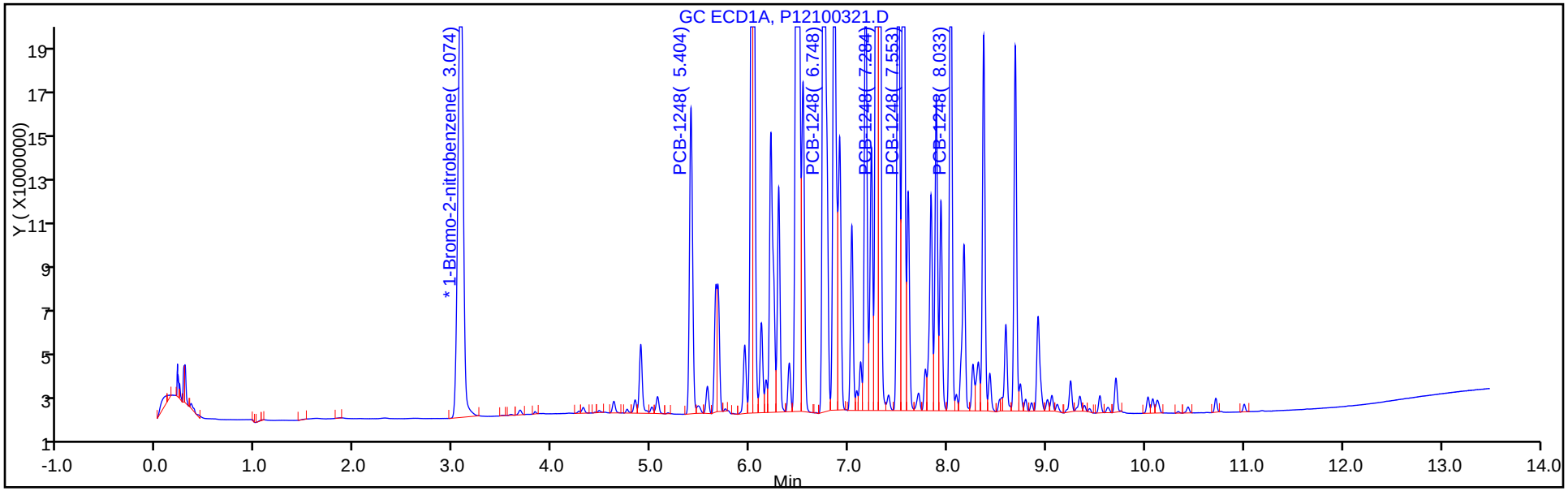
Report Date: 04-Oct-2017 08:17:56 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

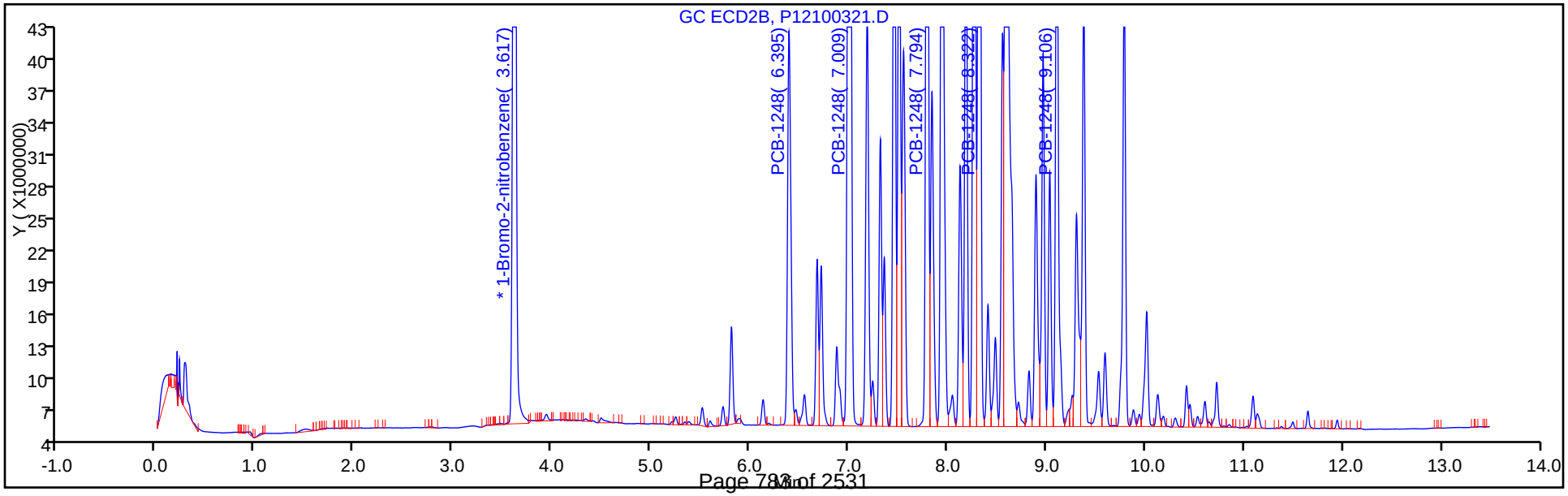
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100321.D

Injection Date:	03-Oct-2017 19:33:11	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std15 1248			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 19:50 Calibration End Date: 10/03/2017 21:18 Calibration ID: 41733

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/22	P12100322.D
Level 2	STD01 240-297285/23	P12100323.D
Level 3	STD02 240-297285/24	P12100324.D
Level 4	STD05 240-297285/25	P12100325.D
Level 5	STD1 240-297285/26	P12100326.D
Level 6	STD15 240-297285/27	P12100327.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.0118 0.0088	0.0109	0.0105	0.0093	0.0089	Ave		0.0100				12.2		20.0			
PCB-1221 Peak 2	0.0075 0.0055	0.0072	0.0068	0.0060	0.0057	Ave		0.0064				12.6		20.0			
PCB-1221 Peak 3	0.0291 0.0216	0.0271	0.0252	0.0222	0.0218	Ave		0.0245				12.8		20.0			
PCB-1254 Peak 1	0.0524 0.0431	0.0485	0.0464	0.0429	0.0429	Ave		0.0460				8.4		20.0			
PCB-1254 Peak 2	0.0705 0.0627	0.0672	0.0659	0.0620	0.0626	Ave		0.0651				5.1		20.0			
PCB-1254 Peak 3	0.0547 0.0477	0.0517	0.0500	0.0470	0.0475	Ave		0.0498				6.0		20.0			
PCB-1254 Peak 4	0.0503 0.0421	0.0471	0.0450	0.0420	0.0421	Ave		0.0448				7.6		20.0			
PCB-1254 Peak 5	0.0714 0.0645	0.0681	0.0660	0.0630	0.0640	Ave		0.0662				4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 19:50 Calibration End Date: 10/03/2017 21:18 Calibration ID: 41733

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/22	P12100322.D
Level 2	STD01 240-297285/23	P12100323.D
Level 3	STD02 240-297285/24	P12100324.D
Level 4	STD05 240-297285/25	P12100325.D
Level 5	STD1 240-297285/26	P12100326.D
Level 6	STD15 240-297285/27	P12100327.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Ave	949812 22289051	1808328	3487343	8191499	15818915	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	BNB	Ave	599342 14036546	1190368	2264712	5274220	10101371	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	BNB	Ave	2336594 54532296	4488116	8381664	19602122	38682764	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	BNB	Ave	4213207 108987341	8030150	15473292	37814096	76082449	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	BNB	Ave	5659444 158715574	11133441	21955759	54656217	110938919	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	BNB	Ave	4392409 120694486	8565795	16651908	41446907	84248384	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	BNB	Ave	4042128 106567568	7808177	14977211	37051124	74582176	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	BNB	Ave	5731704 163102488	11285610	22002871	55521673	113522711	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100322.D
Lims ID: std005 ar2154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 19:50:46 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-022
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:02 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:21:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.076	-0.001	80331713	0.0500	0.0500	
2	3.619	3.619	0.000	229404412	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	949812	0.0500	0.0589	
1	4.840	4.840	0.000	599342	0.0500	0.0579	
1	4.897	4.897	0.000	2336594	0.0500	0.0594	
		Average of Peak Amounts =				0.0587	
2	5.520	5.520	0.000	3486686	0.0500	0.0405	
2	5.729	5.729	0.000	2009543	0.0500	0.0631	
2	5.816	5.816	0.000	6986680	0.0500	0.0631	
		Average of Peak Amounts =				0.0556	
						RPD = 5.51	
8 PCB-1254							
1	7.559	7.559	0.000	4213207	0.0500	0.0570	
1	8.034	8.034	0.000	5659444	0.0500	0.0541	
1	8.367	8.367	0.000	4392409	0.0500	0.0549	
1	8.592	8.592	0.000	4042128	0.0500	0.0562	
1	8.917	8.917	0.000	5731704	0.0500	0.0539	
		Average of Peak Amounts =				0.0552	
2	8.317	8.317	0.000	9429989	0.0500	0.0612	
2	8.557	8.557	0.000	10927406	0.0500	0.0604	
2	9.106	9.106	0.000	15283642	0.0500	0.0605	
2	9.379	9.379	0.000	11315210	0.0500	0.0613	
2	10.016	10.016	0.000	15142348	0.0500	0.0614	
		Average of Peak Amounts =				0.0610	
						RPD = 9.92	

Reagents:

SG2154@0.05PP_00016 Amount Added: 1.00 Units: mL

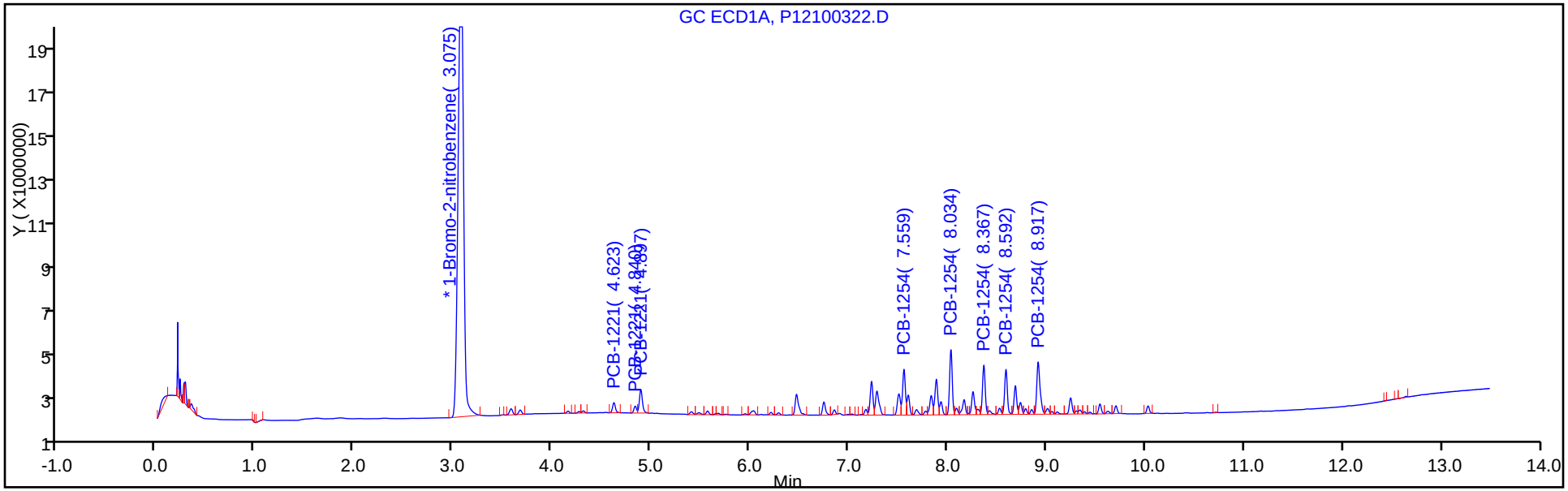
Report Date: 04-Oct-2017 08:18:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

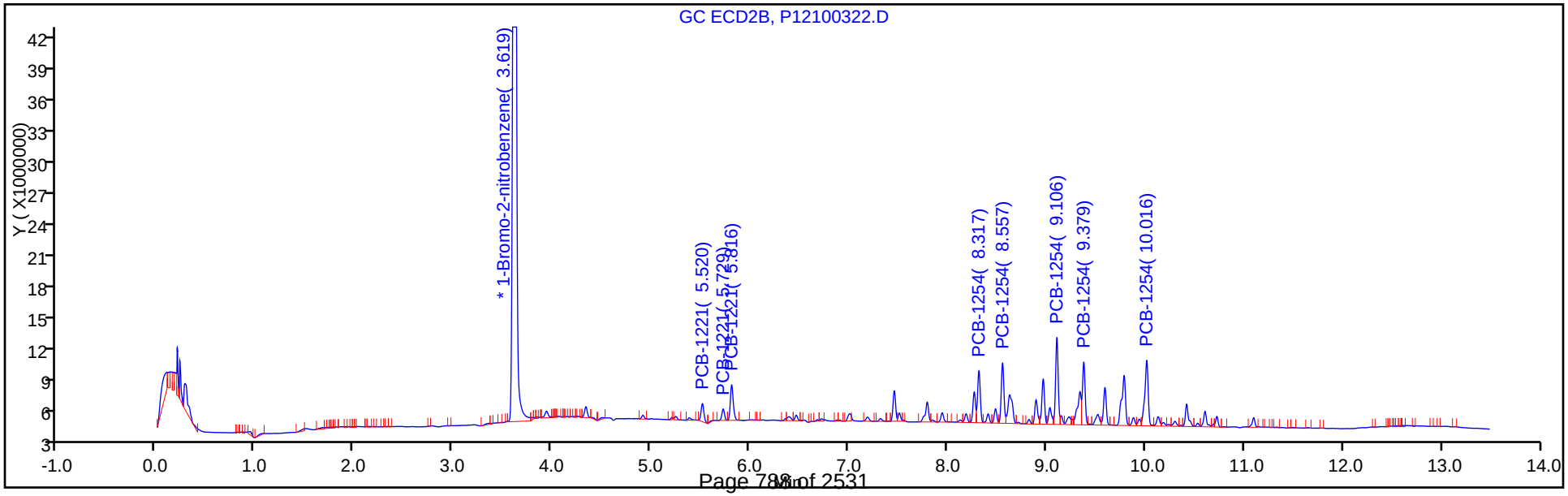
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100322.D

Injection Date:	03-Oct-2017 19:50:46	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 ar2154			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100323.D
Lims ID: std01 ar2154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 20:08:20 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-023
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:09 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:21:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.005	82854821	0.0500	0.0500	
2	3.620	3.619	0.001	228309809	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	1808328	0.1000	0.1087	
1	4.839	4.840	-0.001	1190368	0.1000	0.1115	
1	4.895	4.897	-0.002	4488116	0.1000	0.1106	
		Average of Peak Amounts =				0.1103	
2	5.519	5.520	-0.001	5951346	0.1000	0.1043	
2	5.729	5.729	0.000	3654186	0.1000	0.1153	
2	5.815	5.816	-0.001	12642070	0.1000	0.1147	
		Average of Peak Amounts =				0.1114	
						RPD = 1.04	
8 PCB-1254							
1	7.558	7.559	-0.001	8030150	0.1000	0.1053	
1	8.033	8.034	-0.001	11133441	0.1000	0.1031	
1	8.367	8.367	0.000	8565795	0.1000	0.1039	
1	8.590	8.592	-0.002	7808177	0.1000	0.1053	
1	8.916	8.917	-0.001	11285610	0.1000	0.1029	
		Average of Peak Amounts =				0.1041	
2	8.318	8.317	0.001	17342964	0.1000	0.1131	
2	8.556	8.557	-0.001	20951218	0.1000	0.1164	
2	9.106	9.106	0.000	27782594	0.1000	0.1106	
2	9.379	9.379	0.000	20454278	0.1000	0.1113	
2	10.016	10.016	0.000	27140201	0.1000	0.1107	
		Average of Peak Amounts =				0.1124	
						RPD = 7.69	

Reagents:

SG2154@O.1PPM_00018 Amount Added: 1.00 Units: mL

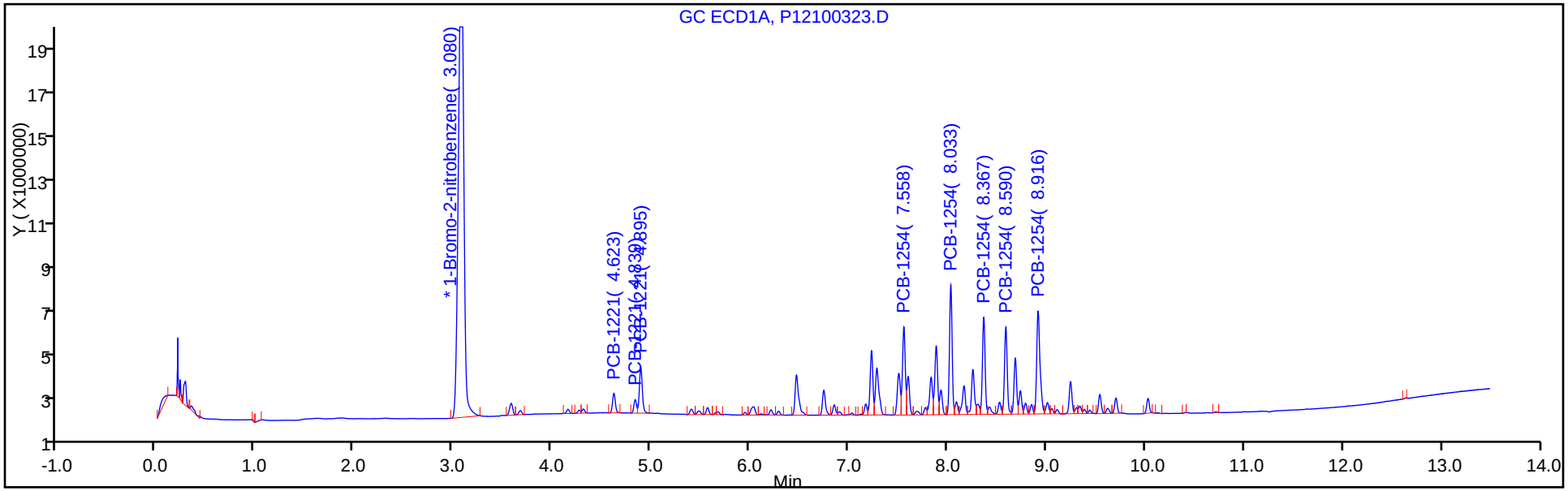
Report Date: 04-Oct-2017 08:18:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

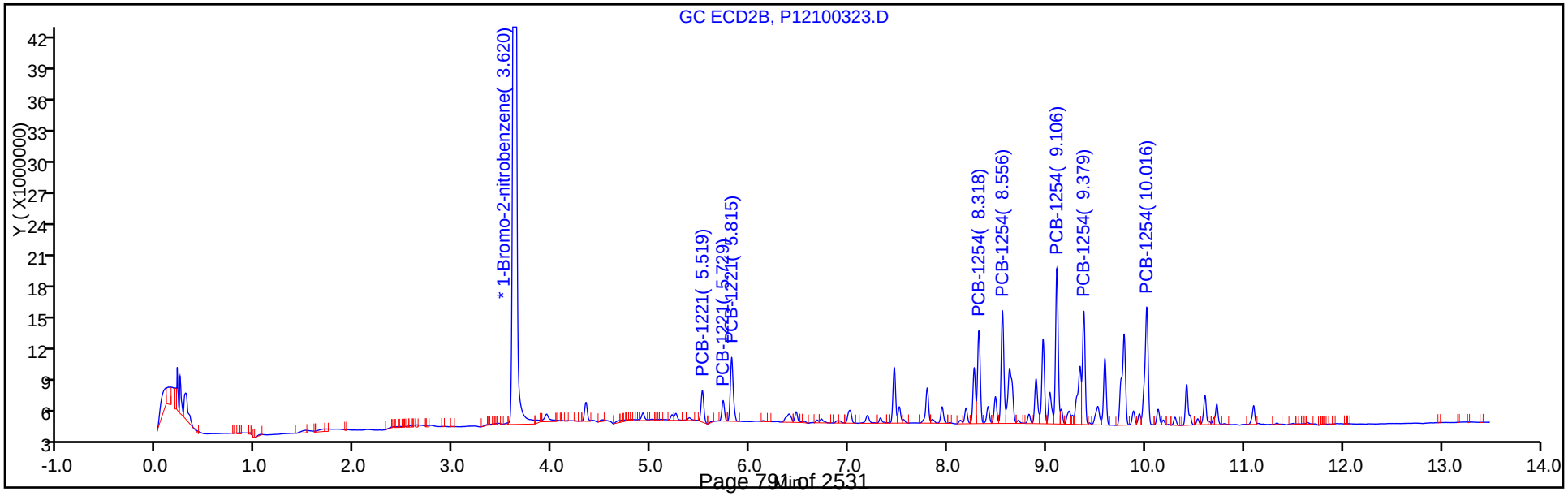
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100323.D

Injection Date:	03-Oct-2017 20:08:20	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 ar2154			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100324.D
Lims ID: std02 ar2154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 20:25:56 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-024
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:14 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:21:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.076	-0.001	83295975	0.0500	0.0500	
2	3.619	3.619	0.000	243343207	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	3487343	0.2000	0.2086	
1	4.839	4.840	-0.001	2264712	0.2000	0.2109	
1	4.895	4.897	-0.002	8381664	0.2000	0.2055	
		Average of Peak Amounts =				0.2083	
2	5.519	5.520	-0.001	11293872	0.2000	0.2236	
2	5.728	5.729	-0.001	7236202	0.2000	0.2142	
2	5.815	5.816	-0.001	24561461	0.2000	0.2091	
		Average of Peak Amounts =				0.2156	
						RPD = 3.44	
8 PCB-1254							
1	7.558	7.559	-0.001	15473292	0.2000	0.2018	
1	8.034	8.034	0.000	21955759	0.2000	0.2023	
1	8.367	8.367	0.000	16651908	0.2000	0.2009	
1	8.590	8.592	-0.002	14977211	0.2000	0.2008	
1	8.916	8.917	-0.001	22002871	0.2000	0.1996	
		Average of Peak Amounts =				0.2011	
2	8.317	8.317	0.000	34015659	0.2000	0.2082	
2	8.556	8.557	-0.001	39766864	0.2000	0.2073	
2	9.106	9.106	0.000	53396036	0.2000	0.1994	
2	9.380	9.379	0.001	38551914	0.2000	0.1969	
2	10.017	10.016	0.001	49348242	0.2000	0.1888	
		Average of Peak Amounts =				0.2001	
						RPD = 0.49	

Reagents:

SG2154@0.2PPM_00017 Amount Added: 1.00 Units: mL

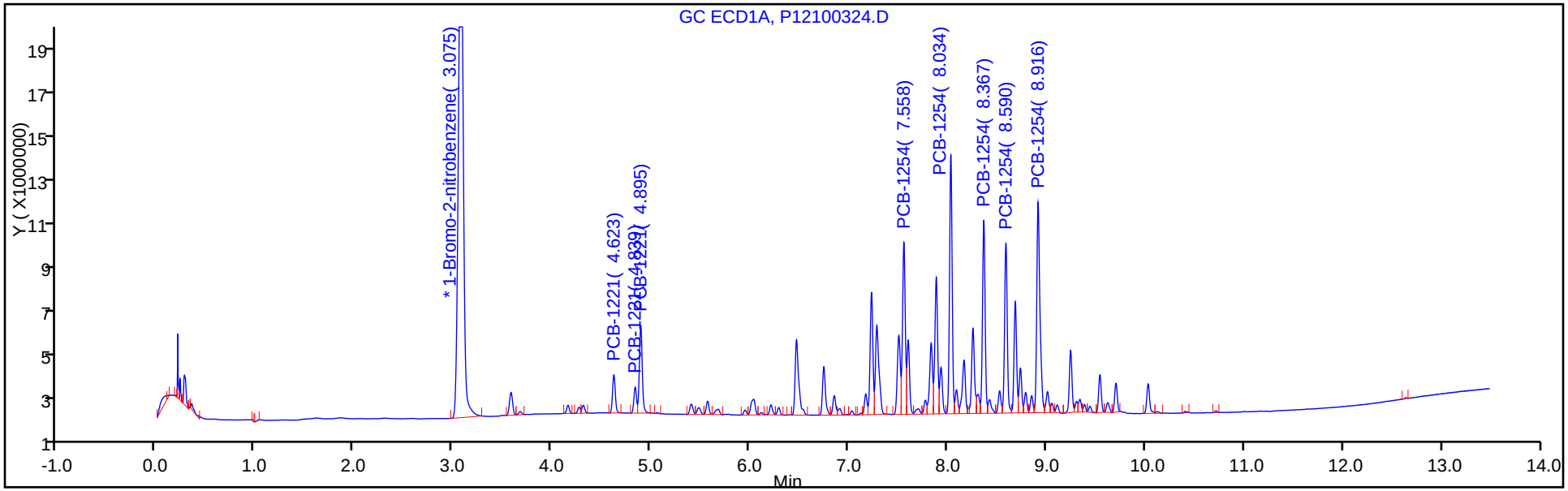
Report Date: 04-Oct-2017 08:18:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

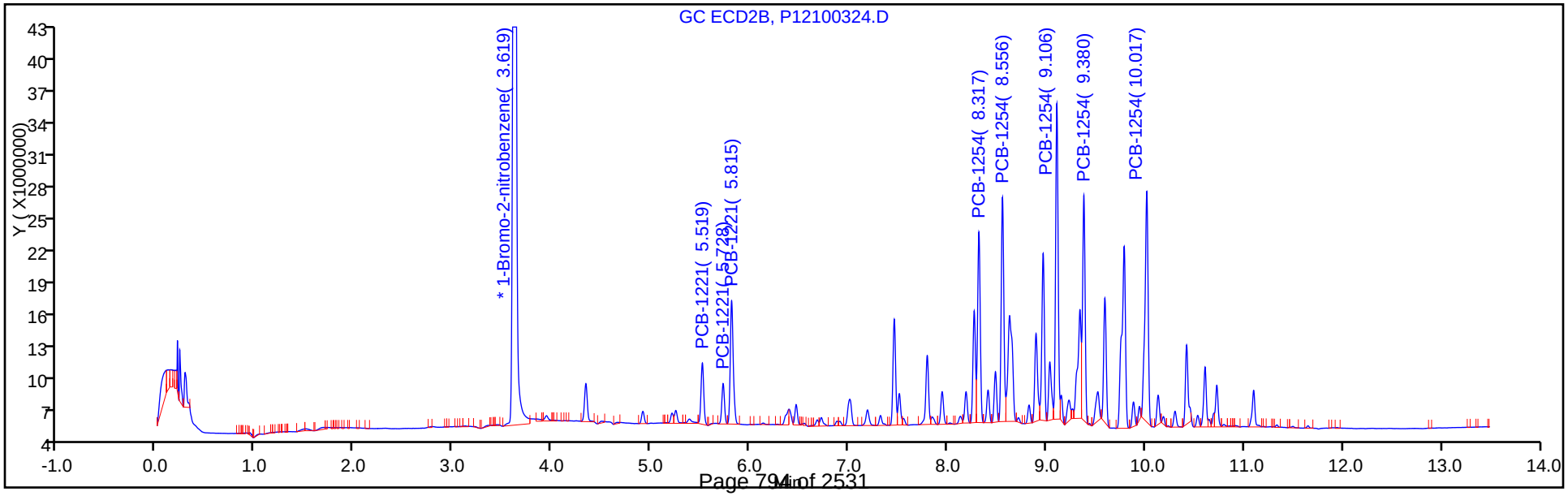
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100324.D

Injection Date:	03-Oct-2017 20:25:56	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 ar2154			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100325.D
Lims ID: std05 ar2154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 20:43:41 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-025
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:44:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	88182499	0.0500	0.0500	
2	3.621	3.619	0.002	250919182	0.0500	0.0500	
3 PCB-1221							
1	4.624	4.623	0.001	8191499	0.5000	0.4627	
1	4.839	4.840	-0.001	5274220	0.5000	0.4640	
1	4.895	4.897	-0.002	19602122	0.5000	0.4539	
		Average of Peak Amounts =				0.4602	
2	5.519	5.520	-0.001	24959978	0.5000	0.5347	
2	5.729	5.729	0.000	15837180	0.5000	0.4547	
2	5.815	5.816	-0.001	55173785	0.5000	0.4554	
		Average of Peak Amounts =				0.4816	
						RPD = 4.54	
8 PCB-1254							M
1	7.559	7.559	0.000	37814096	0.5000	0.4657	
1	8.033	8.034	-0.001	54656217	0.5000	0.4758	
1	8.366	8.367	-0.001	41446907	0.5000	0.4723	
1	8.590	8.592	-0.002	37051124	0.5000	0.4693	
1	8.917	8.917	0.000	55521673	0.5000	0.4759	
		Average of Peak Amounts =				0.4718	
2	8.318	8.317	0.001	75216460	0.5000	0.4465	M
2	8.555	8.557	-0.002	87969125	0.5000	0.4447	M
2	9.105	9.106	-0.001	126176701	0.5000	0.4569	M
2	9.379	9.379	0.000	92250550	0.5000	0.4569	M
2	10.016	10.016	0.000	124830154	0.5000	0.4631	M
		Average of Peak Amounts =				0.4536	
						RPD = 3.93	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.5PPM_00033 Amount Added: 1.00 Units: mL

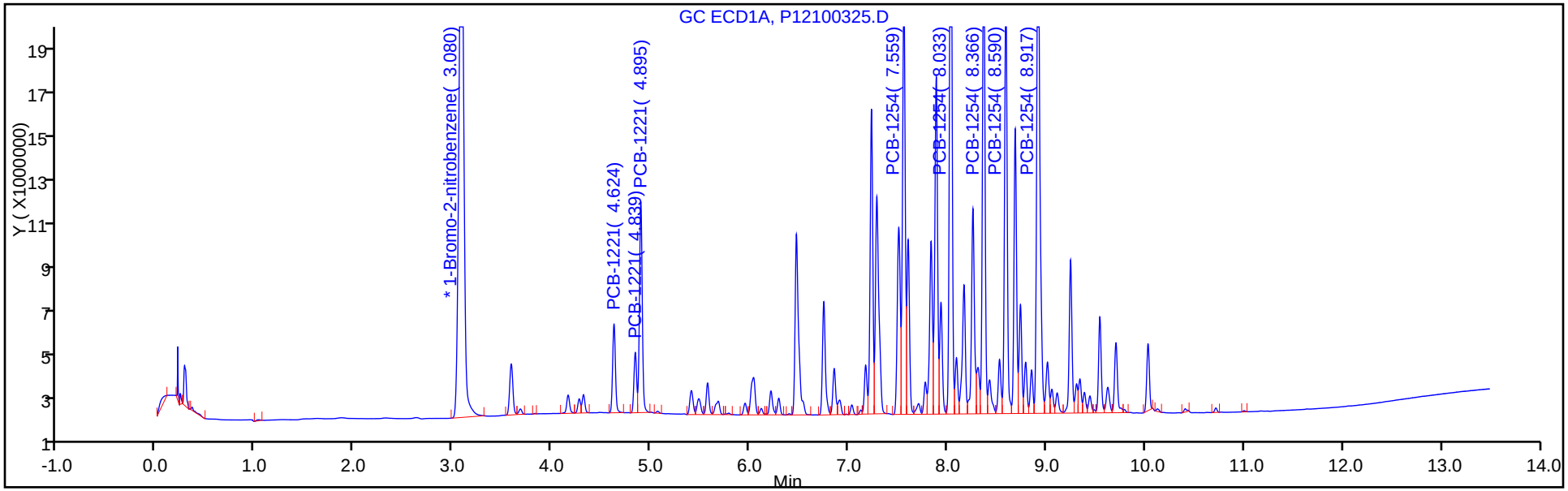
Report Date: 04-Oct-2017 08:18:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

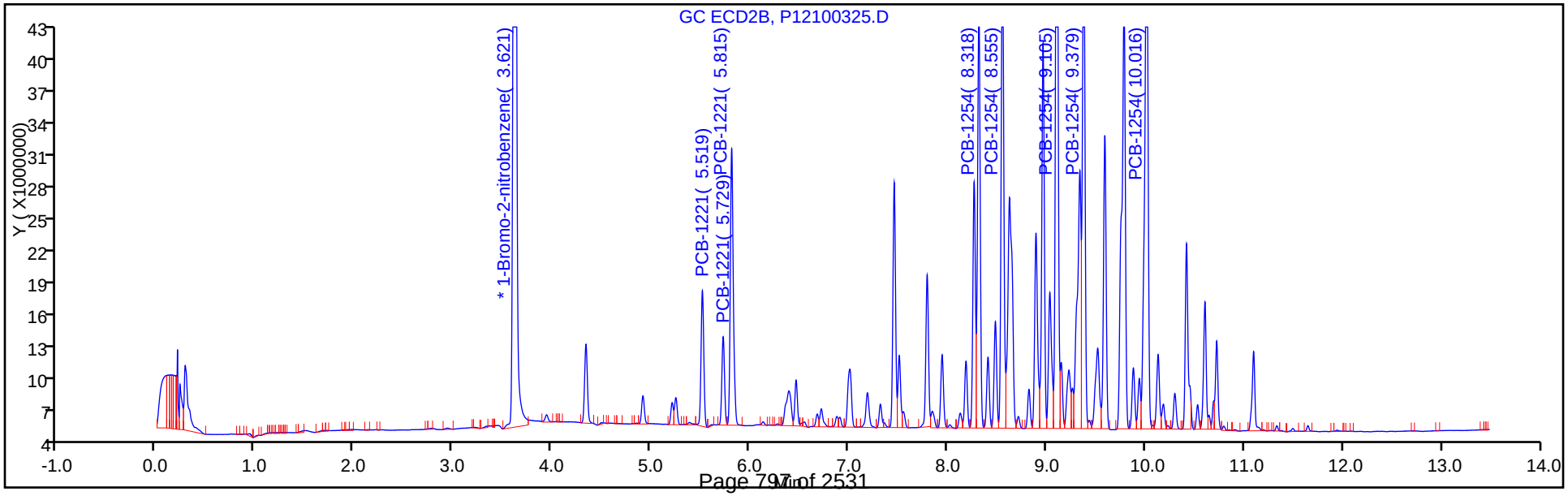
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100325.D

Injection Date:	03-Oct-2017 20:43:41	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 ar2154			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100326.D
Lims ID: std1 ar2154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 21:01:16 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-026
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:25 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:35:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.001	88668747	0.0500	0.0500	
2	3.619	3.619	0.000	247432158	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	15818915	1.00	0.8887	
1	4.839	4.840	-0.001	10101371	1.00	0.8839	
1	4.895	4.897	-0.002	38682764	1.00	0.8908	
		Average of Peak Amounts =				0.8878	
2	5.518	5.520	-0.002	43574026	1.00	0.9841	
2	5.729	5.729	0.000	28387011	1.00	0.8264	
2	5.816	5.816	0.000	100075692	1.00	0.8377	
		Average of Peak Amounts =				0.8827	
						RPD = 0.57	
8 PCB-1254							
1	7.556	7.559	-0.003	76082449	1.00	0.9319	
1	8.032	8.034	-0.002	110938919	1.00	0.9604	
1	8.365	8.367	-0.002	84248384	1.00	0.9547	
1	8.588	8.592	-0.004	74582176	1.00	0.9395	
1	8.915	8.917	-0.002	113522711	1.00	0.9676	
		Average of Peak Amounts =				0.9508	
2	8.317	8.317	0.000	144913356	1.00	0.8723	
2	8.556	8.557	-0.001	169441893	1.00	0.8686	
2	9.106	9.106	0.000	247907230	1.00	0.9104	
2	9.378	9.379	-0.001	178266312	1.00	0.8953	
2	10.016	10.016	0.000	243844820	1.00	0.9174	
		Average of Peak Amounts =				0.8928	
						RPD = 6.29	

Reagents:

SG2154@1.0PPM_00021 Amount Added: 1.00 Units: mL

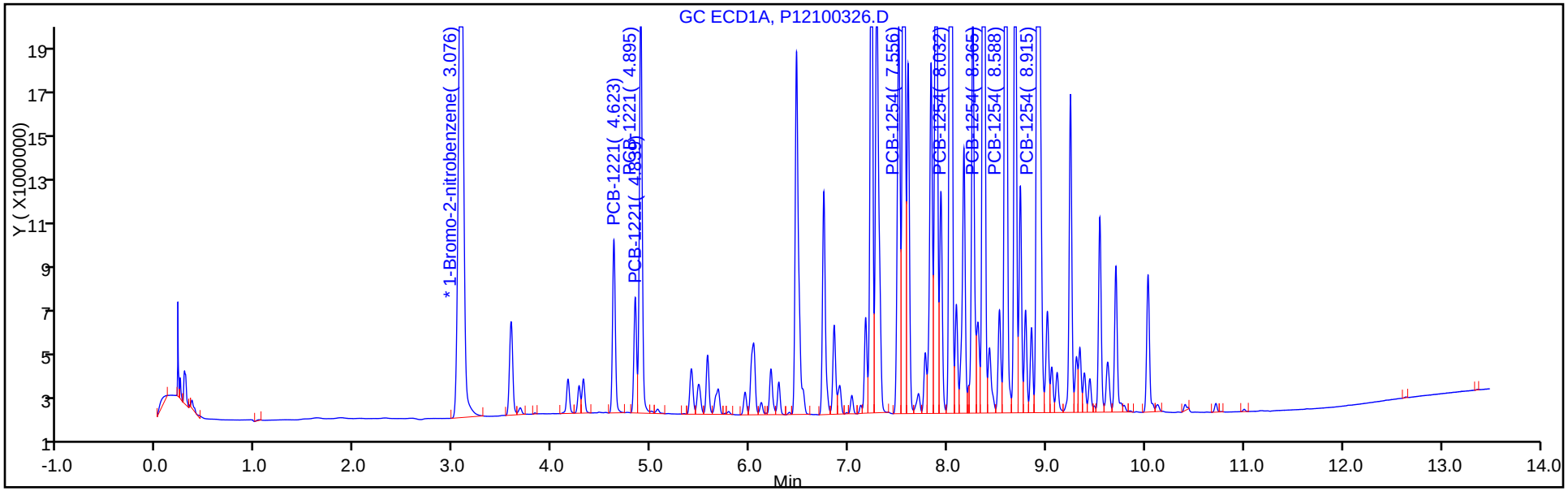
Report Date: 04-Oct-2017 08:18:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

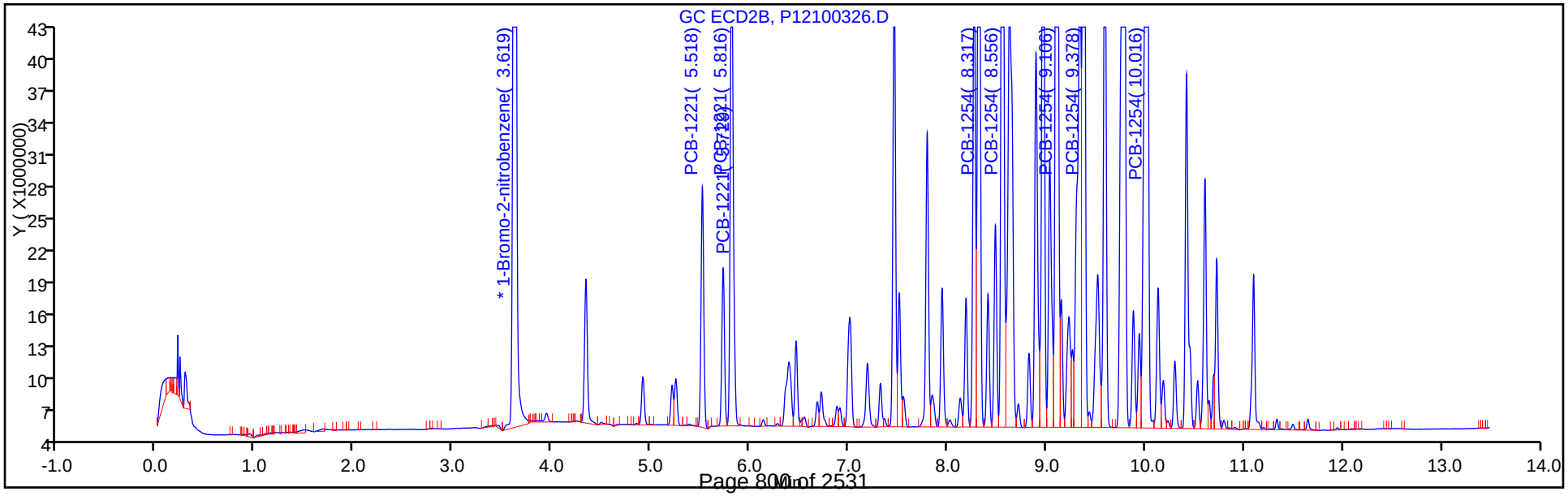
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100326.D

Injection Date:	03-Oct-2017 21:01:16	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 ar2154			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100327.D
Lims ID: std15 ar2154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 21:18:55 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-027
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:30 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:48:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.077	3.076	0.001	84326829	0.0500	0.0500	
2	3.620	3.619	0.001	240156760	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	22289051	1.50	1.32	
1	4.840	4.840	0.000	14036546	1.50	1.29	
1	4.895	4.897	-0.002	54532296	1.50	1.32	
		Average of Peak Amounts =				1.31	
2	5.518	5.520	-0.002	61903192	1.50	1.46	
2	5.729	5.729	0.000	38918501	1.50	1.17	
2	5.815	5.816	-0.001	138730593	1.50	1.20	
		Average of Peak Amounts =				1.28	
						RPD = 2.63	
8 PCB-1254							M
1	7.557	7.559	-0.002	108987341	1.50	1.40	
1	8.033	8.034	-0.001	158715574	1.50	1.44	
1	8.365	8.367	-0.002	120694486	1.50	1.44	
1	8.589	8.592	-0.003	106567568	1.50	1.41	
1	8.915	8.917	-0.002	163102488	1.50	1.46	
		Average of Peak Amounts =				1.43	
2	8.316	8.317	-0.001	202617215	1.50	1.26	
2	8.555	8.557	-0.002	236587506	1.50	1.25	
2	9.105	9.106	-0.001	341934826	1.50	1.29	
2	9.378	9.379	-0.001	251391761	1.50	1.30	
2	10.015	10.016	-0.001	339306096	1.50	1.32	M
		Average of Peak Amounts =				1.28	
						RPD = 10.96	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@1.5PPM_00001 Amount Added: 1.00 Units: mL

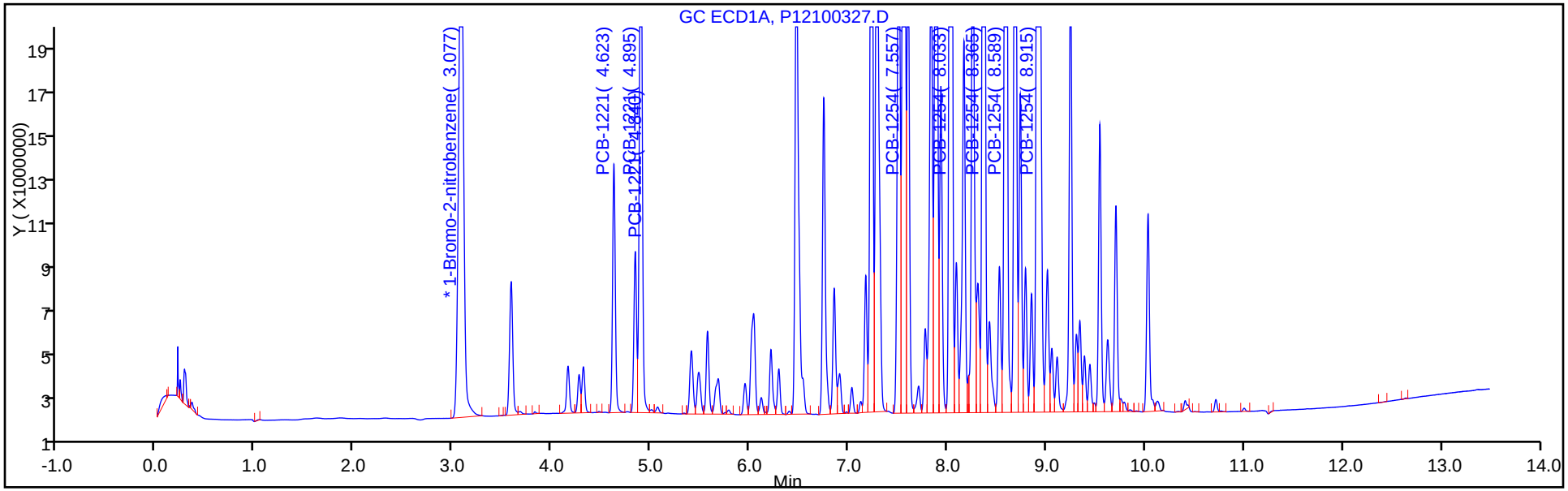
Report Date: 04-Oct-2017 08:18:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

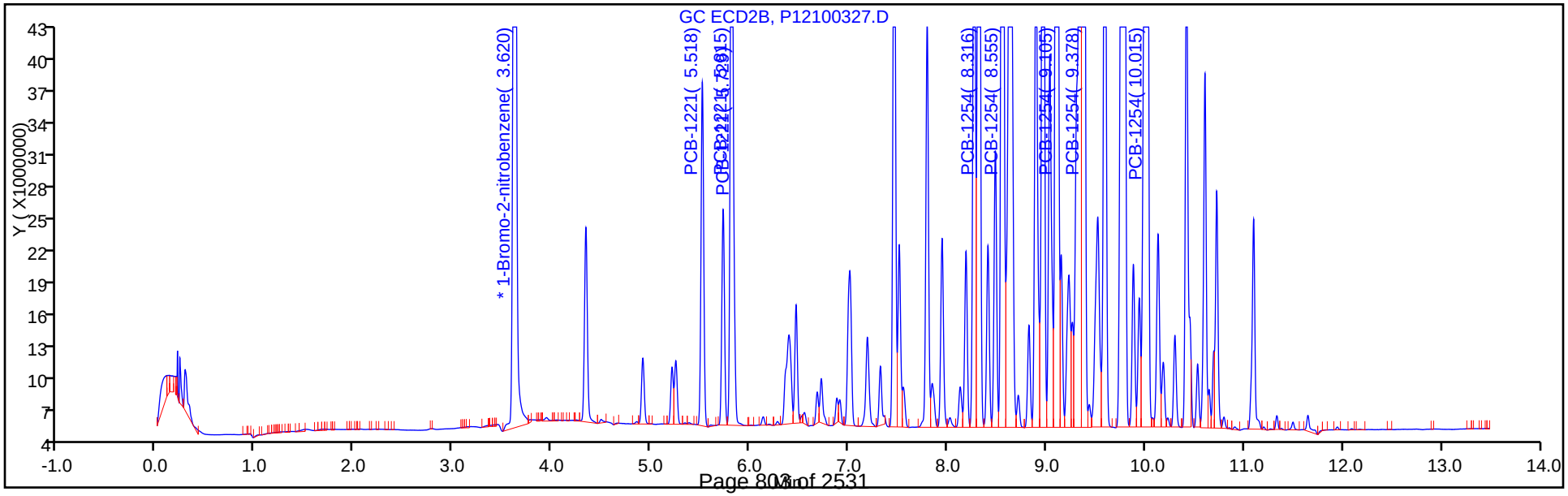
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100327.D

Injection Date:	03-Oct-2017 21:18:55	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std15 ar2154			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 19:50 Calibration End Date: 10/03/2017 21:18 Calibration ID: 41734

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/22	P12100322.D
Level 2	STD01 240-297285/23	P12100323.D
Level 3	STD02 240-297285/24	P12100324.D
Level 4	STD05 240-297285/25	P12100325.D
Level 5	STD1 240-297285/26	P12100326.D
Level 6	STD15 240-297285/27	P12100327.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.0152 0.0086	0.0130	0.0116	0.0099	0.0088	Lin1	0.0004	0.0085							0.9970		0.9900
PCB-1221 Peak 2	0.0088 0.0054	0.0080	0.0074	0.0063	0.0057	Ave		0.0069				19.2		20.0			
PCB-1221 Peak 3	0.0305 0.0193	0.0277	0.0252	0.0220	0.0202	Ave		0.0241				18.3		20.0			
PCB-1254 Peak 1	0.0411 0.0281	0.0380	0.0349	0.0300	0.0293	Ave		0.0336				15.7		20.0			
PCB-1254 Peak 2	0.0476 0.0328	0.0459	0.0409	0.0351	0.0342	Ave		0.0394				16.1		20.0			
PCB-1254 Peak 3	0.0666 0.0475	0.0608	0.0549	0.0503	0.0501	Ave		0.0550				13.4		20.0			
PCB-1254 Peak 4	0.0493 0.0349	0.0448	0.0396	0.0368	0.0360	Ave		0.0402				14.2		20.0			
PCB-1254 Peak 5	0.0660 0.0471	0.0594	0.0507	0.0497	0.0493	Ave		0.0537				13.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 19:50 Calibration End Date: 10/03/2017 21:18 Calibration ID: 41734

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/22	P12100322.D
Level 2	STD01 240-297285/23	P12100323.D
Level 3	STD02 240-297285/24	P12100324.D
Level 4	STD05 240-297285/25	P12100325.D
Level 5	STD1 240-297285/26	P12100326.D
Level 6	STD15 240-297285/27	P12100327.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Lin1	3486686 61903192	5951346	11293872	24959978	43574026	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	BNB	Ave	2009543 38918501	3654186	7236202	15837180	28387011	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	BNB	Ave	6986680 138730593	12642070	24561461	55173785	100075692	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	BNB	Ave	9429989 202617215	17342964	34015659	75216460	144913356	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	BNB	Ave	10927406 236587506	20951218	39766864	87969125	169441893	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	BNB	Ave	15283642 341934826	27782594	53396036	126176701	247907230	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	BNB	Ave	11315210 251391761	20454278	38551914	92250550	178266312	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	BNB	Ave	15142348 339306096	27140201	49348242	124830154	243844820	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100322.D
Lims ID: std005 ar2154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 19:50:46 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-022
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:02 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:21:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.076	-0.001	80331713	0.0500	0.0500	
2	3.619	3.619	0.000	229404412	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	949812	0.0500	0.0589	
1	4.840	4.840	0.000	599342	0.0500	0.0579	
1	4.897	4.897	0.000	2336594	0.0500	0.0594	
		Average of Peak Amounts =				0.0587	
2	5.520	5.520	0.000	3486686	0.0500	0.0405	
2	5.729	5.729	0.000	2009543	0.0500	0.0631	
2	5.816	5.816	0.000	6986680	0.0500	0.0631	
		Average of Peak Amounts =				0.0556	
						RPD = 5.51	
8 PCB-1254							
1	7.559	7.559	0.000	4213207	0.0500	0.0570	
1	8.034	8.034	0.000	5659444	0.0500	0.0541	
1	8.367	8.367	0.000	4392409	0.0500	0.0549	
1	8.592	8.592	0.000	4042128	0.0500	0.0562	
1	8.917	8.917	0.000	5731704	0.0500	0.0539	
		Average of Peak Amounts =				0.0552	
2	8.317	8.317	0.000	9429989	0.0500	0.0612	
2	8.557	8.557	0.000	10927406	0.0500	0.0604	
2	9.106	9.106	0.000	15283642	0.0500	0.0605	
2	9.379	9.379	0.000	11315210	0.0500	0.0613	
2	10.016	10.016	0.000	15142348	0.0500	0.0614	
		Average of Peak Amounts =				0.0610	
						RPD = 9.92	

Reagents:

SG2154@0.05PP_00016 Amount Added: 1.00 Units: mL

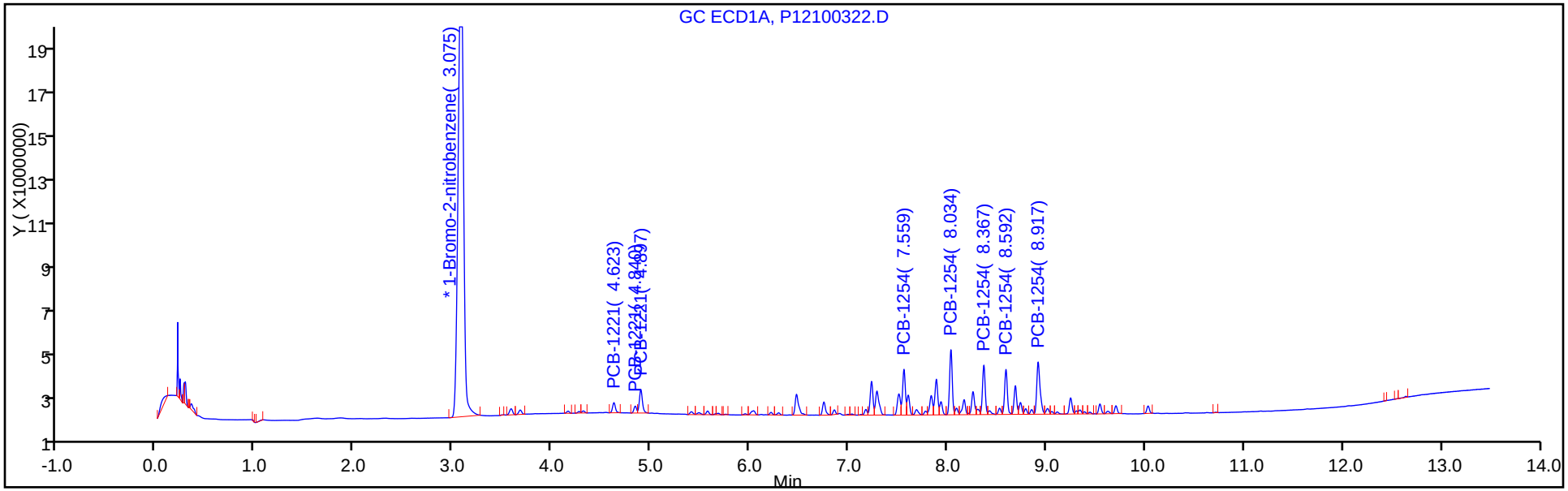
Report Date: 04-Oct-2017 08:18:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

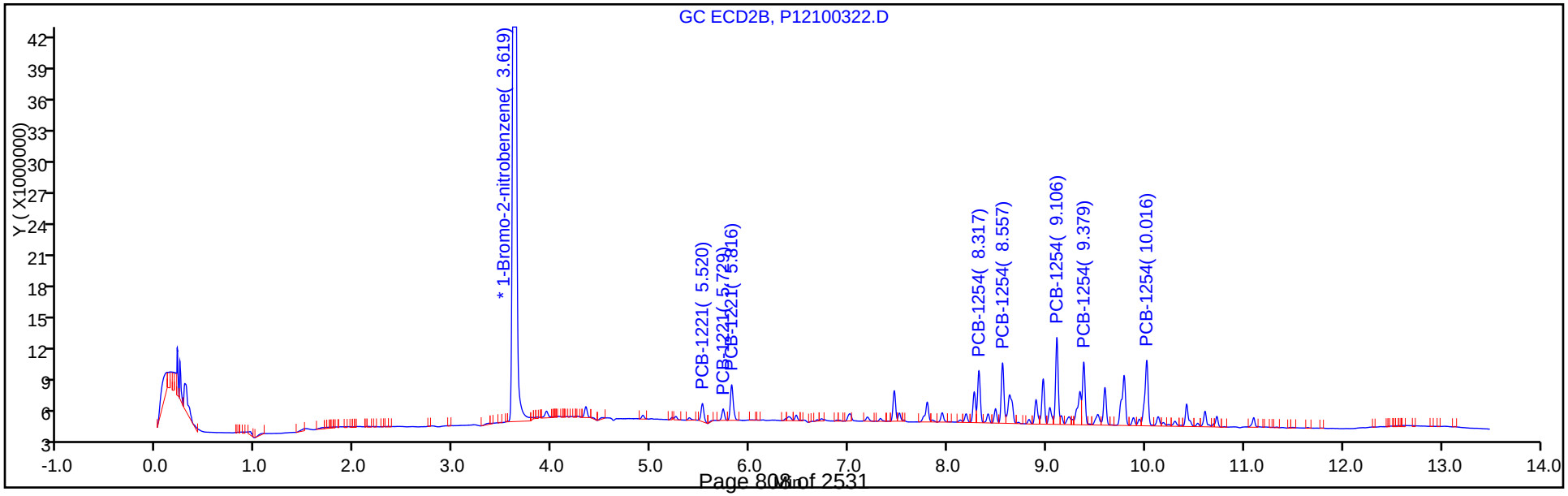
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100322.D

Injection Date:	03-Oct-2017 19:50:46	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 ar2154			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100323.D
Lims ID: std01 ar2154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 20:08:20 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-023
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:09 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:21:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.005	82854821	0.0500	0.0500	
2	3.620	3.619	0.001	228309809	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	1808328	0.1000	0.1087	
1	4.839	4.840	-0.001	1190368	0.1000	0.1115	
1	4.895	4.897	-0.002	4488116	0.1000	0.1106	
		Average of Peak Amounts =				0.1103	
2	5.519	5.520	-0.001	5951346	0.1000	0.1043	
2	5.729	5.729	0.000	3654186	0.1000	0.1153	
2	5.815	5.816	-0.001	12642070	0.1000	0.1147	
		Average of Peak Amounts =				0.1114	
						RPD = 1.04	
8 PCB-1254							
1	7.558	7.559	-0.001	8030150	0.1000	0.1053	
1	8.033	8.034	-0.001	11133441	0.1000	0.1031	
1	8.367	8.367	0.000	8565795	0.1000	0.1039	
1	8.590	8.592	-0.002	7808177	0.1000	0.1053	
1	8.916	8.917	-0.001	11285610	0.1000	0.1029	
		Average of Peak Amounts =				0.1041	
2	8.318	8.317	0.001	17342964	0.1000	0.1131	
2	8.556	8.557	-0.001	20951218	0.1000	0.1164	
2	9.106	9.106	0.000	27782594	0.1000	0.1106	
2	9.379	9.379	0.000	20454278	0.1000	0.1113	
2	10.016	10.016	0.000	27140201	0.1000	0.1107	
		Average of Peak Amounts =				0.1124	
						RPD = 7.69	

Reagents:

SG2154@O.1PPM_00018 Amount Added: 1.00 Units: mL

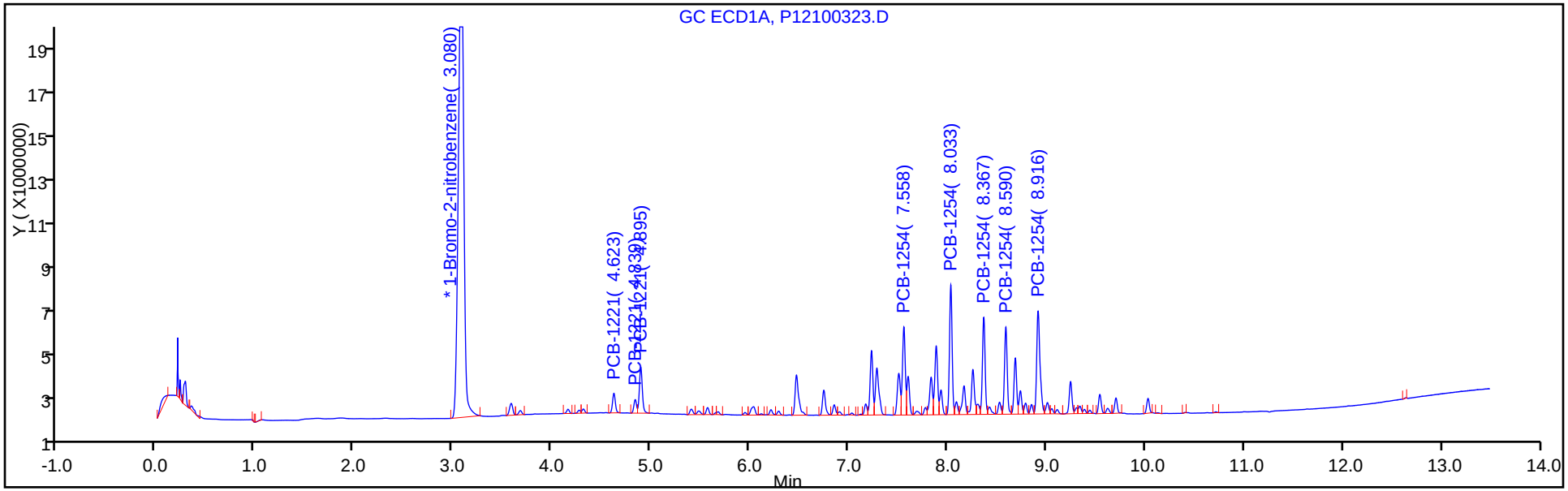
Report Date: 04-Oct-2017 08:18:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

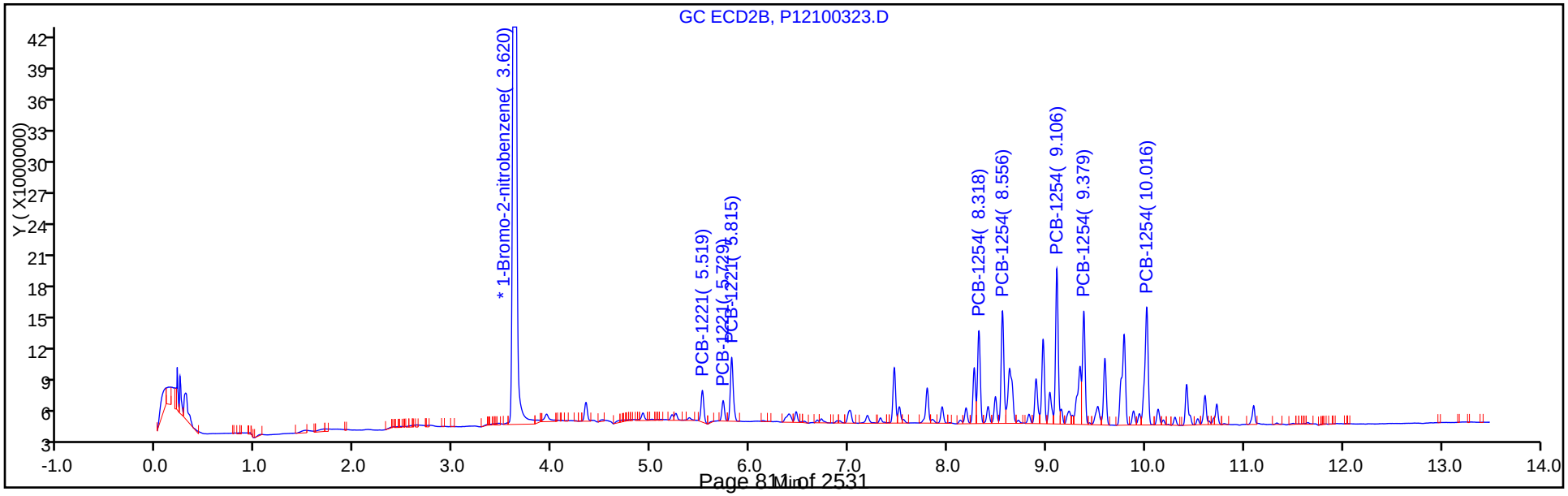
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100323.D

Injection Date:	03-Oct-2017 20:08:20	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 ar2154			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100324.D
Lims ID: std02 ar2154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 20:25:56 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-024
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:14 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:21:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.076	-0.001	83295975	0.0500	0.0500	
2	3.619	3.619	0.000	243343207	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	3487343	0.2000	0.2086	
1	4.839	4.840	-0.001	2264712	0.2000	0.2109	
1	4.895	4.897	-0.002	8381664	0.2000	0.2055	
		Average of Peak Amounts =				0.2083	
2	5.519	5.520	-0.001	11293872	0.2000	0.2236	
2	5.728	5.729	-0.001	7236202	0.2000	0.2142	
2	5.815	5.816	-0.001	24561461	0.2000	0.2091	
		Average of Peak Amounts =				0.2156	
						RPD = 3.44	
8 PCB-1254							
1	7.558	7.559	-0.001	15473292	0.2000	0.2018	
1	8.034	8.034	0.000	21955759	0.2000	0.2023	
1	8.367	8.367	0.000	16651908	0.2000	0.2009	
1	8.590	8.592	-0.002	14977211	0.2000	0.2008	
1	8.916	8.917	-0.001	22002871	0.2000	0.1996	
		Average of Peak Amounts =				0.2011	
2	8.317	8.317	0.000	34015659	0.2000	0.2082	
2	8.556	8.557	-0.001	39766864	0.2000	0.2073	
2	9.106	9.106	0.000	53396036	0.2000	0.1994	
2	9.380	9.379	0.001	38551914	0.2000	0.1969	
2	10.017	10.016	0.001	49348242	0.2000	0.1888	
		Average of Peak Amounts =				0.2001	
						RPD = 0.49	

Reagents:

SG2154@0.2PPM_00017 Amount Added: 1.00 Units: mL

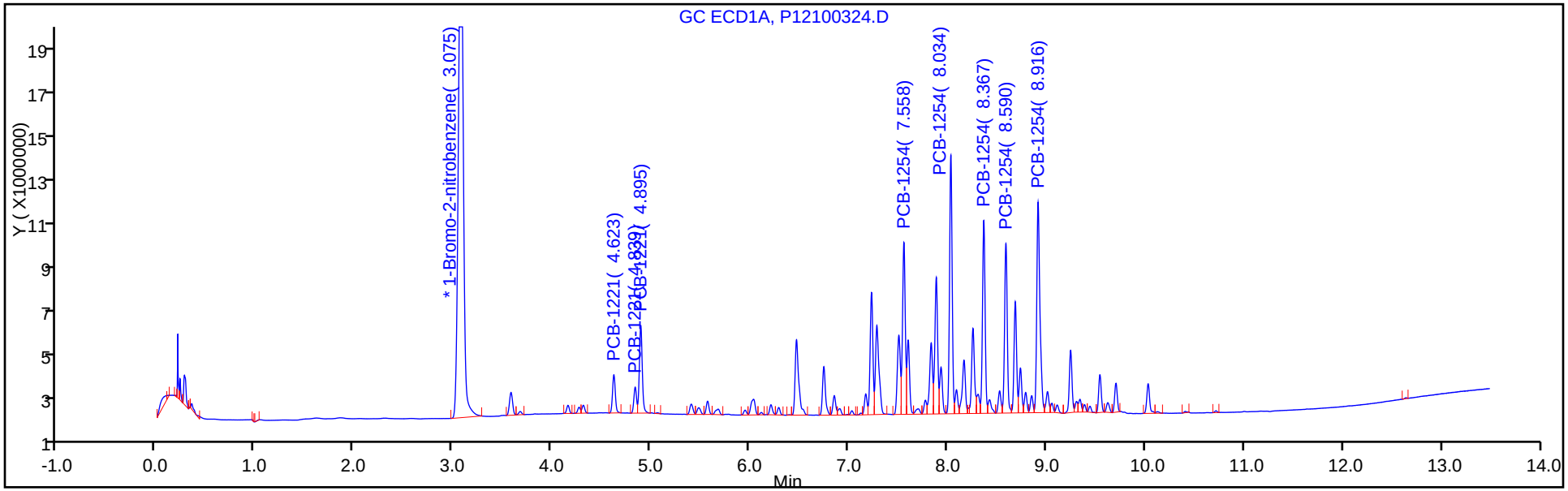
Report Date: 04-Oct-2017 08:18:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

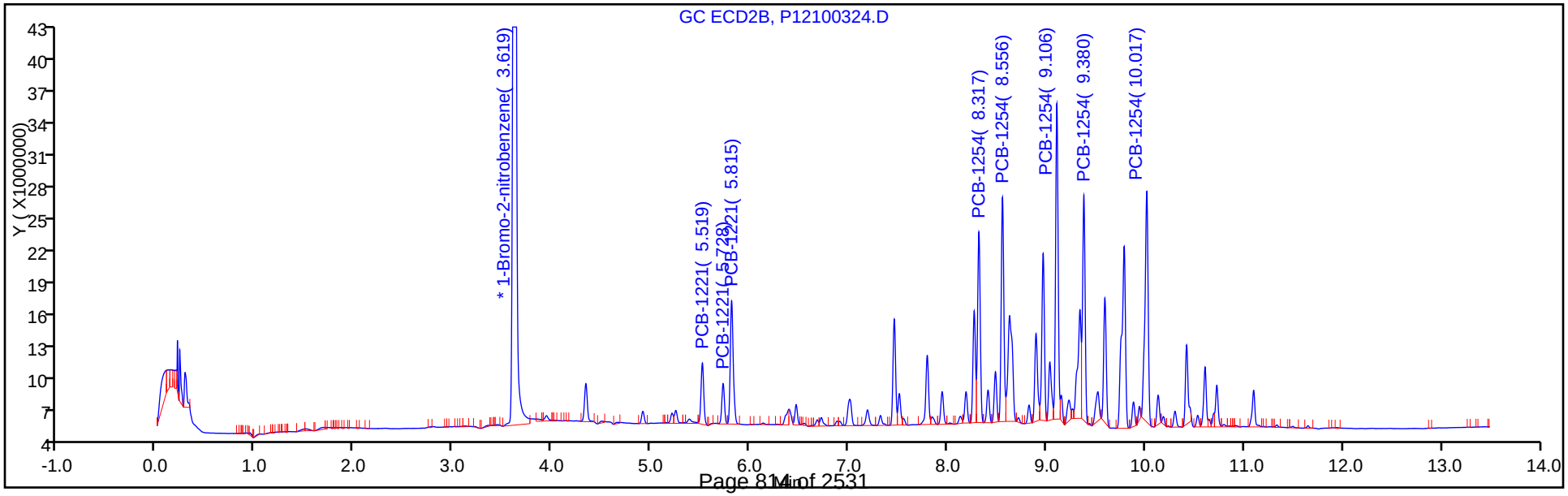
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100324.D

Injection Date:	03-Oct-2017 20:25:56	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 ar2154			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100325.D
Lims ID: std05 ar2154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Oct-2017 20:43:41 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-025
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:44:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	88182499	0.0500	0.0500	
2	3.621	3.619	0.002	250919182	0.0500	0.0500	
3 PCB-1221							
1	4.624	4.623	0.001	8191499	0.5000	0.4627	
1	4.839	4.840	-0.001	5274220	0.5000	0.4640	
1	4.895	4.897	-0.002	19602122	0.5000	0.4539	
		Average of Peak Amounts =				0.4602	
2	5.519	5.520	-0.001	24959978	0.5000	0.5347	
2	5.729	5.729	0.000	15837180	0.5000	0.4547	
2	5.815	5.816	-0.001	55173785	0.5000	0.4554	
		Average of Peak Amounts =				0.4816	
						RPD = 4.54	
8 PCB-1254							M
1	7.559	7.559	0.000	37814096	0.5000	0.4657	
1	8.033	8.034	-0.001	54656217	0.5000	0.4758	
1	8.366	8.367	-0.001	41446907	0.5000	0.4723	
1	8.590	8.592	-0.002	37051124	0.5000	0.4693	
1	8.917	8.917	0.000	55521673	0.5000	0.4759	
		Average of Peak Amounts =				0.4718	
2	8.318	8.317	0.001	75216460	0.5000	0.4465	M
2	8.555	8.557	-0.002	87969125	0.5000	0.4447	M
2	9.105	9.106	-0.001	126176701	0.5000	0.4569	M
2	9.379	9.379	0.000	92250550	0.5000	0.4569	M
2	10.016	10.016	0.000	124830154	0.5000	0.4631	M
		Average of Peak Amounts =				0.4536	
						RPD = 3.93	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.5PPM_00033 Amount Added: 1.00 Units: mL

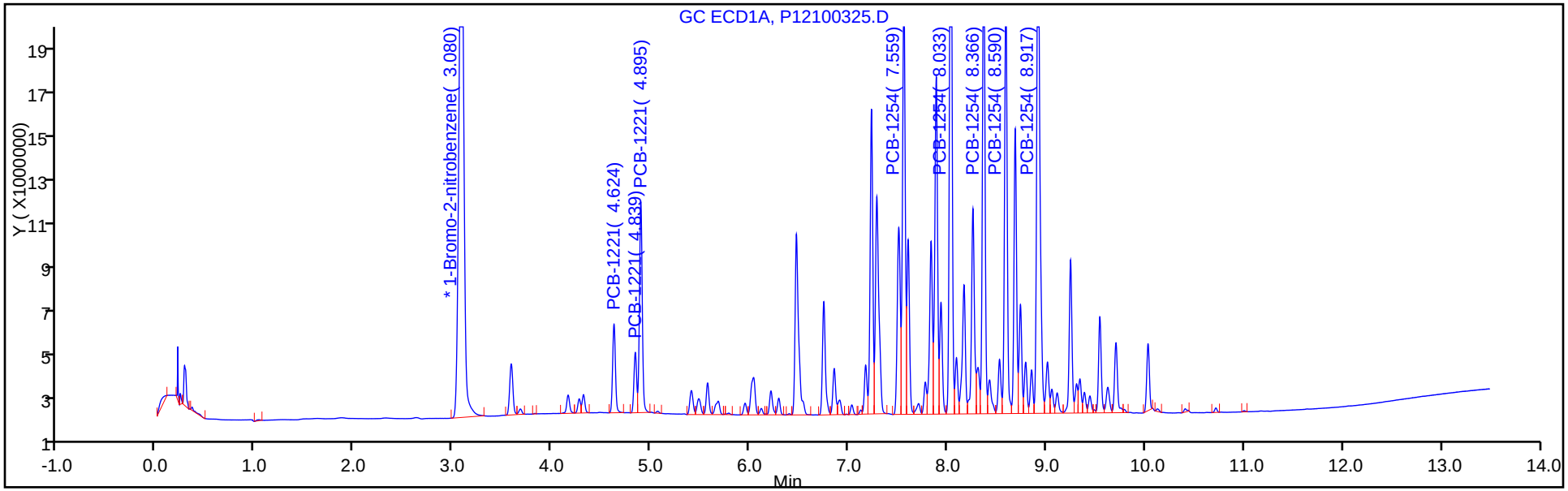
Report Date: 04-Oct-2017 08:18:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

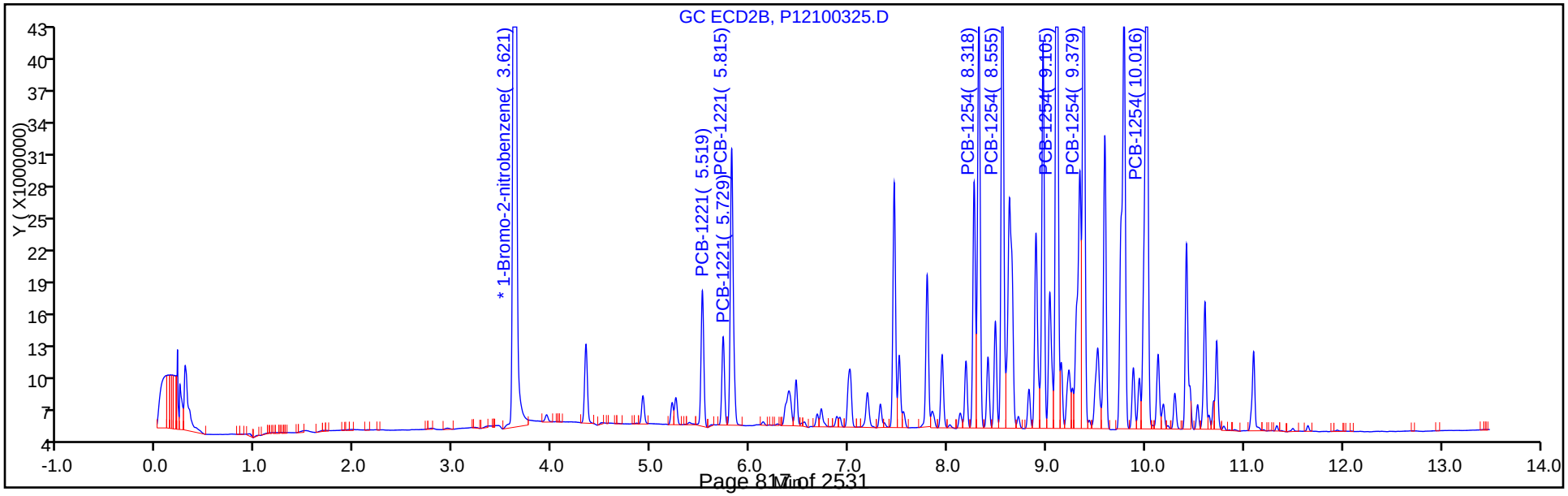
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100325.D

Injection Date:	03-Oct-2017 20:43:41	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 ar2154			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:18:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100325.D

Injection Date: 03-Oct-2017 20:43:41 Instrument ID: A2HP12

Lims ID: std05 ar2154

Client ID:

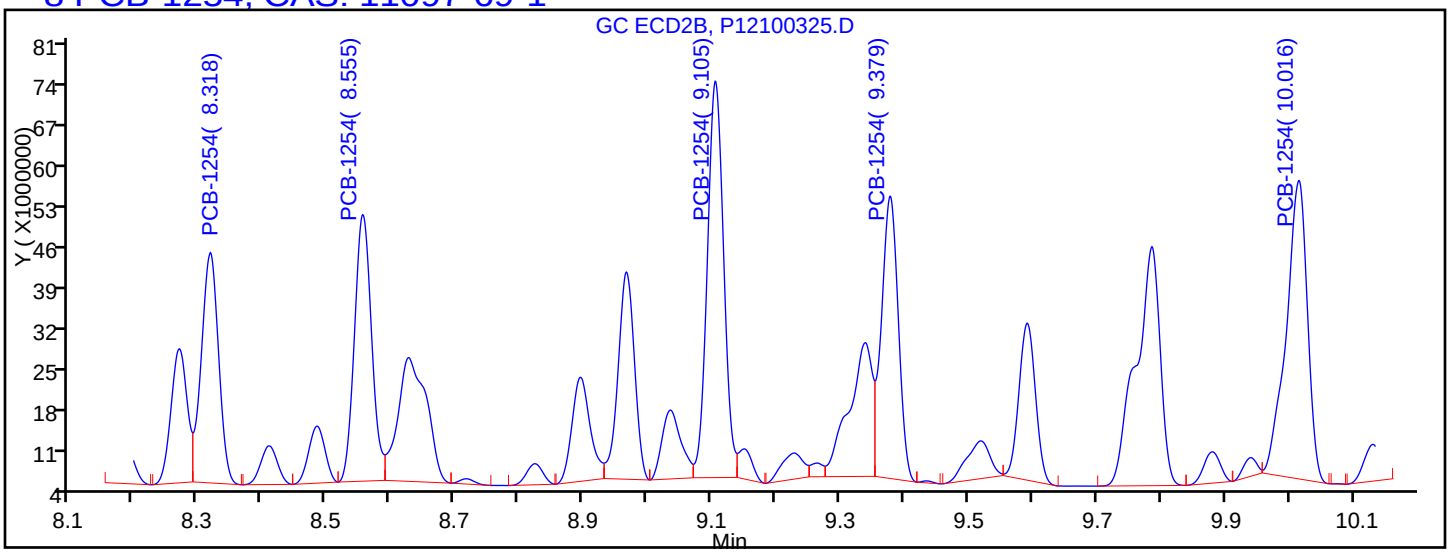
Operator ID: ALS Bottle#: 25 Worklist Smp#: 25

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

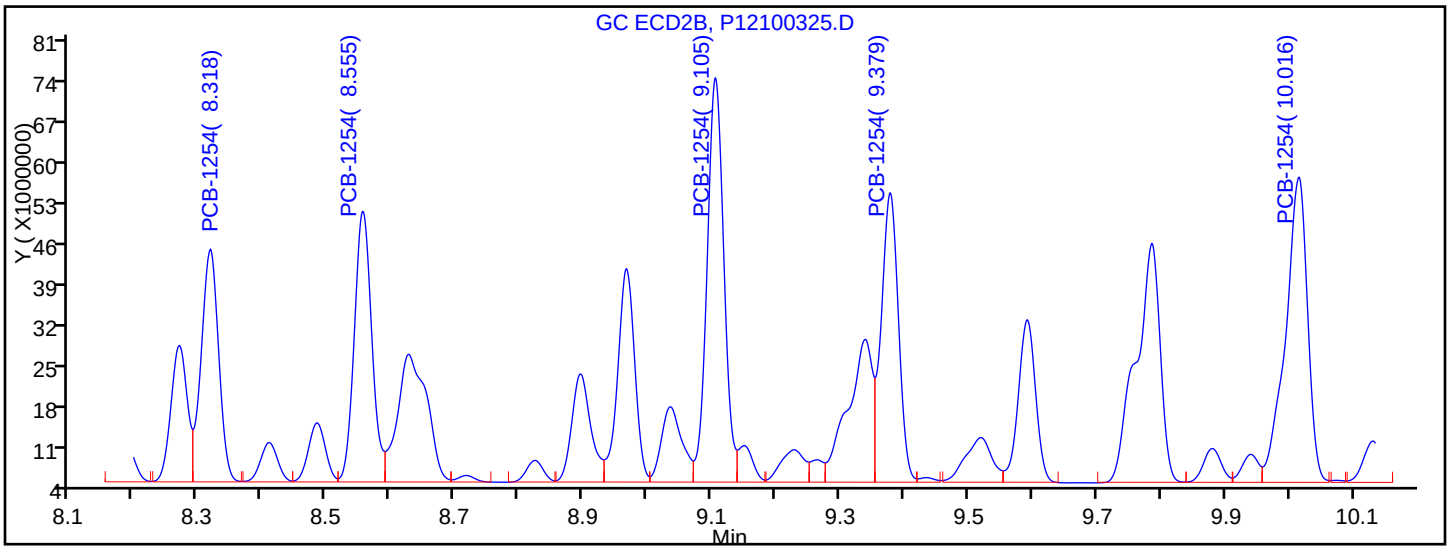
Column: Detector GC ecd2b

8 PCB-1254, CAS: 11097-69-1



Processing Integration Results

8.318	Response = 73771594
8.555	Response = 84944514
9.105	Response = 120708018
9.379	Response = 88106587
10.016	Response = 117051508



Manual Integration Results

8.318	Response = 75216460	M
8.555	Response = 87969125	M
9.105	Response = 126176701	M
9.379	Response = 92250550	M
10.016	Response = 124830154	M

Reviewer: hassl, 04-Oct-2017 05:44:03

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100326.D
Lims ID: std1 ar2154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 21:01:16 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-026
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:25 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:35:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.001	88668747	0.0500	0.0500	
2	3.619	3.619	0.000	247432158	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	15818915	1.00	0.8887	
1	4.839	4.840	-0.001	10101371	1.00	0.8839	
1	4.895	4.897	-0.002	38682764	1.00	0.8908	
		Average of Peak Amounts =				0.8878	
2	5.518	5.520	-0.002	43574026	1.00	0.9841	
2	5.729	5.729	0.000	28387011	1.00	0.8264	
2	5.816	5.816	0.000	100075692	1.00	0.8377	
		Average of Peak Amounts =				0.8827	
						RPD = 0.57	
8 PCB-1254							
1	7.556	7.559	-0.003	76082449	1.00	0.9319	
1	8.032	8.034	-0.002	110938919	1.00	0.9604	
1	8.365	8.367	-0.002	84248384	1.00	0.9547	
1	8.588	8.592	-0.004	74582176	1.00	0.9395	
1	8.915	8.917	-0.002	113522711	1.00	0.9676	
		Average of Peak Amounts =				0.9508	
2	8.317	8.317	0.000	144913356	1.00	0.8723	
2	8.556	8.557	-0.001	169441893	1.00	0.8686	
2	9.106	9.106	0.000	247907230	1.00	0.9104	
2	9.378	9.379	-0.001	178266312	1.00	0.8953	
2	10.016	10.016	0.000	243844820	1.00	0.9174	
		Average of Peak Amounts =				0.8928	
						RPD = 6.29	

Reagents:

SG2154@1.0PPM_00021 Amount Added: 1.00 Units: mL

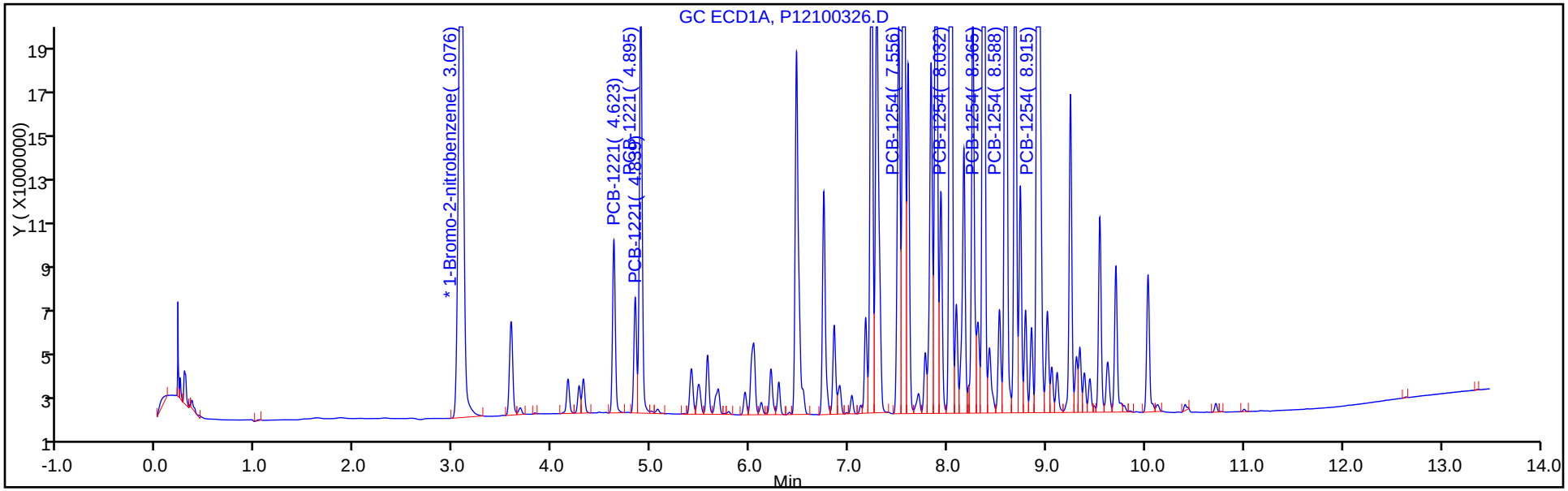
Report Date: 04-Oct-2017 08:18:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

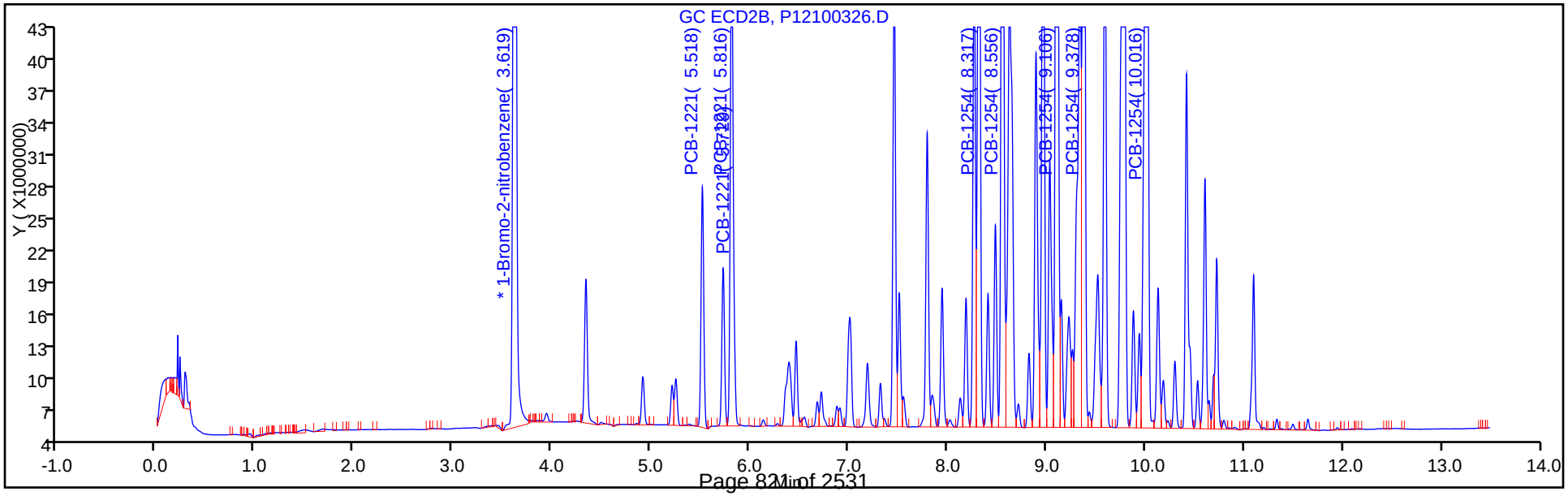
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100326.D

Injection Date:	03-Oct-2017 21:01:16	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 ar2154			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100327.D
Lims ID: std15 ar2154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 21:18:55 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-027
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:30 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:48:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.077	3.076	0.001	84326829	0.0500	0.0500	
2	3.620	3.619	0.001	240156760	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	22289051	1.50	1.32	
1	4.840	4.840	0.000	14036546	1.50	1.29	
1	4.895	4.897	-0.002	54532296	1.50	1.32	
		Average of Peak Amounts =				1.31	
2	5.518	5.520	-0.002	61903192	1.50	1.46	
2	5.729	5.729	0.000	38918501	1.50	1.17	
2	5.815	5.816	-0.001	138730593	1.50	1.20	
		Average of Peak Amounts =				1.28	
						RPD = 2.63	
8 PCB-1254							M
1	7.557	7.559	-0.002	108987341	1.50	1.40	
1	8.033	8.034	-0.001	158715574	1.50	1.44	
1	8.365	8.367	-0.002	120694486	1.50	1.44	
1	8.589	8.592	-0.003	106567568	1.50	1.41	
1	8.915	8.917	-0.002	163102488	1.50	1.46	
		Average of Peak Amounts =				1.43	
2	8.316	8.317	-0.001	202617215	1.50	1.26	
2	8.555	8.557	-0.002	236587506	1.50	1.25	
2	9.105	9.106	-0.001	341934826	1.50	1.29	
2	9.378	9.379	-0.001	251391761	1.50	1.30	
2	10.015	10.016	-0.001	339306096	1.50	1.32	M
		Average of Peak Amounts =				1.28	
						RPD = 10.96	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@1.5PPM_00001 Amount Added: 1.00 Units: mL

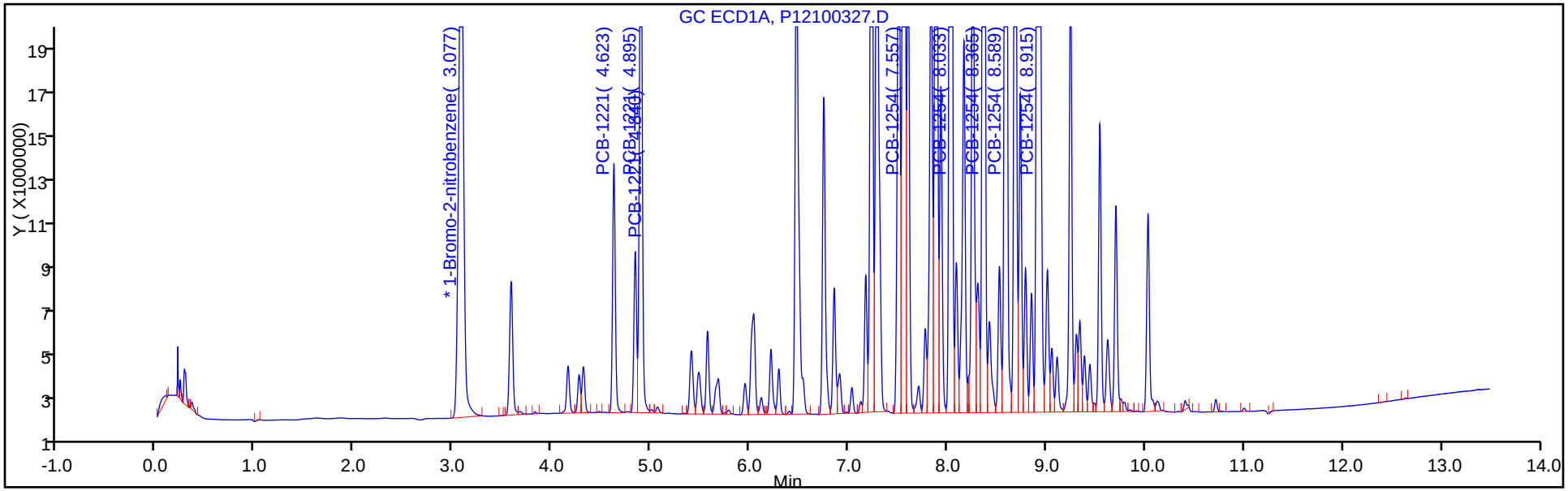
Report Date: 04-Oct-2017 08:18:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

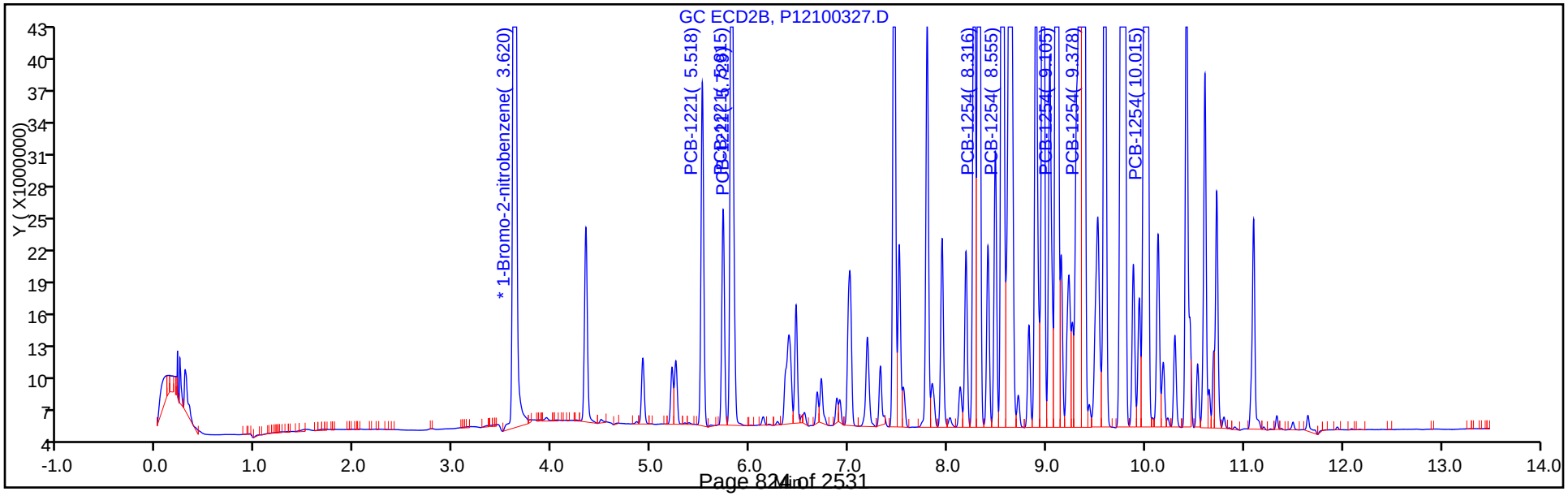
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100327.D

Injection Date:	03-Oct-2017 21:18:55	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std15 ar2154			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:18:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100327.D

Injection Date: 03-Oct-2017 21:18:55 Instrument ID: A2HP12

Lims ID: std15 ar2154

Client ID:

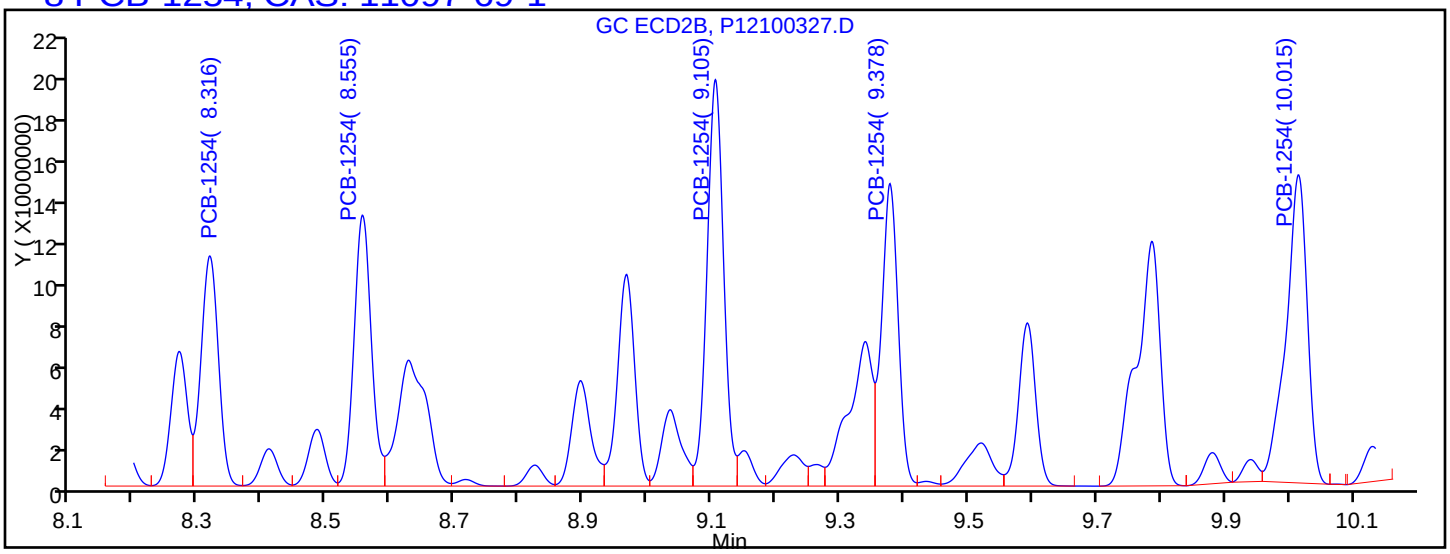
Operator ID: ALS Bottle#: 27 Worklist Smp#: 27

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

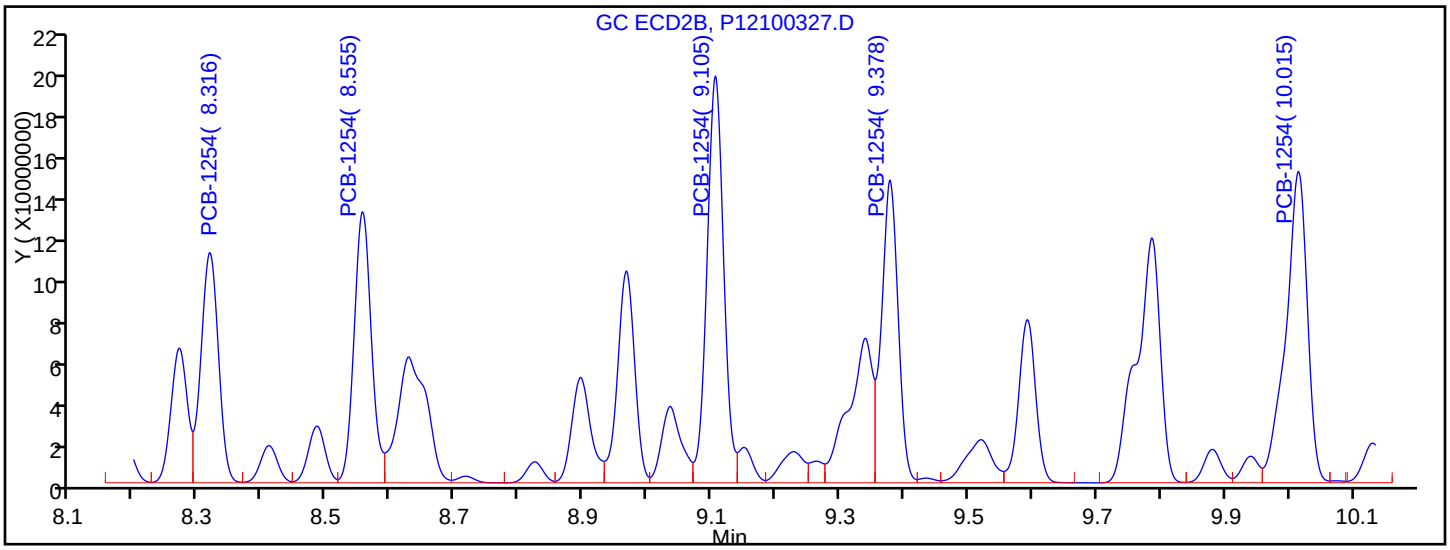
Column: Detector GC ecd2b

8 PCB-1254, CAS: 11097-69-1



Processing Integration Results

8.316	Response = 202617215
8.555	Response = 236587506
9.105	Response = 341934826
9.378	Response = 251391761
10.015	Response = 330043263



Manual Integration Results

8.316	Response = 202617215	
8.555	Response = 236587506	
9.105	Response = 341934826	
9.378	Response = 251391761	
10.015	Response = 339306096	M

Reviewer: hassl, 04-Oct-2017 05:48:20

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 21:36 Calibration End Date: 10/03/2017 23:04 Calibration ID: 41739

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/28	P12100328.D
Level 2	STD01 240-297285/29	P12100329.D
Level 3	STD02 240-297285/30	P12100330.D
Level 4	STD05 240-297285/31	P12100331.D
Level 5	STD1 240-297285/32	P12100332.D
Level 6	STD151660 240-297285/33	P12100333.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.0273 0.0188	0.0230	0.0214	0.0202	0.0190	Ave		0.0216				14.7		20.0			
PCB-1016 Peak 2	0.0451 0.0349	0.0423	0.0394	0.0372	0.0354	Ave		0.0390				10.3		20.0			
PCB-1016 Peak 3	0.0960 0.0867	0.0925	0.0892	0.0883	0.0869	Ave		0.0900				4.1		20.0			
PCB-1016 Peak 4	0.0426 0.0350	0.0407	0.0382	0.0364	0.0353	Ave		0.0380				8.1		20.0			
PCB-1016 Peak 5	0.0440 0.0353	0.0419	0.0383	0.0366	0.0354	Ave		0.0386				9.4		20.0			
PCB-1260 Peak 1	0.0628 0.0540	0.0590	0.0572	0.0552	0.0540	Ave		0.0570				6.0		20.0			
PCB-1260 Peak 2	0.0977 0.0895	0.0930	0.0928	0.0908	0.0892	Ave		0.0922				3.4		20.0			
PCB-1260 Peak 3	0.1080 0.1006	0.1019	0.1027	0.1006	0.0999	Ave		0.1023				2.9		20.0			
PCB-1260 Peak 4	0.1342 0.1353	0.1253	0.1335	0.1323	0.1319	Ave		0.1321				2.7		20.0			
PCB-1260 Peak 5	0.0711 0.0682	0.0684	0.0685	0.0674	0.0672	Ave		0.0685				2.1		20.0			
Tetrachloro-m-xylene	1.0681 0.9252	1.0082	0.9682	0.9514	0.9444	Ave		0.9776				5.4		20.0			
DCB Decachlorobiphenyl	1.2010 0.9719	1.1104	1.0699	0.9859	0.9693	Ave		1.0514				8.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 21:36 Calibration End Date: 10/03/2017 23:04 Calibration ID: 41739

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/28	P12100328.D
Level 2	STD01 240-297285/29	P12100329.D
Level 3	STD02 240-297285/30	P12100330.D
Level 4	STD05 240-297285/31	P12100331.D
Level 5	STD1 240-297285/32	P12100332.D
Level 6	STD151660 240-297285/33	P12100333.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Ave	2425272 49352438	4022106	7215230	18079284	33705238	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	BNB	Ave	4006169 91346649	7378357	13282353	33207948	62883714	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	BNB	Ave	8537265 227241966	16150611	30062398	78924048	154273303	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	BNB	Ave	3784818 91818693	7100356	12867580	32507935	62606017	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	BNB	Ave	3915270 92472962	7315459	12921646	32705509	62772115	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	BNB	Ave	5578448 141630966	10291473	19273827	49313123	95902236	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	BNB	Ave	8683818 234468792	16238735	31292211	81089615	158298374	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	BNB	Ave	9601387 263536295	17778092	34639935	89840288	177383795	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	BNB	Ave	11932016 354496128	21858970	45009723	118214095	234063969	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	BNB	Ave	6322786 178641779	11936077	23096451	60228169	119294135	0.0500 1.50	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	BNB	Ave	4747183 161653127	8797888	16322595	42493255	83810446	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl	BNB	Ave	5337751 169811450	9688986	18037407	44036205	86021814	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100328.D
Lims ID: std005 1660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 21:36:30 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-028
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:37 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:22:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	88888062	0.0500	0.0500	
2	3.619	3.619	0.000	236965441	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.319	4.319	0.000	4747183	0.002500	0.002732	
2	5.028	5.027	0.001	13518929	0.002500	0.002964	
						RPD = 8.15	
6 PCB-1016							
1	4.897	4.895	0.002	2425272	0.0500	0.0631	
1	5.405	5.405	0.000	4006169	0.0500	0.0577	
1	6.038	6.037	0.001	8537265	0.0500	0.0534	
1	6.212	6.212	0.000	3784818	0.0500	0.0560	
1	6.750	6.748	0.002	3915270	0.0500	0.0571	
		Average of Peak Amounts =				0.0574	
2	5.815	5.815	0.000	5981780	0.0500	0.0620	
2	6.399	6.399	0.000	11656589	0.0500	0.0618	
2	7.009	7.012	-0.003	23177068	0.0500	0.0576	
2	7.190	7.190	0.000	10000922	0.0500	0.0610	
2	7.556	7.557	-0.001	4154384	0.0500	0.0603	
		Average of Peak Amounts =				0.0605	
						RPD = 5.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.256	8.257	-0.001	5578448	0.0500	0.0550	
1	8.590	8.591	-0.001	8683818	0.0500	0.0530	
1	8.915	8.915	0.000	9601387	0.0500	0.0528	
1	9.703	9.703	0.000	11932016	0.0500	0.0508	
1	10.029	10.027	0.002	6322786	0.0500	0.0519	
		Average of Peak Amounts =				0.0527	
2	9.340	9.341	-0.001	14806914	0.0500	0.0593	
2	10.014	10.014	0.000	23566529	0.0500	0.0589	
2	10.454	10.454	0.000	13835958	0.0500	0.0593	
2	10.724	10.725	-0.001	26605788	0.0500	0.0558	
2	11.094	11.095	-0.001	19037484	0.0500	0.0564	
		Average of Peak Amounts =				0.0579	
						RPD = 9.44	
$ 12 DCB Decachlorobiphenyl							
1	11.186	11.187	-0.001	5337751	0.002500	0.002856	
2	12.173	12.173	0.000	9690817	0.002500	0.003013	
						RPD = 5.37	

Reagents:

SG1660@.05PPM_00020 Amount Added: 1.00 Units: mL

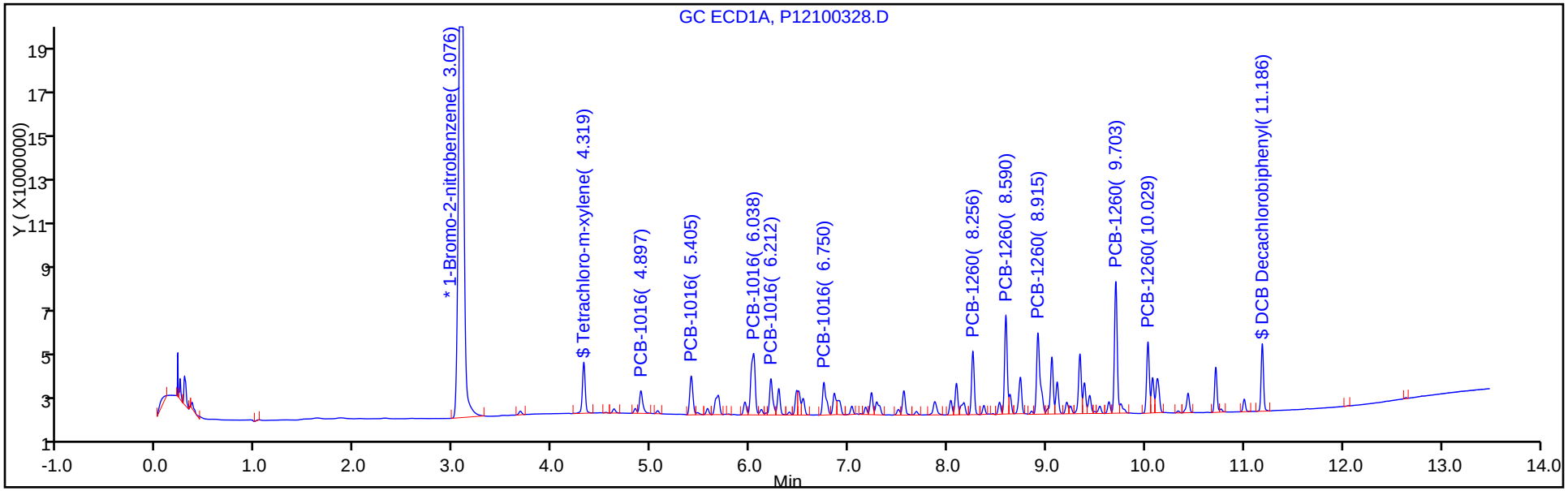
Report Date: 04-Oct-2017 08:18:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

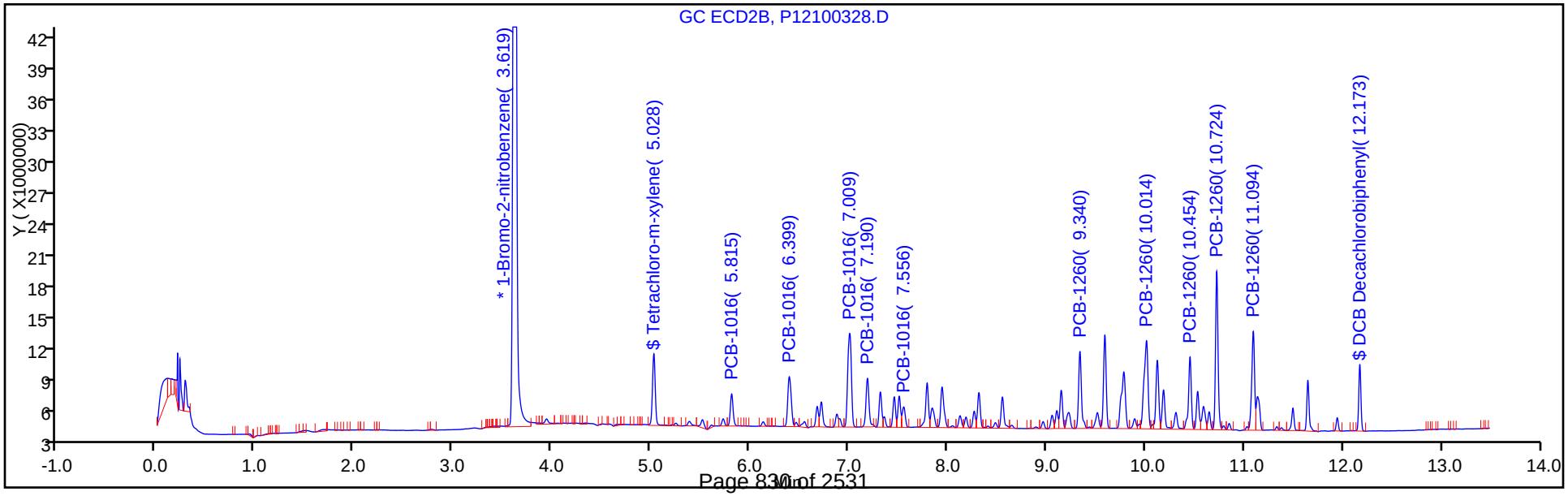
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100328.D

Injection Date:	03-Oct-2017 21:36:30	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1660			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100329.D
Lims ID: std01 1660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 21:54:14 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-029
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:46 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	87260396	0.0500	0.0500	
2	3.621	3.619	0.002	269717105	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.320	4.319	0.001	8797888	0.005000	0.005157	
2	5.028	5.027	0.001	27798896	0.005000	0.005354	
						RPD = 3.75	
6 PCB-1016							M
1	4.897	4.895	0.002	4022106	0.1000	0.1065	
1	5.406	5.405	0.001	7378357	0.1000	0.1083	
1	6.037	6.037	0.000	16150611	0.1000	0.1029	M
1	6.213	6.212	0.001	7100356	0.1000	0.1070	M
1	6.750	6.748	0.002	7315459	0.1000	0.1086	M
		Average of Peak Amounts =				0.1067	
2	5.815	5.815	0.000	12270407	0.1000	0.1117	
2	6.398	6.399	-0.001	23717464	0.1000	0.1104	
2	7.011	7.012	-0.001	47521618	0.1000	0.1037	
2	7.190	7.190	0.000	19805064	0.1000	0.1061	
2	7.556	7.557	-0.001	8589886	0.1000	0.1095	
		Average of Peak Amounts =				0.1083	
						RPD = 1.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.257	8.257	0.000	10291473	0.1000	0.1034	
1	8.590	8.591	-0.001	16238735	0.1000	0.1010	
1	8.915	8.915	0.000	17778092	0.1000	0.0996	
1	9.703	9.703	0.000	21858970	0.1000	0.0948	
1	10.028	10.027	0.001	11936077	0.1000	0.0999	
		Average of Peak Amounts =				0.0997	
2	9.340	9.341	-0.001	30402468	0.1000	0.1069	
2	10.014	10.014	0.000	47599523	0.1000	0.1045	
2	10.454	10.454	0.000	27613439	0.1000	0.1040	
2	10.724	10.725	-0.001	55235939	0.1000	0.1018	
2	11.094	11.095	-0.001	40108579	0.1000	0.1044	
		Average of Peak Amounts =				0.1043	
						RPD = 4.51	
$ 12 DCB Decachlorobiphenyl							
1	11.185	11.187	-0.002	9688986	0.005000	0.005280	
2	12.172	12.173	-0.001	19582515	0.005000	0.005350	
						RPD = 1.30	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660STD@0.1_00020 Amount Added: 1.00 Units: mL

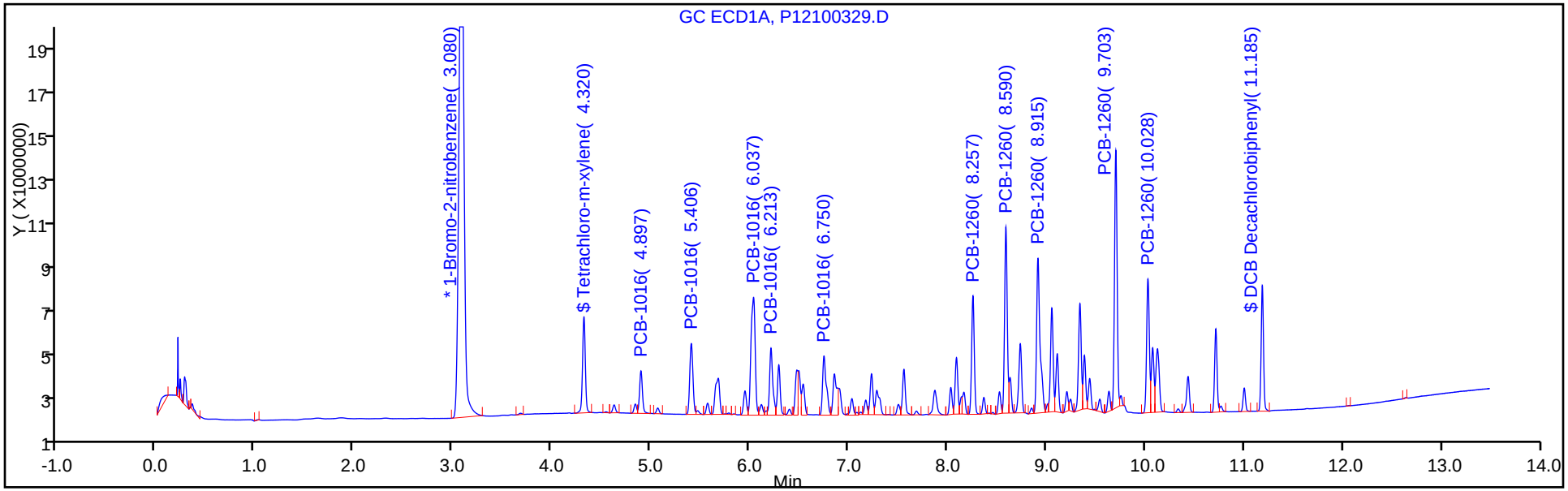
Report Date: 04-Oct-2017 08:18:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

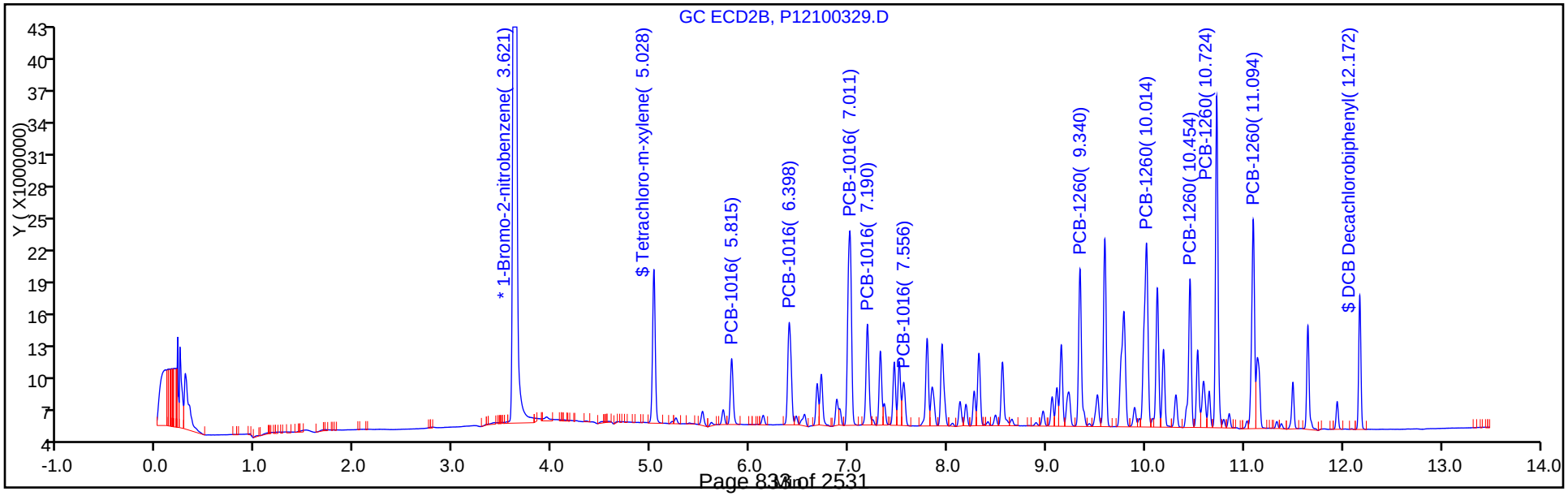
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100329.D

Injection Date:	03-Oct-2017 21:54:14	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1660			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



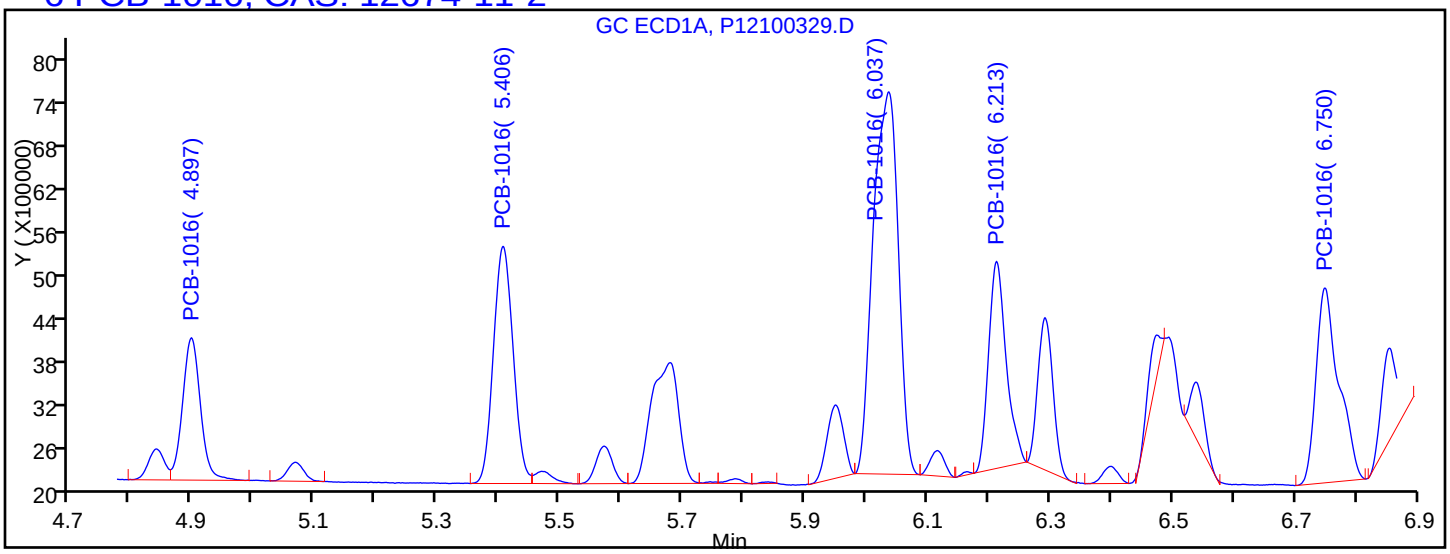
Report Date: 04-Oct-2017 08:18:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100329.D

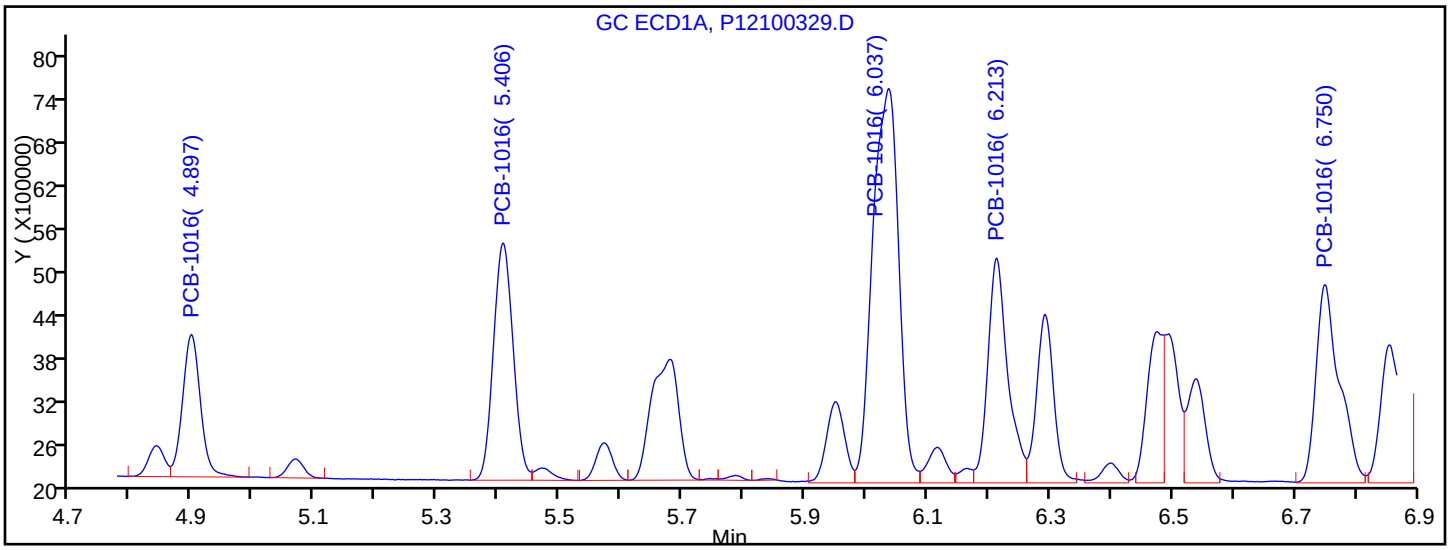
Injection Date:	03-Oct-2017 21:54:14	Instrument ID:	A2HP12		
Lims ID:	std01 1660				
Client ID:					
Operator ID:		ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB12IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

4.897	Response = 4022106
5.406	Response = 7378357
6.037	Response = 15086810
6.213	Response = 5768183
6.750	Response = 6952862



Manual Integration Results

4.897	Response = 4022106	
5.406	Response = 7378357	
6.037	Response = 16150611	M
6.213	Response = 7100356	M
6.750	Response = 7315459	M

Reviewer: hassl, 04-Oct-2017 05:49:04

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100330.D
Lims ID: std02 1660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 22:11:51 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-030
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:52 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:49:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.068	3.076	-0.008	84292925	0.0500	0.0500	
2	3.616	3.619	-0.004	261145987	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.316	4.319	-0.003	16322595	0.0100	0.0099	
2	5.026	5.027	-0.001	48462908	0.0100	0.009640	
						RPD = 2.70	
6 PCB-1016							M
1	4.894	4.895	-0.001	7215230	0.2000	0.1979	
1	5.405	5.405	0.000	13282353	0.2000	0.2018	
1	6.036	6.037	-0.001	30062398	0.2000	0.1982	
1	6.212	6.212	0.000	12867580	0.2000	0.2007	
1	6.749	6.748	0.001	12921646	0.2000	0.1986	M
		Average of Peak Amounts =				0.1995	
2	5.813	5.815	-0.002	21087968	0.2000	0.1983	
2	6.398	6.399	-0.001	41814232	0.2000	0.2010	
2	7.011	7.012	-0.001	88304962	0.2000	0.1990	
2	7.188	7.190	-0.002	36043884	0.2000	0.1994	
2	7.556	7.557	-0.001	15319470	0.2000	0.2017	
		Average of Peak Amounts =				0.1999	
						RPD = 0.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.257	8.257	0.000	19273827	0.2000	0.2005	M
1	8.591	8.591	0.000	31292211	0.2000	0.2014	M
1	8.915	8.915	0.000	34639935	0.2000	0.2009	M
1	9.702	9.703	-0.001	45009723	0.2000	0.2021	M
1	10.027	10.027	0.000	23096451	0.2000	0.2001	M
		Average of Peak Amounts =				0.2010	
2	9.340	9.341	-0.001	56156169	0.2000	0.2039	
2	10.012	10.014	-0.002	89384177	0.2000	0.2027	
2	10.453	10.454	-0.001	52409212	0.2000	0.2039	
2	10.724	10.725	-0.001	106257167	0.2000	0.2024	
2	11.095	11.095	0.000	75041585	0.2000	0.2017	
		Average of Peak Amounts =				0.2029	
						RPD = 0.95	
$ 12 DCB Decachlorobiphenyl							
1	11.186	11.187	-0.001	18037407	0.0100	0.0102	
2	12.173	12.173	0.000	35924249	0.0100	0.0101	
						RPD = 0.40	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.2ppm_00022 Amount Added: 1.00 Units: mL

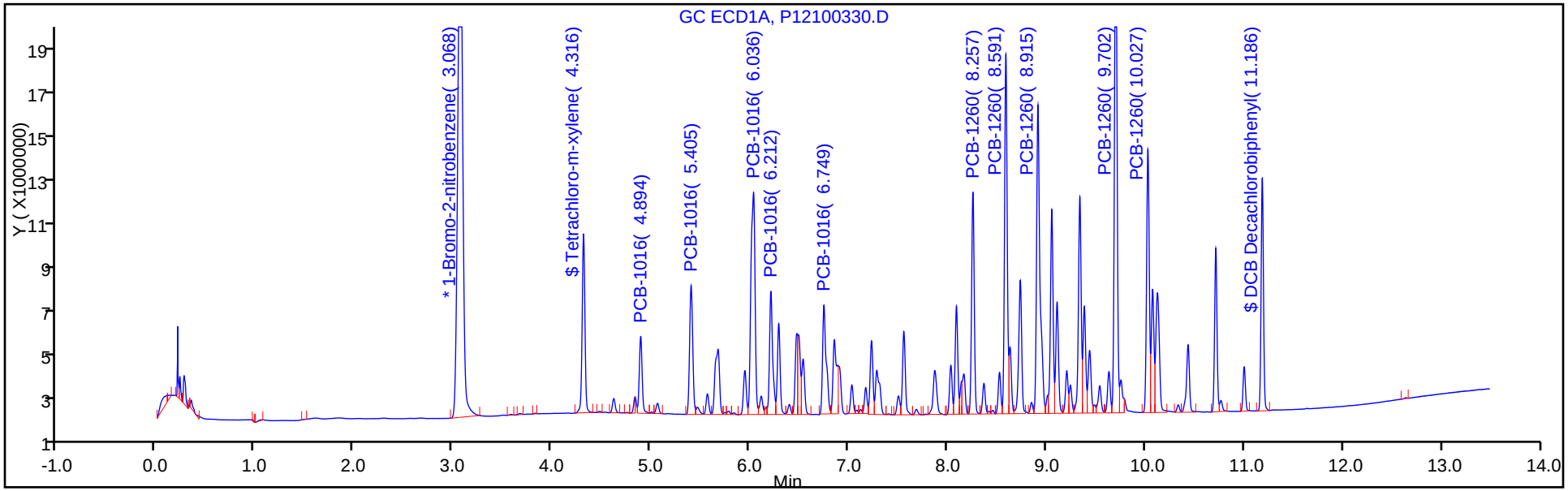
Report Date: 04-Oct-2017 08:18:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

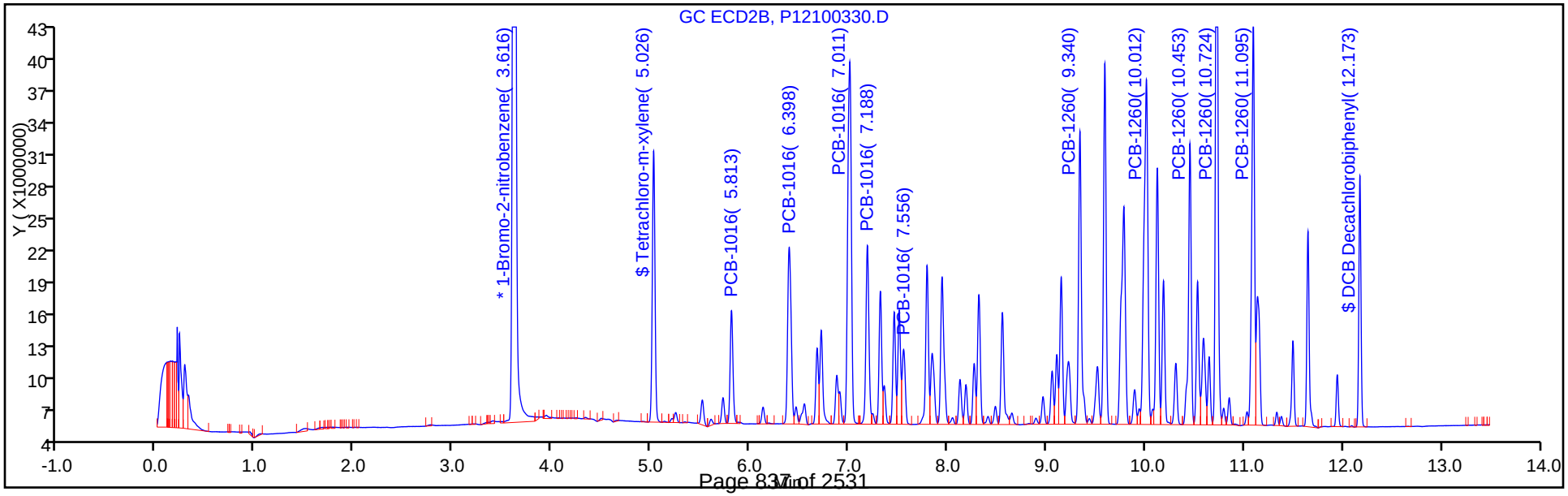
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100330.D

Injection Date:	03-Oct-2017 22:11:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1660			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:18:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100330.D

Injection Date: 03-Oct-2017 22:11:51 Instrument ID: A2HP12

Lims ID: std02 1660

Client ID:

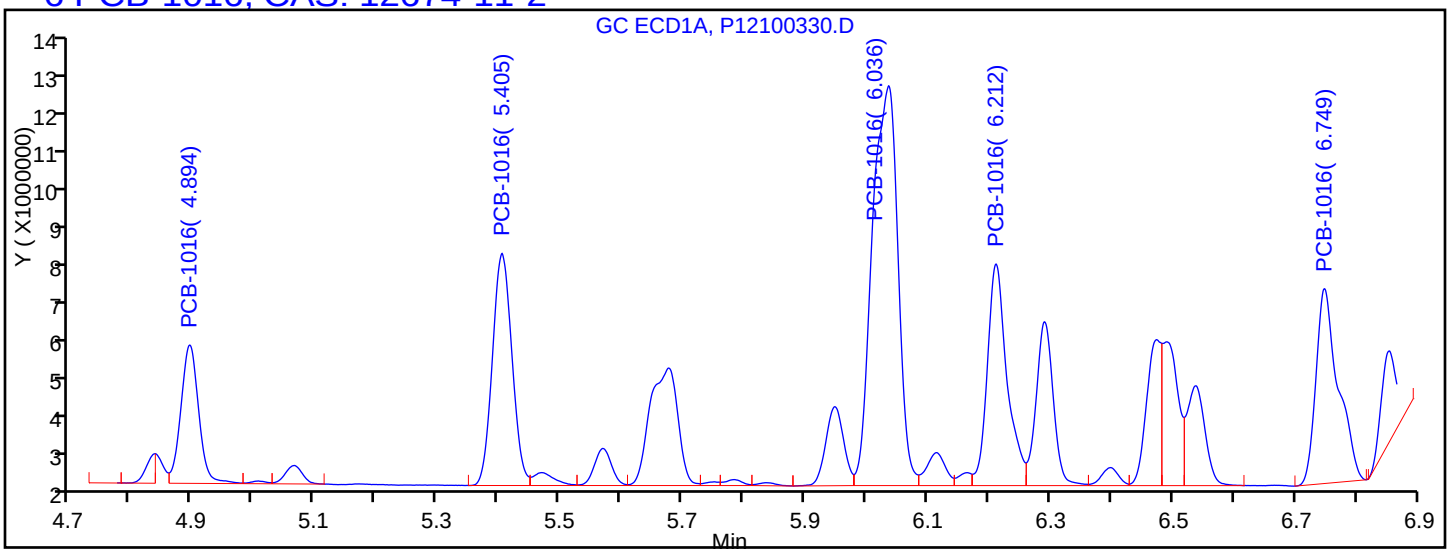
Operator ID: ALS Bottle#: 30 Worklist Smp#: 30

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

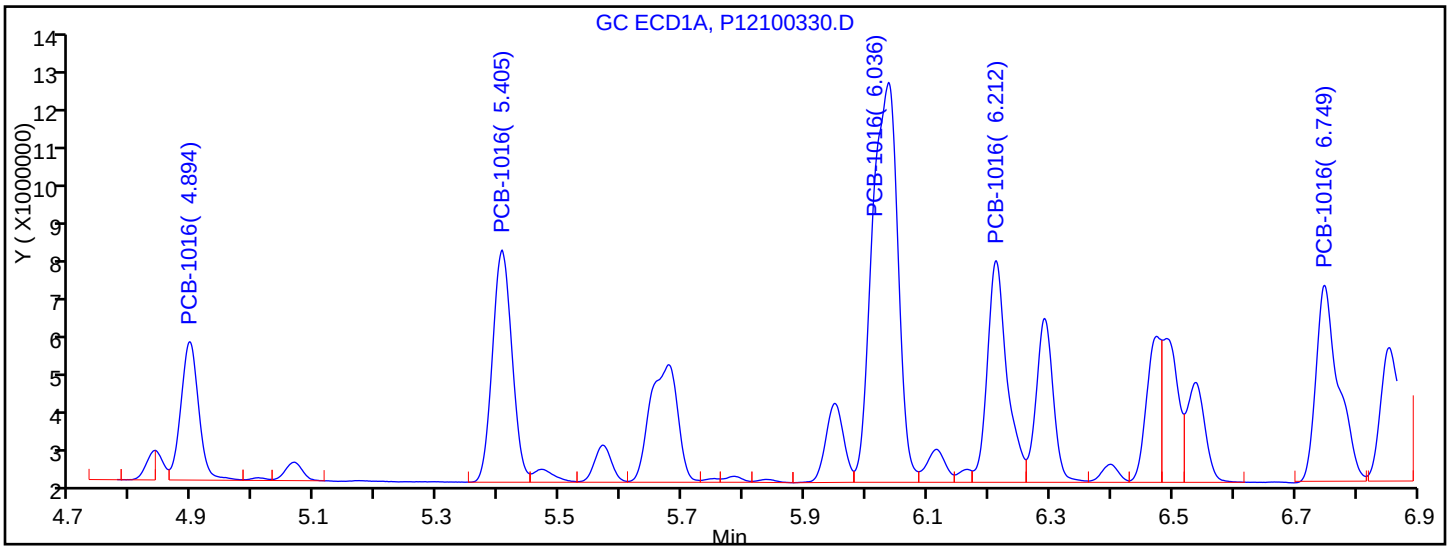
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

4.894	Response = 7215230
5.405	Response = 13282353
6.036	Response = 30062398
6.212	Response = 12867580
6.749	Response = 12639028



Manual Integration Results

4.894	Response = 7215230	
5.405	Response = 13282353	
6.036	Response = 30062398	
6.212	Response = 12867580	
6.749	Response = 12921646	M

Reviewer: hassl, 04-Oct-2017 06:22:53

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Report Date: 04-Oct-2017 08:18:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100330.D

Injection Date: 03-Oct-2017 22:11:51 Instrument ID: A2HP12

Lims ID: std02 1660

Client ID:

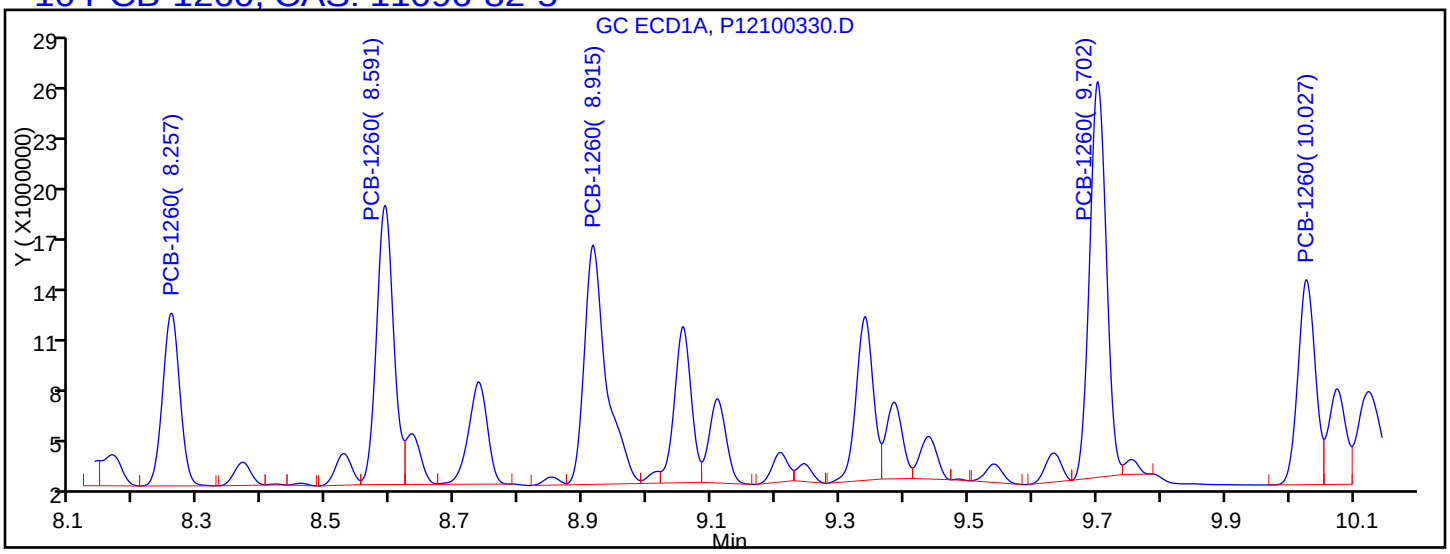
Operator ID: ALS Bottle#: 30 Worklist Smp#: 30

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

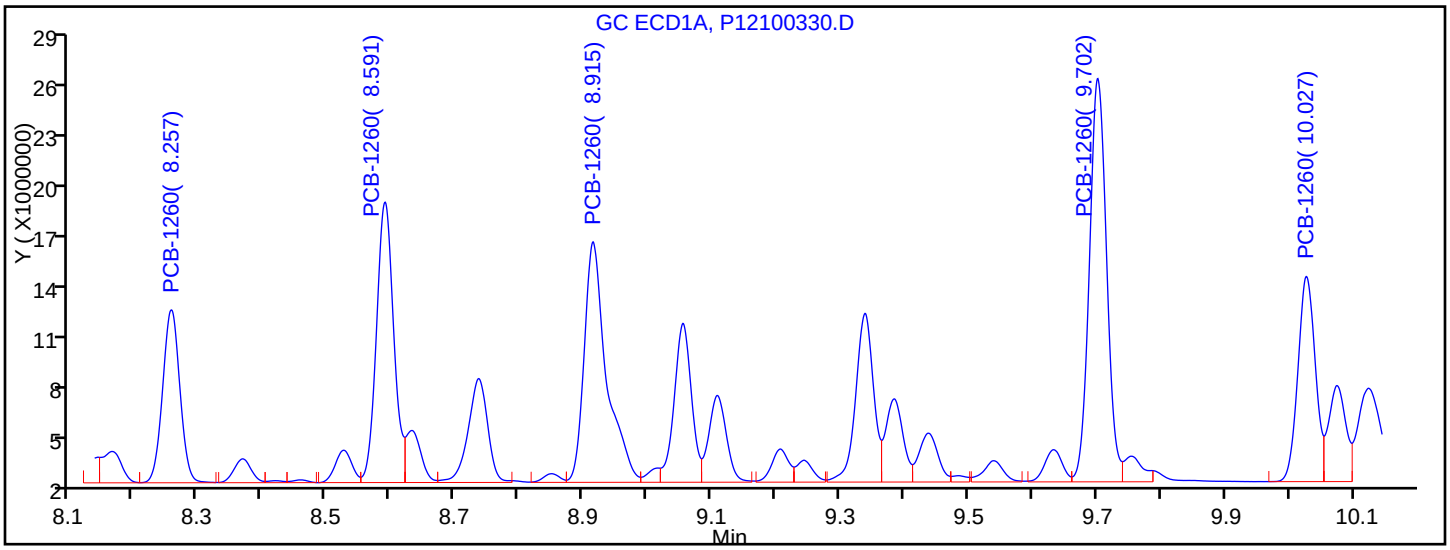
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

8.257	Response = 19194201
8.591	Response = 30959607
8.915	Response = 34012457
9.702	Response = 42822367
10.027	Response = 23024163



Manual Integration Results

8.257	Response = 19273827	M
8.591	Response = 31292211	M
8.915	Response = 34639935	M
9.702	Response = 45009723	M
10.027	Response = 23096451	M

Reviewer: hassl, 04-Oct-2017 05:49:26

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100331.D
Lims ID: std05 1660
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 03-Oct-2017 22:29:27 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-031
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:59 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:39:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	89331333	0.0500	0.0500	
2	3.619	3.619	0.000	274925471	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.319	4.319	0.000	42493255	0.0250	0.0243	
2	5.027	5.027	0.000	124324881	0.0250	0.0235	
						RPD = 3.51	
6 PCB-1016							M
1	4.895	4.895	0.000	18079284	0.5000	0.4678	
1	5.405	5.405	0.000	33207948	0.5000	0.4762	
1	6.037	6.037	0.000	78924048	0.5000	0.4911	
1	6.212	6.212	0.000	32507935	0.5000	0.4786	
1	6.748	6.748	0.000	32705509	0.5000	0.4743	
		Average of Peak Amounts =				0.4776	
2	5.815	5.815	0.000	52402308	0.5000	0.4681	
2	6.399	6.399	0.000	101845419	0.5000	0.4651	M
2	7.012	7.012	0.000	225529965	0.5000	0.4827	
2	7.190	7.190	0.000	89981390	0.5000	0.4727	
2	7.557	7.557	0.000	37417211	0.5000	0.4679	
		Average of Peak Amounts =				0.4713	
						RPD = 1.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.257	8.257	0.000	49313123	0.5000	0.4840	
1	8.591	8.591	0.000	81089615	0.5000	0.4925	
1	8.915	8.915	0.000	89840288	0.5000	0.4916	
1	9.703	9.703	0.000	118214095	0.5000	0.5010	
1	10.027	10.027	0.000	60228169	0.5000	0.4923	
		Average of Peak Amounts =				0.4923	
2	9.341	9.341	0.000	134629062	0.5000	0.4644	
2	10.014	10.014	0.000	217308448	0.5000	0.4682	
2	10.454	10.454	0.000	126122160	0.5000	0.4661	
2	10.725	10.725	0.000	262388542	0.5000	0.4746	
2	11.095	11.095	0.000	183502305	0.5000	0.4685	
		Average of Peak Amounts =				0.4684	
						RPD = 4.98	
$ 12 DCB Decachlorobiphenyl							
1	11.187	11.187	0.000	44036205	0.0250	0.0234	
2	12.173	12.173	0.000	83816349	0.0250	0.0225	
						RPD = 4.27	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.5PPM_00072 Amount Added: 1.00 Units: mL

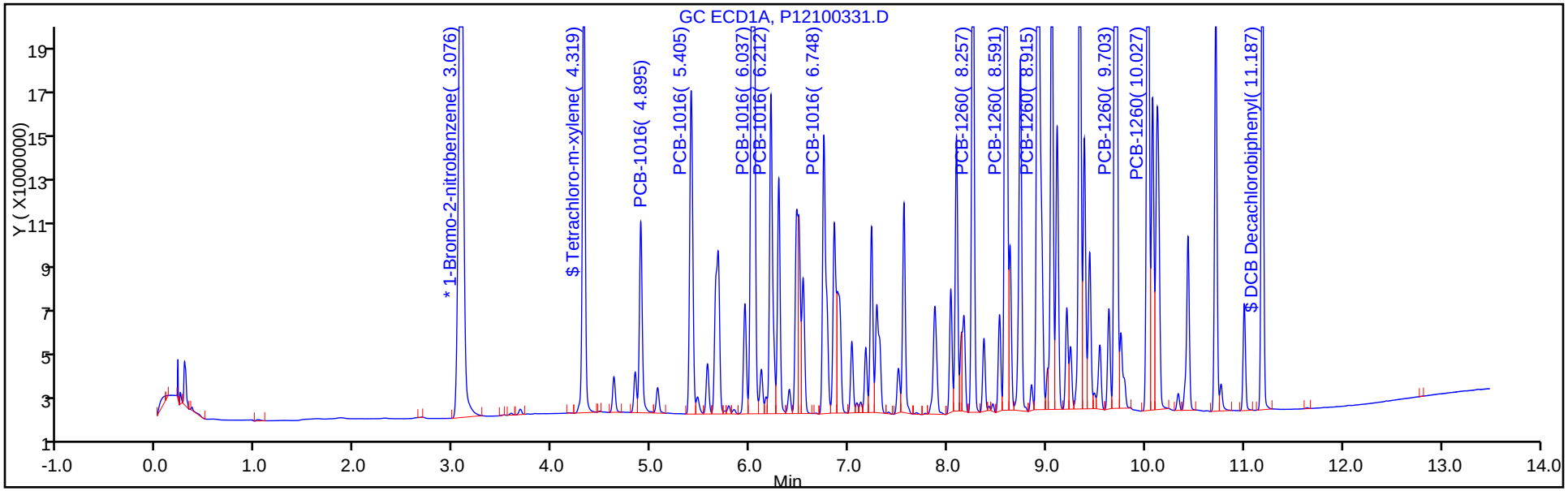
Report Date: 04-Oct-2017 08:19:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

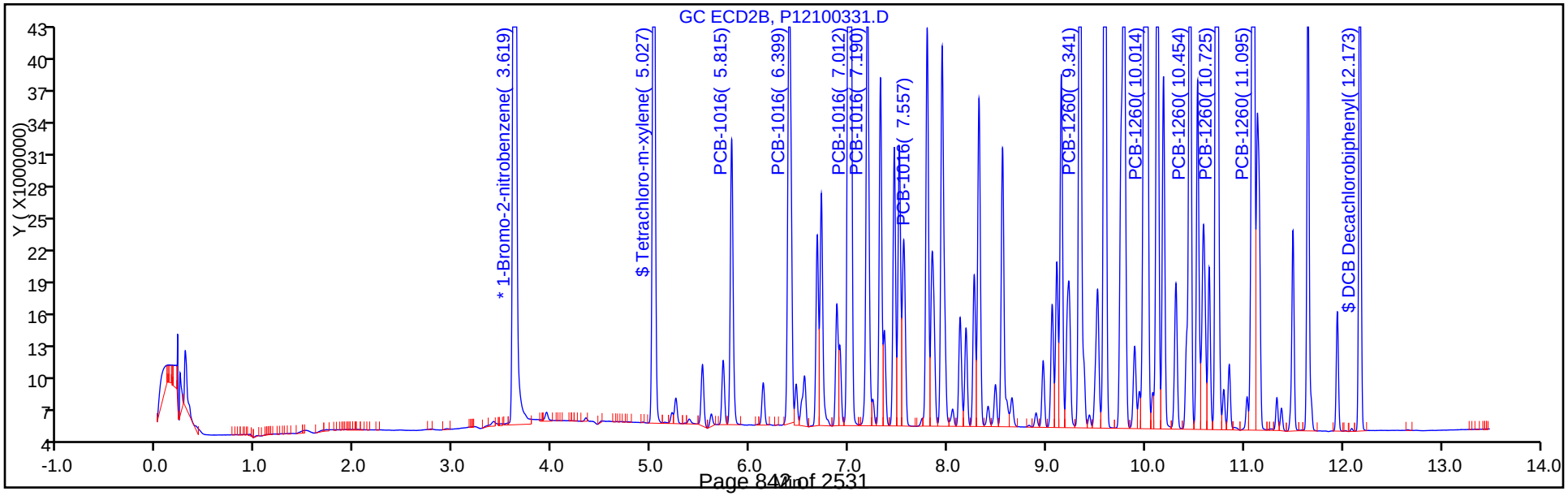
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100331.D

Injection Date:	03-Oct-2017 22:29:27	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1660			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D
Lims ID: std1 1660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 22:47:01 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-032
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:10 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:49:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	88745477	0.0500	0.0500	
2	3.621	3.619	0.002	265556591	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.320	4.319	0.001	83810446	0.0500	0.0483	
2	5.028	5.027	0.001	237102228	0.0500	0.0464	
						RPD = 4.06	
6 PCB-1016							M
1	4.897	4.895	0.002	33705238	1.00	0.8779	
1	5.406	5.405	0.001	62883714	1.00	0.9077	M
1	6.038	6.037	0.001	154273303	1.00	0.9663	M
1	6.213	6.212	0.001	62606017	1.00	0.9277	M
1	6.748	6.748	0.000	62772115	1.00	0.9164	M
		Average of Peak Amounts =				0.9192	
2	5.815	5.815	0.000	93723453	1.00	0.8667	
2	6.399	6.399	0.000	185942375	1.00	0.8792	
2	7.011	7.012	-0.001	418610060	1.00	0.9276	
2	7.189	7.190	-0.001	164591810	1.00	0.8952	
2	7.556	7.557	-0.001	67468424	1.00	0.8734	
		Average of Peak Amounts =				0.8884	
						RPD = 3.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.256	8.257	-0.001	95902236	1.00	0.9475	M
1	8.590	8.591	-0.001	158298374	1.00	0.9677	M
1	8.914	8.915	-0.001	177383795	1.00	0.9771	M
1	9.702	9.703	-0.001	234063969	1.00	1.00	M
1	10.028	10.027	0.001	119294135	1.00	0.9816	M
		Average of Peak Amounts =				0.9745	
2	9.339	9.341	-0.002	253536120	1.00	0.9054	
2	10.014	10.014	0.000	410481012	1.00	0.9155	
2	10.453	10.454	-0.001	241327323	1.00	0.9234	
2	10.724	10.725	-0.001	511716192	1.00	0.9583	
2	11.094	11.095	-0.001	359911471	1.00	0.9513	
		Average of Peak Amounts =				0.9308	
						RPD = 4.59	
$ 12 DCB Decachlorobiphenyl							M
1	11.185	11.187	-0.002	86021814	0.0500	0.0461	M
2	12.172	12.173	-0.001	165084358	0.0500	0.0458	
						RPD = 0.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.0PPM_00023 Amount Added: 1.00 Units: mL

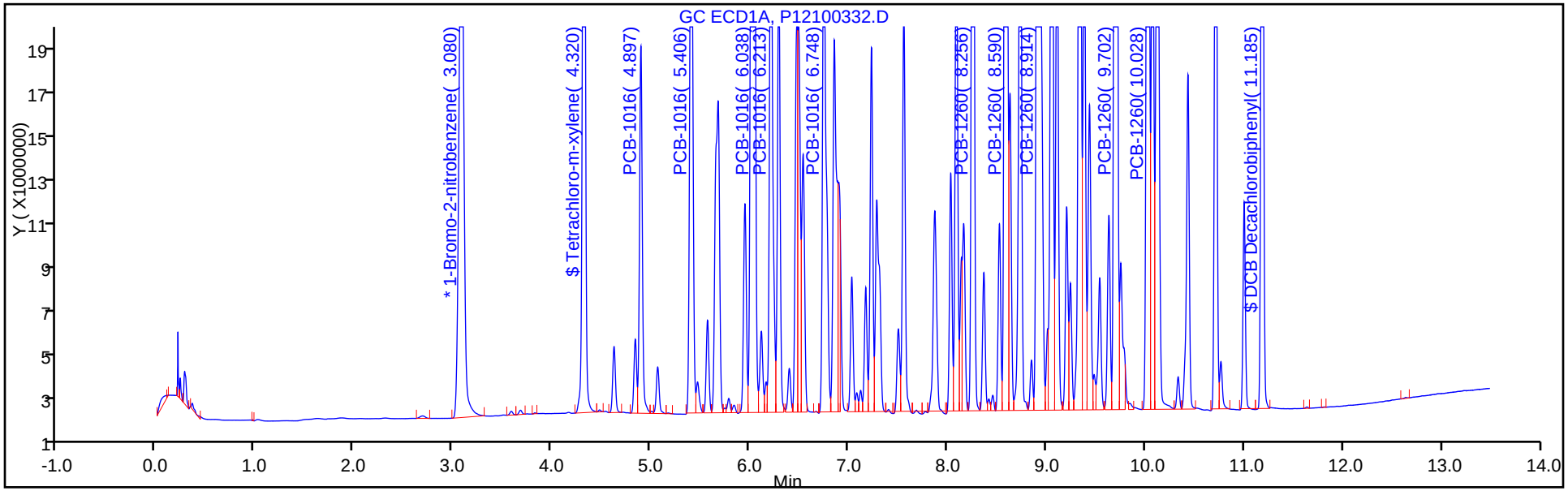
Report Date: 04-Oct-2017 08:19:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

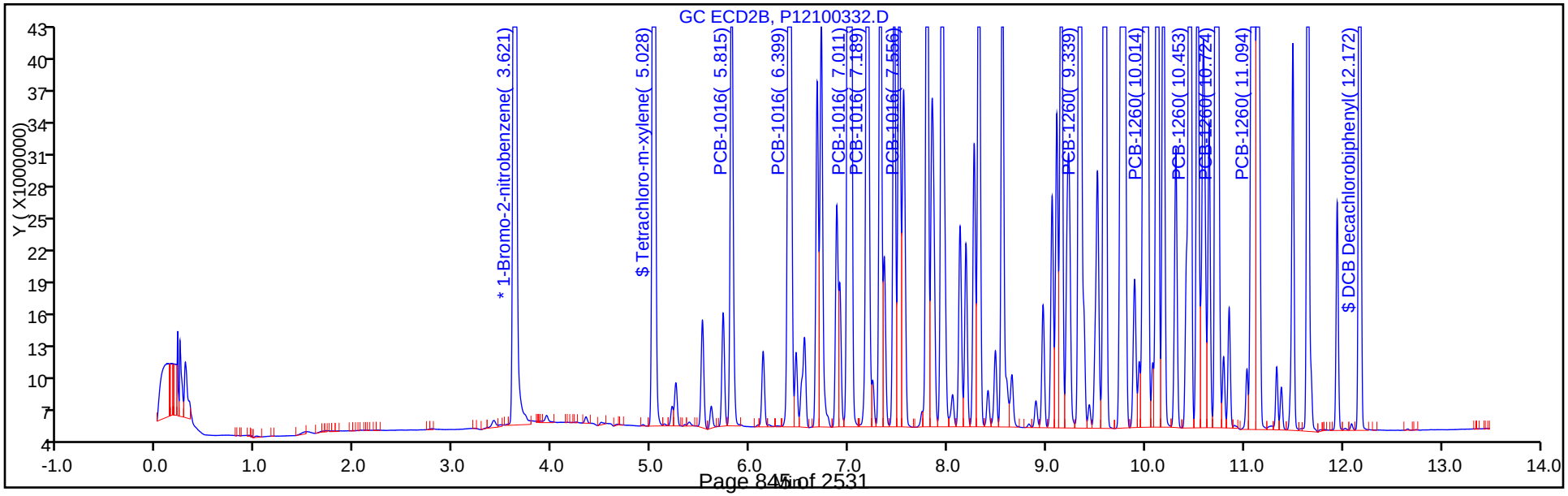
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D

Injection Date:	03-Oct-2017 22:47:01	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1660			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:19:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D

Injection Date: 03-Oct-2017 22:47:01 Instrument ID: A2HP12

Lims ID: std1 1660

Client ID:

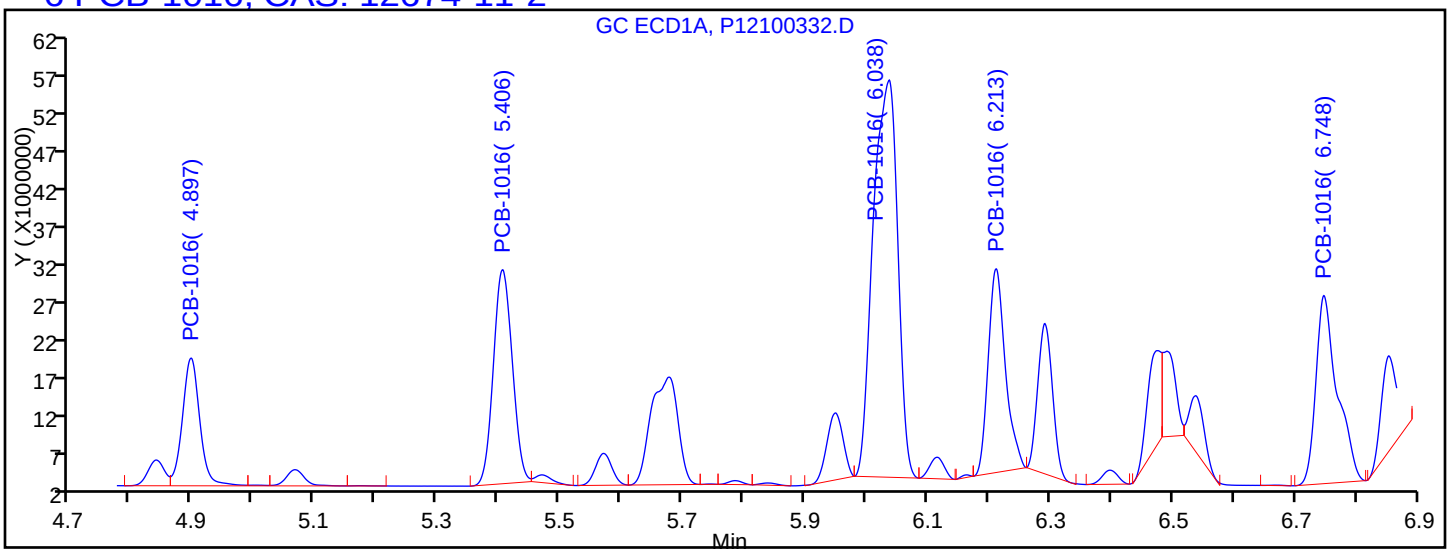
Operator ID: ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

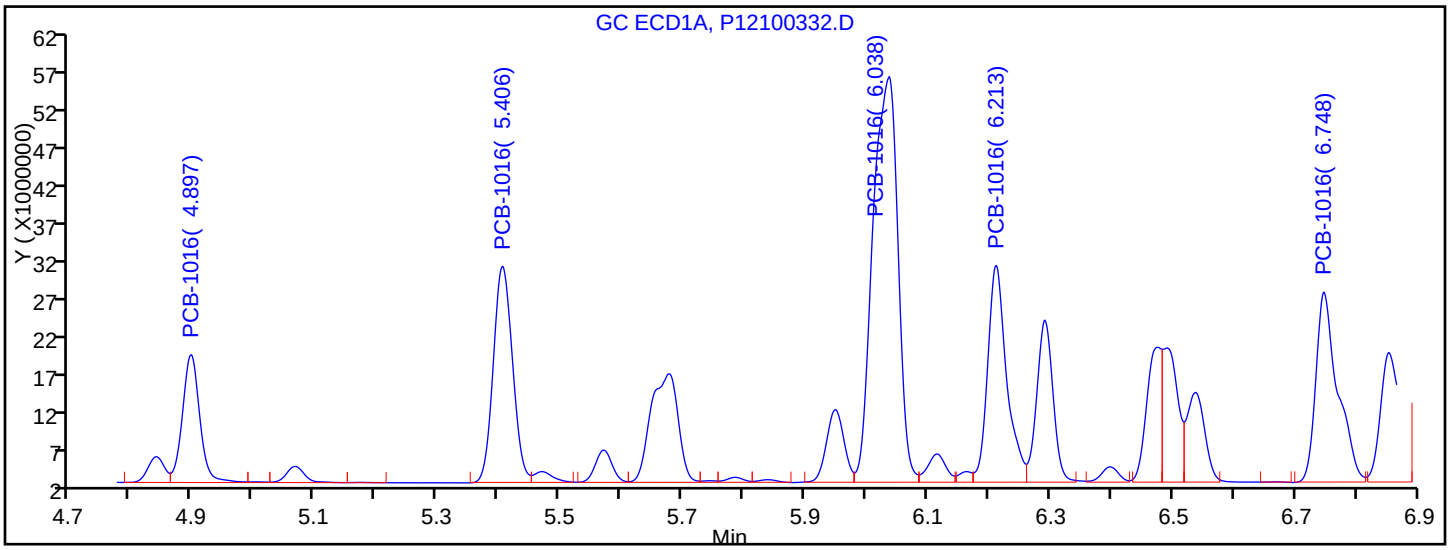
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

4.897	Response = 33705238	
5.406	Response = 61412808	
6.038	Response = 147214081	
6.213	Response = 53190299	
6.748	Response = 60795810	



Manual Integration Results

4.897	Response = 33705238	
5.406	Response = 62883714	M
6.038	Response = 154273303	M
6.213	Response = 62606017	M
6.748	Response = 62772115	M

Reviewer: hassl, 04-Oct-2017 05:49:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Report Date: 04-Oct-2017 08:19:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D

Injection Date: 03-Oct-2017 22:47:01 Instrument ID: A2HP12

Lims ID: std1 1660

Client ID:

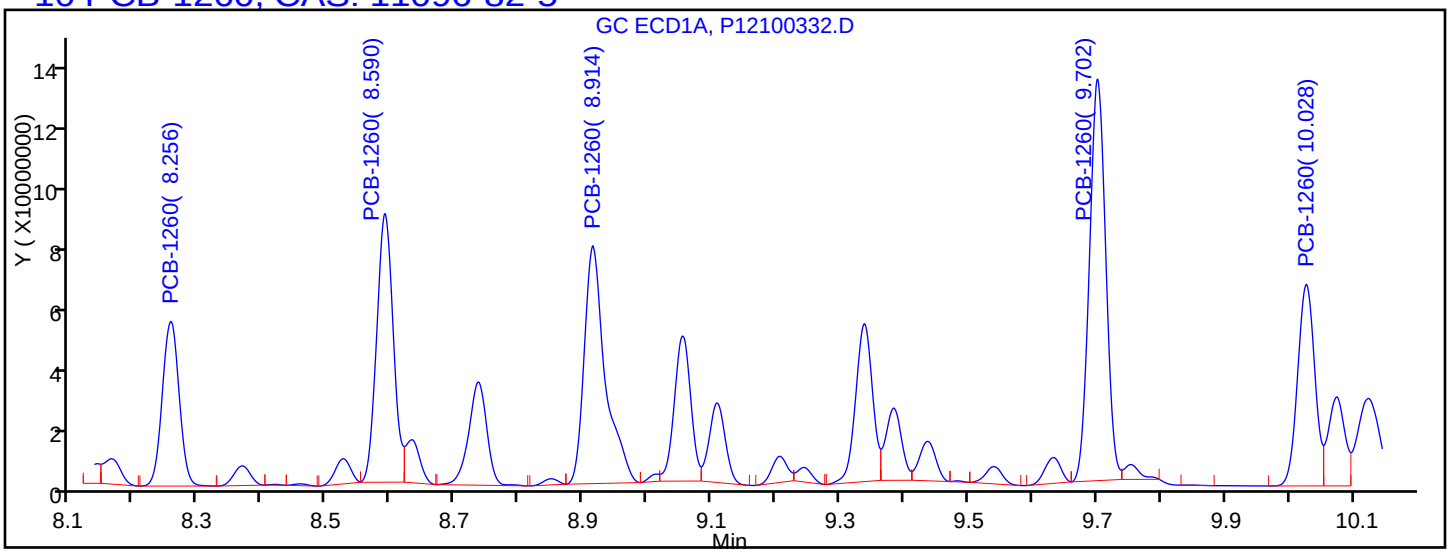
Operator ID: ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

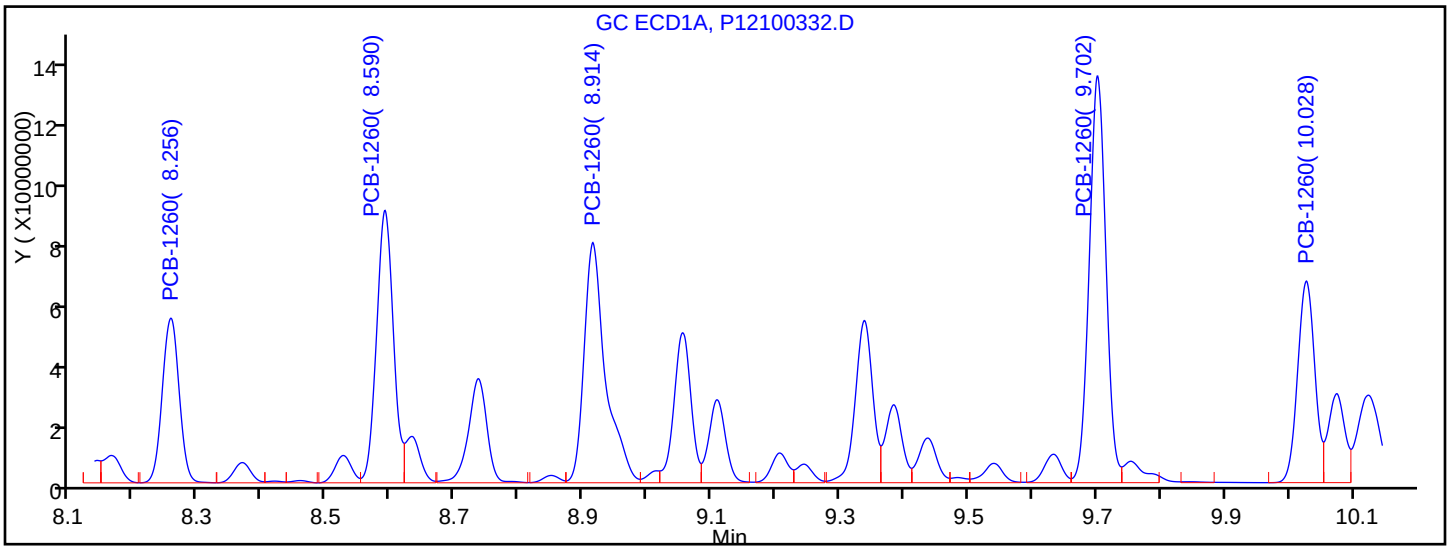
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

8.256	Response = 95749337
8.590	Response = 153274333
8.914	Response = 171488395
9.702	Response = 226195071
10.028	Response = 119296759



Manual Integration Results

8.256	Response = 95902236	M
8.590	Response = 158298374	M
8.914	Response = 177383795	M
9.702	Response = 234063969	M
10.028	Response = 119294135	M

Reviewer: hassl, 04-Oct-2017 05:49:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

TestAmerica Canton

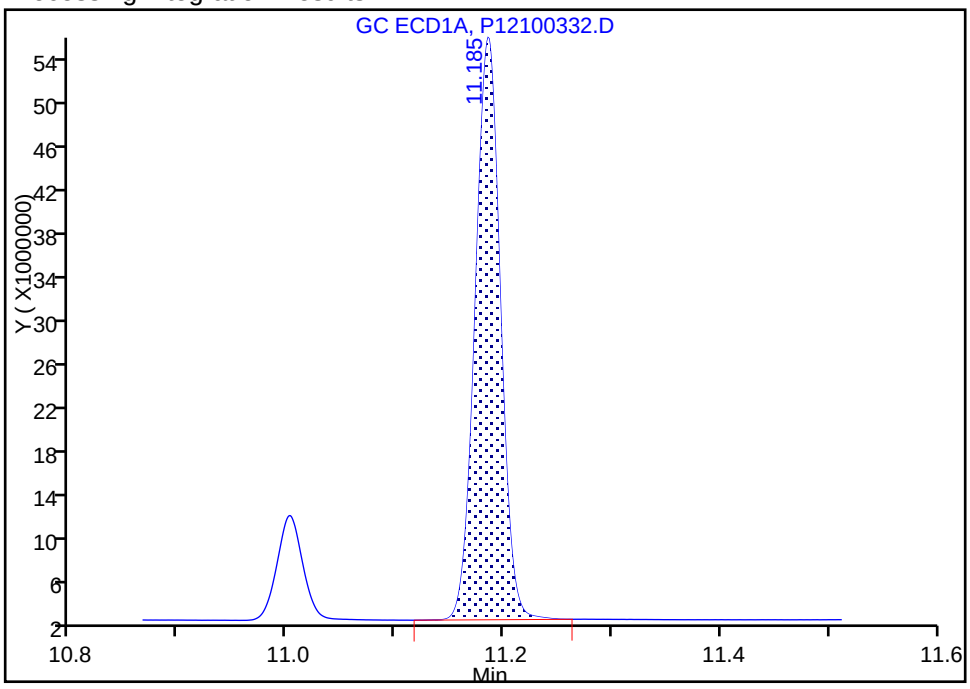
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D
Injection Date: 03-Oct-2017 22:47:01 Instrument ID: A2HP12
Lims ID: std1 1660
Client ID:
Operator ID: ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB12IS Limit Group: GC 8082A IS
Column: Detector GC ECD1A

$ 12 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

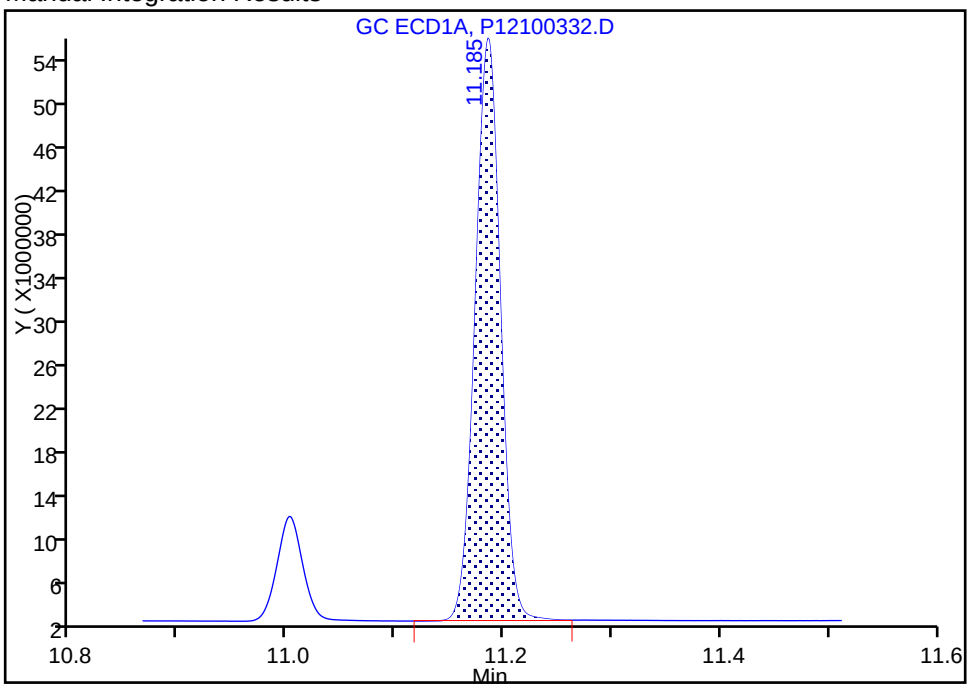
Processing Integration Results

RT: 11.19
Area: 86107914
Amount: 0.046135
Amount Units: ng/ul



Manual Integration Results

RT: 11.19
Area: 86021814
Amount: 0.046096
Amount Units: ng/ul



Reviewer: hassl, 04-Oct-2017 05:49:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D
Lims ID: std151660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 23:04:47 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-033
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:50:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.074	3.076	-0.001	87360422	0.0500	0.0500	
2	3.618	3.619	-0.001	268714805	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.319	4.319	0.000	161653127	0.1000	0.0946	
2	5.027	5.027	0.000	472022957	0.1000	0.0912	
						RPD = 3.65	
6 PCB-1016							M
1	4.895	4.895	0.000	49352438	1.50	1.31	
1	5.404	5.405	-0.001	91346649	1.50	1.34	M
1	6.037	6.037	0.000	227241966	1.50	1.45	M
1	6.212	6.212	0.000	91818693	1.50	1.38	M
1	6.749	6.748	0.001	92472962	1.50	1.37	M
		Average of Peak Amounts =				1.37	
2	5.814	5.815	-0.001	139300423	1.50	1.27	
2	6.397	6.399	-0.002	271566073	1.50	1.27	
2	7.011	7.012	-0.001	633218114	1.50	1.39	
2	7.189	7.190	-0.001	246317074	1.50	1.32	
2	7.556	7.557	-0.001	103454173	1.50	1.32	
		Average of Peak Amounts =				1.32	
						RPD = 4.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.255	8.257	-0.002	141630966	1.50	1.42	M
1	8.590	8.591	-0.001	234468792	1.50	1.46	M
1	8.914	8.915	-0.001	263536295	1.50	1.47	M
1	9.702	9.703	-0.001	354496128	1.50	1.54	M
1	10.028	10.027	0.001	178641779	1.50	1.49	M
		Average of Peak Amounts =				1.48	
2	9.340	9.341	-0.001	379212061	1.50	1.34	
2	10.014	10.014	0.000	620063045	1.50	1.37	
2	10.454	10.454	0.000	356168230	1.50	1.35	
2	10.724	10.725	-0.001	766318972	1.50	1.42	
2	11.094	11.095	-0.001	534916696	1.50	1.40	
		Average of Peak Amounts =				1.37	
						RPD = 7.22	
$ 12 DCB Decachlorobiphenyl							
1	11.185	11.187	-0.002	169811450	0.1000	0.0924	
2	12.174	12.173	0.001	326955540	0.1000	0.0897	
						RPD = 3.06	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.5PPM_00001 Amount Added: 1.00 Units: mL

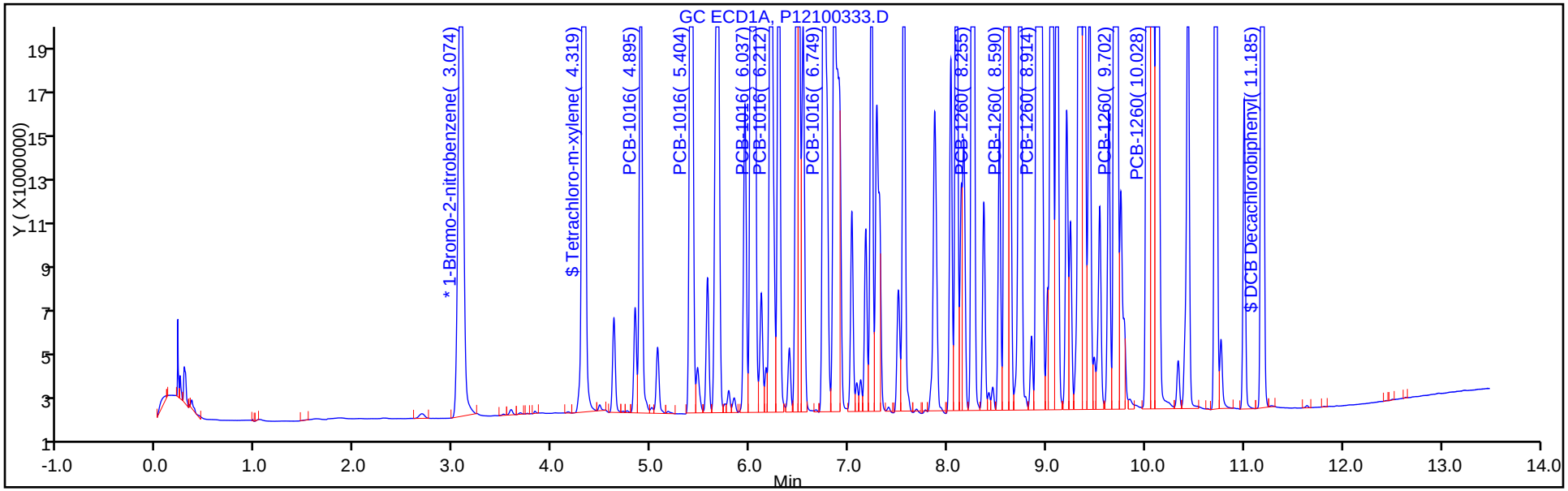
Report Date: 04-Oct-2017 08:19:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

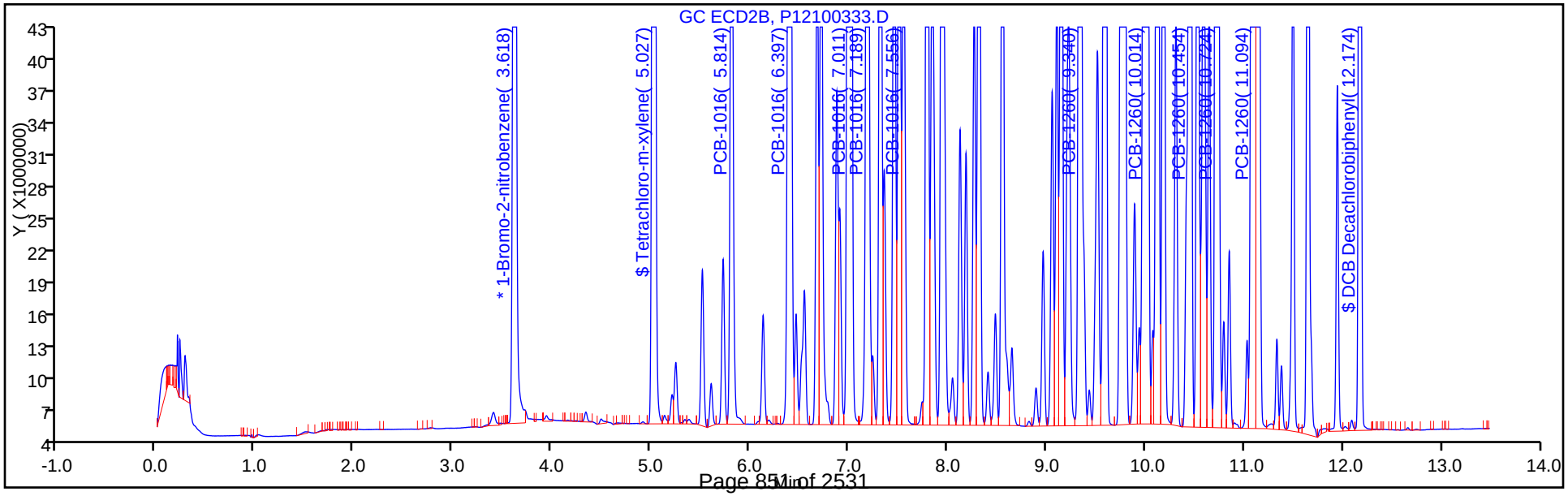
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Injection Date:	03-Oct-2017 23:04:47	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std151660			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:19:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Injection Date: 03-Oct-2017 23:04:47 Instrument ID: A2HP12

Lims ID: std151660

Client ID:

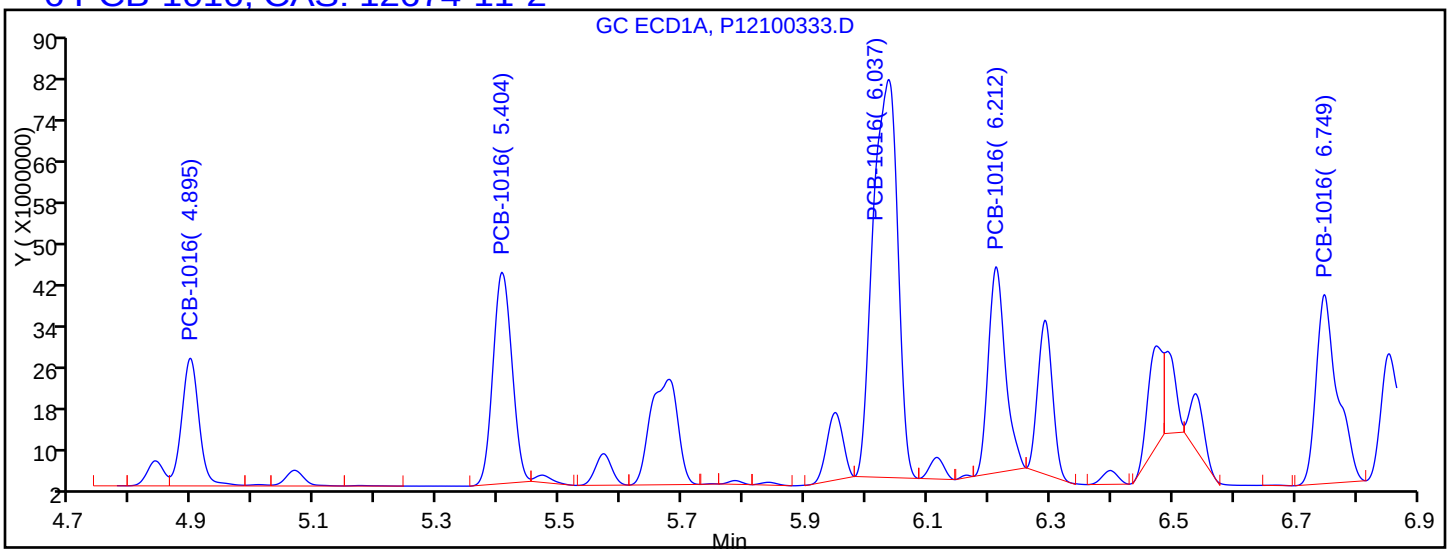
Operator ID: ALS Bottle#: 33 Worklist Smp#: 33

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

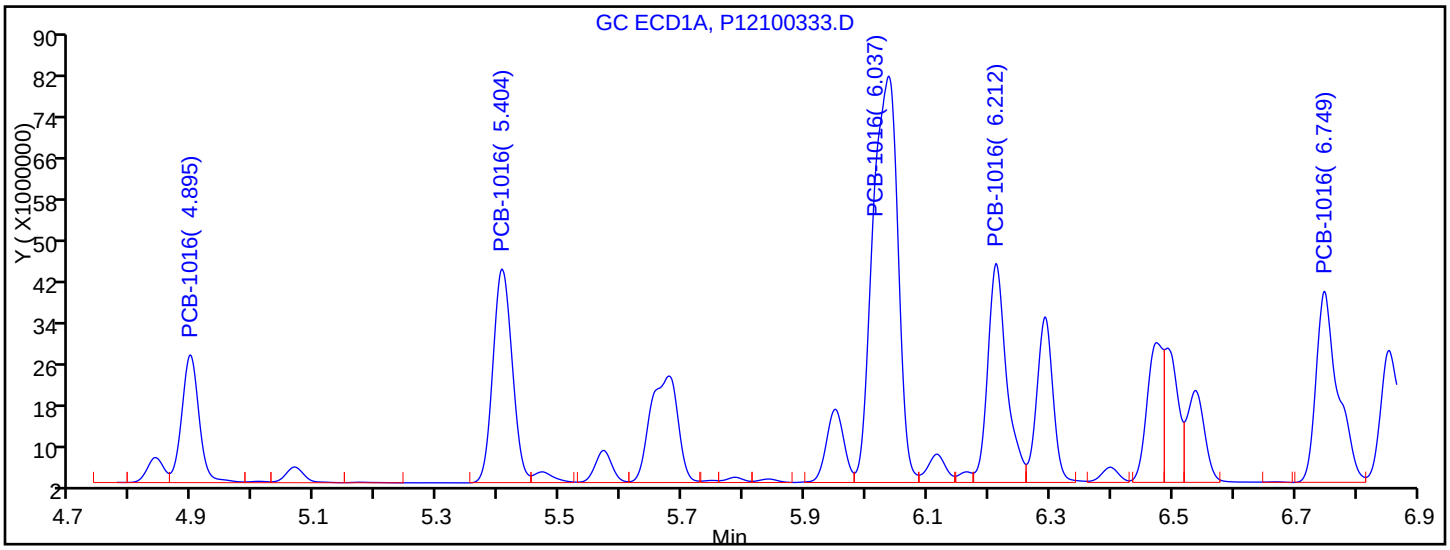
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

4.895	Response = 49352438	
5.404	Response = 88811160	
6.037	Response = 217049410	
6.212	Response = 78153623	
6.749	Response = 89233171	



Manual Integration Results

4.895	Response = 49352438	
5.404	Response = 91346649	M
6.037	Response = 227241966	M
6.212	Response = 91818693	M
6.749	Response = 92472962	M

Reviewer: hassl, 04-Oct-2017 05:50:09

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Report Date: 04-Oct-2017 08:19:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Injection Date: 03-Oct-2017 23:04:47 Instrument ID: A2HP12

Lims ID: std151660

Client ID:

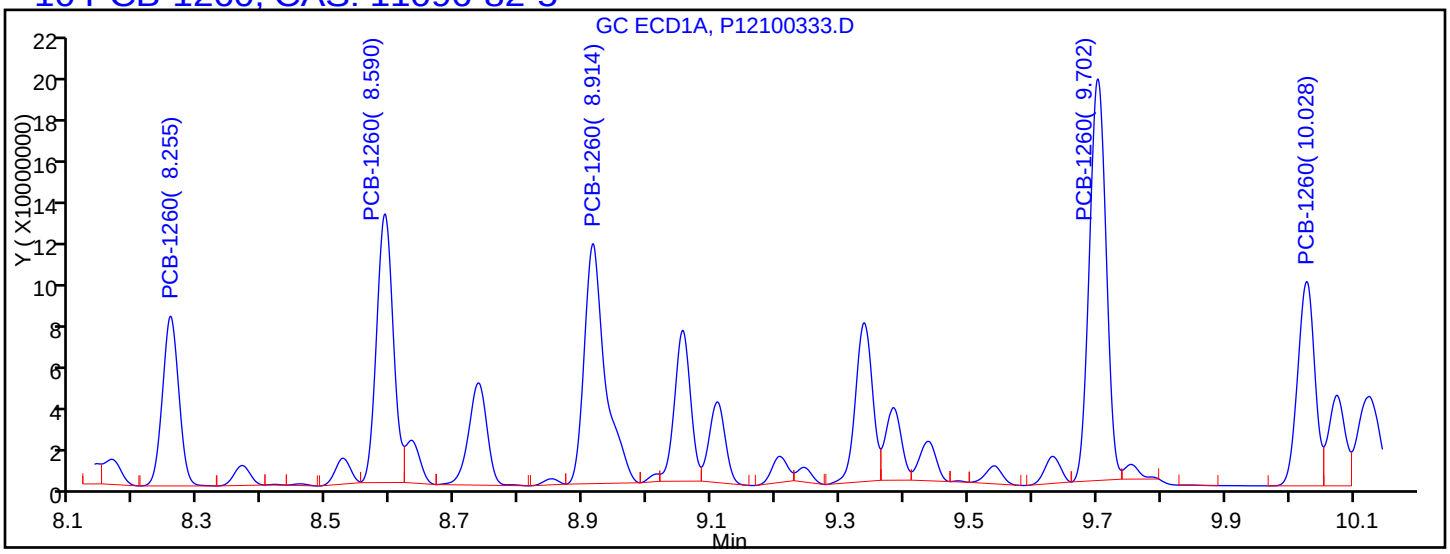
Operator ID: ALS Bottle#: 33 Worklist Smp#: 33

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

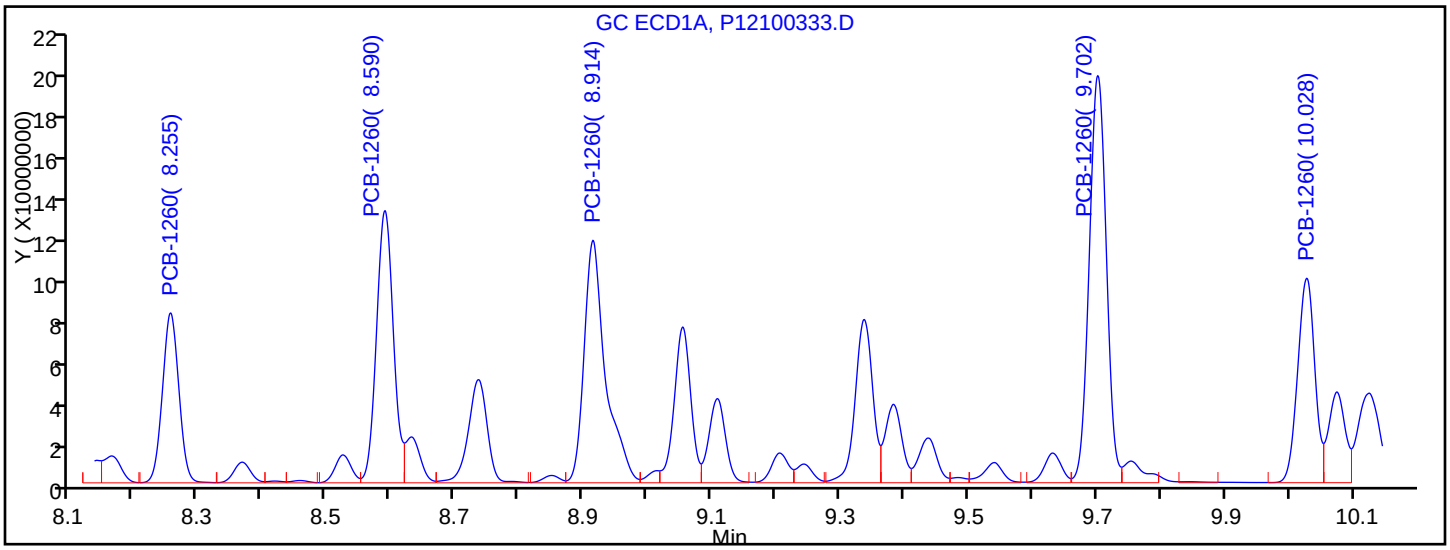
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

8.255	Response = 140934220
8.590	Response = 227694912
8.914	Response = 254943770
9.702	Response = 342501028
10.028	Response = 178292173



Manual Integration Results

8.255	Response = 141630966	M
8.590	Response = 234468792	M
8.914	Response = 263536295	M
9.702	Response = 354496128	M
10.028	Response = 178641779	M

Reviewer: hassl, 04-Oct-2017 05:50:09

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 21:36 Calibration End Date: 10/03/2017 23:04 Calibration ID: 41740

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/28	P12100328.D
Level 2	STD01 240-297285/29	P12100329.D
Level 3	STD02 240-297285/30	P12100330.D
Level 4	STD05 240-297285/31	P12100331.D
Level 5	STD1 240-297285/32	P12100332.D
Level 6	STD151660 240-297285/33	P12100333.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.0252 0.0173	0.0227	0.0202	0.0191	0.0176	Ave		0.0204				15.2		20.0			
PCB-1016 Peak 2	0.0492 0.0337	0.0440	0.0400	0.0370	0.0350	Ave		0.0398				14.8		20.0			
PCB-1016 Peak 3	0.0978 0.0785	0.0881	0.0845	0.0820	0.0788	Ave		0.0850				8.5		20.0			
PCB-1016 Peak 4	0.0422 0.0306	0.0367	0.0345	0.0327	0.0310	Ave		0.0346				12.6		20.0			
PCB-1016 Peak 5	0.0175 0.0128	0.0159	0.0147	0.0136	0.0127	Ave		0.0145				13.1		20.0			
PCB-1260 Peak 1	0.0625 0.0470	0.0564	0.0538	0.0490	0.0477	Ave		0.0527				11.4		20.0			
PCB-1260 Peak 2	0.0995 0.0769	0.0882	0.0856	0.0790	0.0773	Ave		0.0844				10.3		20.0			
PCB-1260 Peak 3	0.0584 0.0442	0.0512	0.0502	0.0459	0.0454	Ave		0.0492				10.7		20.0			
PCB-1260 Peak 4	0.1123 0.0951	0.1024	0.1017	0.0954	0.0963	Ave		0.1005				6.5		20.0			
PCB-1260 Peak 5	0.0803 0.0664	0.0744	0.0718	0.0667	0.0678	Ave		0.0712				7.7		20.0			
Tetrachloro-m-xylene	1.1410 0.8783	1.0307	0.9279	0.9044	0.8929	Ave		0.9625				10.7		20.0			
DCB Decachlorobiphenyl	0.8179 0.6084	0.7260	0.6878	0.6097	0.6217	Ave		0.6786				12.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297285

SDG No.:

Instrument ID: A2HP12 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 21:36 Calibration End Date: 10/03/2017 23:04 Calibration ID: 41740

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297285/28	P12100328.D
Level 2	STD01 240-297285/29	P12100329.D
Level 3	STD02 240-297285/30	P12100330.D
Level 4	STD05 240-297285/31	P12100331.D
Level 5	STD1 240-297285/32	P12100332.D
Level 6	STD151660 240-297285/33	P12100333.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Ave	5981780 139300423	12270407	21087968	52402308	93723453	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	BNB	Ave	11656589 271566073	23717464	41814232	101845419	185942375	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	BNB	Ave	23177068 633218114	47521618	88304962	225529965	418610060	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	BNB	Ave	10000922 246317074	19805064	36043884	89981390	164591810	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	BNB	Ave	4154384 103454173	8589886	15319470	37417211	67468424	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	BNB	Ave	14806914 379212061	30402468	56156169	134629062	253536120	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	BNB	Ave	23566529 620063045	47599523	89384177	217308448	410481012	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	BNB	Ave	13835958 356168230	27613439	52409212	126122160	241327323	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	BNB	Ave	26605788 766318972	55235939	106257167	262388542	511716192	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	BNB	Ave	19037484 534916696	40108579	75041585	183502305	359911471	0.0500 1.50	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	BNB	Ave	13518929 472022957	27798896	48462908	124324881	237102228	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl	BNB	Ave	9690817 326955540	19582515	35924249	83816349	165084358	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100328.D
Lims ID: std005 1660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Oct-2017 21:36:30 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-028
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:37 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:22:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	88888062	0.0500	0.0500	
2	3.619	3.619	0.000	236965441	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.319	4.319	0.000	4747183	0.002500	0.002732	
2	5.028	5.027	0.001	13518929	0.002500	0.002964	
						RPD = 8.15	
6 PCB-1016							
1	4.897	4.895	0.002	2425272	0.0500	0.0631	
1	5.405	5.405	0.000	4006169	0.0500	0.0577	
1	6.038	6.037	0.001	8537265	0.0500	0.0534	
1	6.212	6.212	0.000	3784818	0.0500	0.0560	
1	6.750	6.748	0.002	3915270	0.0500	0.0571	
		Average of Peak Amounts =				0.0574	
2	5.815	5.815	0.000	5981780	0.0500	0.0620	
2	6.399	6.399	0.000	11656589	0.0500	0.0618	
2	7.009	7.012	-0.003	23177068	0.0500	0.0576	
2	7.190	7.190	0.000	10000922	0.0500	0.0610	
2	7.556	7.557	-0.001	4154384	0.0500	0.0603	
		Average of Peak Amounts =				0.0605	
						RPD = 5.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.256	8.257	-0.001	5578448	0.0500	0.0550	
1	8.590	8.591	-0.001	8683818	0.0500	0.0530	
1	8.915	8.915	0.000	9601387	0.0500	0.0528	
1	9.703	9.703	0.000	11932016	0.0500	0.0508	
1	10.029	10.027	0.002	6322786	0.0500	0.0519	
		Average of Peak Amounts =				0.0527	
2	9.340	9.341	-0.001	14806914	0.0500	0.0593	
2	10.014	10.014	0.000	23566529	0.0500	0.0589	
2	10.454	10.454	0.000	13835958	0.0500	0.0593	
2	10.724	10.725	-0.001	26605788	0.0500	0.0558	
2	11.094	11.095	-0.001	19037484	0.0500	0.0564	
		Average of Peak Amounts =				0.0579	
						RPD = 9.44	
$ 12 DCB Decachlorobiphenyl							
1	11.186	11.187	-0.001	5337751	0.002500	0.002856	
2	12.173	12.173	0.000	9690817	0.002500	0.003013	
						RPD = 5.37	

Reagents:

SG1660@.05PPM_00020 Amount Added: 1.00 Units: mL

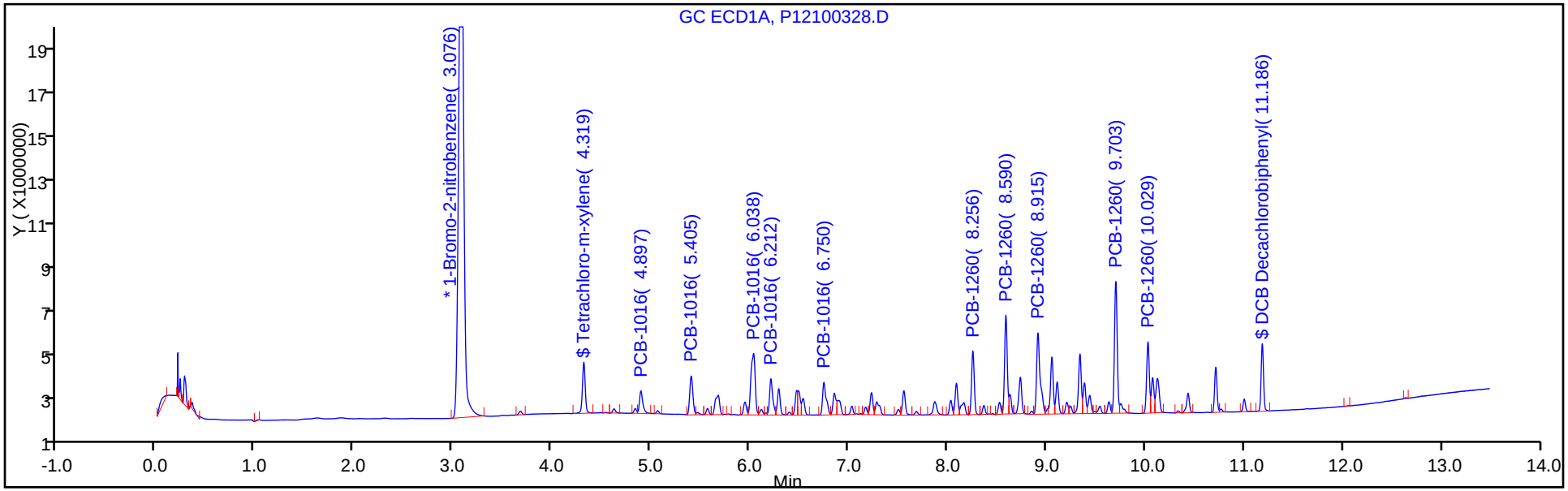
Report Date: 04-Oct-2017 08:18:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

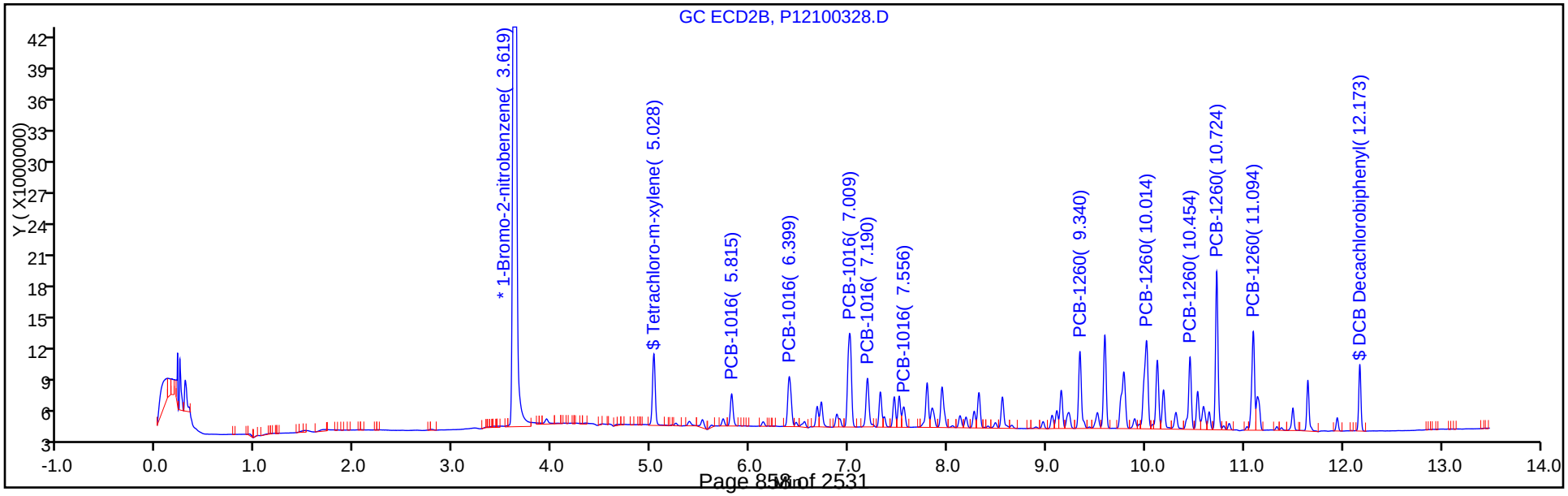
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100328.D

Injection Date:	03-Oct-2017 21:36:30	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std005 1660			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100329.D
Lims ID: std01 1660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Oct-2017 21:54:14 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-029
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:46 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	87260396	0.0500	0.0500	
2	3.621	3.619	0.002	269717105	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.320	4.319	0.001	8797888	0.005000	0.005157	
2	5.028	5.027	0.001	27798896	0.005000	0.005354	
						RPD = 3.75	
6 PCB-1016							M
1	4.897	4.895	0.002	4022106	0.1000	0.1065	
1	5.406	5.405	0.001	7378357	0.1000	0.1083	
1	6.037	6.037	0.000	16150611	0.1000	0.1029	M
1	6.213	6.212	0.001	7100356	0.1000	0.1070	M
1	6.750	6.748	0.002	7315459	0.1000	0.1086	M
		Average of Peak Amounts =				0.1067	
2	5.815	5.815	0.000	12270407	0.1000	0.1117	
2	6.398	6.399	-0.001	23717464	0.1000	0.1104	
2	7.011	7.012	-0.001	47521618	0.1000	0.1037	
2	7.190	7.190	0.000	19805064	0.1000	0.1061	
2	7.556	7.557	-0.001	8589886	0.1000	0.1095	
		Average of Peak Amounts =				0.1083	
						RPD = 1.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.257	8.257	0.000	10291473	0.1000	0.1034	
1	8.590	8.591	-0.001	16238735	0.1000	0.1010	
1	8.915	8.915	0.000	17778092	0.1000	0.0996	
1	9.703	9.703	0.000	21858970	0.1000	0.0948	
1	10.028	10.027	0.001	11936077	0.1000	0.0999	
		Average of Peak Amounts =				0.0997	
2	9.340	9.341	-0.001	30402468	0.1000	0.1069	
2	10.014	10.014	0.000	47599523	0.1000	0.1045	
2	10.454	10.454	0.000	27613439	0.1000	0.1040	
2	10.724	10.725	-0.001	55235939	0.1000	0.1018	
2	11.094	11.095	-0.001	40108579	0.1000	0.1044	
		Average of Peak Amounts =				0.1043	
						RPD = 4.51	
$ 12 DCB Decachlorobiphenyl							
1	11.185	11.187	-0.002	9688986	0.005000	0.005280	
2	12.172	12.173	-0.001	19582515	0.005000	0.005350	
						RPD = 1.30	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660STD@0.1_00020 Amount Added: 1.00 Units: mL

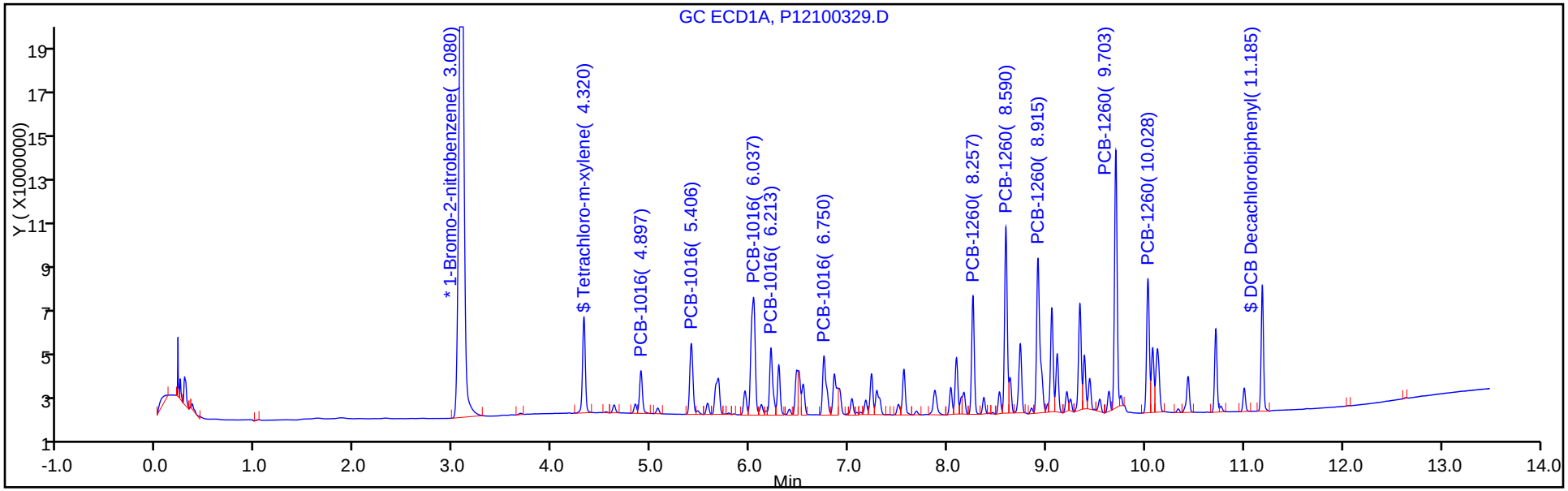
Report Date: 04-Oct-2017 08:18:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

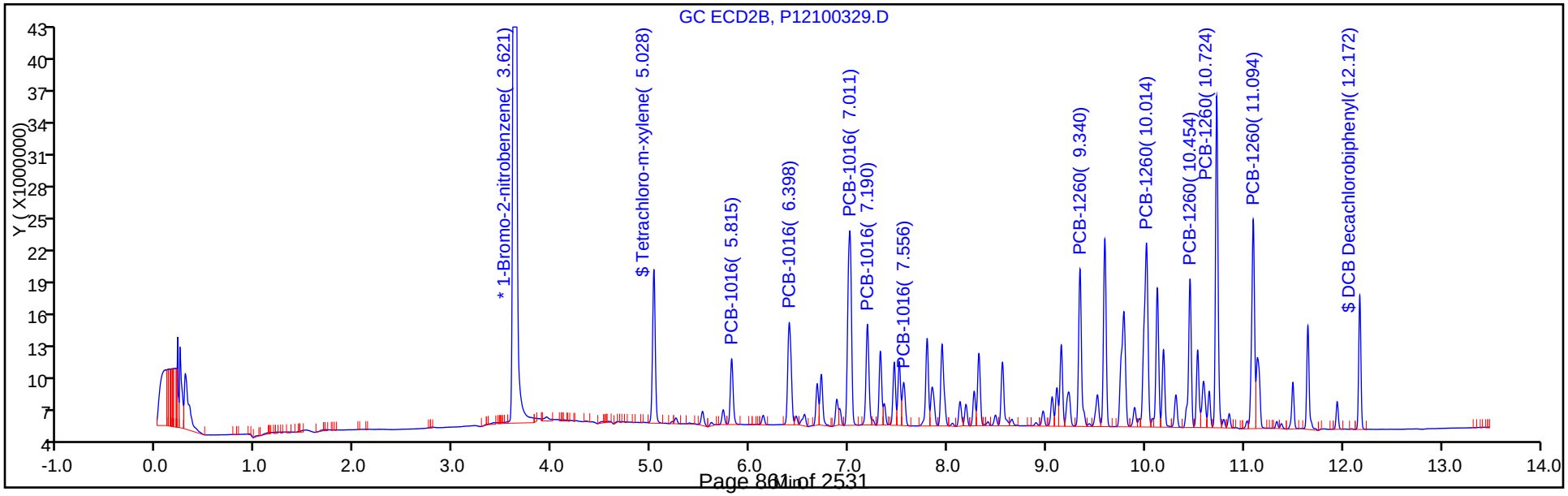
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100329.D

Injection Date:	03-Oct-2017 21:54:14	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std01 1660			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100330.D
Lims ID: std02 1660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Oct-2017 22:11:51 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-030
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:52 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:49:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.068	3.076	-0.008	84292925	0.0500	0.0500	
2	3.616	3.619	-0.004	261145987	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.316	4.319	-0.003	16322595	0.0100	0.0099	
2	5.026	5.027	-0.001	48462908	0.0100	0.009640	
						RPD = 2.70	
6 PCB-1016							M
1	4.894	4.895	-0.001	7215230	0.2000	0.1979	
1	5.405	5.405	0.000	13282353	0.2000	0.2018	
1	6.036	6.037	-0.001	30062398	0.2000	0.1982	
1	6.212	6.212	0.000	12867580	0.2000	0.2007	
1	6.749	6.748	0.001	12921646	0.2000	0.1986	M
		Average of Peak Amounts =				0.1995	
2	5.813	5.815	-0.002	21087968	0.2000	0.1983	
2	6.398	6.399	-0.001	41814232	0.2000	0.2010	
2	7.011	7.012	-0.001	88304962	0.2000	0.1990	
2	7.188	7.190	-0.002	36043884	0.2000	0.1994	
2	7.556	7.557	-0.001	15319470	0.2000	0.2017	
		Average of Peak Amounts =				0.1999	
						RPD = 0.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.257	8.257	0.000	19273827	0.2000	0.2005	M
1	8.591	8.591	0.000	31292211	0.2000	0.2014	M
1	8.915	8.915	0.000	34639935	0.2000	0.2009	M
1	9.702	9.703	-0.001	45009723	0.2000	0.2021	M
1	10.027	10.027	0.000	23096451	0.2000	0.2001	M
		Average of Peak Amounts =				0.2010	
2	9.340	9.341	-0.001	56156169	0.2000	0.2039	
2	10.012	10.014	-0.002	89384177	0.2000	0.2027	
2	10.453	10.454	-0.001	52409212	0.2000	0.2039	
2	10.724	10.725	-0.001	106257167	0.2000	0.2024	
2	11.095	11.095	0.000	75041585	0.2000	0.2017	
		Average of Peak Amounts =				0.2029	
						RPD = 0.95	
$ 12 DCB Decachlorobiphenyl							
1	11.186	11.187	-0.001	18037407	0.0100	0.0102	
2	12.173	12.173	0.000	35924249	0.0100	0.0101	
						RPD = 0.40	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.2ppm_00022 Amount Added: 1.00 Units: mL

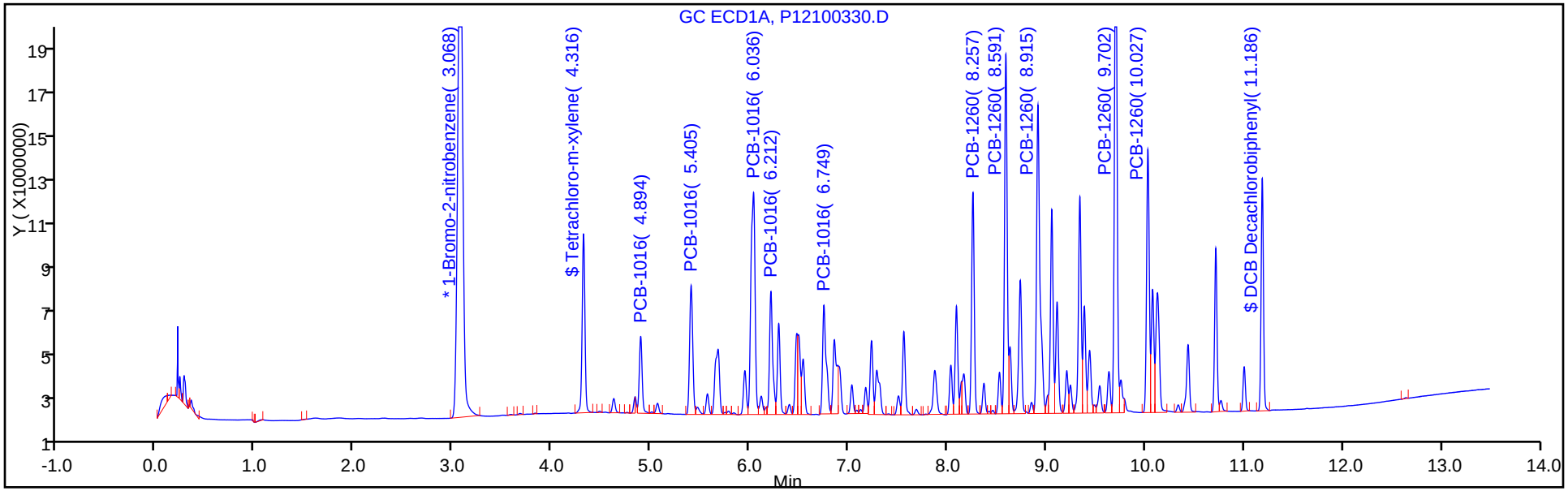
Report Date: 04-Oct-2017 08:18:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

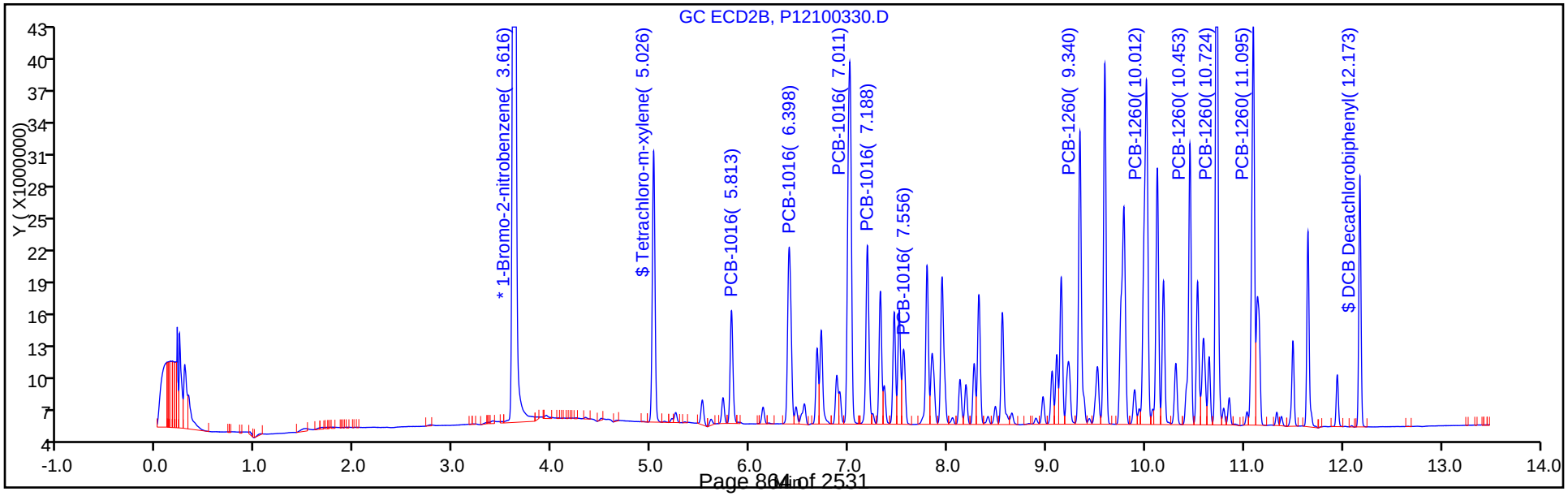
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100330.D

Injection Date:	03-Oct-2017 22:11:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std02 1660			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100331.D
Lims ID: std05 1660
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 03-Oct-2017 22:29:27 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-031
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:18:59 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:39:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	89331333	0.0500	0.0500	
2	3.619	3.619	0.000	274925471	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.319	4.319	0.000	42493255	0.0250	0.0243	
2	5.027	5.027	0.000	124324881	0.0250	0.0235	
						RPD = 3.51	
6 PCB-1016							M
1	4.895	4.895	0.000	18079284	0.5000	0.4678	
1	5.405	5.405	0.000	33207948	0.5000	0.4762	
1	6.037	6.037	0.000	78924048	0.5000	0.4911	
1	6.212	6.212	0.000	32507935	0.5000	0.4786	
1	6.748	6.748	0.000	32705509	0.5000	0.4743	
		Average of Peak Amounts =				0.4776	
2	5.815	5.815	0.000	52402308	0.5000	0.4681	
2	6.399	6.399	0.000	101845419	0.5000	0.4651	M
2	7.012	7.012	0.000	225529965	0.5000	0.4827	
2	7.190	7.190	0.000	89981390	0.5000	0.4727	
2	7.557	7.557	0.000	37417211	0.5000	0.4679	
		Average of Peak Amounts =				0.4713	
						RPD = 1.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.257	8.257	0.000	49313123	0.5000	0.4840	
1	8.591	8.591	0.000	81089615	0.5000	0.4925	
1	8.915	8.915	0.000	89840288	0.5000	0.4916	
1	9.703	9.703	0.000	118214095	0.5000	0.5010	
1	10.027	10.027	0.000	60228169	0.5000	0.4923	
		Average of Peak Amounts =				0.4923	
2	9.341	9.341	0.000	134629062	0.5000	0.4644	
2	10.014	10.014	0.000	217308448	0.5000	0.4682	
2	10.454	10.454	0.000	126122160	0.5000	0.4661	
2	10.725	10.725	0.000	262388542	0.5000	0.4746	
2	11.095	11.095	0.000	183502305	0.5000	0.4685	
		Average of Peak Amounts =				0.4684	
						RPD = 4.98	
$ 12 DCB Decachlorobiphenyl							
1	11.187	11.187	0.000	44036205	0.0250	0.0234	
2	12.173	12.173	0.000	83816349	0.0250	0.0225	
						RPD = 4.27	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.5PPM_00072 Amount Added: 1.00 Units: mL

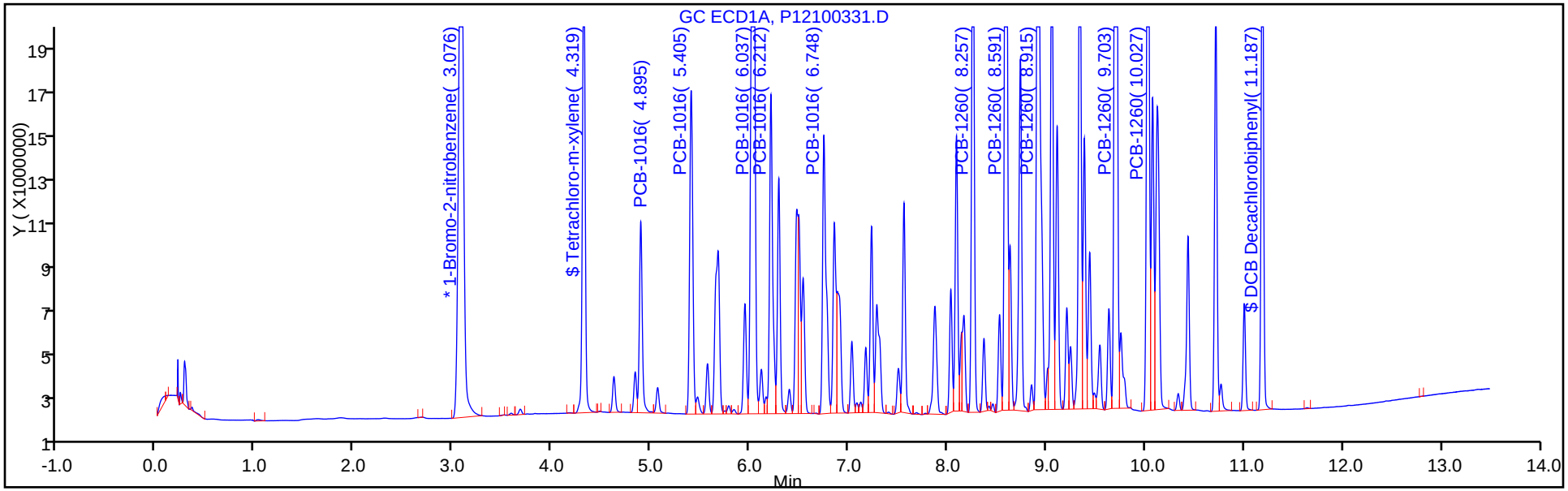
Report Date: 04-Oct-2017 08:19:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

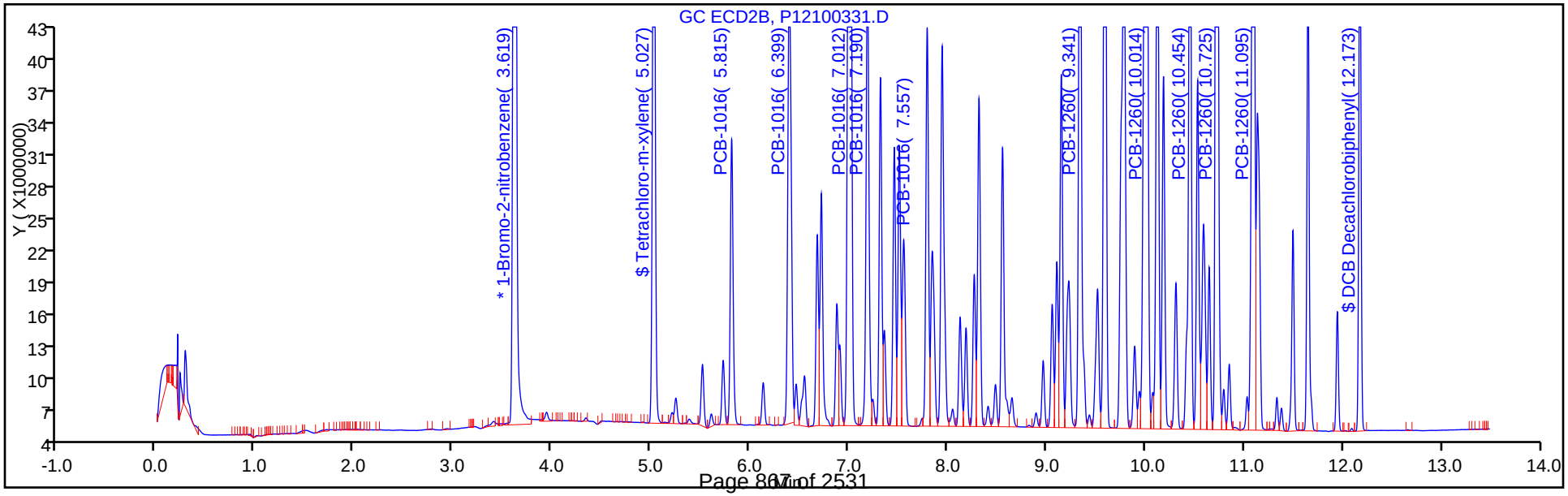
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100331.D

Injection Date:	03-Oct-2017 22:29:27	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std05 1660			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:19:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100331.D

Injection Date: 03-Oct-2017 22:29:27 Instrument ID: A2HP12

Lims ID: std05 1660

Client ID:

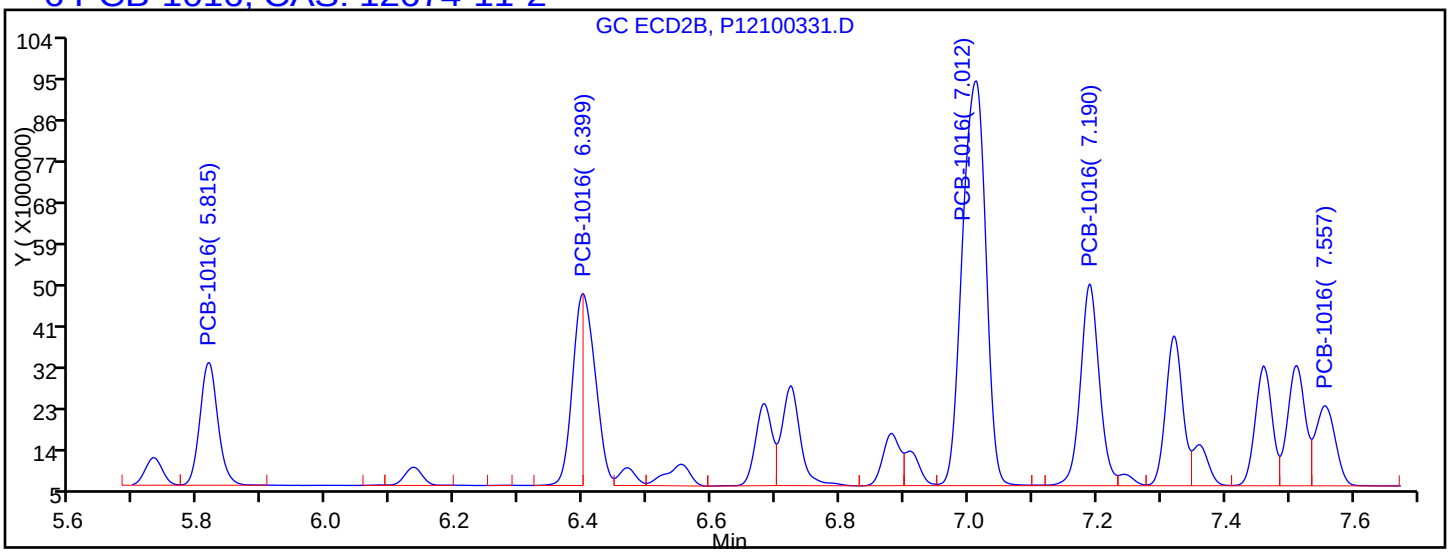
Operator ID: ALS Bottle#: 31 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

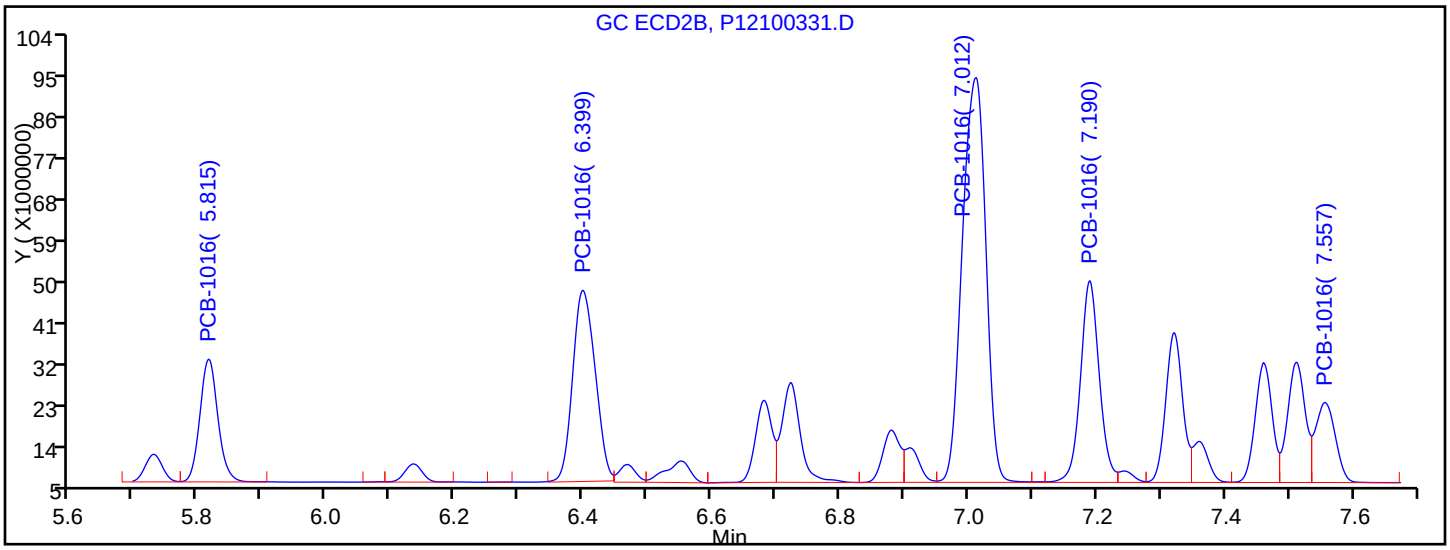
Column: Detector GC ecd2b

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

5.815	Response = 52402308
6.399	Response = 46688702
7.012	Response = 225529965
7.190	Response = 89981390
7.557	Response = 37417211



Manual Integration Results

5.815	Response = 52402308	
6.399	Response = 101845419	M
7.012	Response = 225529965	
7.190	Response = 89981390	
7.557	Response = 37417211	

Reviewer: hassl, 04-Oct-2017 06:38:53

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D
Lims ID: std1 1660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Oct-2017 22:47:01 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-032
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:10 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:49:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.080	3.076	0.004	88745477	0.0500	0.0500	
2	3.621	3.619	0.002	265556591	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.320	4.319	0.001	83810446	0.0500	0.0483	
2	5.028	5.027	0.001	237102228	0.0500	0.0464	
						RPD = 4.06	
6 PCB-1016							M
1	4.897	4.895	0.002	33705238	1.00	0.8779	
1	5.406	5.405	0.001	62883714	1.00	0.9077	M
1	6.038	6.037	0.001	154273303	1.00	0.9663	M
1	6.213	6.212	0.001	62606017	1.00	0.9277	M
1	6.748	6.748	0.000	62772115	1.00	0.9164	M
		Average of Peak Amounts =				0.9192	
2	5.815	5.815	0.000	93723453	1.00	0.8667	
2	6.399	6.399	0.000	185942375	1.00	0.8792	
2	7.011	7.012	-0.001	418610060	1.00	0.9276	
2	7.189	7.190	-0.001	164591810	1.00	0.8952	
2	7.556	7.557	-0.001	67468424	1.00	0.8734	
		Average of Peak Amounts =				0.8884	
						RPD = 3.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.256	8.257	-0.001	95902236	1.00	0.9475	M
1	8.590	8.591	-0.001	158298374	1.00	0.9677	M
1	8.914	8.915	-0.001	177383795	1.00	0.9771	M
1	9.702	9.703	-0.001	234063969	1.00	1.00	M
1	10.028	10.027	0.001	119294135	1.00	0.9816	M
		Average of Peak Amounts =				0.9745	
2	9.339	9.341	-0.002	253536120	1.00	0.9054	
2	10.014	10.014	0.000	410481012	1.00	0.9155	
2	10.453	10.454	-0.001	241327323	1.00	0.9234	
2	10.724	10.725	-0.001	511716192	1.00	0.9583	
2	11.094	11.095	-0.001	359911471	1.00	0.9513	
		Average of Peak Amounts =				0.9308	
						RPD = 4.59	
$ 12 DCB Decachlorobiphenyl							M
1	11.185	11.187	-0.002	86021814	0.0500	0.0461	M
2	12.172	12.173	-0.001	165084358	0.0500	0.0458	
						RPD = 0.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.0PPM_00023 Amount Added: 1.00 Units: mL

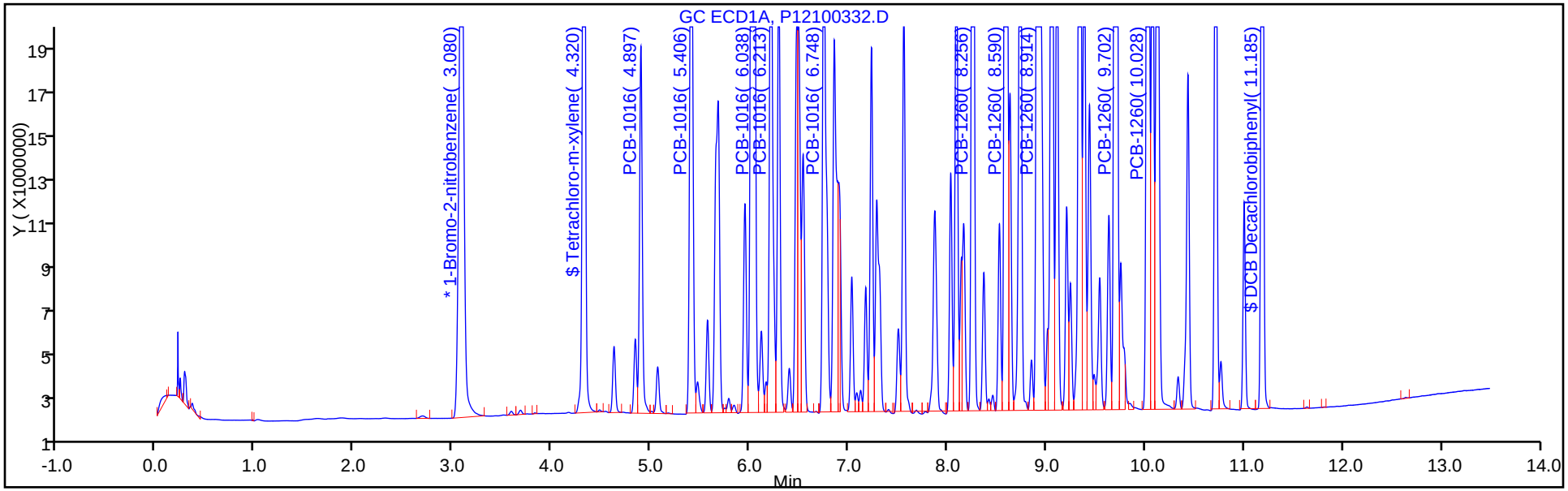
Report Date: 04-Oct-2017 08:19:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

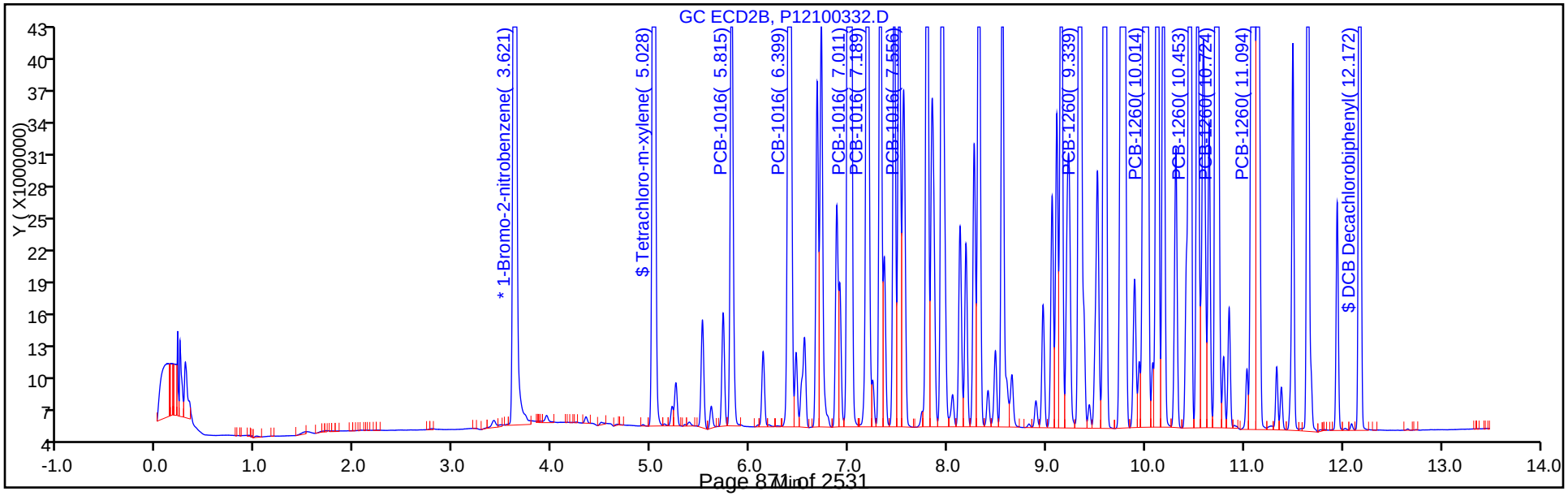
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100332.D

Injection Date:	03-Oct-2017 22:47:01	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std1 1660			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D
Lims ID: std151660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Oct-2017 23:04:47 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-033
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 05:50:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.074	3.076	-0.001	87360422	0.0500	0.0500	
2	3.618	3.619	-0.001	268714805	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.319	4.319	0.000	161653127	0.1000	0.0946	
2	5.027	5.027	0.000	472022957	0.1000	0.0912	
						RPD = 3.65	
6 PCB-1016							M
1	4.895	4.895	0.000	49352438	1.50	1.31	
1	5.404	5.405	-0.001	91346649	1.50	1.34	M
1	6.037	6.037	0.000	227241966	1.50	1.45	M
1	6.212	6.212	0.000	91818693	1.50	1.38	M
1	6.749	6.748	0.001	92472962	1.50	1.37	M
		Average of Peak Amounts =				1.37	
2	5.814	5.815	-0.001	139300423	1.50	1.27	
2	6.397	6.399	-0.002	271566073	1.50	1.27	
2	7.011	7.012	-0.001	633218114	1.50	1.39	
2	7.189	7.190	-0.001	246317074	1.50	1.32	
2	7.556	7.557	-0.001	103454173	1.50	1.32	
		Average of Peak Amounts =				1.32	
						RPD = 4.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.255	8.257	-0.002	141630966	1.50	1.42	M
1	8.590	8.591	-0.001	234468792	1.50	1.46	M
1	8.914	8.915	-0.001	263536295	1.50	1.47	M
1	9.702	9.703	-0.001	354496128	1.50	1.54	M
1	10.028	10.027	0.001	178641779	1.50	1.49	M
		Average of Peak Amounts =				1.48	
2	9.340	9.341	-0.001	379212061	1.50	1.34	
2	10.014	10.014	0.000	620063045	1.50	1.37	
2	10.454	10.454	0.000	356168230	1.50	1.35	
2	10.724	10.725	-0.001	766318972	1.50	1.42	
2	11.094	11.095	-0.001	534916696	1.50	1.40	
		Average of Peak Amounts =				1.37	
						RPD = 7.22	
$ 12 DCB Decachlorobiphenyl							
1	11.185	11.187	-0.002	169811450	0.1000	0.0924	
2	12.174	12.173	0.001	326955540	0.1000	0.0897	
						RPD = 3.06	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.5PPM_00001 Amount Added: 1.00 Units: mL

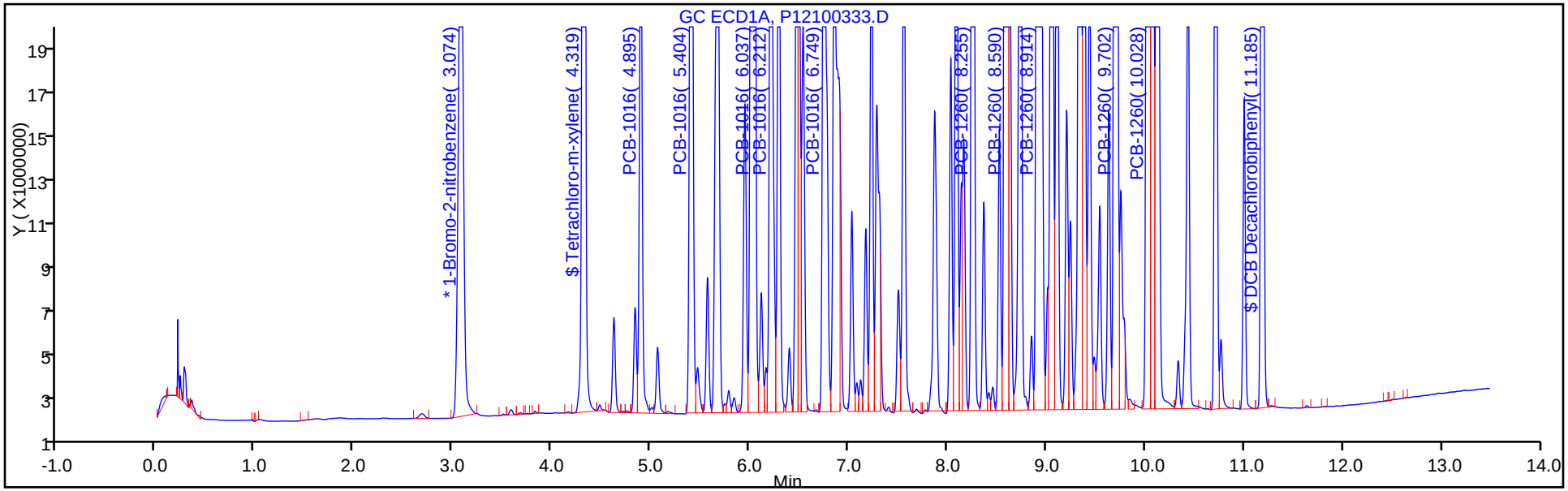
Report Date: 04-Oct-2017 08:19:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

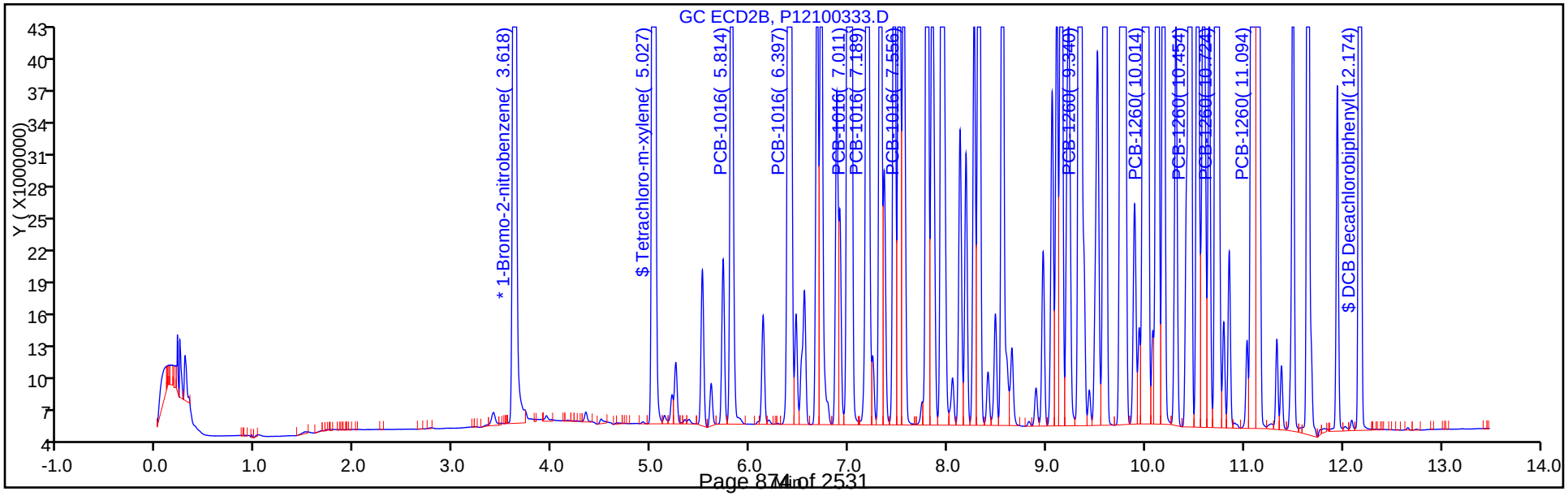
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Injection Date:	03-Oct-2017 23:04:47	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	std151660			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 13:35 Calibration End Date: 10/02/2017 15:07 Calibration ID: 41677

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD15 240-297169/9	SIG10100209.D
Level 2	STD005 240-297169/4	SIG10100204.D
Level 3	STD01 240-297169/5	SIG10100205.D
Level 4	STD02 240-297169/6	SIG10100206.D
Level 5	STD05 240-297169/7	SIG10100207.D
Level 6	STD1 240-297169/8	SIG10100208.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	+++++ 0.0209	0.0302	0.0284	0.0254	0.0228	Ave		0.0255				15.0		20.0			
PCB-1232 Peak 2	+++++ 0.0177	0.0231	0.0236	0.0220	0.0186	Ave		0.0210				12.9		20.0			
PCB-1232 Peak 3	+++++ 0.0361	0.0447	0.0452	0.0425	0.0381	Ave		0.0413				9.8		20.0			
PCB-1232 Peak 4	+++++ 0.0161	0.0190	0.0196	0.0186	0.0169	Ave		0.0181				8.1		20.0			
PCB-1232 Peak 5	+++++ 0.0062	0.0076	0.0075	0.0070	0.0066	Ave		0.0070				8.2		20.0			
PCB-1262 Peak 1	+++++ 0.0480	0.0608	0.0591	0.0575	0.0504	Ave		0.0552				10.2		20.0			
PCB-1262 Peak 2	+++++ 0.0631	0.0861	0.0799	0.0762	0.0652	Ave		0.0741				13.2		20.0			
PCB-1262 Peak 3	+++++ 0.0543	0.0689	0.0664	0.0641	0.0558	Ave		0.0619				10.5		20.0			
PCB-1262 Peak 4	+++++ 0.1154	0.1395	0.1365	0.1313	0.1184	Ave		0.1282				8.4		20.0			
PCB-1262 Peak 5	+++++ 0.0475	0.0624	0.0588	0.0556	0.0493	Ave		0.0547				11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 13:35 Calibration End Date: 10/02/2017 15:07 Calibration ID: 41677

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD15 240-297169/9	SIG10100209.D
Level 2	STD005 240-297169/4	SIG10100204.D
Level 3	STD01 240-297169/5	SIG10100205.D
Level 4	STD02 240-297169/6	SIG10100206.D
Level 5	STD05 240-297169/7	SIG10100207.D
Level 6	STD1 240-297169/8	SIG10100208.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Ave	+++++ 87700399	6466085	12067712	21725258	49996808	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 2	BNB	Ave	+++++ 74018662	4954410	10020076	18827236	40808821	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 3	BNB	Ave	+++++ 151271839	9567151	19184473	36310370	83628061	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 4	BNB	Ave	+++++ 67550859	4073186	8314839	15915722	37197775	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 5	BNB	Ave	+++++ 26130811	1619928	3185439	6003255	14512967	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 1	BNB	Ave	+++++ 201148664	13026247	25107026	49143564	110655425	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 2	BNB	Ave	+++++ 264497282	18433738	33932059	65072124	143164732	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 3	BNB	Ave	+++++ 227593346	14762759	28187528	54796400	122587515	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 4	BNB	Ave	+++++ 483549789	29866463	57948199	112225917	260077699	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 5	BNB	Ave	+++++ 198951654	13356077	24974625	47512344	108289691	+++++ 1.00	0.0500	0.100	0.200	0.500

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100204.D
Lims ID: std005 1232 1262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 13:35:35 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-004
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:55 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:01:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.952	1.949	0.003	214159562	0.0500	0.0500	
2	2.393	2.391	0.002	39807065	0.0500	0.0500	
4 PCB-1232							M
1	3.748	3.748	0.000	6466085	0.0500	0.0591	
1	4.355	4.355	0.000	4954410	0.0500	0.0551	
1	5.100	5.100	0.000	9567151	0.0500	0.0541	M
1	5.303	5.303	0.000	4073186	0.0500	0.0527	
1	5.680	5.680	0.000	1619928	0.0500	0.0541	
		Average of Peak Amounts =				0.0550	
2	4.950	4.950	0.000	1098085	0.0500	0.0557	
2	5.630	5.630	0.000	912945	0.0500	0.0541	
2	6.336	6.336	0.000	1676428	0.0500	0.0546	
2	6.525	6.525	0.000	658823	0.0500	0.0514	
2	7.122	7.122	0.000	390095	0.0500	0.0439	
		Average of Peak Amounts =				0.0520	
						RPD = 5.70	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.729	7.729	0.000	13026247	0.0500	0.0551	
1	8.110	8.110	0.000	18433738	0.0500	0.0581	
1	8.336	8.336	0.000	14762759	0.0500	0.0557	
1	8.615	8.615	0.000	29866463	0.0500	0.0544	
1	8.893	8.893	0.000	13356077	0.0500	0.0570	
		Average of Peak Amounts =				0.0560	
2	8.625	8.625	0.000	2097552	0.0500	0.0540	
2	9.022	9.022	0.000	2784918	0.0500	0.0487	
2	9.275	9.275	0.000	2590544	0.0500	0.0523	
2	9.484	9.484	0.000	5426824	0.0500	0.0497	
2	9.783	9.783	0.000	4023902	0.0500	0.0521	
		Average of Peak Amounts =				0.0514	
						RPD = 8.69	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG3262@.05PPM_00009 Amount Added: 1.00 Units: mL

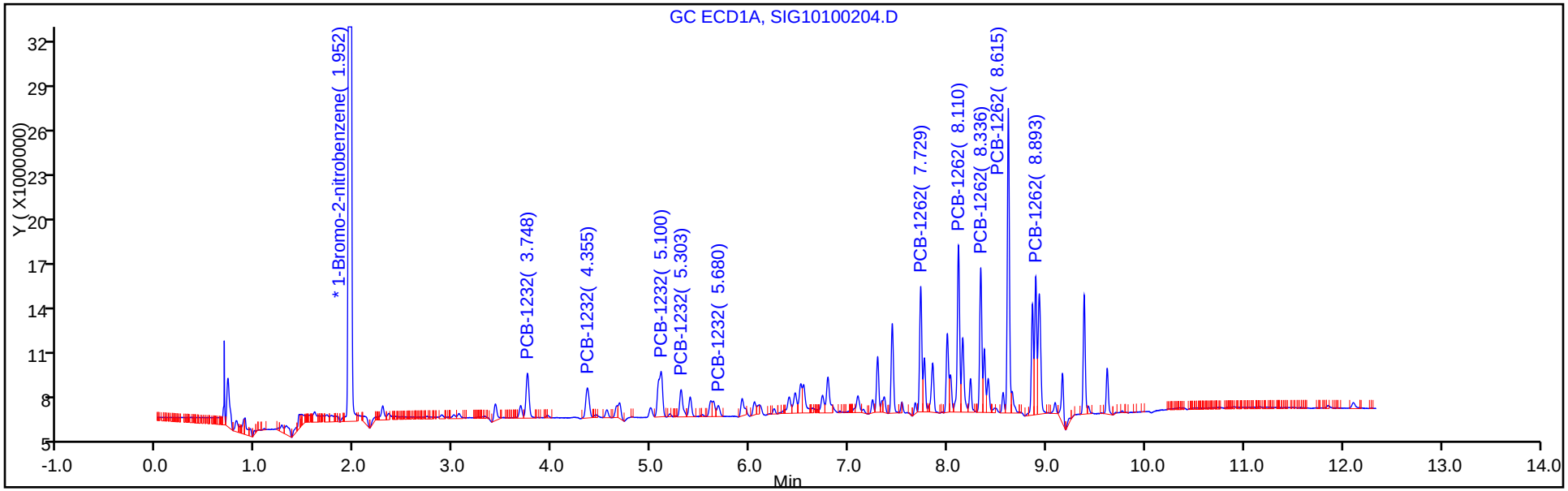
Report Date: 03-Oct-2017 08:44:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

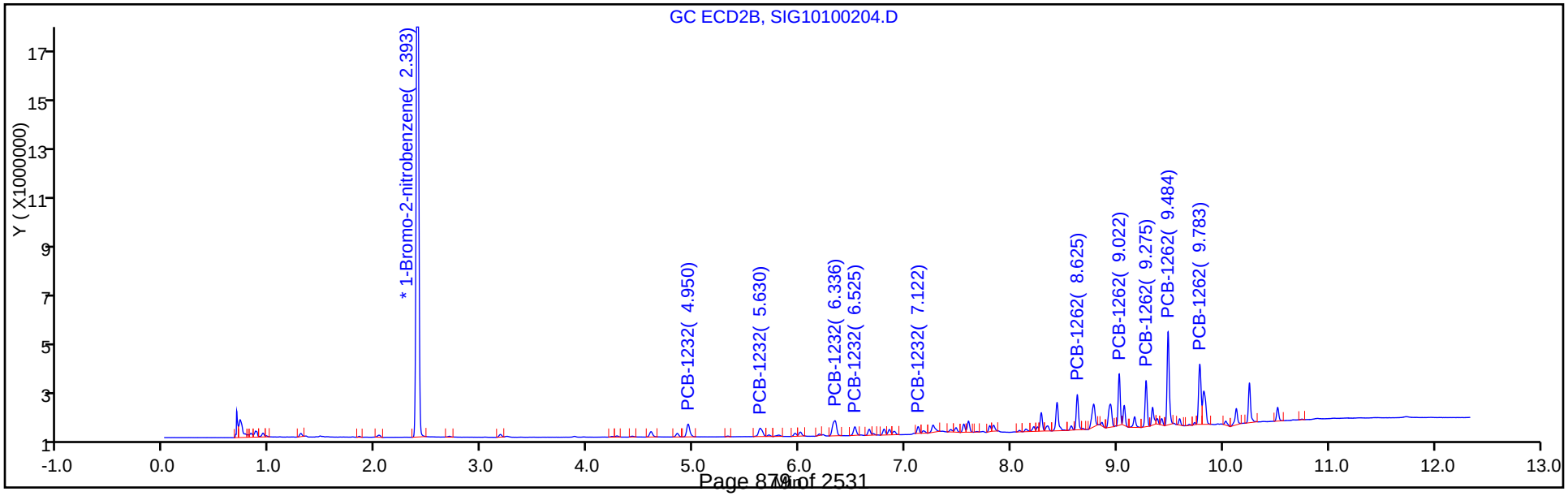
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100204.D

Injection Date:	02-Oct-2017 13:35:35	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1232 1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:44:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100204.D

Injection Date: 02-Oct-2017 13:35:35 Instrument ID: A2HP13

Lims ID: std005 1232 1262

Client ID:

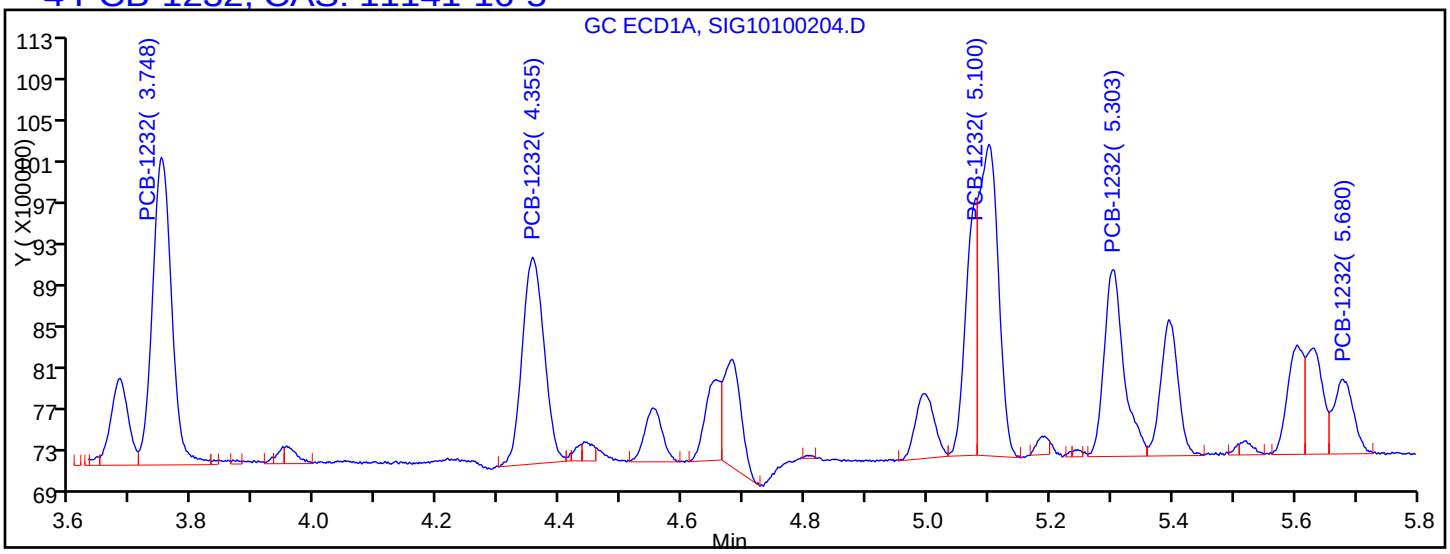
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

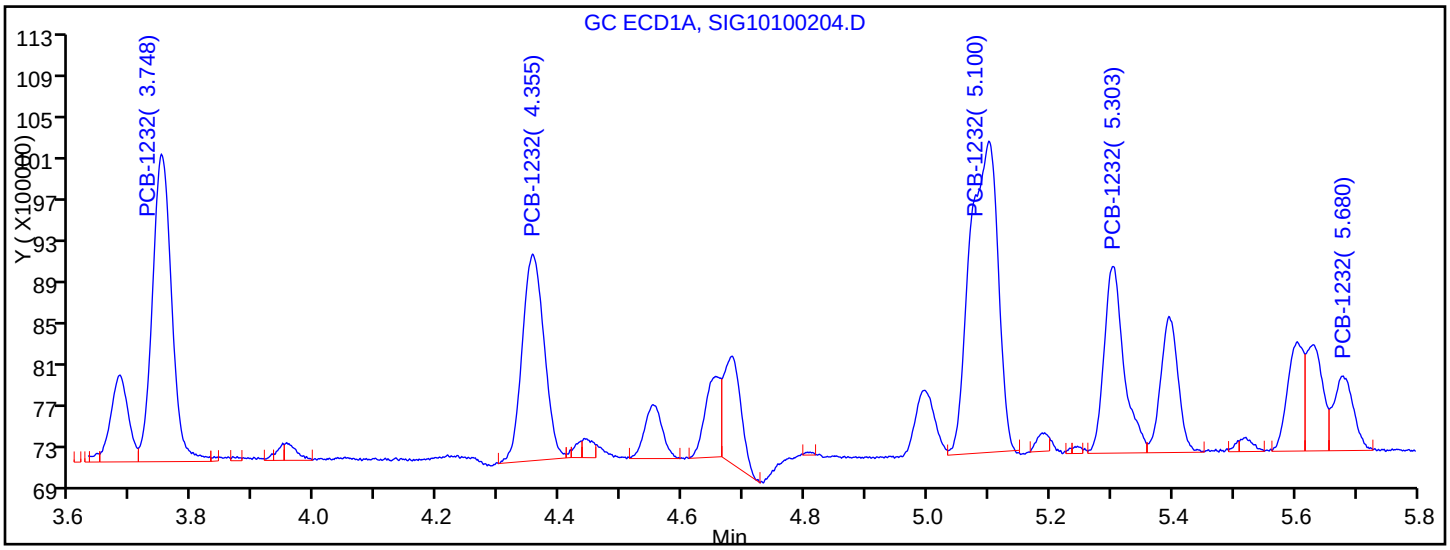
Column: Detector GC ECD1A

4 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.748	Response = 6466085
4.355	Response = 4954410
5.100	Response = 6458811
5.303	Response = 4073186
5.680	Response = 1619928



Manual Integration Results

3.748	Response = 6466085	
4.355	Response = 4954410	
5.100	Response = 9567151	M
5.303	Response = 4073186	
5.680	Response = 1619928	

Reviewer: hassl, 03-Oct-2017 06:01:17

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100205.D
Lims ID: std01 1232 1262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 13:54:02 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-005
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:59 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:02:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.951	1.949	0.002	212242292	0.0500	0.0500	
2	2.392	2.391	0.001	39447229	0.0500	0.0500	
4 PCB-1232							
1	3.749	3.748	0.001	12067712	0.1000	0.1113	
1	4.354	4.355	-0.001	10020076	0.1000	0.1124	
1	5.099	5.100	-0.001	19184473	0.1000	0.1094	
1	5.302	5.303	-0.001	8314839	0.1000	0.1085	
1	5.679	5.680	-0.001	3185439	0.1000	0.1074	
		Average of Peak Amounts =				0.1098	
2	4.948	4.950	-0.002	2137858	0.1000	0.1095	
2	5.629	5.630	-0.001	1861140	0.1000	0.1114	
2	6.335	6.336	-0.001	3230810	0.1000	0.1062	
2	6.524	6.525	-0.001	1335200	0.1000	0.1051	
2	7.121	7.122	-0.001	1023878	0.1000	0.1162	
		Average of Peak Amounts =				0.1097	
						RPD = 0.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.728	7.729	-0.001	25107026	0.1000	0.1072	
1	8.109	8.110	-0.001	33932059	0.1000	0.1079	
1	8.335	8.336	-0.001	28187528	0.1000	0.1072	
1	8.614	8.615	-0.001	57948199	0.1000	0.1065	
1	8.891	8.893	-0.002	24974625	0.1000	0.1075	
		Average of Peak Amounts =				0.1073	
2	8.624	8.625	-0.001	3988010	0.1000	0.1037	
2	9.020	9.022	-0.002	6166419	0.1000	0.1088	
2	9.274	9.275	-0.001	5215503	0.1000	0.1062	
2	9.482	9.484	-0.002	11505159	0.1000	0.1064	
2	9.781	9.783	-0.002	8041996	0.1000	0.1051	
		Average of Peak Amounts =				0.1061	
						RPD = 1.14	

Reagents:

SG3262@0.1PPM_00010 Amount Added: 1.00 Units: mL

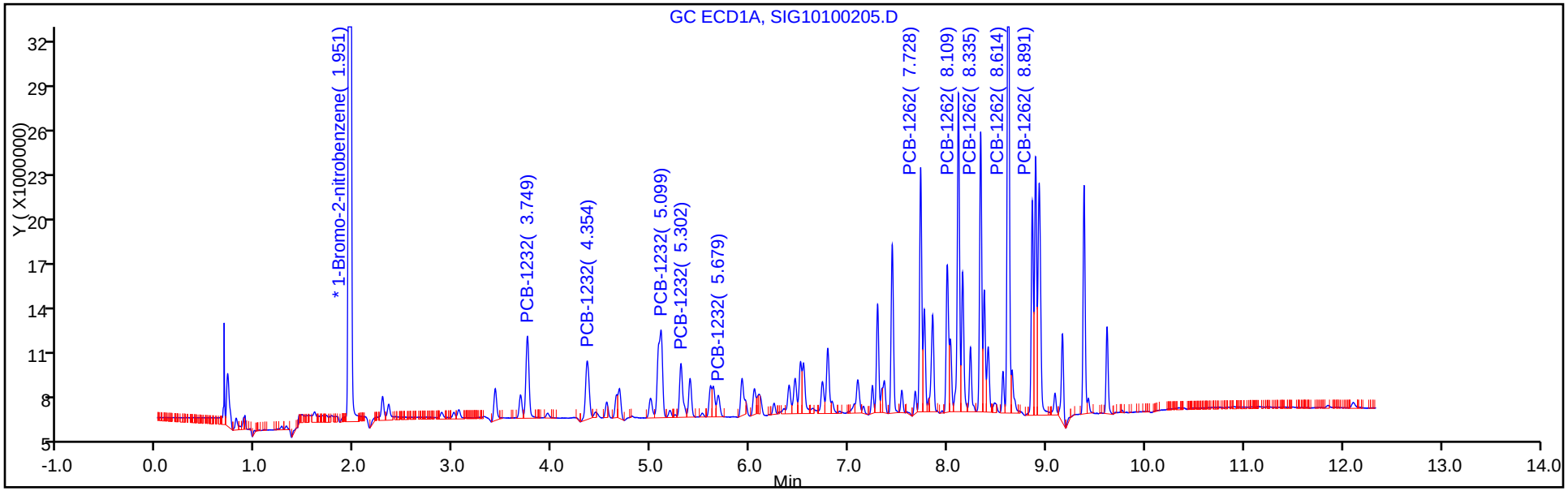
Report Date: 03-Oct-2017 08:45:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

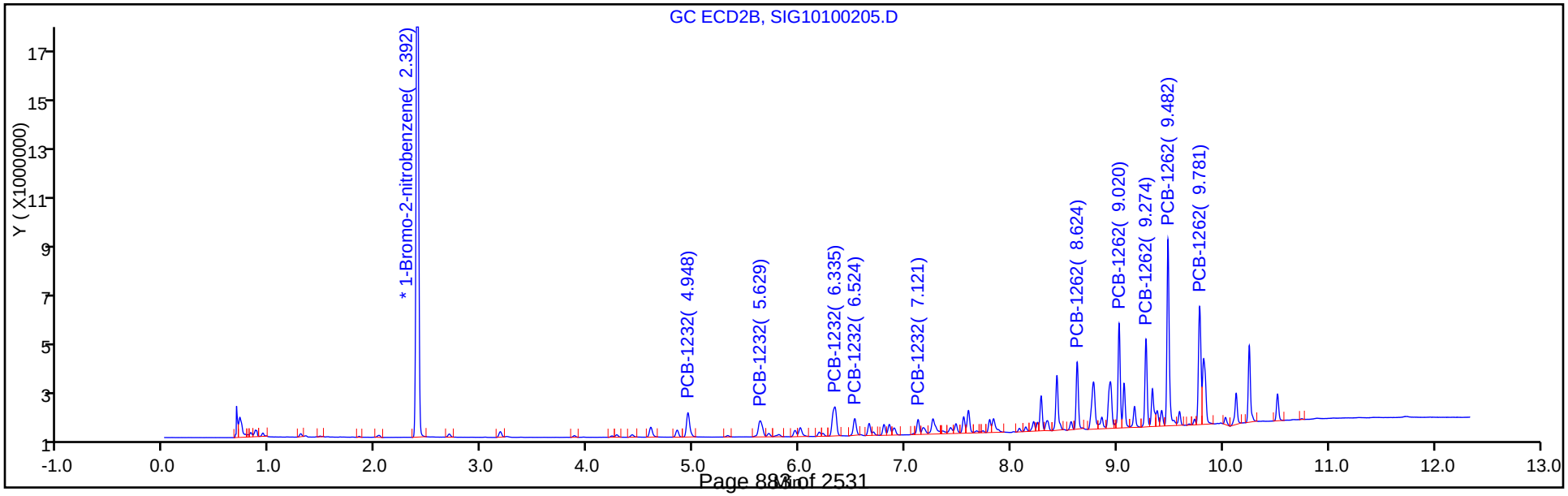
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100205.D

Injection Date:	02-Oct-2017 13:54:02	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1232 1262			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100206.D
Lims ID: std02 1232 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 14:12:23 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-006
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:08 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:02:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.951	1.949	0.002	213605818	0.0500	0.0500	
2	2.392	2.391	0.002	40274243	0.0500	0.0500	
4 PCB-1232							
1	3.748	3.748	0.000	21725258	0.2000	0.1991	
1	4.354	4.355	-0.001	18827236	0.2000	0.2098	
1	5.100	5.100	0.000	36310370	0.2000	0.2058	
1	5.302	5.303	-0.001	15915722	0.2000	0.2063	
1	5.680	5.680	0.000	6003255	0.2000	0.2011	
		Average of Peak Amounts =				0.2044	
2	4.948	4.950	-0.002	3986569	0.2000	0.2000	
2	5.631	5.630	0.001	3469026	0.2000	0.2033	
2	6.337	6.336	0.001	6194538	0.2000	0.1994	
2	6.523	6.525	-0.002	2679868	0.2000	0.2067	
2	7.122	7.122	0.000	1950038	0.2000	0.2168	
		Average of Peak Amounts =				0.2053	
						RPD = 0.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.728	7.729	-0.001	49143564	0.2000	0.2085	
1	8.110	8.110	0.000	65072124	0.2000	0.2056	
1	8.336	8.336	0.000	54796400	0.2000	0.2071	
1	8.615	8.615	0.000	112225917	0.2000	0.2049	
1	8.892	8.893	-0.001	47512344	0.2000	0.2033	
		Average of Peak Amounts =				0.2059	
2	8.625	8.625	0.000	7957013	0.2000	0.2026	
2	9.022	9.022	0.000	11823746	0.2000	0.2044	
2	9.276	9.275	0.001	10044692	0.2000	0.2004	
2	9.483	9.484	-0.001	22049556	0.2000	0.1997	
2	9.782	9.783	-0.001	15579495	0.2000	0.1995	
		Average of Peak Amounts =				0.2013	
						RPD = 2.23	

Reagents:

SG3262@.2PPM_00012 Amount Added: 1.00 Units: mL

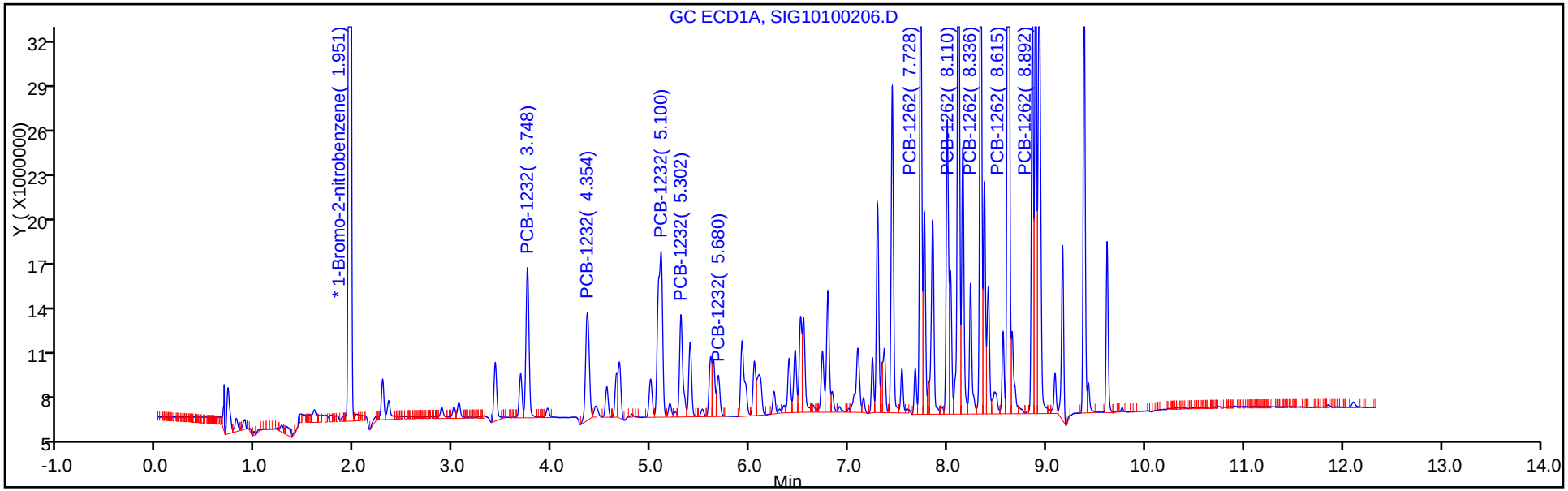
Report Date: 03-Oct-2017 08:45:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

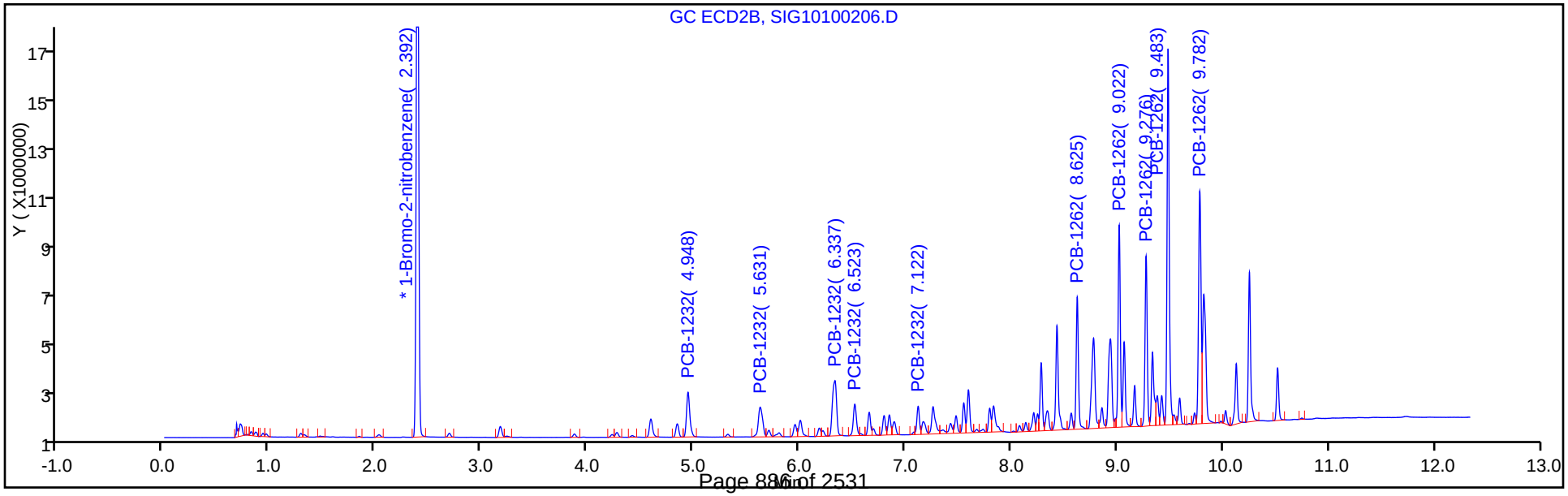
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100206.D

Injection Date:	02-Oct-2017 14:12:23	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1232 1262			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100207.D
Lims ID: std05 1232 1262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 14:30:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-007
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:20 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:02:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	219595370	0.0500	0.0500	
2	2.391	2.391	0.001	41592484	0.0500	0.0500	
4 PCB-1232							
1	3.748	3.748	0.000	49996808	0.5000	0.4456	
1	4.354	4.355	-0.001	40808821	0.5000	0.4424	
1	5.100	5.100	0.000	83628061	0.5000	0.4610	
1	5.301	5.303	-0.002	37197775	0.5000	0.4690	
1	5.680	5.680	0.000	14512967	0.5000	0.4729	
		Average of Peak Amounts =				0.4582	
2	4.948	4.950	-0.002	9241418	0.5000	0.4489	
2	5.630	5.630	0.000	7994824	0.5000	0.4537	
2	6.336	6.336	0.000	14854490	0.5000	0.4631	
2	6.524	6.525	-0.001	6362575	0.5000	0.4752	
2	7.122	7.122	0.000	4491424	0.5000	0.4836	
		Average of Peak Amounts =				0.4649	
						RPD = 1.46	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.727	7.729	-0.002	110655425	0.5000	0.4567	
1	8.110	8.110	0.000	143164732	0.5000	0.4399	
1	8.335	8.336	-0.001	122587515	0.5000	0.4508	
1	8.614	8.615	-0.001	260077699	0.5000	0.4618	
1	8.891	8.893	-0.002	108289691	0.5000	0.4506	
		Average of Peak Amounts =				0.4520	
2	8.625	8.625	0.000	18811756	0.5000	0.4638	
2	9.021	9.022	-0.001	28261163	0.5000	0.4731	
2	9.275	9.275	0.000	24145997	0.5000	0.4664	
2	9.483	9.484	-0.001	54318077	0.5000	0.4764	
2	9.782	9.783	-0.001	37741477	0.5000	0.4680	
		Average of Peak Amounts =				0.4695	
						RPD = 3.81	

Reagents:

SG3262@0.5PPM_00019 Amount Added: 1.00 Units: mL

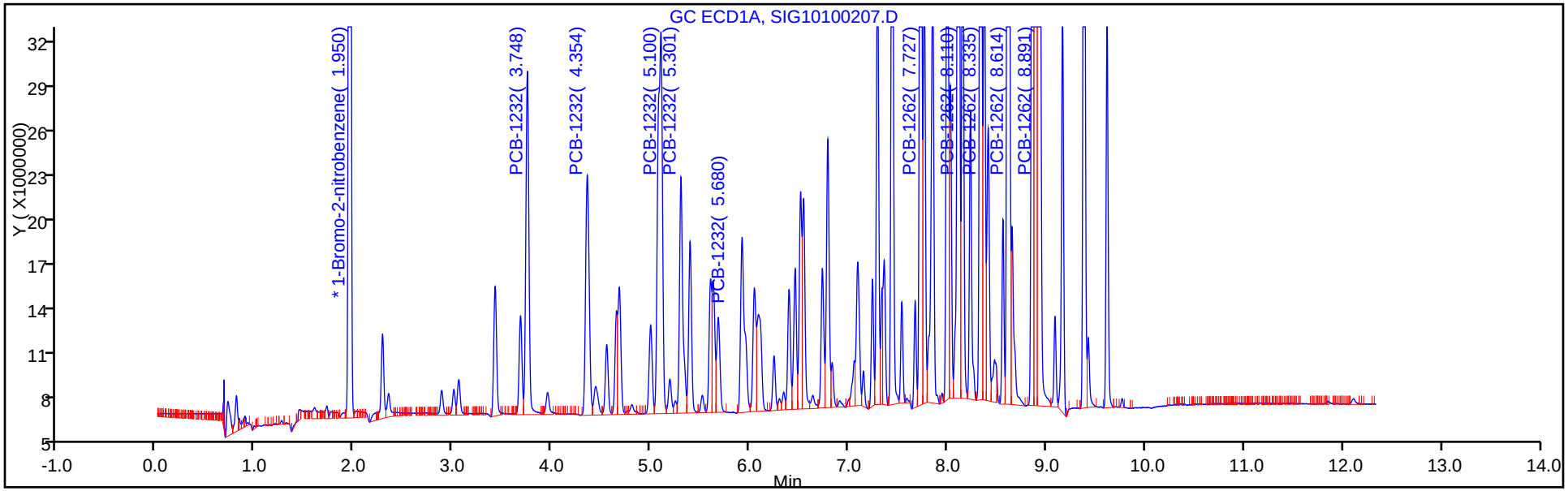
Report Date: 03-Oct-2017 08:45:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

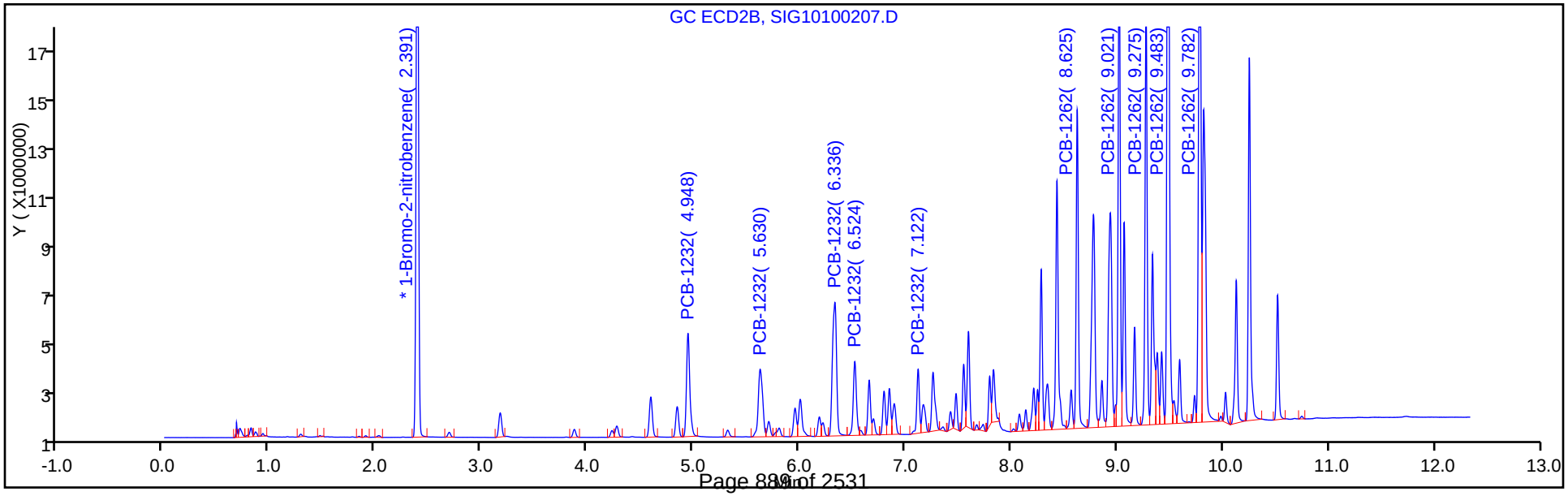
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100207.D

Injection Date:	02-Oct-2017 14:30:43	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1232 1262			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100208.D
Lims ID: std1 1232 1262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 14:49:02 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-008
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:25 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:03:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	209567090	0.0500	0.0500	
2	2.391	2.391	0.001	38982158	0.0500	0.0500	
4 PCB-1232							
1	3.746	3.748	-0.002	87700399	1.00	0.8190	
1	4.353	4.355	-0.002	74018662	1.00	0.8408	
1	5.100	5.100	0.000	151271839	1.00	0.8737	
1	5.301	5.303	-0.002	67550859	1.00	0.8925	
1	5.680	5.680	0.000	26130811	1.00	0.8922	
		Average of Peak Amounts =				0.8636	
2	4.948	4.950	-0.002	17217817	1.00	0.8924	
2	5.629	5.630	-0.001	14529237	1.00	0.8797	
2	6.336	6.336	0.000	27741564	1.00	0.9227	
2	6.523	6.525	-0.002	11755108	1.00	0.9367	
2	7.121	7.122	-0.001	7907876	1.00	0.9085	
		Average of Peak Amounts =				0.9080	
						RPD = 5.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.727	7.729	-0.002	201148664	1.00	0.8698	
1	8.109	8.110	-0.001	264497282	1.00	0.8517	
1	8.335	8.336	-0.001	227593346	1.00	0.8770	
1	8.614	8.615	-0.001	483549789	1.00	0.8997	
1	8.891	8.893	-0.002	198951654	1.00	0.8675	
		Average of Peak Amounts =				0.8731	
2	8.625	8.625	0.000	35790849	1.00	0.9416	
2	9.021	9.022	-0.001	54254010	1.00	0.9691	
2	9.275	9.275	0.000	46477799	1.00	0.9578	
2	9.483	9.484	-0.001	105816694	1.00	0.99	
2	9.782	9.783	-0.001	73521277	1.00	0.9726	
		Average of Peak Amounts =				0.9663	
						RPD = 10.12	

Reagents:

SG3262@1.0PPM_00012 Amount Added: 1.00 Units: mL

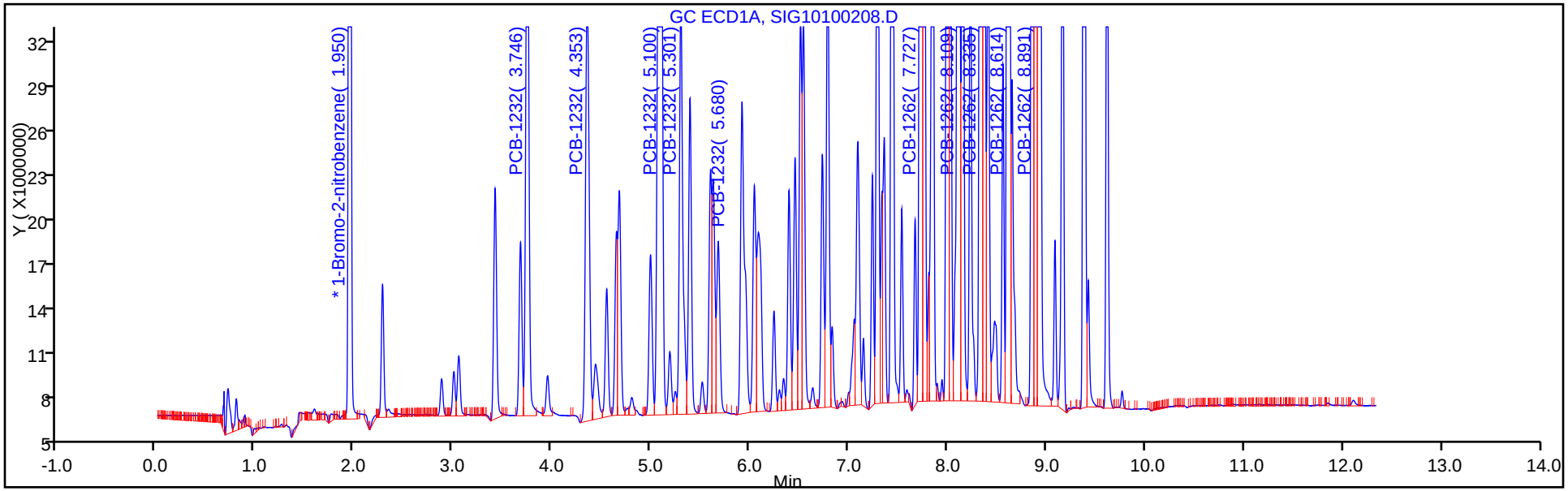
Report Date: 03-Oct-2017 08:45:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

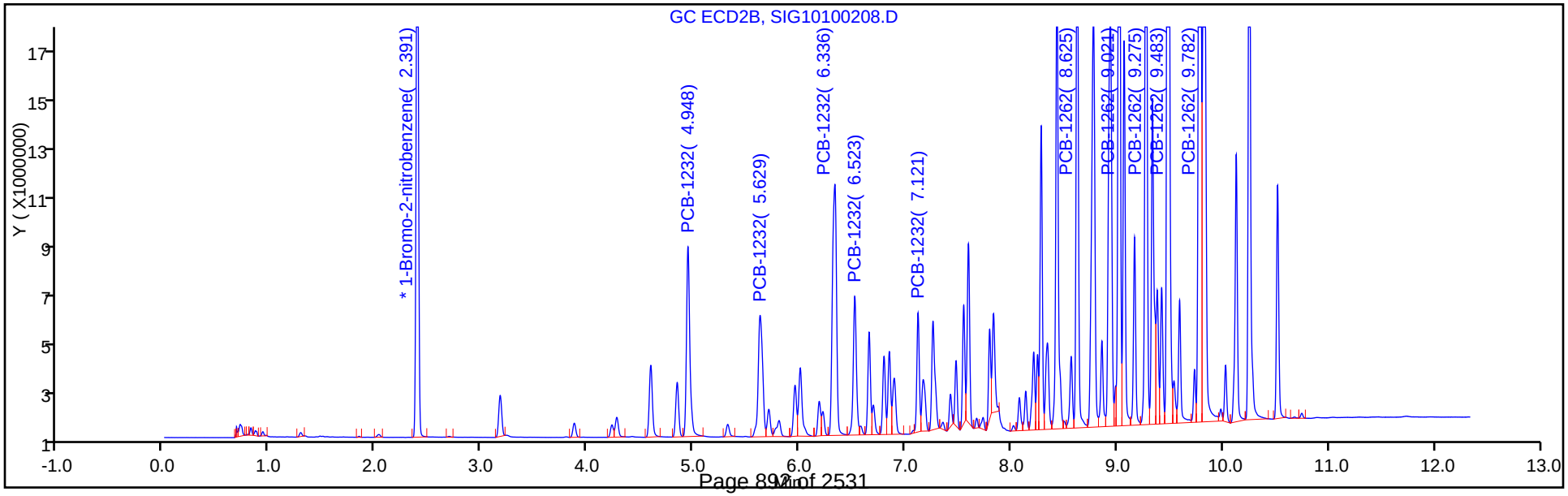
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100208.D

Injection Date:	02-Oct-2017 14:49:02	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1232 1262			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100209.D
Lims ID: std15 1232 1262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 15:07:28 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-009
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:33 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949				0.0500	ND	
2	2.391						
4 PCB-1232							
1	3.748				ND	ND	
1	4.355						
1	5.100						
1	5.303						
1	5.680						
2	4.950						
2	5.630						
2	6.336						
2	6.525						
2	7.122						
9 PCB-1262							
1	7.729				ND	ND	
1	8.110						
1	8.336						
1	8.615						
1	8.893						
2	8.625						
2	9.022						
2	9.275						
2	9.484						
2	9.783						

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SG3262@1.5PPM_00001 Amount Added: 1.00 Units: mL

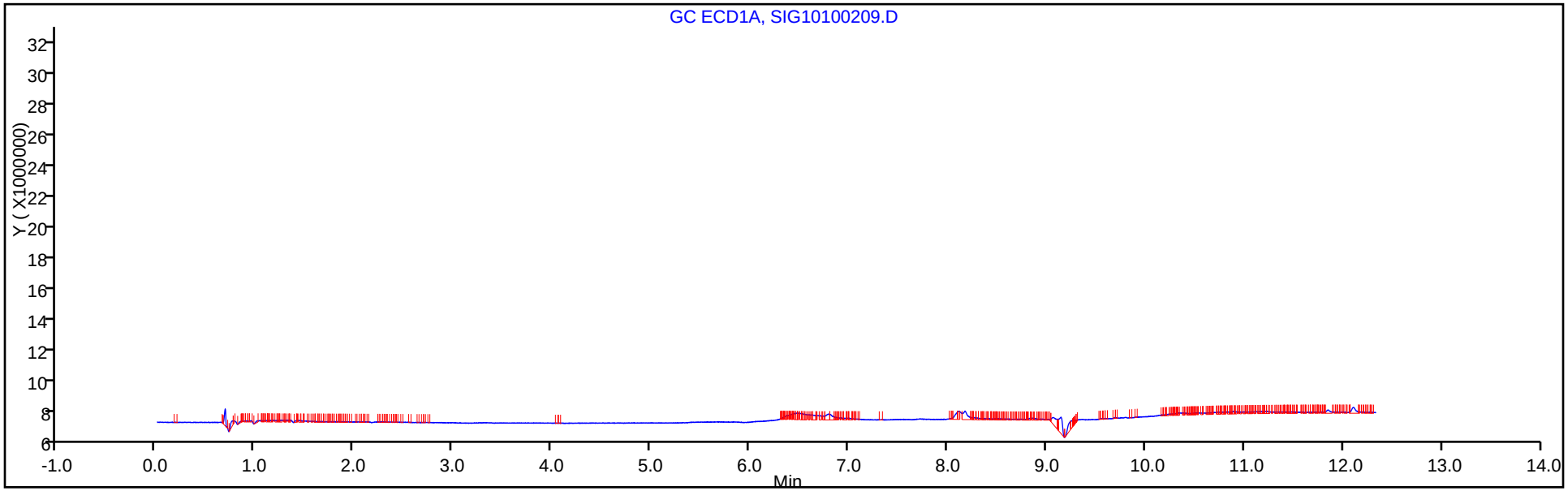
Report Date: 03-Oct-2017 08:45:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

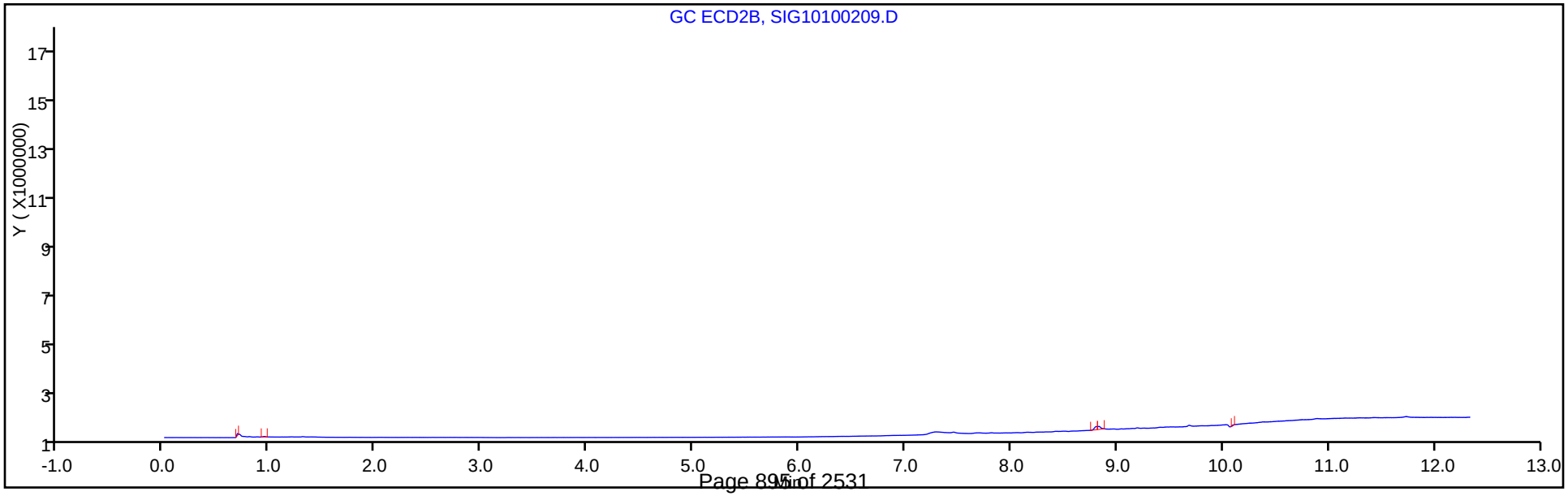
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100209.D

Injection Date:	02-Oct-2017 15:07:28	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std15 1232 1262			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 13:35 Calibration End Date: 10/02/2017 15:07 Calibration ID: 41678

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD15 240-297169/9	SIG10100209.D
Level 2	STD005 240-297169/4	SIG10100204.D
Level 3	STD01 240-297169/5	SIG10100205.D
Level 4	STD02 240-297169/6	SIG10100206.D
Level 5	STD05 240-297169/7	SIG10100207.D
Level 6	STD1 240-297169/8	SIG10100208.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	+++++ 0.0221	0.0276	0.0271	0.0247	0.0222	Ave		0.0247				10.5		20.0			
PCB-1232 Peak 2	+++++ 0.0186	0.0229	0.0236	0.0215	0.0192	Ave		0.0212				10.4		20.0			
PCB-1232 Peak 3	+++++ 0.0356	0.0421	0.0410	0.0385	0.0357	Ave		0.0386				7.7		20.0			
PCB-1232 Peak 4	+++++ 0.0151	0.0166	0.0169	0.0166	0.0153	Ave		0.0161				5.3		20.0			
PCB-1232 Peak 5	+++++ 0.0101	0.0098	0.0130	0.0121	0.0108	Ave		0.0112				12.0		20.0			
PCB-1262 Peak 1	+++++ 0.0459	0.0527	0.0505	0.0494	0.0452	Ave		0.0488				6.5		20.0			
PCB-1262 Peak 2	+++++ 0.0696	0.0700	0.0782	0.0734	0.0679	Ave		0.0718				5.7		20.0			
PCB-1262 Peak 3	+++++ 0.0596	0.0651	0.0661	0.0624	0.0581	Ave		0.0622				5.5		20.0			
PCB-1262 Peak 4	+++++ 0.1357	0.1363	0.1458	0.1369	0.1306	Ave		0.1371				4.0		20.0			
PCB-1262 Peak 5	+++++ 0.0943	0.1011	0.1019	0.0967	0.0907	Ave		0.0970				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 13:35 Calibration End Date: 10/02/2017 15:07 Calibration ID: 41678

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD15 240-297169/9	SIG10100209.D
Level 2	STD005 240-297169/4	SIG10100204.D
Level 3	STD01 240-297169/5	SIG10100205.D
Level 4	STD02 240-297169/6	SIG10100206.D
Level 5	STD05 240-297169/7	SIG10100207.D
Level 6	STD1 240-297169/8	SIG10100208.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Ave	+++++ 17217817	1098085	2137858	3986569	9241418	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 2	BNB	Ave	+++++ 14529237	912945	1861140	3469026	7994824	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 3	BNB	Ave	+++++ 27741564	1676428	3230810	6194538	14854490	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 4	BNB	Ave	+++++ 11755108	658823	1335200	2679868	6362575	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1232 Peak 5	BNB	Ave	+++++ 7907876	390095	1023878	1950038	4491424	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 1	BNB	Ave	+++++ 35790849	2097552	3988010	7957013	18811756	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 2	BNB	Ave	+++++ 54254010	2784918	6166419	11823746	28261163	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 3	BNB	Ave	+++++ 46477799	2590544	5215503	10044692	24145997	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 4	BNB	Ave	+++++ 105816694	5426824	11505159	22049556	54318077	+++++ 1.00	0.0500	0.100	0.200	0.500
PCB-1262 Peak 5	BNB	Ave	+++++ 73521277	4023902	8041996	15579495	37741477	+++++ 1.00	0.0500	0.100	0.200	0.500

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100204.D
Lims ID: std005 1232 1262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 13:35:35 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-004
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:55 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:01:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.952	1.949	0.003	214159562	0.0500	0.0500	
2	2.393	2.391	0.002	39807065	0.0500	0.0500	
4 PCB-1232							M
1	3.748	3.748	0.000	6466085	0.0500	0.0591	
1	4.355	4.355	0.000	4954410	0.0500	0.0551	
1	5.100	5.100	0.000	9567151	0.0500	0.0541	M
1	5.303	5.303	0.000	4073186	0.0500	0.0527	
1	5.680	5.680	0.000	1619928	0.0500	0.0541	
		Average of Peak Amounts =				0.0550	
2	4.950	4.950	0.000	1098085	0.0500	0.0557	
2	5.630	5.630	0.000	912945	0.0500	0.0541	
2	6.336	6.336	0.000	1676428	0.0500	0.0546	
2	6.525	6.525	0.000	658823	0.0500	0.0514	
2	7.122	7.122	0.000	390095	0.0500	0.0439	
		Average of Peak Amounts =				0.0520	
						RPD = 5.70	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.729	7.729	0.000	13026247	0.0500	0.0551	
1	8.110	8.110	0.000	18433738	0.0500	0.0581	
1	8.336	8.336	0.000	14762759	0.0500	0.0557	
1	8.615	8.615	0.000	29866463	0.0500	0.0544	
1	8.893	8.893	0.000	13356077	0.0500	0.0570	
		Average of Peak Amounts =				0.0560	
2	8.625	8.625	0.000	2097552	0.0500	0.0540	
2	9.022	9.022	0.000	2784918	0.0500	0.0487	
2	9.275	9.275	0.000	2590544	0.0500	0.0523	
2	9.484	9.484	0.000	5426824	0.0500	0.0497	
2	9.783	9.783	0.000	4023902	0.0500	0.0521	
		Average of Peak Amounts =				0.0514	
						RPD = 8.69	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG3262@.05PPM_00009 Amount Added: 1.00 Units: mL

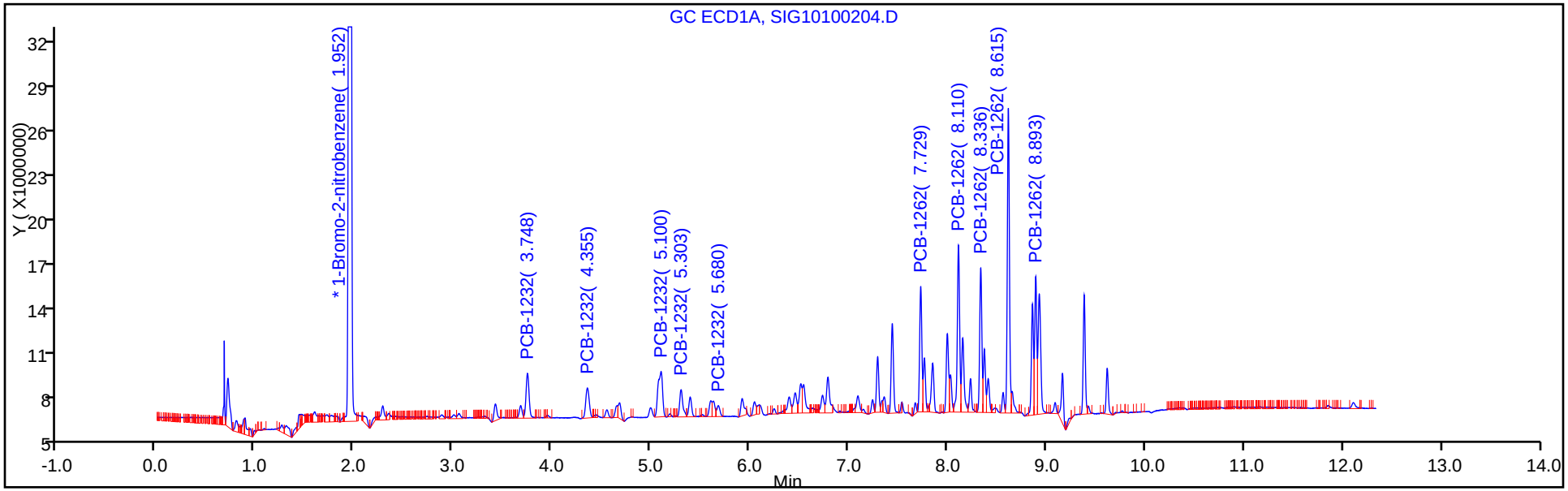
Report Date: 03-Oct-2017 08:44:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

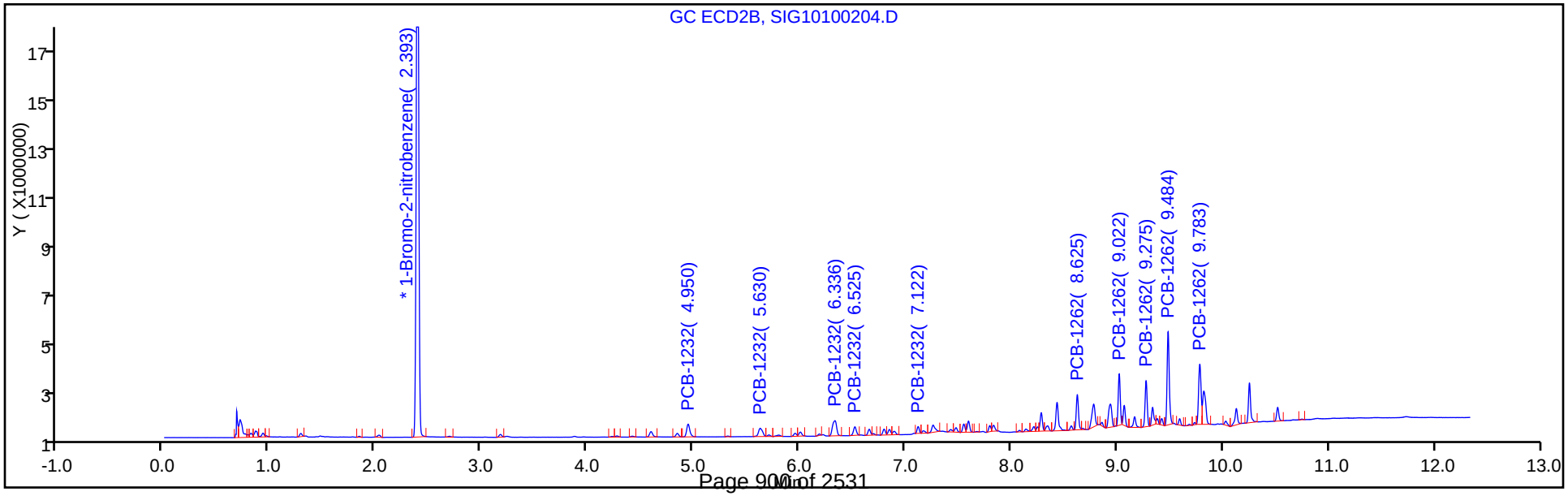
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100204.D

Injection Date:	02-Oct-2017 13:35:35	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1232 1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100205.D
Lims ID: std01 1232 1262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 13:54:02 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-005
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:59 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:02:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.951	1.949	0.002	212242292	0.0500	0.0500	
2	2.392	2.391	0.001	39447229	0.0500	0.0500	
4 PCB-1232							
1	3.749	3.748	0.001	12067712	0.1000	0.1113	
1	4.354	4.355	-0.001	10020076	0.1000	0.1124	
1	5.099	5.100	-0.001	19184473	0.1000	0.1094	
1	5.302	5.303	-0.001	8314839	0.1000	0.1085	
1	5.679	5.680	-0.001	3185439	0.1000	0.1074	
		Average of Peak Amounts =				0.1098	
2	4.948	4.950	-0.002	2137858	0.1000	0.1095	
2	5.629	5.630	-0.001	1861140	0.1000	0.1114	
2	6.335	6.336	-0.001	3230810	0.1000	0.1062	
2	6.524	6.525	-0.001	1335200	0.1000	0.1051	
2	7.121	7.122	-0.001	1023878	0.1000	0.1162	
		Average of Peak Amounts =				0.1097	
						RPD = 0.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.728	7.729	-0.001	25107026	0.1000	0.1072	
1	8.109	8.110	-0.001	33932059	0.1000	0.1079	
1	8.335	8.336	-0.001	28187528	0.1000	0.1072	
1	8.614	8.615	-0.001	57948199	0.1000	0.1065	
1	8.891	8.893	-0.002	24974625	0.1000	0.1075	
		Average of Peak Amounts =				0.1073	
2	8.624	8.625	-0.001	3988010	0.1000	0.1037	
2	9.020	9.022	-0.002	6166419	0.1000	0.1088	
2	9.274	9.275	-0.001	5215503	0.1000	0.1062	
2	9.482	9.484	-0.002	11505159	0.1000	0.1064	
2	9.781	9.783	-0.002	8041996	0.1000	0.1051	
		Average of Peak Amounts =				0.1061	
						RPD = 1.14	

Reagents:

SG3262@0.1PPM_00010 Amount Added: 1.00 Units: mL

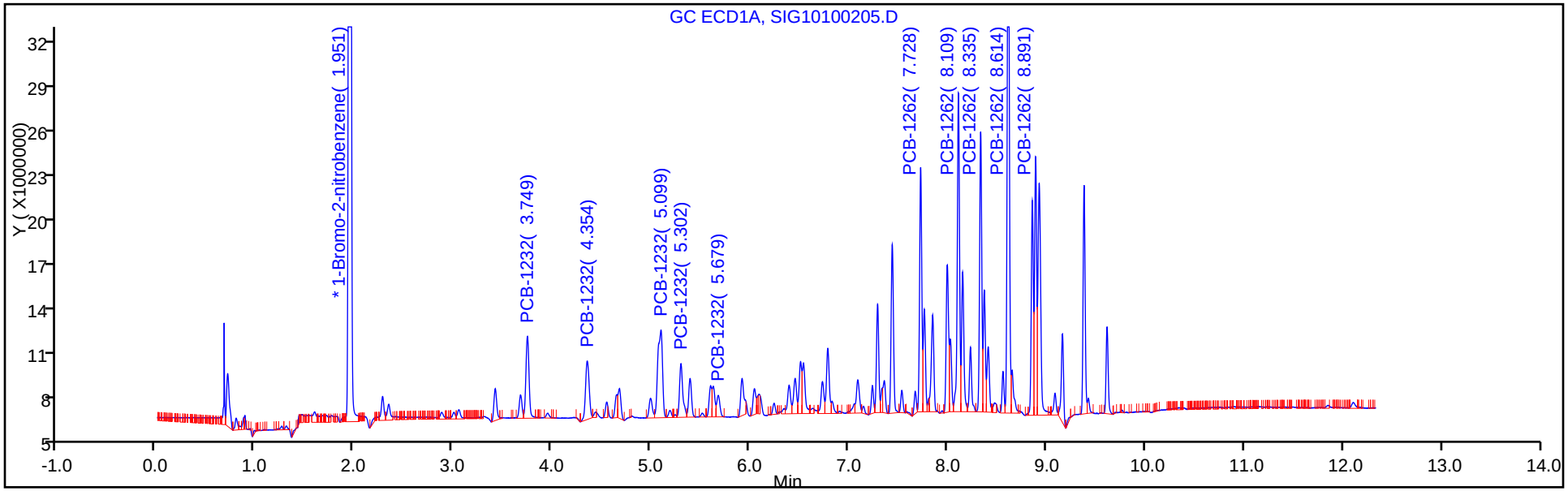
Report Date: 03-Oct-2017 08:45:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

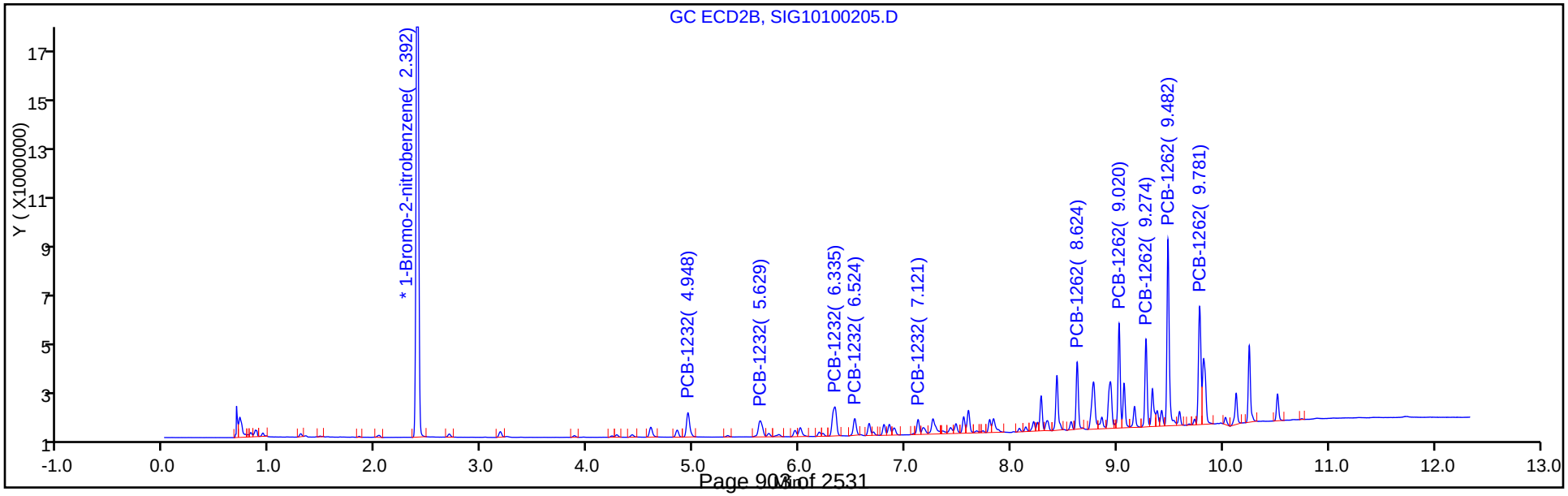
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100205.D

Injection Date:	02-Oct-2017 13:54:02	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1232 1262			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100206.D
Lims ID: std02 1232 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 14:12:23 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-006
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:08 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:02:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.951	1.949	0.002	213605818	0.0500	0.0500	
2	2.392	2.391	0.002	40274243	0.0500	0.0500	
4 PCB-1232							
1	3.748	3.748	0.000	21725258	0.2000	0.1991	
1	4.354	4.355	-0.001	18827236	0.2000	0.2098	
1	5.100	5.100	0.000	36310370	0.2000	0.2058	
1	5.302	5.303	-0.001	15915722	0.2000	0.2063	
1	5.680	5.680	0.000	6003255	0.2000	0.2011	
		Average of Peak Amounts =				0.2044	
2	4.948	4.950	-0.002	3986569	0.2000	0.2000	
2	5.631	5.630	0.001	3469026	0.2000	0.2033	
2	6.337	6.336	0.001	6194538	0.2000	0.1994	
2	6.523	6.525	-0.002	2679868	0.2000	0.2067	
2	7.122	7.122	0.000	1950038	0.2000	0.2168	
		Average of Peak Amounts =				0.2053	
						RPD = 0.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.728	7.729	-0.001	49143564	0.2000	0.2085	
1	8.110	8.110	0.000	65072124	0.2000	0.2056	
1	8.336	8.336	0.000	54796400	0.2000	0.2071	
1	8.615	8.615	0.000	112225917	0.2000	0.2049	
1	8.892	8.893	-0.001	47512344	0.2000	0.2033	
		Average of Peak Amounts =				0.2059	
2	8.625	8.625	0.000	7957013	0.2000	0.2026	
2	9.022	9.022	0.000	11823746	0.2000	0.2044	
2	9.276	9.275	0.001	10044692	0.2000	0.2004	
2	9.483	9.484	-0.001	22049556	0.2000	0.1997	
2	9.782	9.783	-0.001	15579495	0.2000	0.1995	
		Average of Peak Amounts =				0.2013	
						RPD = 2.23	

Reagents:

SG3262@.2PPM_00012 Amount Added: 1.00 Units: mL

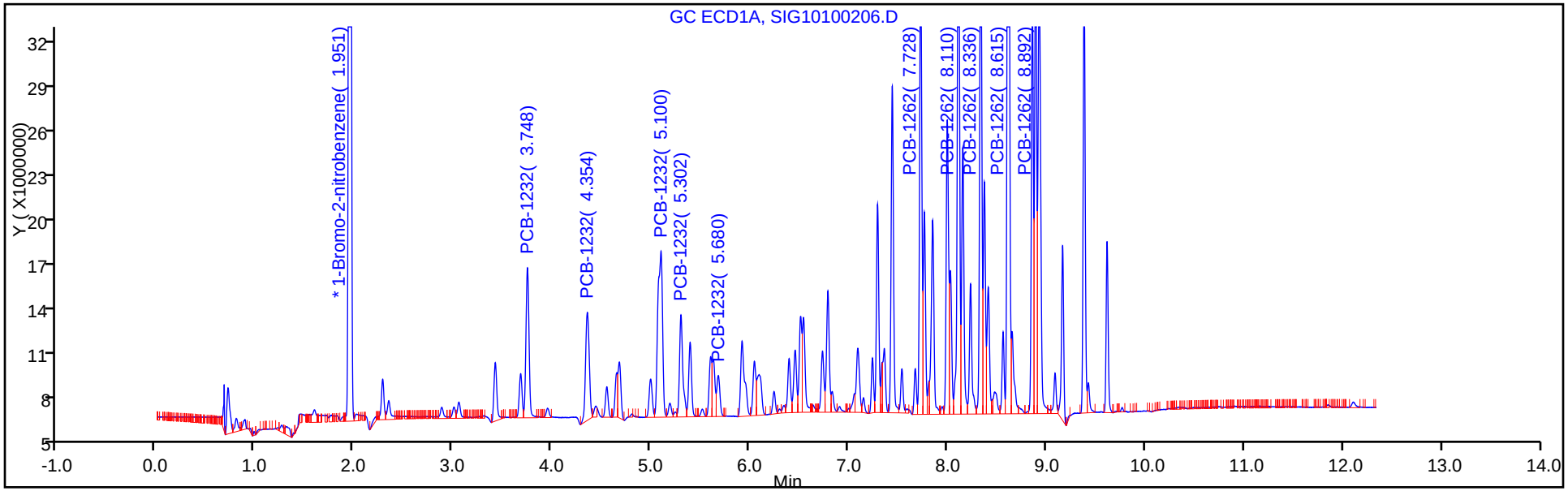
Report Date: 03-Oct-2017 08:45:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

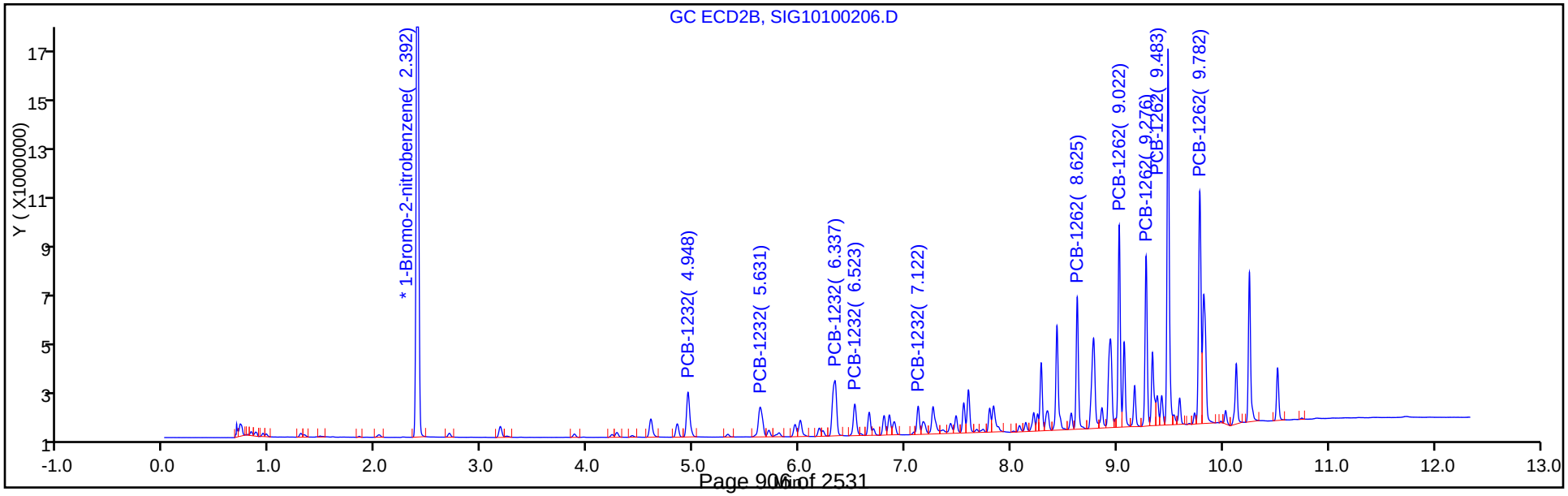
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100206.D

Injection Date:	02-Oct-2017 14:12:23	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1232 1262			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100207.D
Lims ID: std05 1232 1262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 14:30:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-007
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:20 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:02:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	219595370	0.0500	0.0500	
2	2.391	2.391	0.001	41592484	0.0500	0.0500	
4 PCB-1232							
1	3.748	3.748	0.000	49996808	0.5000	0.4456	
1	4.354	4.355	-0.001	40808821	0.5000	0.4424	
1	5.100	5.100	0.000	83628061	0.5000	0.4610	
1	5.301	5.303	-0.002	37197775	0.5000	0.4690	
1	5.680	5.680	0.000	14512967	0.5000	0.4729	
		Average of Peak Amounts =				0.4582	
2	4.948	4.950	-0.002	9241418	0.5000	0.4489	
2	5.630	5.630	0.000	7994824	0.5000	0.4537	
2	6.336	6.336	0.000	14854490	0.5000	0.4631	
2	6.524	6.525	-0.001	6362575	0.5000	0.4752	
2	7.122	7.122	0.000	4491424	0.5000	0.4836	
		Average of Peak Amounts =				0.4649	
						RPD = 1.46	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.727	7.729	-0.002	110655425	0.5000	0.4567	
1	8.110	8.110	0.000	143164732	0.5000	0.4399	
1	8.335	8.336	-0.001	122587515	0.5000	0.4508	
1	8.614	8.615	-0.001	260077699	0.5000	0.4618	
1	8.891	8.893	-0.002	108289691	0.5000	0.4506	
		Average of Peak Amounts =				0.4520	
2	8.625	8.625	0.000	18811756	0.5000	0.4638	
2	9.021	9.022	-0.001	28261163	0.5000	0.4731	
2	9.275	9.275	0.000	24145997	0.5000	0.4664	
2	9.483	9.484	-0.001	54318077	0.5000	0.4764	
2	9.782	9.783	-0.001	37741477	0.5000	0.4680	
		Average of Peak Amounts =				0.4695	
						RPD = 3.81	

Reagents:

SG3262@0.5PPM_00019 Amount Added: 1.00 Units: mL

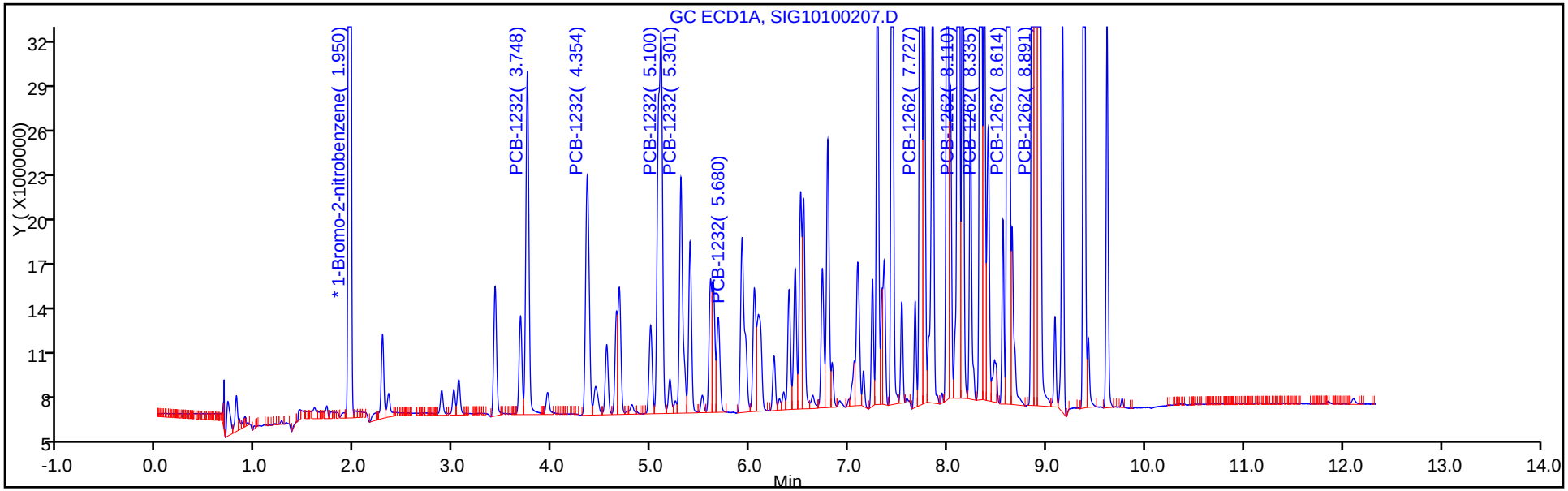
Report Date: 03-Oct-2017 08:45:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

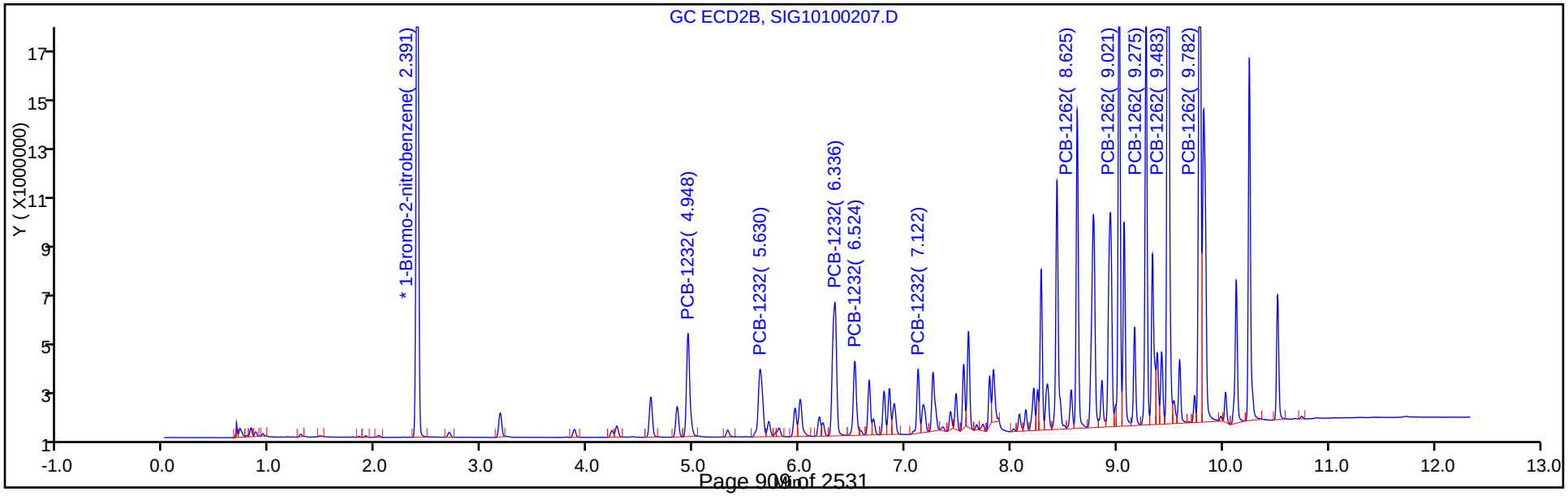
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100207.D

Injection Date:	02-Oct-2017 14:30:43	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1232 1262			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100208.D
Lims ID: std1 1232 1262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 14:49:02 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-008
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:25 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:03:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	209567090	0.0500	0.0500	
2	2.391	2.391	0.001	38982158	0.0500	0.0500	
4 PCB-1232							
1	3.746	3.748	-0.002	87700399	1.00	0.8190	
1	4.353	4.355	-0.002	74018662	1.00	0.8408	
1	5.100	5.100	0.000	151271839	1.00	0.8737	
1	5.301	5.303	-0.002	67550859	1.00	0.8925	
1	5.680	5.680	0.000	26130811	1.00	0.8922	
		Average of Peak Amounts =				0.8636	
2	4.948	4.950	-0.002	17217817	1.00	0.8924	
2	5.629	5.630	-0.001	14529237	1.00	0.8797	
2	6.336	6.336	0.000	27741564	1.00	0.9227	
2	6.523	6.525	-0.002	11755108	1.00	0.9367	
2	7.121	7.122	-0.001	7907876	1.00	0.9085	
		Average of Peak Amounts =				0.9080	
						RPD = 5.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.727	7.729	-0.002	201148664	1.00	0.8698	
1	8.109	8.110	-0.001	264497282	1.00	0.8517	
1	8.335	8.336	-0.001	227593346	1.00	0.8770	
1	8.614	8.615	-0.001	483549789	1.00	0.8997	
1	8.891	8.893	-0.002	198951654	1.00	0.8675	
		Average of Peak Amounts =				0.8731	
2	8.625	8.625	0.000	35790849	1.00	0.9416	
2	9.021	9.022	-0.001	54254010	1.00	0.9691	
2	9.275	9.275	0.000	46477799	1.00	0.9578	
2	9.483	9.484	-0.001	105816694	1.00	0.99	
2	9.782	9.783	-0.001	73521277	1.00	0.9726	
		Average of Peak Amounts =				0.9663	
						RPD = 10.12	

Reagents:

SG3262@1.0PPM_00012 Amount Added: 1.00 Units: mL

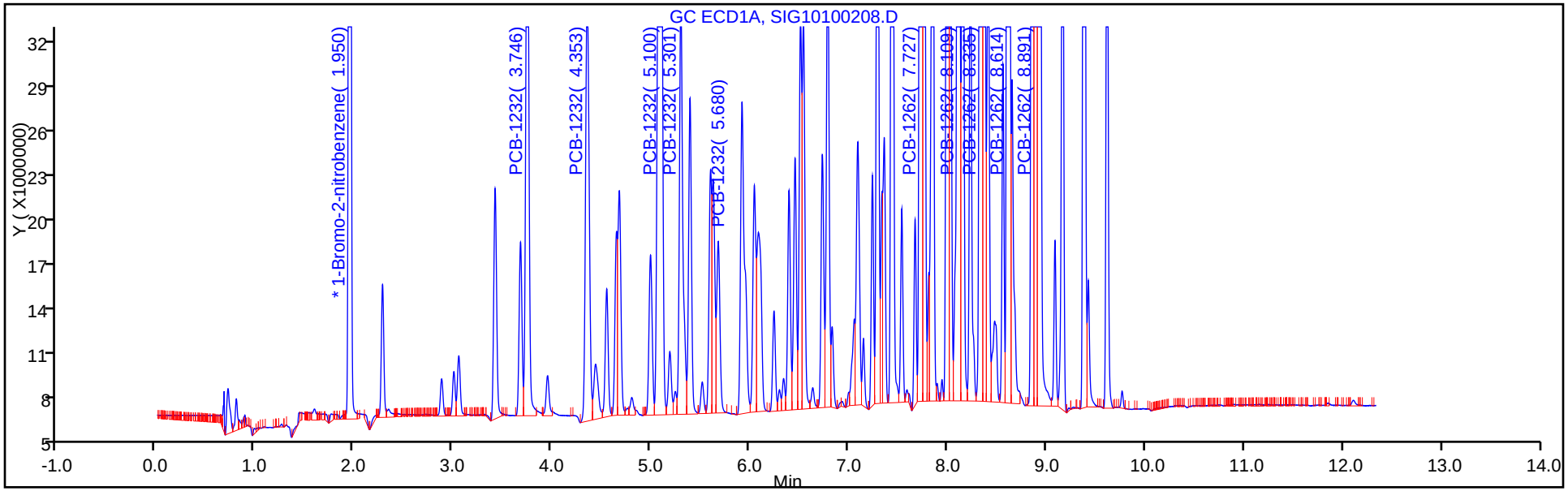
Report Date: 03-Oct-2017 08:45:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

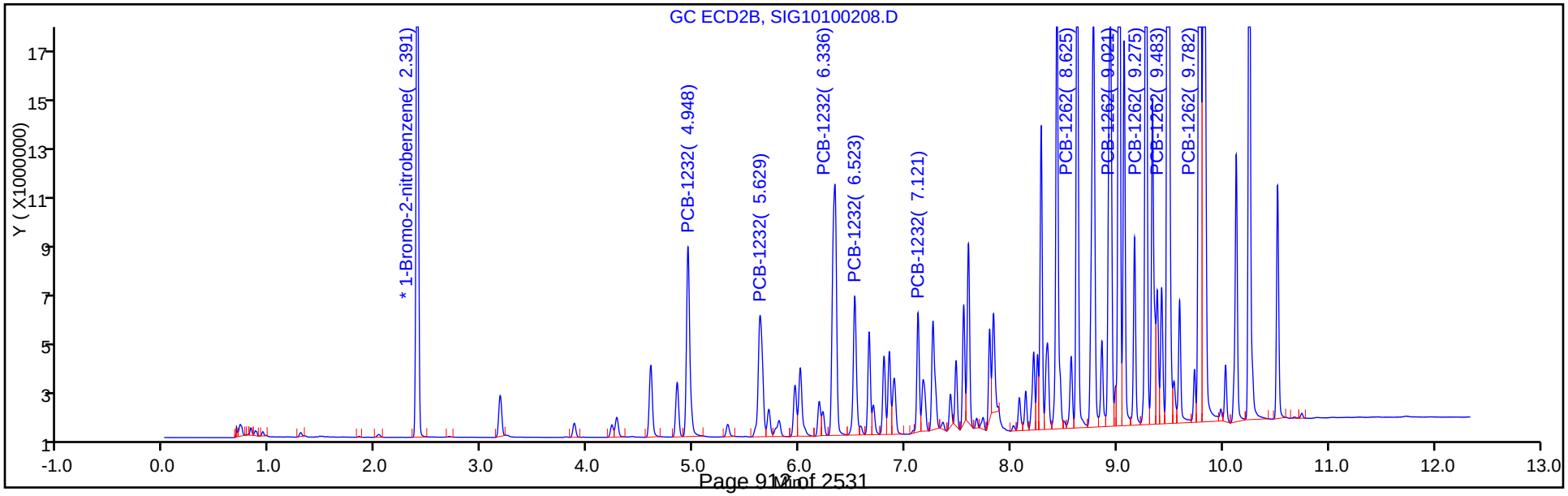
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100208.D

Injection Date:	02-Oct-2017 14:49:02	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1232 1262			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100209.D
Lims ID: std15 1232 1262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 15:07:28 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-009
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:33 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949				0.0500	ND	
2	2.391						
4 PCB-1232							
1	3.748				ND	ND	
1	4.355						
1	5.100						
1	5.303						
1	5.680						
2	4.950						
2	5.630						
2	6.336						
2	6.525						
2	7.122						
9 PCB-1262							
1	7.729				ND	ND	
1	8.110						
1	8.336						
1	8.615						
1	8.893						
2	8.625						
2	9.022						
2	9.275						
2	9.484						
2	9.783						

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SG3262@1.5PPM_00001 Amount Added: 1.00 Units: mL

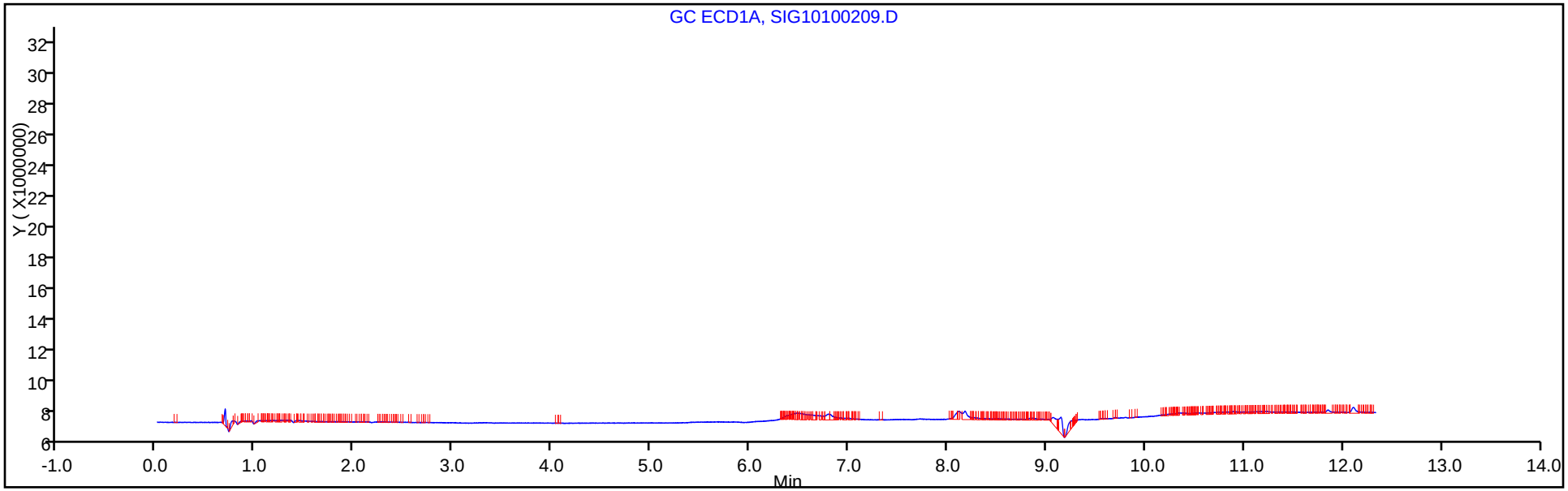
Report Date: 03-Oct-2017 08:45:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

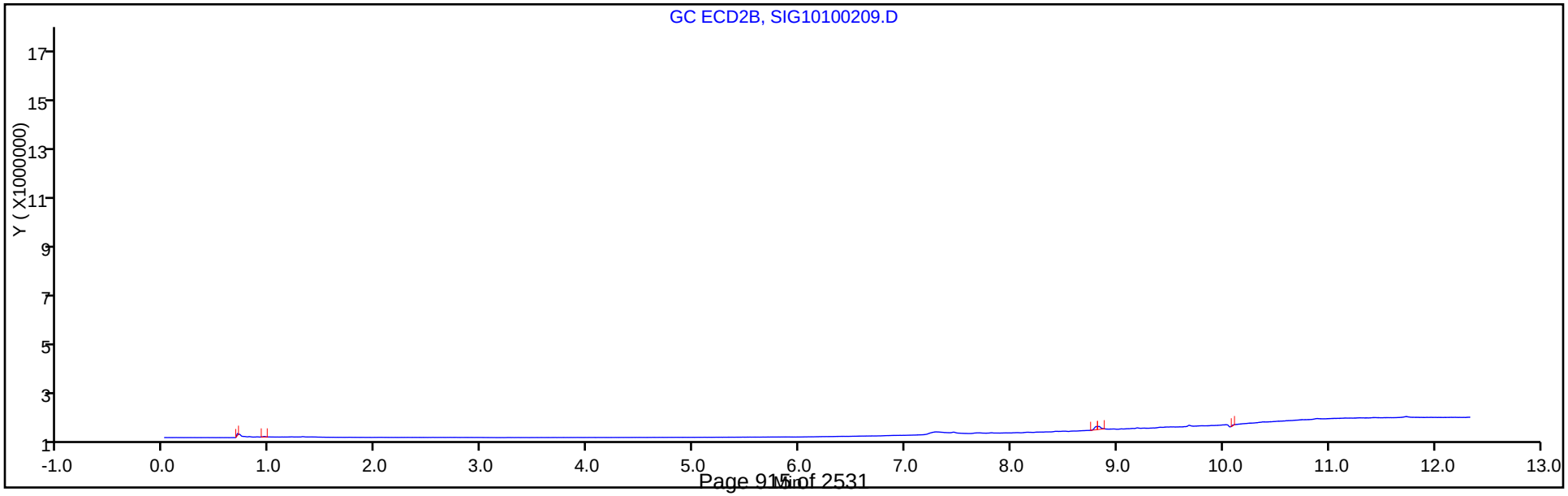
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100209.D

Injection Date:	02-Oct-2017 15:07:28	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std15 1232 1262			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 15:25 Calibration End Date: 10/02/2017 16:57 Calibration ID: 41689

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/10	SIG10100210.D
Level 2	STD01 240-297169/11	SIG10100211.D
Level 3	STD02 240-297169/12	SIG10100212.D
Level 4	STD05 240-297169/13	SIG10100213.D
Level 5	STD1 240-297169/14	SIG10100214.D
Level 6	STD151242 240-297169/15	SIG10100215.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.0224 0.0156	0.0200	0.0199	0.0172	0.0163	Ave		0.0186				14.0		20.0			
PCB-1242 Peak 2	0.0444 0.0269	0.0375	0.0351	0.0316	0.0282	Ave		0.0340				19.2		20.0			
PCB-1242 Peak 3	0.0817 0.0589	0.0750	0.0687	0.0656	0.0599	Ave		0.0683				12.9		20.0			
PCB-1242 Peak 4	0.0352 0.0260	0.0333	0.0299	0.0292	0.0267	Ave		0.0301				12.0		20.0			
PCB-1242 Peak 5	0.0149 0.0110	0.0143	0.0128	0.0123	0.0111	Ave		0.0127				12.7		20.0			
PCB-1268 Peak 1	0.1687 0.1264	0.1532	0.1396	0.1353	0.1248	Ave		0.1413				11.9		20.0			
PCB-1268 Peak 2	0.1690 0.1251	0.1550	0.1426	0.1358	0.1277	Ave		0.1425				11.8		20.0			
PCB-1268 Peak 3	0.1432 0.1078	0.1316	0.1206	0.1159	0.1079	Ave		0.1212				11.6		20.0			
PCB-1268 Peak 4	0.0610 0.0457	0.0555	0.0513	0.0495	0.0457	Ave		0.0515				11.6		20.0			
PCB-1268 Peak 5	0.4041 0.3116	0.3757	0.3511	0.3426	0.3169	Ave		0.3503				10.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 15:25 Calibration End Date: 10/02/2017 16:57 Calibration ID: 41689

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/10	SIG10100210.D
Level 2	STD01 240-297169/11	SIG10100211.D
Level 3	STD02 240-297169/12	SIG10100212.D
Level 4	STD05 240-297169/13	SIG10100213.D
Level 5	STD1 240-297169/14	SIG10100214.D
Level 6	STD151242 240-297169/15	SIG10100215.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Ave	5012580 98502404	8842838	16655328	36859393	69765580	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	BNB	Ave	9963235 169790944	16589543	29393132	67673876	120463557	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	BNB	Ave	18317811 372054200	33125166	57519635	140530428	256053787	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	BNB	Ave	7895308 164499527	14709814	25053176	62579944	114052793	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	BNB	Ave	3331805 69520240	6335186	10705516	26255628	47479960	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 1	BNB	Ave	37825546 798695607	67675635	116974276	290020653	533214324	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 2	BNB	Ave	37887190 790516186	68466375	119423722	291014346	545740932	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 3	BNB	Ave	32110272 681044334	58140613	101029154	248290314	460927390	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 4	BNB	Ave	13677204 288923730	24539785	42990614	106115777	195199310	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 5	BNB	Ave	90602768 1968804280	165988912	294099199	734063504	1354305550	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100210.D
Lims ID: std005 1242 1268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 15:25:48 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-010
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:41 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:03:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.952	1.949	0.003	224198488	0.0500	0.0500	
2	2.392	2.391	0.002	41762783	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	5012580	0.0500	0.0602	
1	4.354	4.354	0.000	9963235	0.0500	0.0654	
1	5.100	5.100	0.000	18317811	0.0500	0.0598	
1	5.302	5.302	0.000	7895308	0.0500	0.0586	
1	5.679	5.679	0.000	3331805	0.0500	0.0584	
		Average of Peak Amounts =				0.0605	
2	4.949	4.949	0.000	835411	0.0500	0.0554	
2	5.629	5.629	0.000	1658076	0.0500	0.0589	
2	6.336	6.336	0.000	3153699	0.0500	0.0569	
2	6.523	6.523	0.000	1231388	0.0500	0.0531	
2	7.122	7.122	0.000	991177	0.0500	0.0557	
		Average of Peak Amounts =				0.0560	
						RPD = 7.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.892	8.892	0.000	37825546	0.0500	0.0597	
1	8.924	8.924	0.000	37887190	0.0500	0.0593	
1	9.088	9.088	0.000	32110272	0.0500	0.0591	
1	9.382	9.382	0.000	13677204	0.0500	0.0593	
1	9.614	9.614	0.000	90602768	0.0500	0.0577	
		Average of Peak Amounts =				0.0590	
2	9.780	9.780	0.000	7564493	0.0500	0.0560	
2	9.818	9.818	0.000	7461869	0.0500	0.0561	
2	10.027	10.027	0.000	6329239	0.0500	0.0562	
2	10.251	10.251	0.000	2605551	0.0500	0.0555	
2	10.517	10.517	0.000	18461746	0.0500	0.0533	
		Average of Peak Amounts =				0.0554	
						RPD = 6.26	

Reagents:

SG4268@.05PPM_00011 Amount Added: 1.00 Units: mL

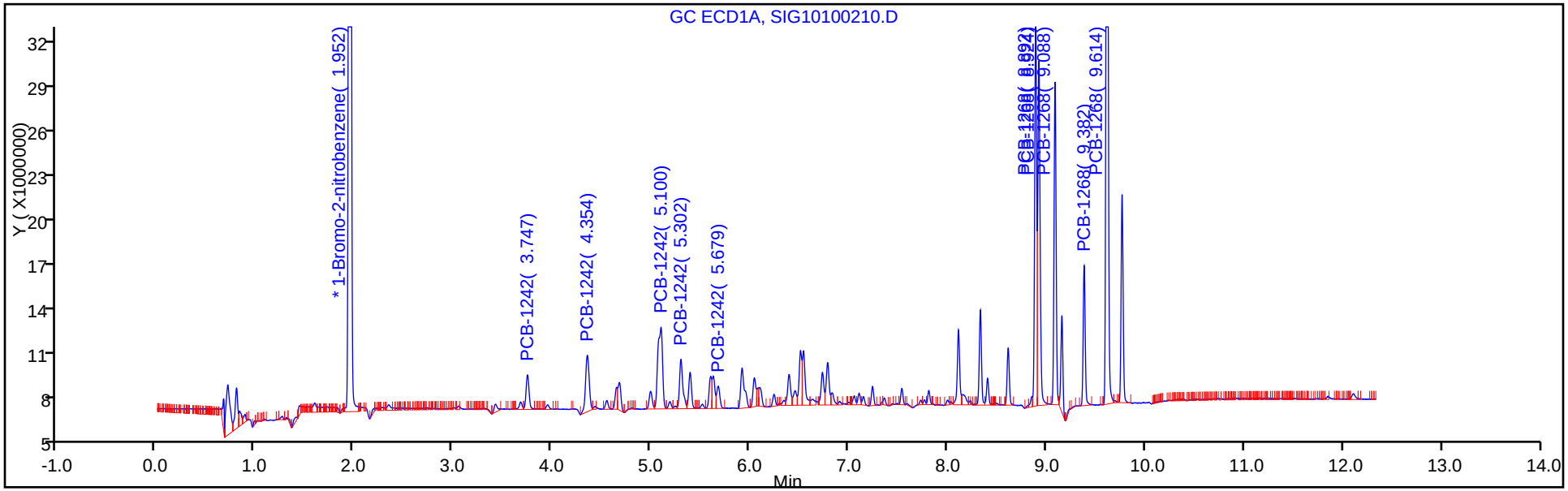
Report Date: 03-Oct-2017 08:45:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

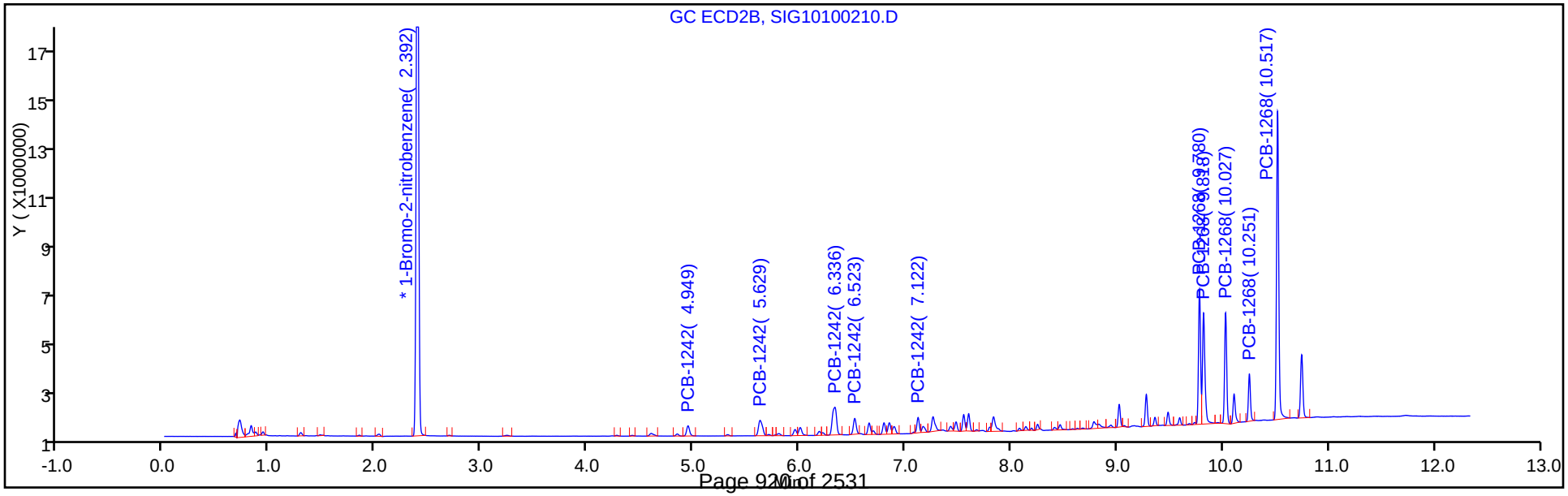
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100210.D

Injection Date:	02-Oct-2017 15:25:48	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1242 1268			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100211.D
Lims ID: std01 1242 1268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 15:44:10 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-011
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:48 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:05:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	220906031	0.0500	0.0500	
2	2.391	2.391	0.001	41382135	0.0500	0.0500	
5 PCB-1242							M
1	3.747	3.747	0.000	8842838	0.1000	0.1078	
1	4.353	4.354	-0.001	16589543	0.1000	0.1106	
1	5.100	5.100	0.000	33125166	0.1000	0.1098	M
1	5.300	5.302	-0.002	14709814	0.1000	0.1108	
1	5.679	5.679	0.000	6335186	0.1000	0.1127	
		Average of Peak Amounts =				0.1103	
2	4.948	4.949	-0.001	1565249	0.1000	0.1047	
2	5.629	5.629	0.000	3051543	0.1000	0.1093	
2	6.335	6.336	-0.001	5719174	0.1000	0.1042	
2	6.523	6.523	0.000	2477297	0.1000	0.1078	
2	7.121	7.122	-0.001	1951468	0.1000	0.1107	
		Average of Peak Amounts =				0.1073	
						RPD = 2.76	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.890	8.892	-0.002	67675635	0.1000	0.1084	
1	8.924	8.924	0.000	68466375	0.1000	0.1087	
1	9.087	9.088	-0.001	58140613	0.1000	0.1086	
1	9.382	9.382	0.000	24539785	0.1000	0.1079	
1	9.615	9.614	0.001	165988912	0.1000	0.1072	
		Average of Peak Amounts =				0.1082	
2	9.780	9.780	0.000	13643052	0.1000	0.1020	
2	9.818	9.818	0.000	13353627	0.1000	0.1013	
2	10.026	10.027	-0.001	11430684	0.1000	0.1025	
2	10.251	10.251	0.000	4839339	0.1000	0.1039	
2	10.517	10.517	0.000	34260722	0.1000	0.0998	
		Average of Peak Amounts =				0.1019	
						RPD = 5.97	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@.1PPM_00012 Amount Added: 1.00 Units: mL

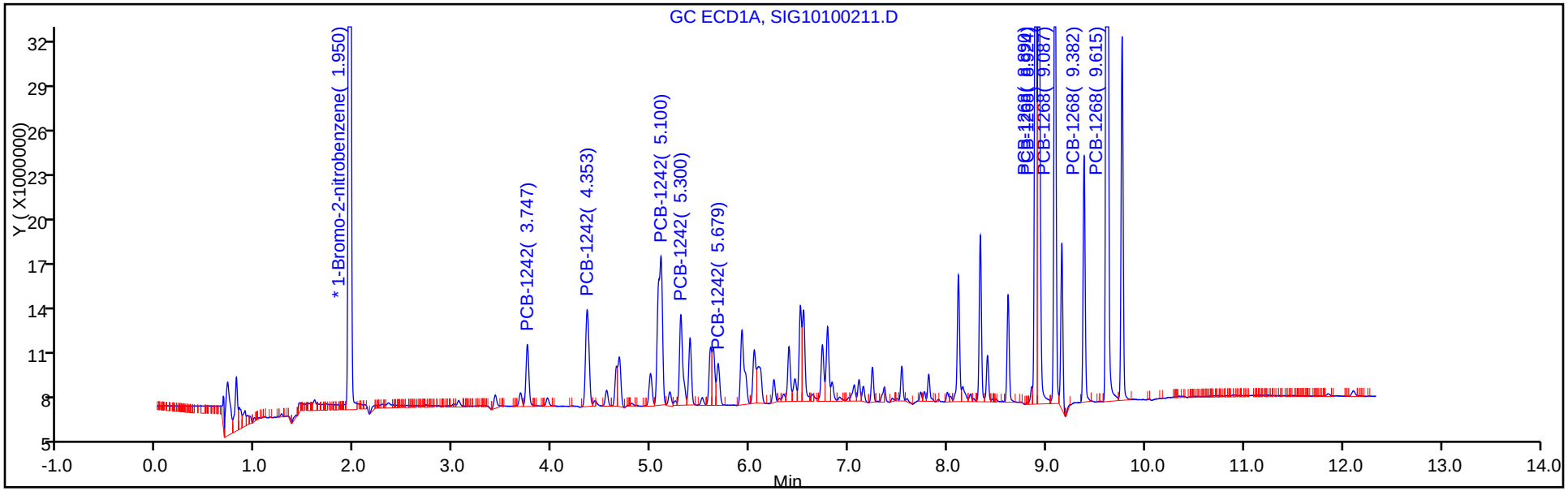
Report Date: 03-Oct-2017 08:45:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

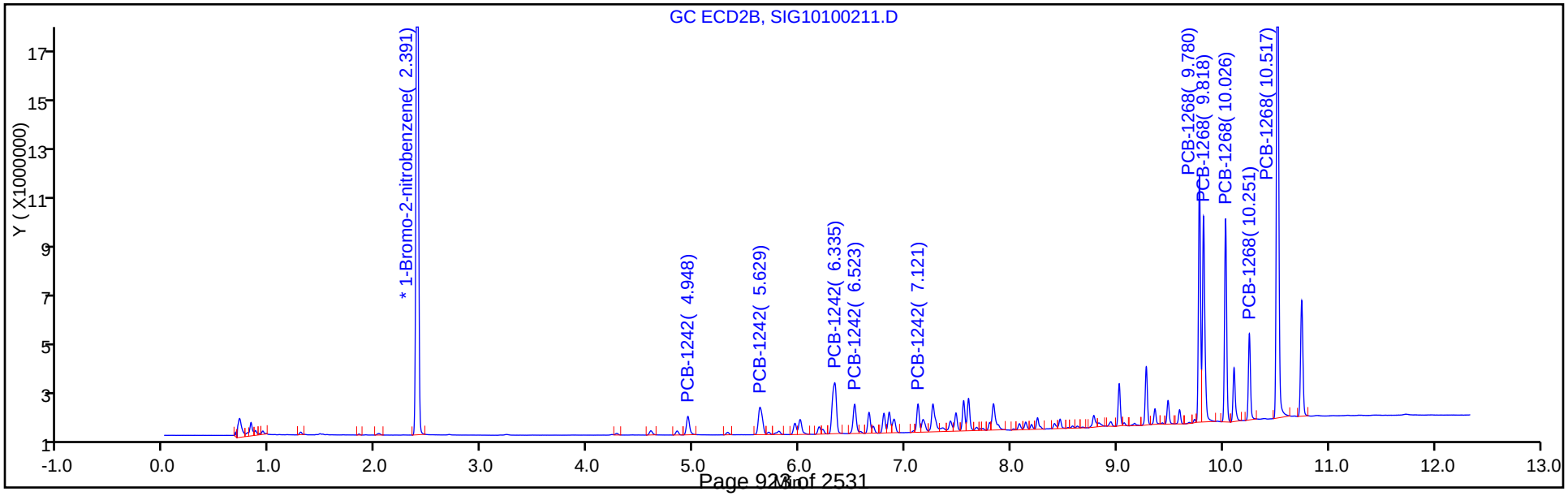
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100211.D

Injection Date:	02-Oct-2017 15:44:10	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1242 1268			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:45:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100211.D

Injection Date: 02-Oct-2017 15:44:10 Instrument ID: A2HP13

Lims ID: std01 1242 1268

Client ID:

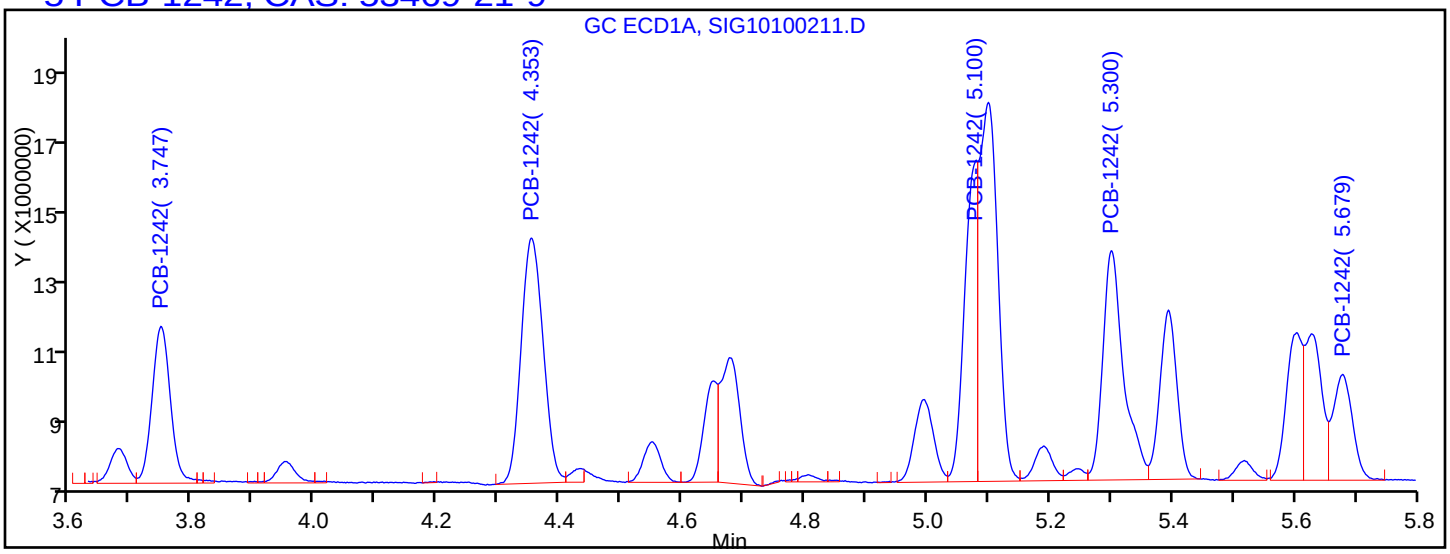
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

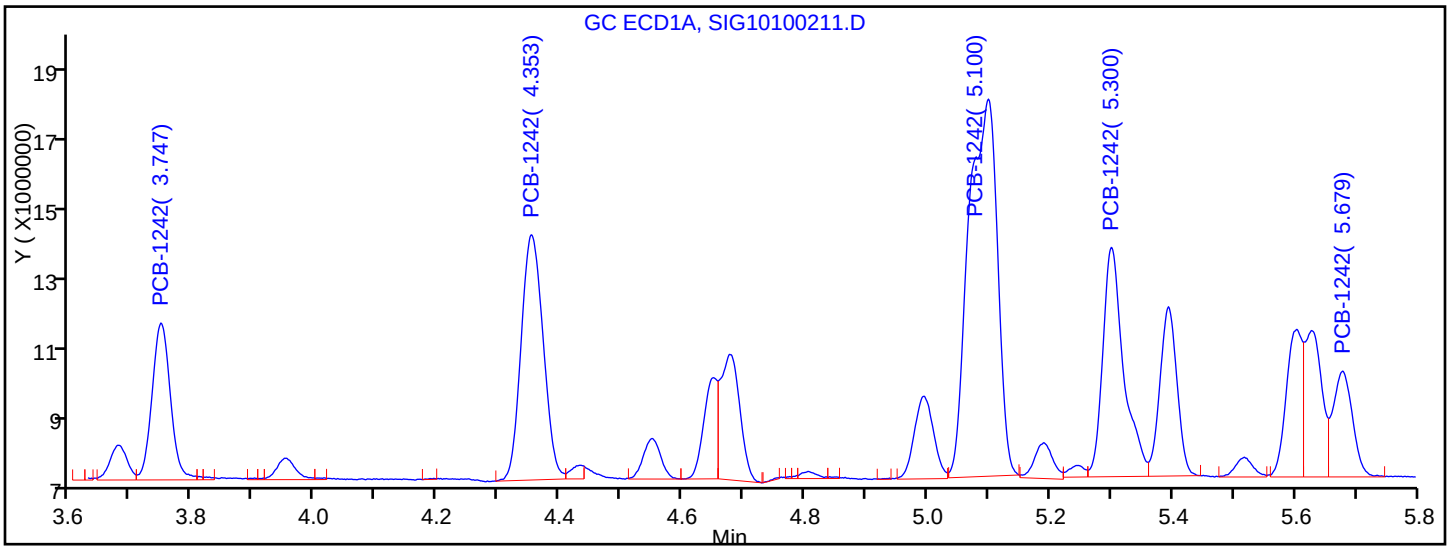
Column: Detector GC ECD1A

5 PCB-1242, CAS: 53469-21-9



Processing Integration Results

3.747	Response = 8842838
4.353	Response = 16589543
5.100	Response = 21134775
5.300	Response = 14709814
5.679	Response = 6335186



Manual Integration Results

3.747	Response = 8842838	
4.353	Response = 16589543	
5.100	Response = 33125166	M
5.300	Response = 14709814	
5.679	Response = 6335186	

Reviewer: hassl, 03-Oct-2017 06:05:26

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100212.D
Lims ID: std02 1242 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 16:02:27 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-012
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:56 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:05:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.951	1.949	0.002	209407197	0.0500	0.0500	
2	2.392	2.391	0.001	38873340	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	16655328	0.2000	0.2142	
1	4.353	4.354	-0.001	29393132	0.2000	0.2067	
1	5.099	5.100	-0.001	57519635	0.2000	0.2011	
1	5.302	5.302	0.000	25053176	0.2000	0.1990	
1	5.678	5.679	-0.001	10705516	0.2000	0.2009	
		Average of Peak Amounts =				0.2044	
2	4.948	4.949	-0.001	2890135	0.2000	0.2057	
2	5.631	5.629	0.002	5434794	0.2000	0.2073	
2	6.336	6.336	0.000	10205384	0.2000	0.1978	
2	6.522	6.523	-0.001	4516625	0.2000	0.2092	
2	7.122	7.122	0.000	3452221	0.2000	0.2085	
		Average of Peak Amounts =				0.2057	
						RPD = 0.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.892	8.892	0.000	116974276	0.2000	0.1976	
1	8.924	8.924	0.000	119423722	0.2000	0.2001	
1	9.087	9.088	-0.001	101029154	0.2000	0.1991	
1	9.382	9.382	0.000	42990614	0.2000	0.1994	
1	9.614	9.614	0.000	294099199	0.2000	0.2004	
		Average of Peak Amounts =				0.1993	
2	9.780	9.780	0.000	24148601	0.2000	0.1922	
2	9.819	9.818	0.001	23880665	0.2000	0.1928	
2	10.027	10.027	0.000	20172303	0.2000	0.1925	
2	10.252	10.251	0.001	8622495	0.2000	0.1972	
2	10.517	10.517	0.000	62230902	0.2000	0.1930	
		Average of Peak Amounts =				0.1935	
						RPD = 2.95	

Reagents:

SG4268@.2PPM_00012 Amount Added: 1.00 Units: mL

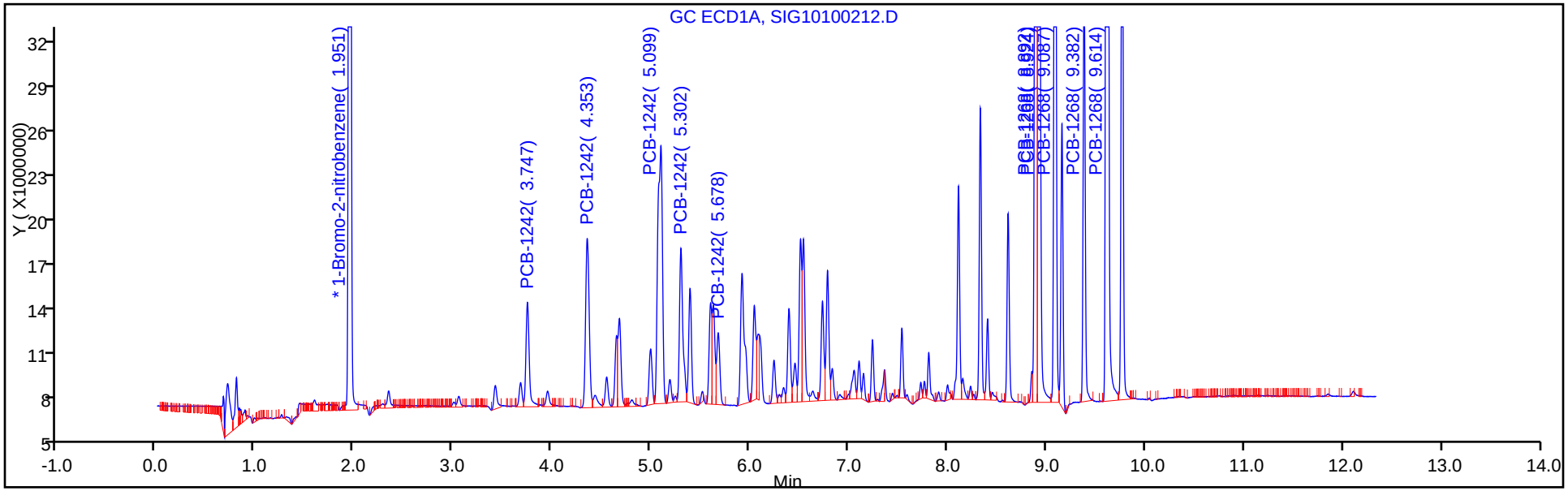
Report Date: 03-Oct-2017 08:46:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

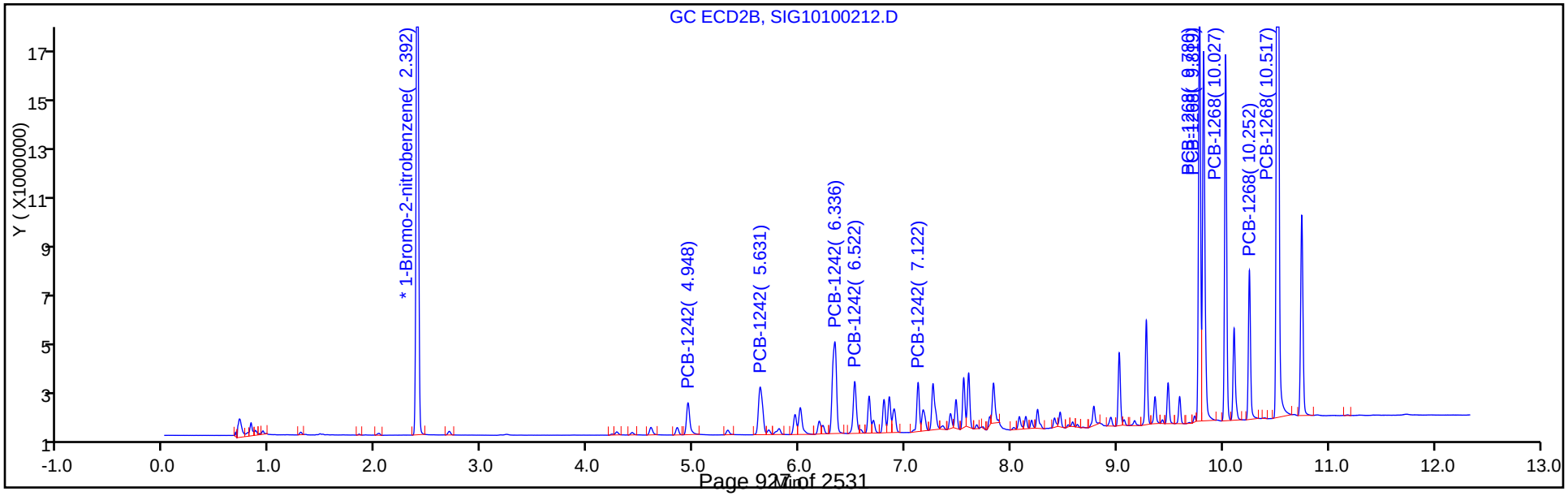
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100212.D

Injection Date:	02-Oct-2017 16:02:27	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1242 1268			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100213.D
Lims ID: std05 1242 1268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 16:20:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-013
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:06:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	214283571	0.0500	0.0500	
2	2.391	2.391	0.001	39958481	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	36859393	0.5000	0.4633	
1	4.353	4.354	-0.001	67673876	0.5000	0.4651	
1	5.099	5.100	-0.001	140530428	0.5000	0.4802	
1	5.301	5.302	-0.001	62579944	0.5000	0.4858	
1	5.678	5.679	-0.001	26255628	0.5000	0.4815	
		Average of Peak Amounts =				0.4752	
2	4.948	4.949	-0.001	6810016	0.5000	0.4716	
2	5.630	5.629	0.001	12742765	0.5000	0.4727	
2	6.334	6.336	-0.002	25585872	0.5000	0.4825	
2	6.524	6.523	0.001	10719039	0.5000	0.4830	
2	7.121	7.122	-0.001	7947131	0.5000	0.4670	
		Average of Peak Amounts =				0.4754	
						RPD = 0.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.890	8.892	-0.002	290020653	0.5000	0.4788	
1	8.923	8.924	-0.001	291014346	0.5000	0.4764	
1	9.086	9.088	-0.002	248290314	0.5000	0.4782	
1	9.381	9.382	-0.001	106115777	0.5000	0.4811	
1	9.614	9.614	0.000	734063504	0.5000	0.4889	
		Average of Peak Amounts =				0.4807	
2	9.780	9.780	0.000	63234136	0.5000	0.4897	
2	9.819	9.818	0.001	61979330	0.5000	0.4868	
2	10.026	10.027	-0.001	52757386	0.5000	0.4897	
2	10.250	10.251	-0.001	22102391	0.5000	0.4917	
2	10.517	10.517	0.000	166223402	0.5000	0.5016	
		Average of Peak Amounts =				0.4919	
						RPD = 2.31	

Reagents:

SG4268@0.5PPM_00025 Amount Added: 1.00 Units: mL

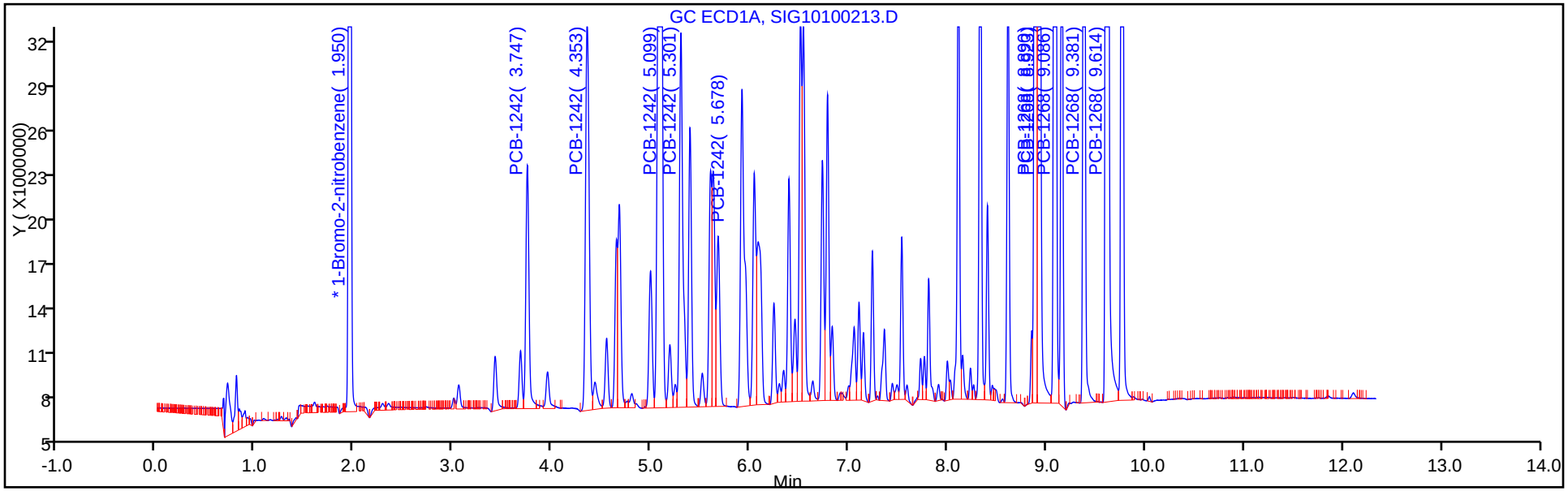
Report Date: 03-Oct-2017 08:46:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

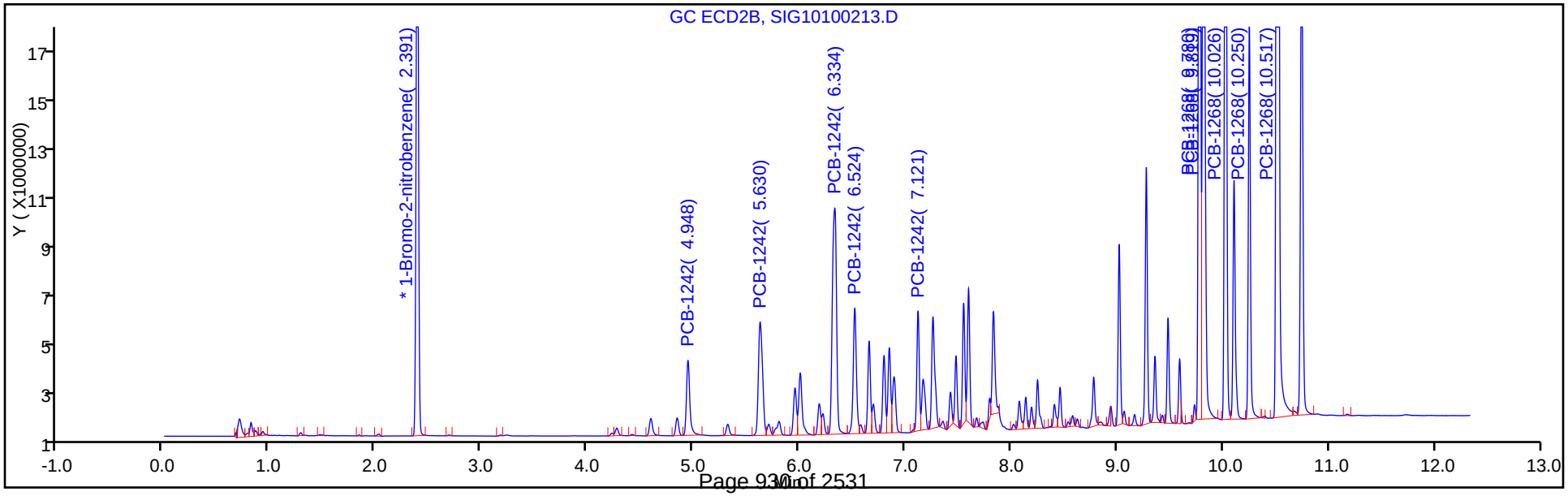
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100213.D

Injection Date:	02-Oct-2017 16:20:55	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1242 1268			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100214.D
Lims ID: std1 1242 1268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 16:39:12 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-014
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:15 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:06:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	213679290	0.0500	0.0500	
2	2.391	2.391	0.000	39464363	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	69765580	1.00	0.8795	
1	4.353	4.354	-0.001	120463557	1.00	0.8302	
1	5.099	5.100	-0.001	256053787	1.00	0.8774	
1	5.300	5.302	-0.002	114052793	1.00	0.8879	
1	5.677	5.679	-0.002	47479960	1.00	0.8731	
		Average of Peak Amounts =				0.8696	
2	4.948	4.949	-0.001	13722962	1.00	0.9623	
2	5.629	5.629	0.000	23713568	1.00	0.8908	
2	6.334	6.336	-0.002	49164813	1.00	0.9388	
2	6.523	6.523	0.000	20571025	1.00	0.9386	
2	7.121	7.122	-0.001	15319713	1.00	0.9115	
		Average of Peak Amounts =				0.9284	
						RPD = 6.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.891	8.892	-0.001	533214324	1.00	0.8827	
1	8.923	8.924	-0.001	545740932	1.00	0.8960	
1	9.087	9.088	-0.001	460927390	1.00	0.8902	
1	9.381	9.382	-0.001	195199310	1.00	0.8875	
1	9.614	9.614	0.000	1354305550	1.00	0.9046	
		Average of Peak Amounts =				0.8922	
2	9.779	9.780	-0.001	121979346	1.00	0.9564	
2	9.818	9.818	0.000	121624220	1.00	0.9673	
2	10.026	10.027	-0.001	101590809	1.00	0.9549	
2	10.250	10.251	-0.001	41987882	1.00	0.9457	
2	10.517	10.517	0.000	320503651	1.00	0.9792	
		Average of Peak Amounts =				0.9607	
						RPD = 7.39	

Reagents:

SG42/68@1.0PP_00018 Amount Added: 1.00 Units: mL

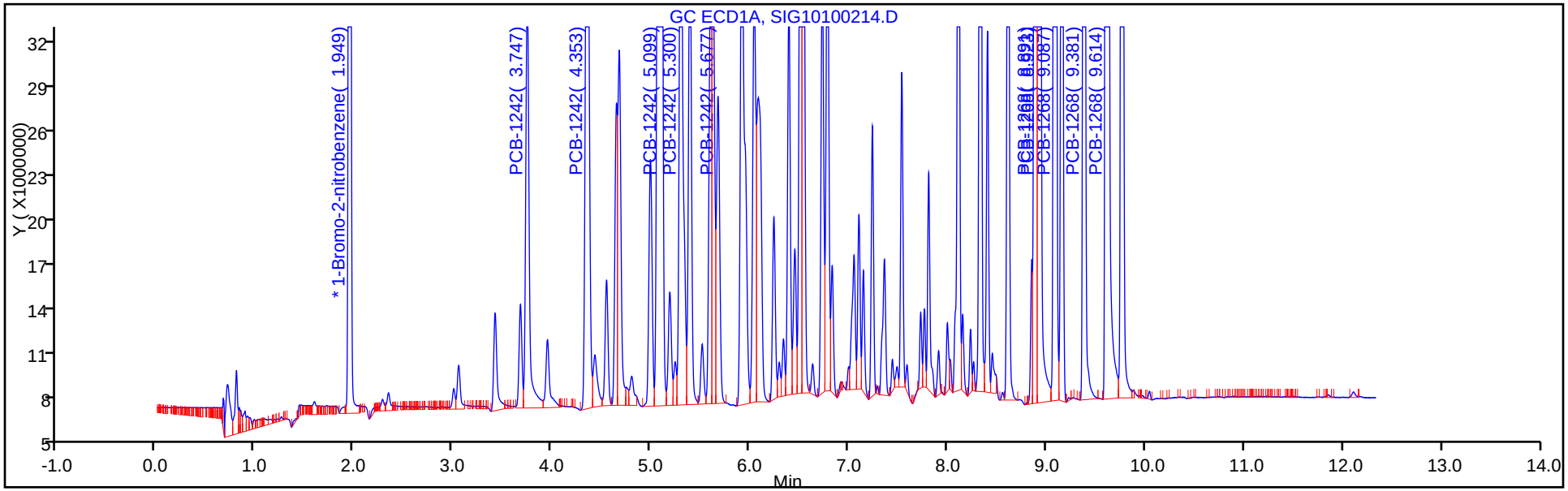
Report Date: 03-Oct-2017 08:46:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

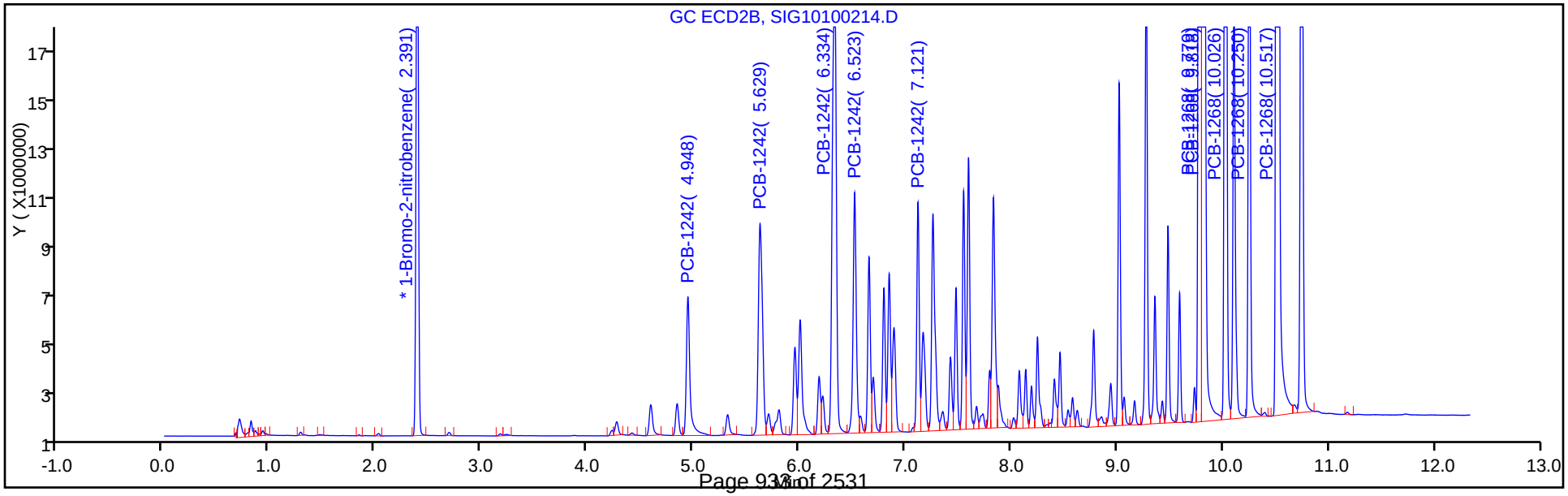
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100214.D

Injection Date:	02-Oct-2017 16:39:12	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1242 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100215.D
Lims ID: std151242 1268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 16:57:33 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-015
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:20 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:07:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	210613582	0.0500	0.0500	
2	2.391	2.391	0.000	39758217	0.0500	0.0500	
5 PCB-1242							M
1	3.748	3.747	0.001	98502404	1.50	1.26	
1	4.353	4.354	-0.001	169790944	1.50	1.19	
1	5.098	5.100	-0.002	372054200	1.50	1.29	
1	5.301	5.302	-0.001	164499527	1.50	1.30	
1	5.678	5.679	-0.001	69520240	1.50	1.30	M
		Average of Peak Amounts =				1.27	
2	4.948	4.949	-0.001	19655792	1.50	1.37	
2	5.629	5.629	0.000	34488709	1.50	1.29	
2	6.335	6.336	-0.001	73377053	1.50	1.39	
2	6.523	6.523	0.000	30119968	1.50	1.36	
2	7.122	7.122	0.000	22605574	1.50	1.34	
		Average of Peak Amounts =				1.35	
						RPD = 6.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							M
1	8.890	8.892	-0.002	798695607	1.50	1.34	M
1	8.923	8.924	-0.001	790516186	1.50	1.32	M
1	9.086	9.088	-0.002	681044334	1.50	1.33	M
1	9.381	9.382	-0.001	288923730	1.50	1.33	M
1	9.613	9.614	-0.001	1968804280	1.50	1.33	M
		Average of Peak Amounts =				1.33	
2	9.778	9.780	-0.002	185384110	1.50	1.44	
2	9.817	9.818	-0.001	182508469	1.50	1.44	
2	10.025	10.027	-0.002	153428710	1.50	1.43	
2	10.249	10.251	-0.002	62831338	1.50	1.40	
2	10.517	10.517	0.000	488930190	1.50	1.48	
		Average of Peak Amounts =				1.44	
						RPD = 7.83	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@1.5PPM_00003 Amount Added: 1.00 Units: mL

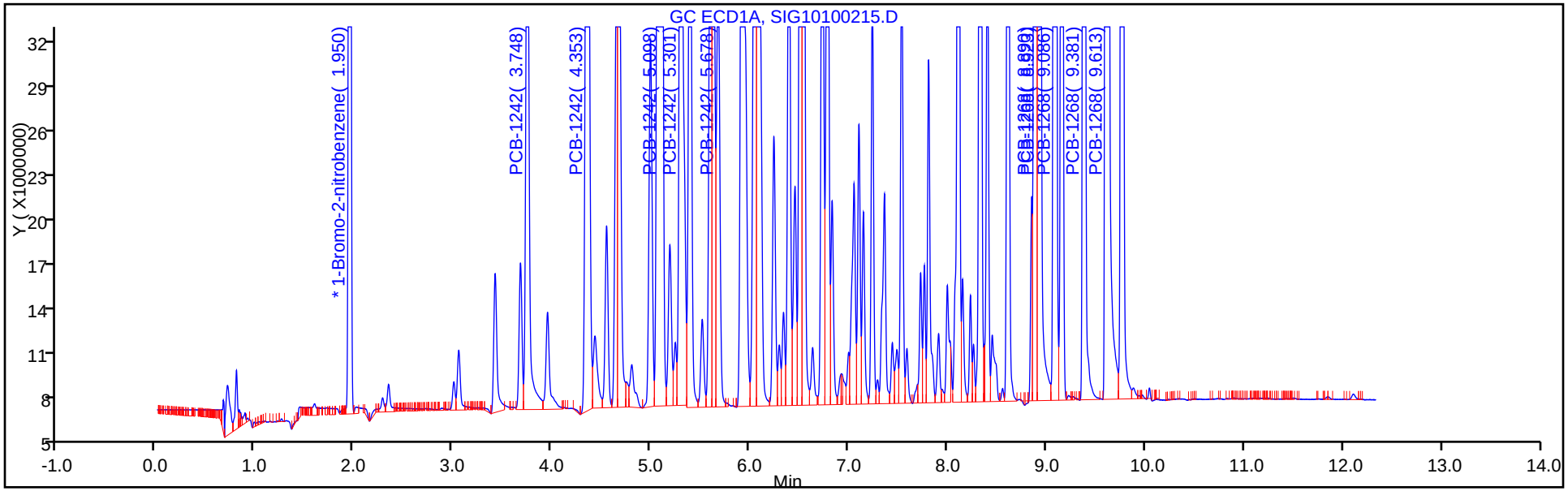
Report Date: 03-Oct-2017 08:46:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

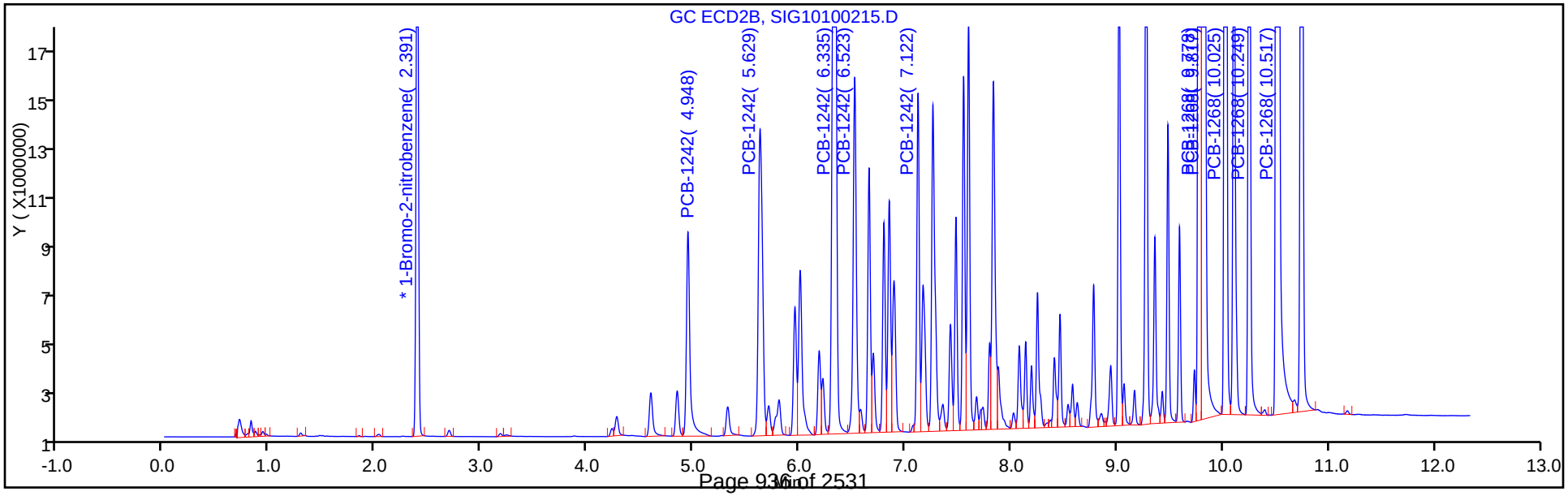
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100215.D

Injection Date:	02-Oct-2017 16:57:33	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std151242 1268			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:46:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100215.D

Injection Date: 02-Oct-2017 16:57:33 Instrument ID: A2HP13

Lims ID: std151242 1268

Client ID:

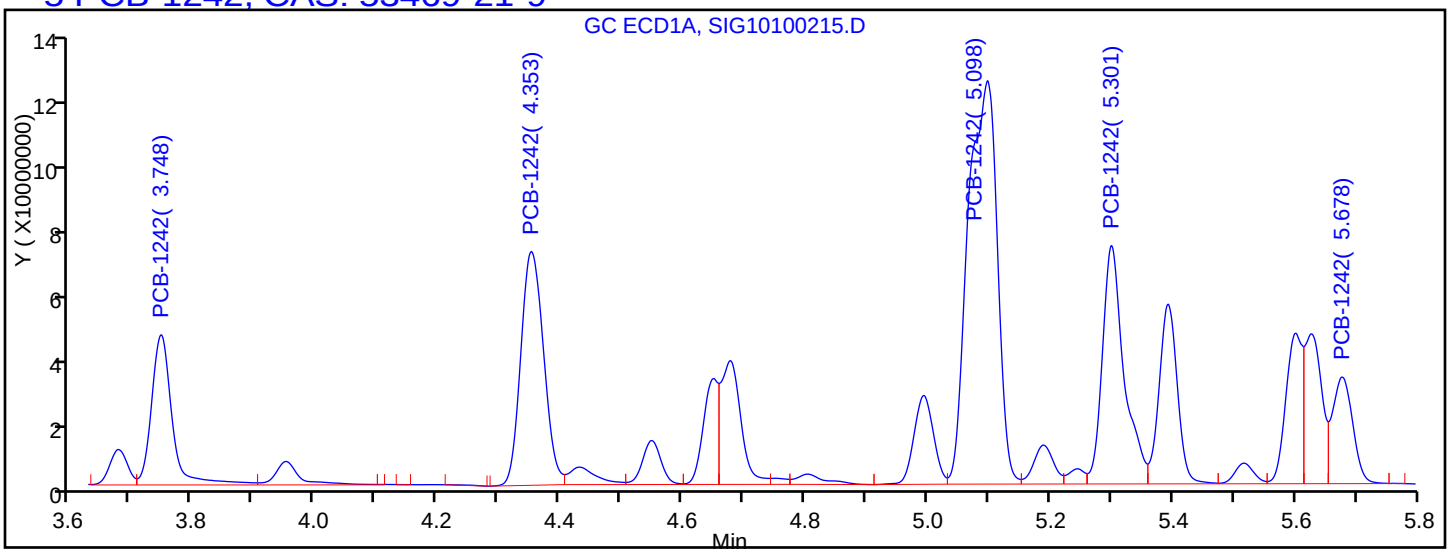
Operator ID: ALS Bottle#: 15 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

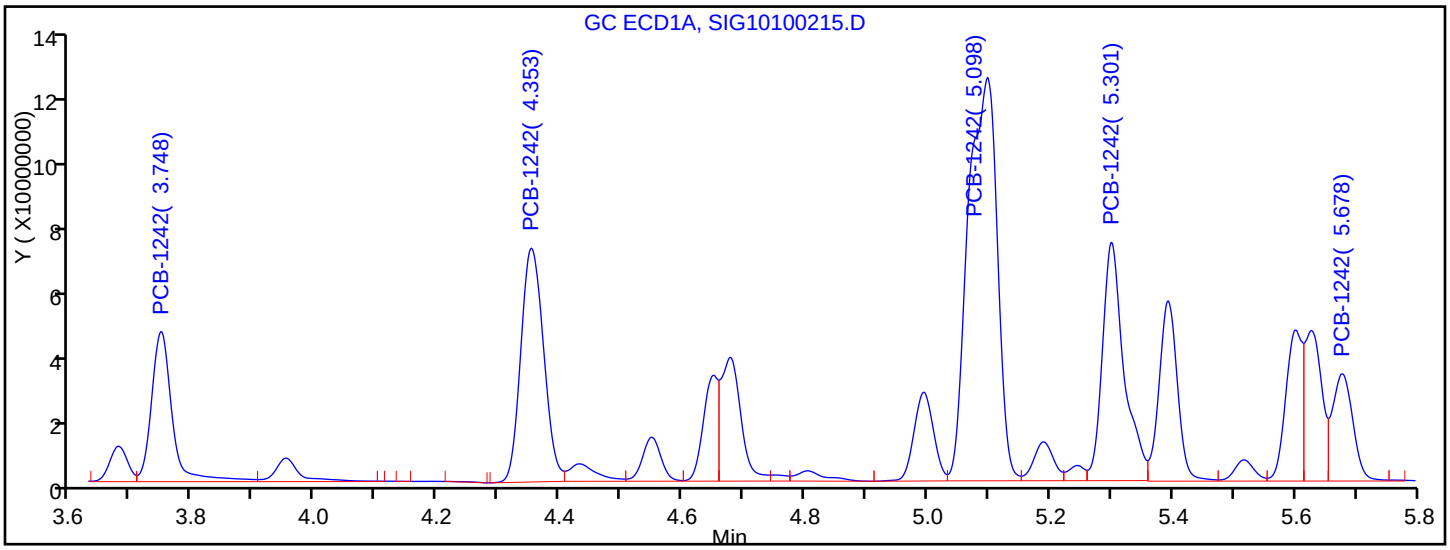
Column: Detector GC ECD1A

5 PCB-1242, CAS: 53469-21-9



Processing Integration Results

3.748	Response = 98502404
4.353	Response = 169790944
5.098	Response = 372054200
5.301	Response = 164499527
5.678	Response = 68413037



Manual Integration Results

3.748	Response = 98502404	
4.353	Response = 169790944	
5.098	Response = 372054200	
5.301	Response = 164499527	
5.678	Response = 69520240	M

Reviewer: hassl, 03-Oct-2017 06:06:57

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

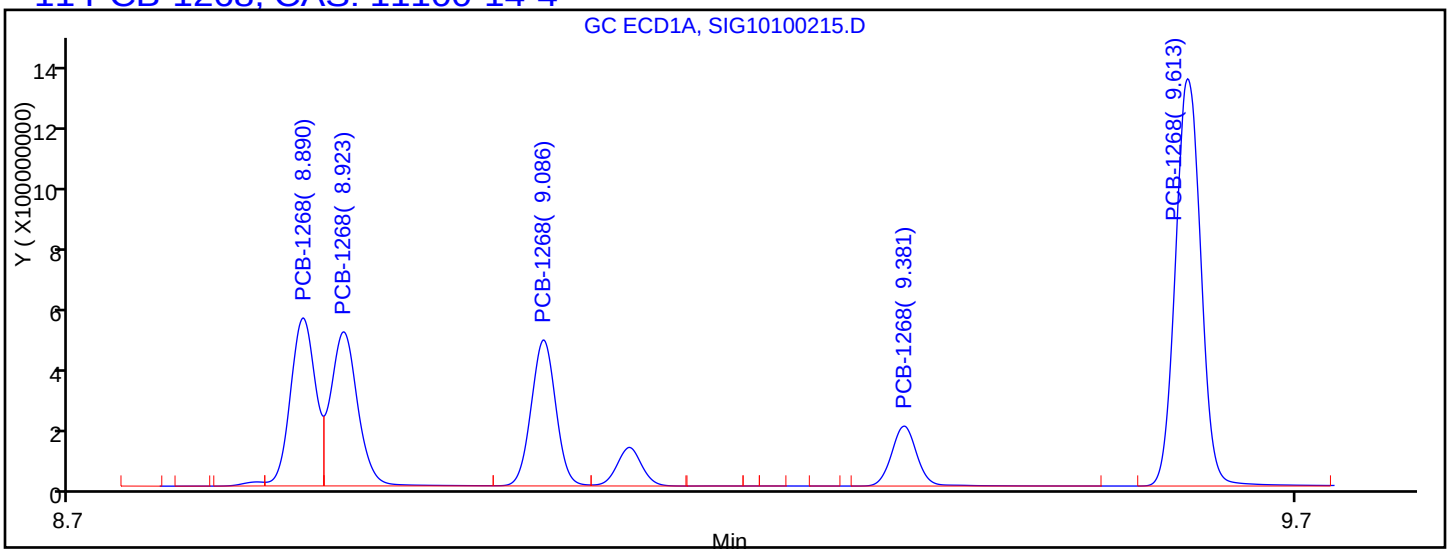
Report Date: 03-Oct-2017 08:46:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100215.D

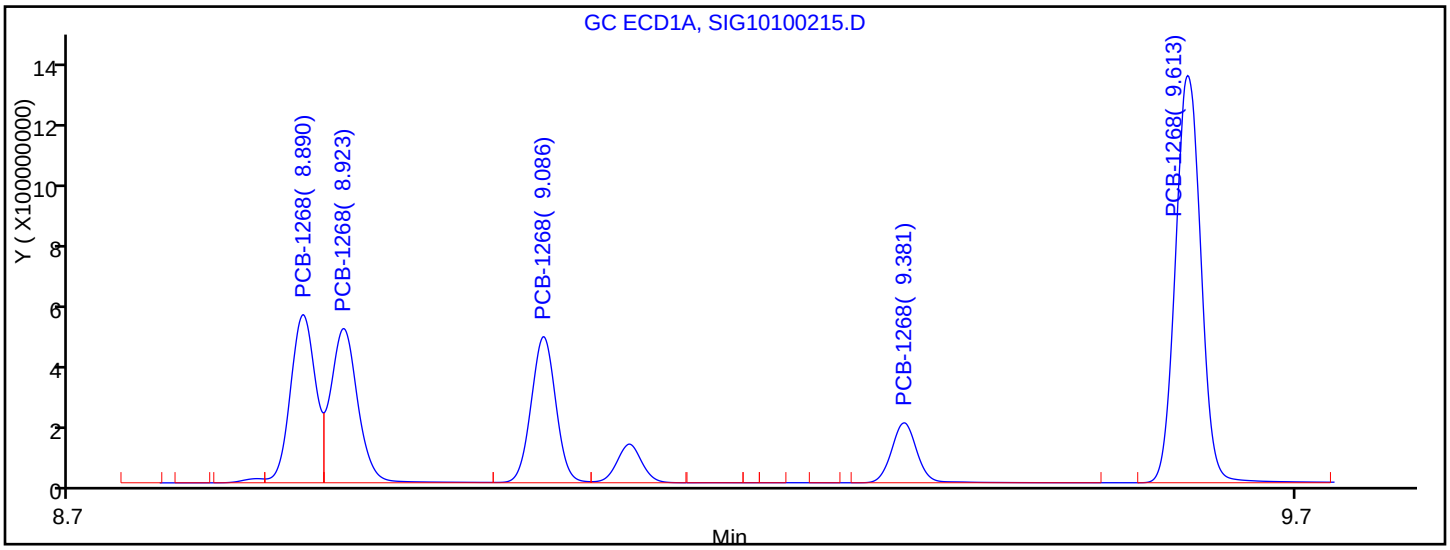
Injection Date:	02-Oct-2017 16:57:33	Instrument ID:	A2HP13		
Lims ID:	std151242 1268				
Client ID:					
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

11 PCB-1268, CAS: 11100-14-4



Processing Integration Results

8.890	Response = 797347223
8.923	Response = 786683266
9.086	Response = 679128921
9.381	Response = 288930646
9.613	Response = 1968410749



Manual Integration Results

8.890	Response = 798695607	M
8.923	Response = 790516186	M
9.086	Response = 681044334	M
9.381	Response = 288923730	M
9.613	Response = 1968804280	M

Reviewer: hassl, 03-Oct-2017 06:06:57

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 15:25 Calibration End Date: 10/02/2017 16:57 Calibration ID: 41690

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/10	SIG10100210.D
Level 2	STD01 240-297169/11	SIG10100211.D
Level 3	STD02 240-297169/12	SIG10100212.D
Level 4	STD05 240-297169/13	SIG10100213.D
Level 5	STD1 240-297169/14	SIG10100214.D
Level 6	STD151242 240-297169/15	SIG10100215.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.0200 0.0165	0.0189	0.0186	0.0170	0.0174	Ave		0.0181				7.3		20.0			
PCB-1242 Peak 2	0.0397 0.0289	0.0369	0.0350	0.0319	0.0300	Ave		0.0337				12.4		20.0			
PCB-1242 Peak 3	0.0755 0.0615	0.0691	0.0656	0.0640	0.0623	Ave		0.0663				7.9		20.0			
PCB-1242 Peak 4	0.0295 0.0253	0.0299	0.0290	0.0268	0.0261	Ave		0.0278				7.1		20.0			
PCB-1242 Peak 5	0.0237 0.0190	0.0236	0.0222	0.0199	0.0194	Ave		0.0213				10.1		20.0			
PCB-1268 Peak 1	0.1811 0.1554	0.1648	0.1553	0.1582	0.1545	Ave		0.1616				6.4		20.0			
PCB-1268 Peak 2	0.1787 0.1530	0.1613	0.1536	0.1551	0.1541	Ave		0.1593				6.3		20.0			
PCB-1268 Peak 3	0.1516 0.1286	0.1381	0.1297	0.1320	0.1287	Ave		0.1348				6.6		20.0			
PCB-1268 Peak 4	0.0624 0.0527	0.0585	0.0555	0.0553	0.0532	Ave		0.0563				6.5		20.0			
PCB-1268 Peak 5	0.4421 0.4099	0.4140	0.4002	0.4160	0.4061	Ave		0.4147				3.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-2 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 15:25 | Calibration End Date: 10/02/2017 16:57 | Calibration ID: 41690

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/10	SIG10100210.D
Level 2	STD01 240-297169/11	SIG10100211.D
Level 3	STD02 240-297169/12	SIG10100212.D
Level 4	STD05 240-297169/13	SIG10100213.D
Level 5	STD1 240-297169/14	SIG10100214.D
Level 6	STD151242 240-297169/15	SIG10100215.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Ave	835411 19655792	1565249	2890135	6810016	13722962	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	BNB	Ave	1658076 34488709	3051543	5434794	12742765	23713568	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	BNB	Ave	3153699 73377053	5719174	10205384	25585872	49164813	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	BNB	Ave	1231388 30119968	2477297	4516625	10719039	20571025	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	BNB	Ave	991177 22605574	1951468	3452221	7947131	15319713	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 1	BNB	Ave	7564493 185384110	13643052	24148601	63234136	121979346	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 2	BNB	Ave	7461869 182508469	13353627	23880665	61979330	121624220	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 3	BNB	Ave	6329239 153428710	11430684	20172303	52757386	101590809	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 4	BNB	Ave	2605551 62831338	4839339	8622495	22102391	41987882	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1268 Peak 5	BNB	Ave	18461746 488930190	34260722	62230902	166223402	320503651	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100210.D
Lims ID: std005 1242 1268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 15:25:48 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-010
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:41 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:03:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.952	1.949	0.003	224198488	0.0500	0.0500	
2	2.392	2.391	0.002	41762783	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	5012580	0.0500	0.0602	
1	4.354	4.354	0.000	9963235	0.0500	0.0654	
1	5.100	5.100	0.000	18317811	0.0500	0.0598	
1	5.302	5.302	0.000	7895308	0.0500	0.0586	
1	5.679	5.679	0.000	3331805	0.0500	0.0584	
		Average of Peak Amounts =				0.0605	
2	4.949	4.949	0.000	835411	0.0500	0.0554	
2	5.629	5.629	0.000	1658076	0.0500	0.0589	
2	6.336	6.336	0.000	3153699	0.0500	0.0569	
2	6.523	6.523	0.000	1231388	0.0500	0.0531	
2	7.122	7.122	0.000	991177	0.0500	0.0557	
		Average of Peak Amounts =				0.0560	
						RPD = 7.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.892	8.892	0.000	37825546	0.0500	0.0597	
1	8.924	8.924	0.000	37887190	0.0500	0.0593	
1	9.088	9.088	0.000	32110272	0.0500	0.0591	
1	9.382	9.382	0.000	13677204	0.0500	0.0593	
1	9.614	9.614	0.000	90602768	0.0500	0.0577	
		Average of Peak Amounts =				0.0590	
2	9.780	9.780	0.000	7564493	0.0500	0.0560	
2	9.818	9.818	0.000	7461869	0.0500	0.0561	
2	10.027	10.027	0.000	6329239	0.0500	0.0562	
2	10.251	10.251	0.000	2605551	0.0500	0.0555	
2	10.517	10.517	0.000	18461746	0.0500	0.0533	
		Average of Peak Amounts =				0.0554	
						RPD = 6.26	

Reagents:

SG4268@.05PPM_00011 Amount Added: 1.00 Units: mL

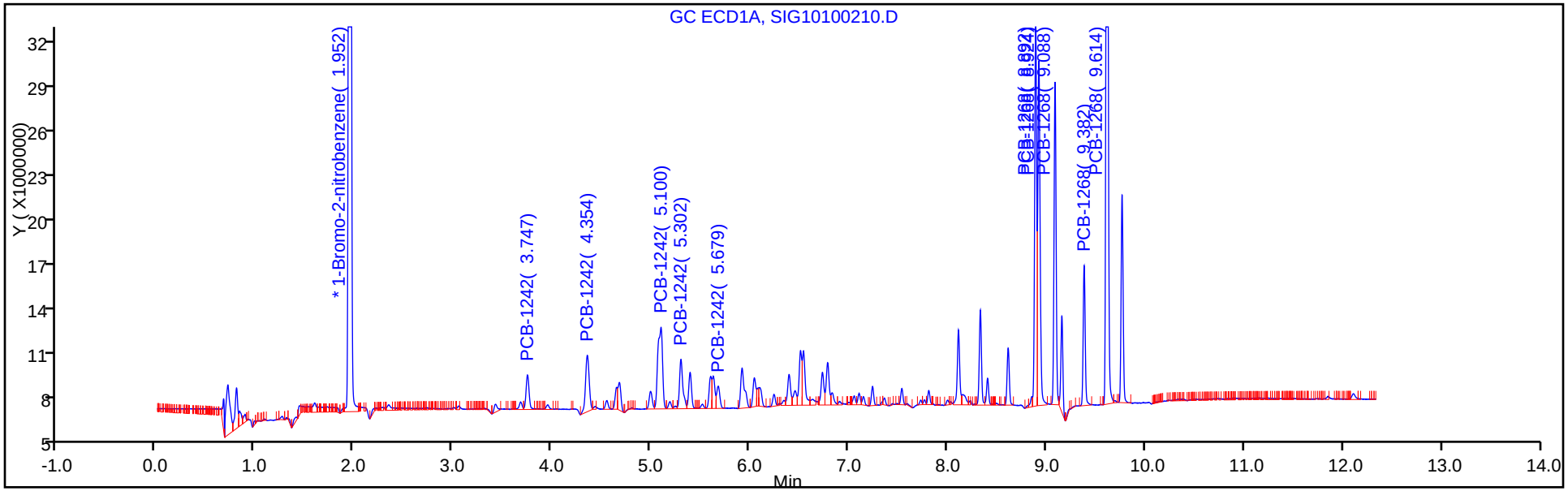
Report Date: 03-Oct-2017 08:45:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

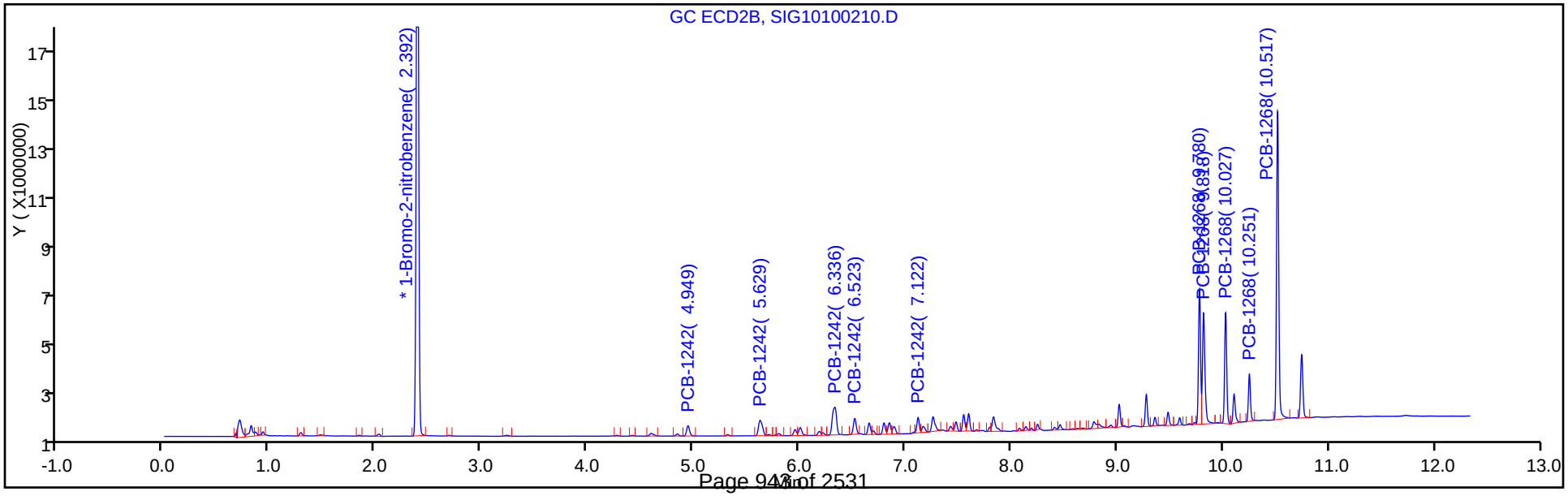
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100210.D

Injection Date:	02-Oct-2017 15:25:48	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1242 1268			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100211.D
Lims ID: std01 1242 1268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 15:44:10 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-011
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:48 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:05:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	220906031	0.0500	0.0500	
2	2.391	2.391	0.001	41382135	0.0500	0.0500	
5 PCB-1242							M
1	3.747	3.747	0.000	8842838	0.1000	0.1078	
1	4.353	4.354	-0.001	16589543	0.1000	0.1106	
1	5.100	5.100	0.000	33125166	0.1000	0.1098	M
1	5.300	5.302	-0.002	14709814	0.1000	0.1108	
1	5.679	5.679	0.000	6335186	0.1000	0.1127	
		Average of Peak Amounts =				0.1103	
2	4.948	4.949	-0.001	1565249	0.1000	0.1047	
2	5.629	5.629	0.000	3051543	0.1000	0.1093	
2	6.335	6.336	-0.001	5719174	0.1000	0.1042	
2	6.523	6.523	0.000	2477297	0.1000	0.1078	
2	7.121	7.122	-0.001	1951468	0.1000	0.1107	
		Average of Peak Amounts =				0.1073	
						RPD = 2.76	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.890	8.892	-0.002	67675635	0.1000	0.1084	
1	8.924	8.924	0.000	68466375	0.1000	0.1087	
1	9.087	9.088	-0.001	58140613	0.1000	0.1086	
1	9.382	9.382	0.000	24539785	0.1000	0.1079	
1	9.615	9.614	0.001	165988912	0.1000	0.1072	
		Average of Peak Amounts =				0.1082	
2	9.780	9.780	0.000	13643052	0.1000	0.1020	
2	9.818	9.818	0.000	13353627	0.1000	0.1013	
2	10.026	10.027	-0.001	11430684	0.1000	0.1025	
2	10.251	10.251	0.000	4839339	0.1000	0.1039	
2	10.517	10.517	0.000	34260722	0.1000	0.0998	
		Average of Peak Amounts =				0.1019	
						RPD = 5.97	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@.1PPM_00012 Amount Added: 1.00 Units: mL

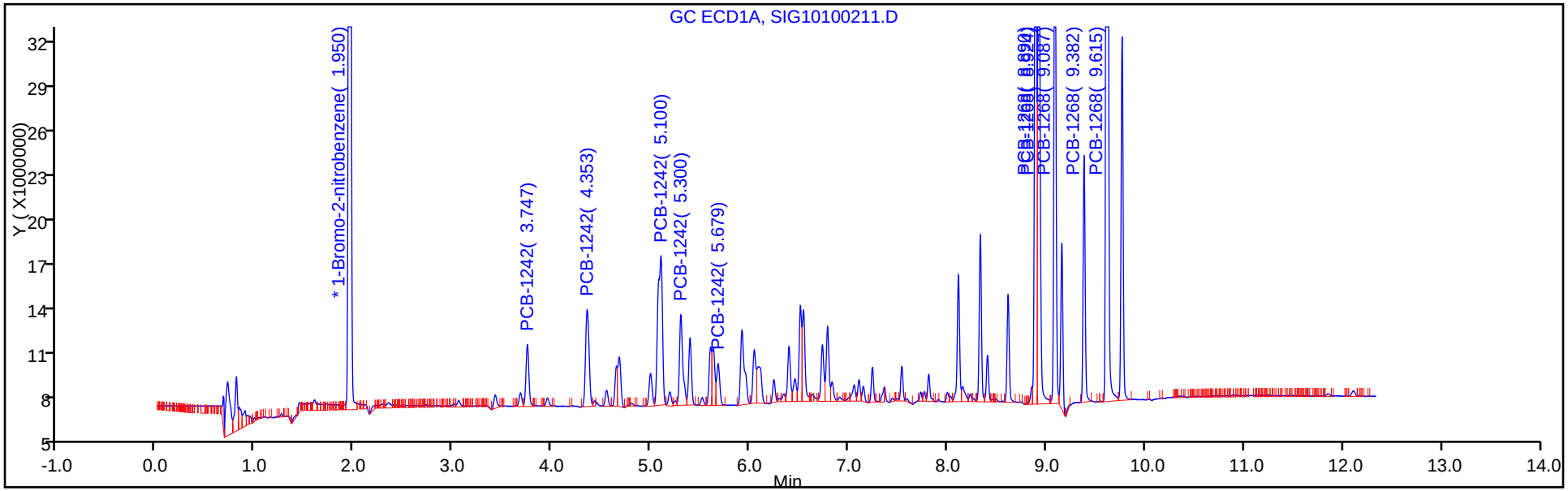
Report Date: 03-Oct-2017 08:45:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

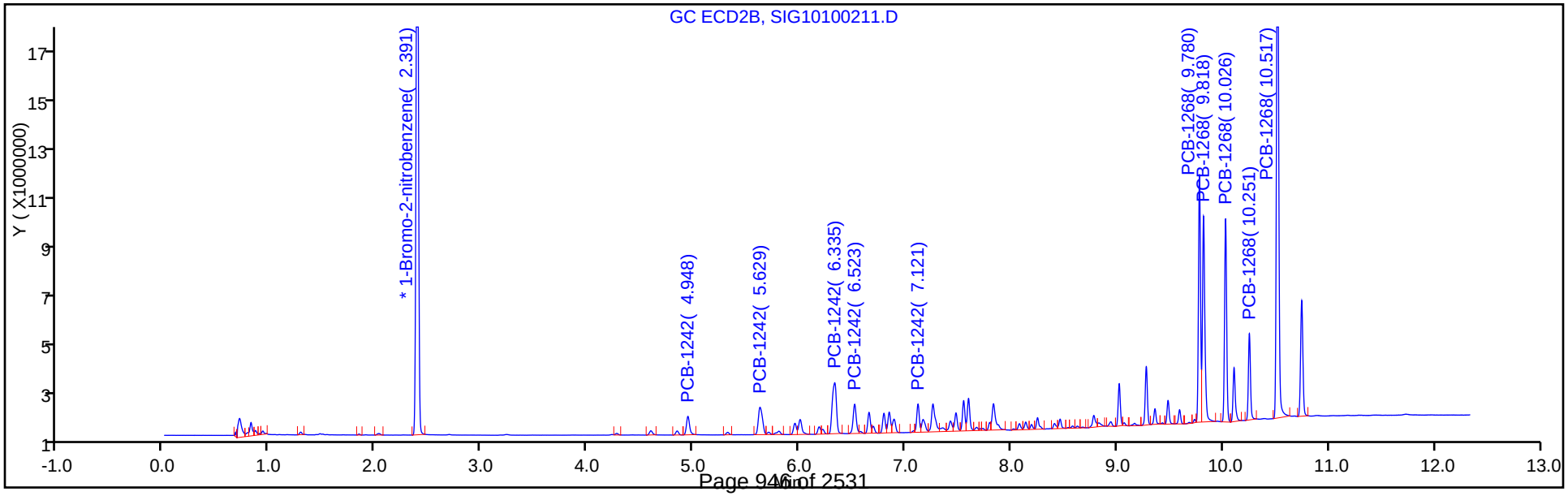
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100211.D

Injection Date:	02-Oct-2017 15:44:10	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1242 1268			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100212.D
Lims ID: std02 1242 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 16:02:27 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-012
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:45:56 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:05:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.951	1.949	0.002	209407197	0.0500	0.0500	
2	2.392	2.391	0.001	38873340	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	16655328	0.2000	0.2142	
1	4.353	4.354	-0.001	29393132	0.2000	0.2067	
1	5.099	5.100	-0.001	57519635	0.2000	0.2011	
1	5.302	5.302	0.000	25053176	0.2000	0.1990	
1	5.678	5.679	-0.001	10705516	0.2000	0.2009	
		Average of Peak Amounts =				0.2044	
2	4.948	4.949	-0.001	2890135	0.2000	0.2057	
2	5.631	5.629	0.002	5434794	0.2000	0.2073	
2	6.336	6.336	0.000	10205384	0.2000	0.1978	
2	6.522	6.523	-0.001	4516625	0.2000	0.2092	
2	7.122	7.122	0.000	3452221	0.2000	0.2085	
		Average of Peak Amounts =				0.2057	
						RPD = 0.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.892	8.892	0.000	116974276	0.2000	0.1976	
1	8.924	8.924	0.000	119423722	0.2000	0.2001	
1	9.087	9.088	-0.001	101029154	0.2000	0.1991	
1	9.382	9.382	0.000	42990614	0.2000	0.1994	
1	9.614	9.614	0.000	294099199	0.2000	0.2004	
		Average of Peak Amounts =				0.1993	
2	9.780	9.780	0.000	24148601	0.2000	0.1922	
2	9.819	9.818	0.001	23880665	0.2000	0.1928	
2	10.027	10.027	0.000	20172303	0.2000	0.1925	
2	10.252	10.251	0.001	8622495	0.2000	0.1972	
2	10.517	10.517	0.000	62230902	0.2000	0.1930	
		Average of Peak Amounts =				0.1935	
						RPD = 2.95	

Reagents:

SG4268@.2PPM_00012 Amount Added: 1.00 Units: mL

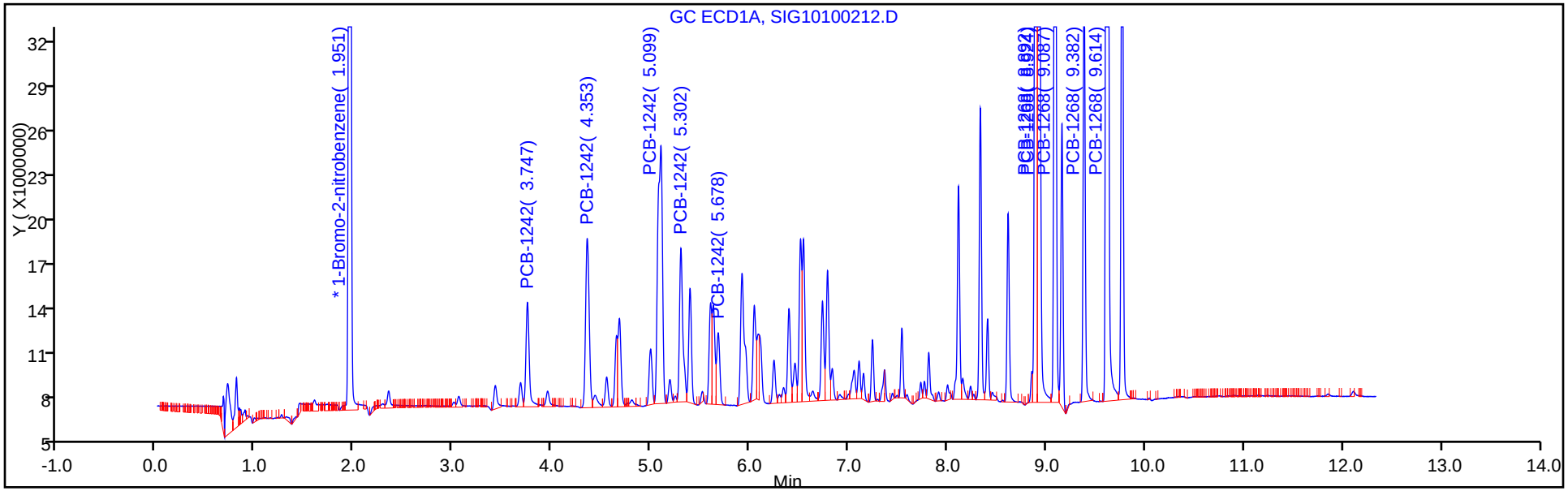
Report Date: 03-Oct-2017 08:46:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

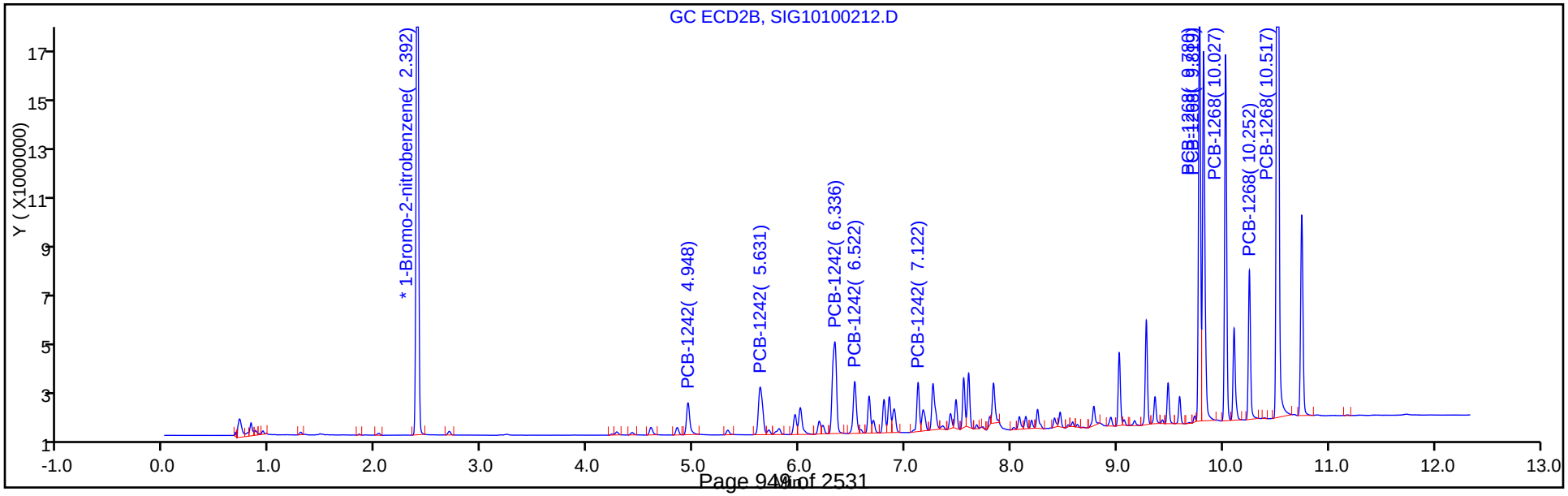
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100212.D

Injection Date:	02-Oct-2017 16:02:27	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1242 1268			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100213.D
Lims ID: std05 1242 1268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 16:20:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-013
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:06:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	214283571	0.0500	0.0500	
2	2.391	2.391	0.001	39958481	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	36859393	0.5000	0.4633	
1	4.353	4.354	-0.001	67673876	0.5000	0.4651	
1	5.099	5.100	-0.001	140530428	0.5000	0.4802	
1	5.301	5.302	-0.001	62579944	0.5000	0.4858	
1	5.678	5.679	-0.001	26255628	0.5000	0.4815	
		Average of Peak Amounts =				0.4752	
2	4.948	4.949	-0.001	6810016	0.5000	0.4716	
2	5.630	5.629	0.001	12742765	0.5000	0.4727	
2	6.334	6.336	-0.002	25585872	0.5000	0.4825	
2	6.524	6.523	0.001	10719039	0.5000	0.4830	
2	7.121	7.122	-0.001	7947131	0.5000	0.4670	
		Average of Peak Amounts =				0.4754	
						RPD = 0.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.890	8.892	-0.002	290020653	0.5000	0.4788	
1	8.923	8.924	-0.001	291014346	0.5000	0.4764	
1	9.086	9.088	-0.002	248290314	0.5000	0.4782	
1	9.381	9.382	-0.001	106115777	0.5000	0.4811	
1	9.614	9.614	0.000	734063504	0.5000	0.4889	
		Average of Peak Amounts =				0.4807	
2	9.780	9.780	0.000	63234136	0.5000	0.4897	
2	9.819	9.818	0.001	61979330	0.5000	0.4868	
2	10.026	10.027	-0.001	52757386	0.5000	0.4897	
2	10.250	10.251	-0.001	22102391	0.5000	0.4917	
2	10.517	10.517	0.000	166223402	0.5000	0.5016	
		Average of Peak Amounts =				0.4919	
						RPD = 2.31	

Reagents:

SG4268@0.5PPM_00025 Amount Added: 1.00 Units: mL

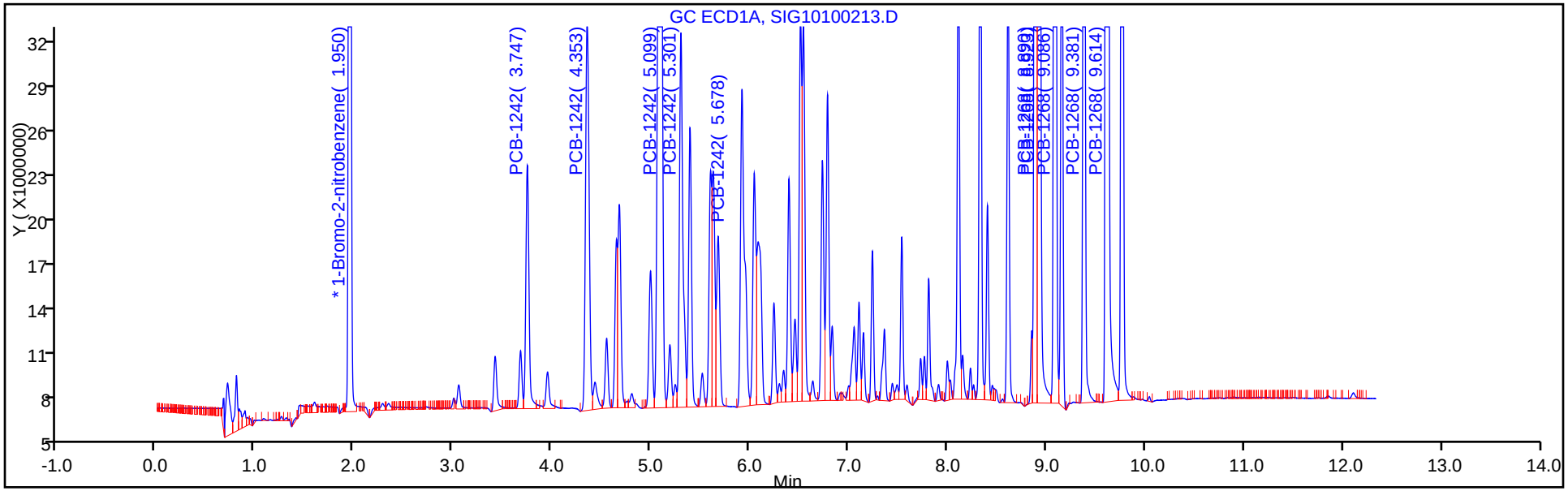
Report Date: 03-Oct-2017 08:46:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

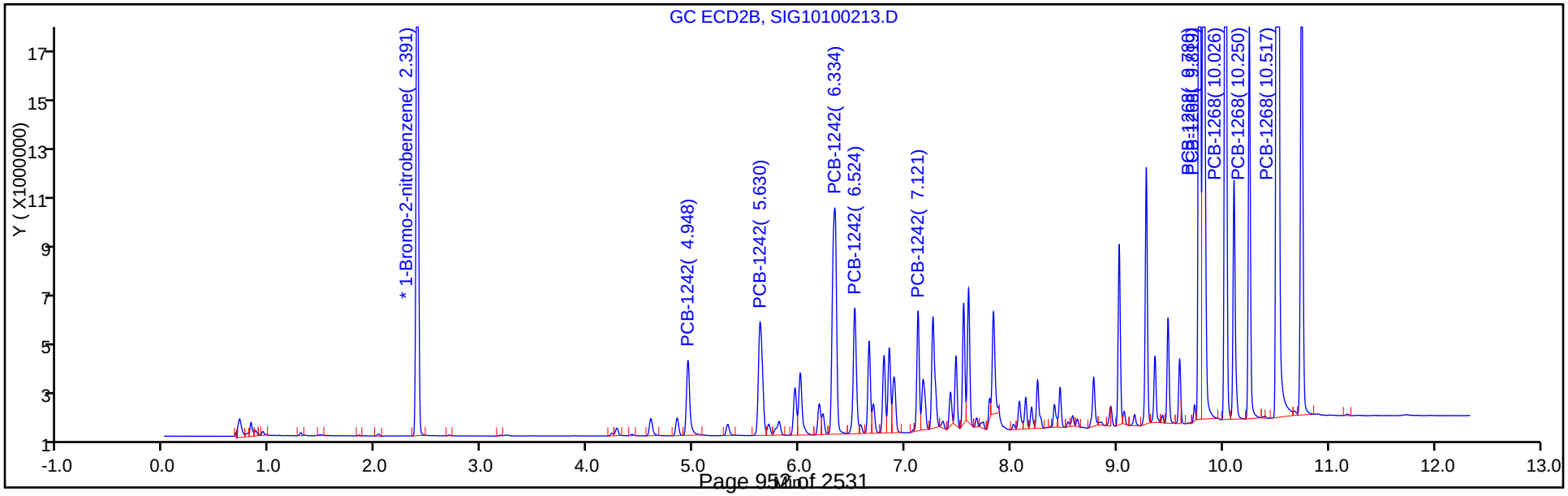
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100213.D

Injection Date:	02-Oct-2017 16:20:55	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1242 1268			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100214.D
Lims ID: std1 1242 1268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 16:39:12 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-014
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:15 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:06:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	213679290	0.0500	0.0500	
2	2.391	2.391	0.000	39464363	0.0500	0.0500	
5 PCB-1242							
1	3.747	3.747	0.000	69765580	1.00	0.8795	
1	4.353	4.354	-0.001	120463557	1.00	0.8302	
1	5.099	5.100	-0.001	256053787	1.00	0.8774	
1	5.300	5.302	-0.002	114052793	1.00	0.8879	
1	5.677	5.679	-0.002	47479960	1.00	0.8731	
		Average of Peak Amounts =				0.8696	
2	4.948	4.949	-0.001	13722962	1.00	0.9623	
2	5.629	5.629	0.000	23713568	1.00	0.8908	
2	6.334	6.336	-0.002	49164813	1.00	0.9388	
2	6.523	6.523	0.000	20571025	1.00	0.9386	
2	7.121	7.122	-0.001	15319713	1.00	0.9115	
		Average of Peak Amounts =				0.9284	
						RPD = 6.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.891	8.892	-0.001	533214324	1.00	0.8827	
1	8.923	8.924	-0.001	545740932	1.00	0.8960	
1	9.087	9.088	-0.001	460927390	1.00	0.8902	
1	9.381	9.382	-0.001	195199310	1.00	0.8875	
1	9.614	9.614	0.000	1354305550	1.00	0.9046	
		Average of Peak Amounts =				0.8922	
2	9.779	9.780	-0.001	121979346	1.00	0.9564	
2	9.818	9.818	0.000	121624220	1.00	0.9673	
2	10.026	10.027	-0.001	101590809	1.00	0.9549	
2	10.250	10.251	-0.001	41987882	1.00	0.9457	
2	10.517	10.517	0.000	320503651	1.00	0.9792	
		Average of Peak Amounts =				0.9607	
						RPD = 7.39	

Reagents:

SG42/68@1.0PP_00018 Amount Added: 1.00 Units: mL

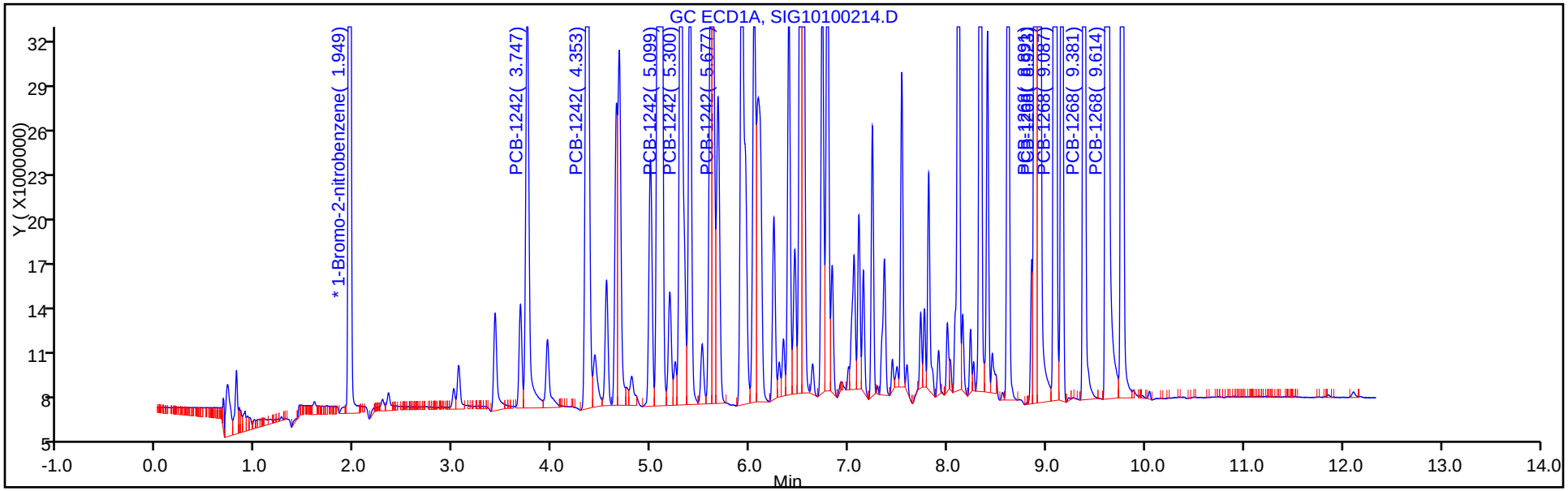
Report Date: 03-Oct-2017 08:46:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

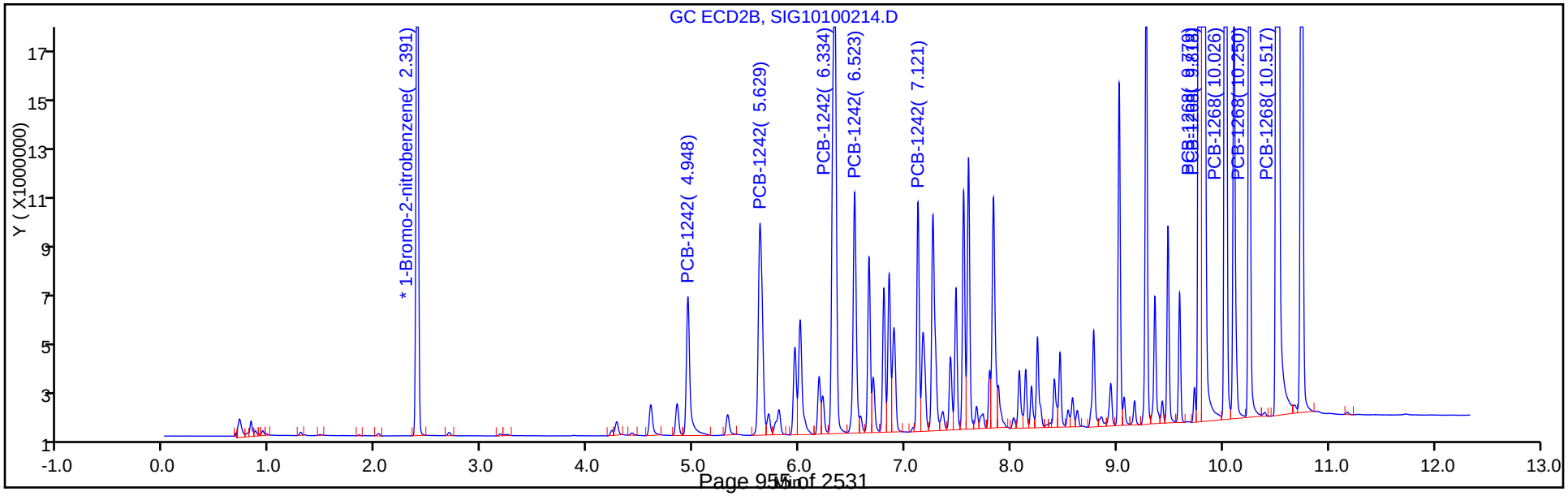
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100214.D

Injection Date:	02-Oct-2017 16:39:12	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1242 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100215.D
Lims ID: std151242 1268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 16:57:33 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-015
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:20 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:07:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	210613582	0.0500	0.0500	
2	2.391	2.391	0.000	39758217	0.0500	0.0500	
5 PCB-1242							M
1	3.748	3.747	0.001	98502404	1.50	1.26	
1	4.353	4.354	-0.001	169790944	1.50	1.19	
1	5.098	5.100	-0.002	372054200	1.50	1.29	
1	5.301	5.302	-0.001	164499527	1.50	1.30	
1	5.678	5.679	-0.001	69520240	1.50	1.30	M
		Average of Peak Amounts =				1.27	
2	4.948	4.949	-0.001	19655792	1.50	1.37	
2	5.629	5.629	0.000	34488709	1.50	1.29	
2	6.335	6.336	-0.001	73377053	1.50	1.39	
2	6.523	6.523	0.000	30119968	1.50	1.36	
2	7.122	7.122	0.000	22605574	1.50	1.34	
		Average of Peak Amounts =				1.35	
						RPD = 6.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							M
1	8.890	8.892	-0.002	798695607	1.50	1.34	M
1	8.923	8.924	-0.001	790516186	1.50	1.32	M
1	9.086	9.088	-0.002	681044334	1.50	1.33	M
1	9.381	9.382	-0.001	288923730	1.50	1.33	M
1	9.613	9.614	-0.001	1968804280	1.50	1.33	M
		Average of Peak Amounts =				1.33	
2	9.778	9.780	-0.002	185384110	1.50	1.44	
2	9.817	9.818	-0.001	182508469	1.50	1.44	
2	10.025	10.027	-0.002	153428710	1.50	1.43	
2	10.249	10.251	-0.002	62831338	1.50	1.40	
2	10.517	10.517	0.000	488930190	1.50	1.48	
		Average of Peak Amounts =				1.44	
						RPD = 7.83	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@1.5PPM_00003 Amount Added: 1.00 Units: mL

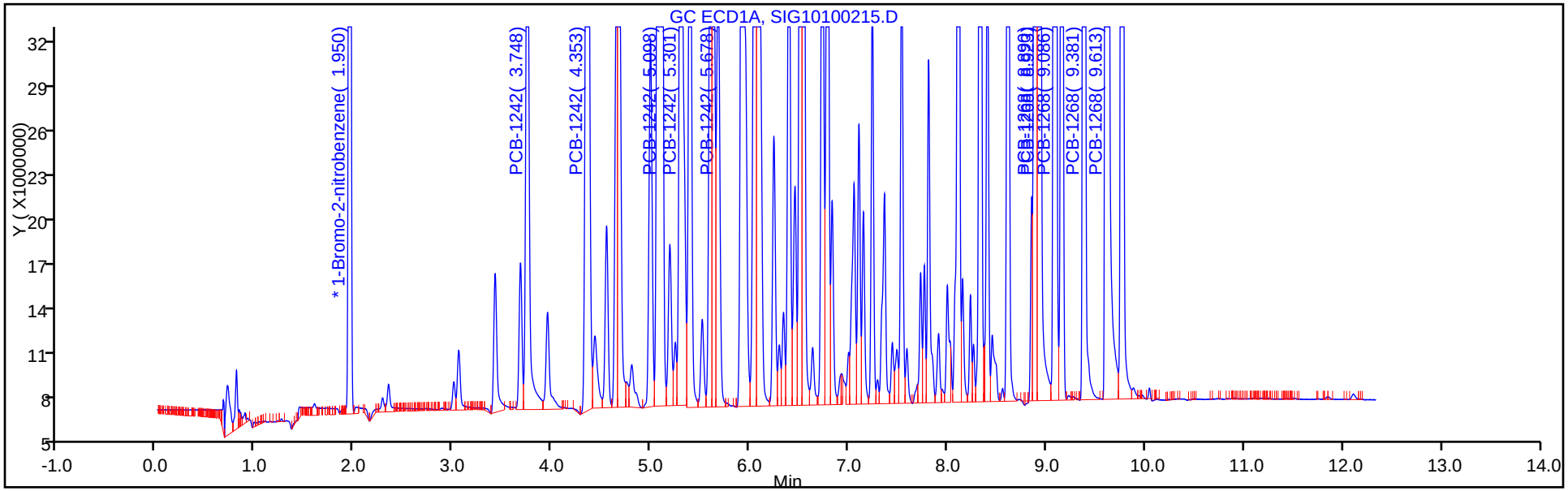
Report Date: 03-Oct-2017 08:46:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

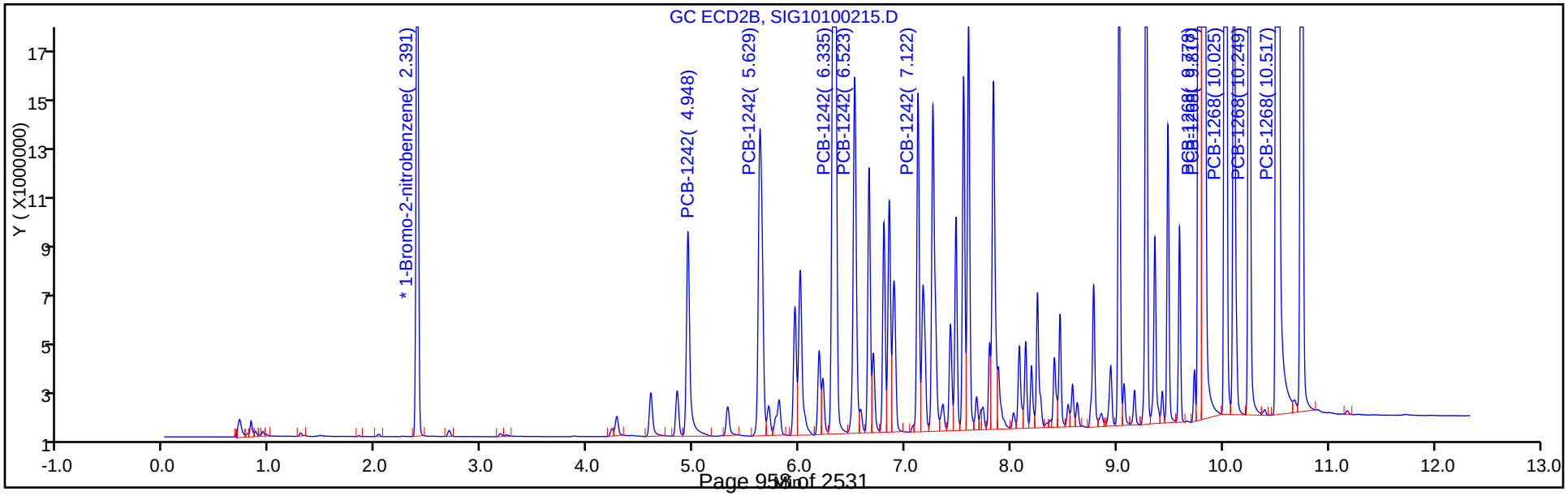
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100215.D

Injection Date:	02-Oct-2017 16:57:33	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std151242 1268			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-1 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 17:15 | Calibration End Date: 10/02/2017 18:47 | Calibration ID: 41695

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/16	SIG10100216.D
Level 2	STD01 240-297169/17	SIG10100217.D
Level 3	STD02 240-297169/18	SIG10100218.D
Level 4	STD05 240-297169/19	SIG10100219.D
Level 5	STD1 240-297169/20	SIG10100220.D
Level 6	STD15 240-297169/21	SIG10100221.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.0239 0.0163	0.0235	0.0206	0.0181	0.0169	Ave		0.0199				16.7		20.0			
PCB-1248 Peak 2	0.0507 0.0390	0.0492	0.0482	0.0434	0.0407	Ave		0.0452				10.8		20.0			
PCB-1248 Peak 3	0.0448 0.0292	0.0367	0.0368	0.0335	0.0307	Ave		0.0353				15.8		20.0			
PCB-1248 Peak 4	0.0419 0.0284	0.0376	0.0356	0.0319	0.0300	Ave		0.0342				14.9		20.0			
PCB-1248 Peak 5	0.0235 0.0188	0.0227	0.0224	0.0208	0.0198	Ave		0.0213				8.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-1 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 17:15 | Calibration End Date: 10/02/2017 18:47 | Calibration ID: 41695

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/16	SIG10100216.D
Level 2	STD01 240-297169/17	SIG10100217.D
Level 3	STD02 240-297169/18	SIG10100218.D
Level 4	STD05 240-297169/19	SIG10100219.D
Level 5	STD1 240-297169/20	SIG10100220.D
Level 6	STD15 240-297169/21	SIG10100221.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Ave	4704122 98734683	9489336	16362928	37057586	68354259	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	BNB	Ave	9980915 236329541	19867519	38255613	88807430	164522213	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	BNB	Ave	8818921 177125454	14822018	29195506	68504665	124218040	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	BNB	Ave	8248188 172284160	15161792	28263396	65194688	121358260	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	BNB	Ave	4632914 114072476	9176649	17773934	42476906	80076177	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100216.D
Lims ID: std005 1248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 17:15:53 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-016
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:26 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:07:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	196794430	0.0500	0.0500	
2	2.391	2.391	0.000	36616990	0.0500	0.0500	
7 PCB-1248							
1	4.353	4.353	0.000	4704122	0.0500	0.0601	
1	5.919	5.919	0.000	9980915	0.0500	0.0561	
1	6.541	6.541	0.000	8818921	0.0500	0.0635	
1	6.787	6.787	0.000	8248188	0.0500	0.0612	
1	7.239	7.239	0.000	4632914	0.0500	0.0552	
		Average of Peak Amounts =				0.0592	
2	5.629	5.629	0.000	790815	0.0500	0.0561	
2	6.799	6.799	0.000	1194047	0.0500	0.0606	
2	7.263	7.263	0.000	1642520	0.0500	0.0556	
2	7.598	7.598	0.000	1546771	0.0500	0.0501	
2	8.250	8.250	0.000	900635	0.0500	0.0547	
		Average of Peak Amounts =				0.0554	
						RPD = 6.65	

Reagents:

SG1248@.05ppm_00023 Amount Added: 1.00 Units: mL

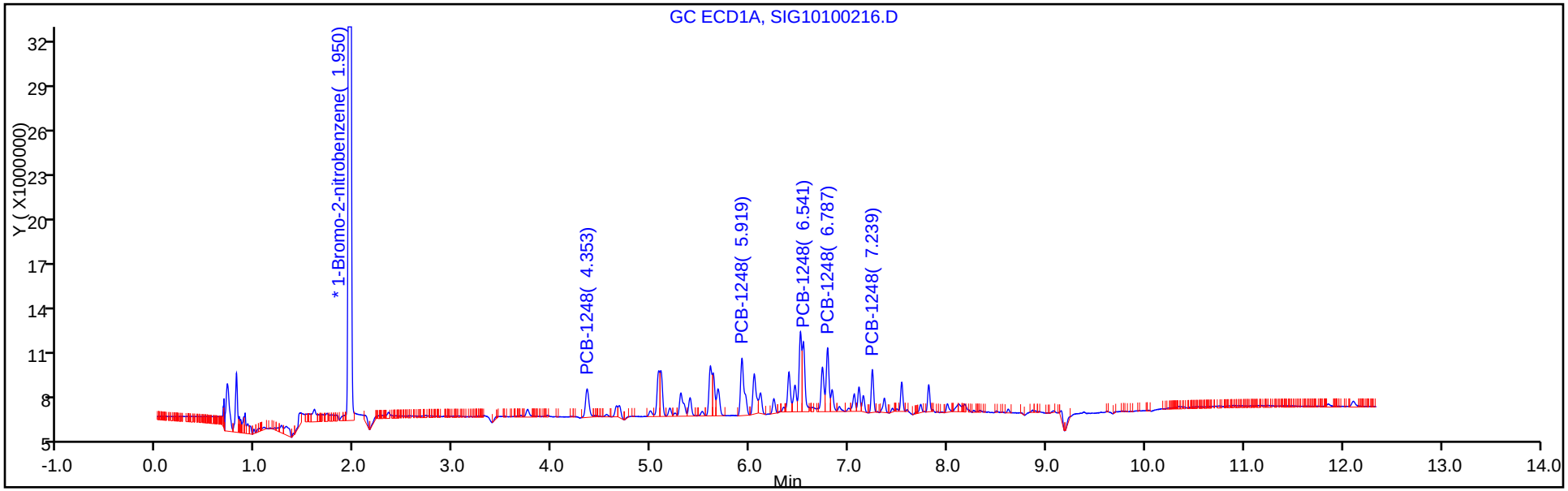
Report Date: 03-Oct-2017 08:46:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

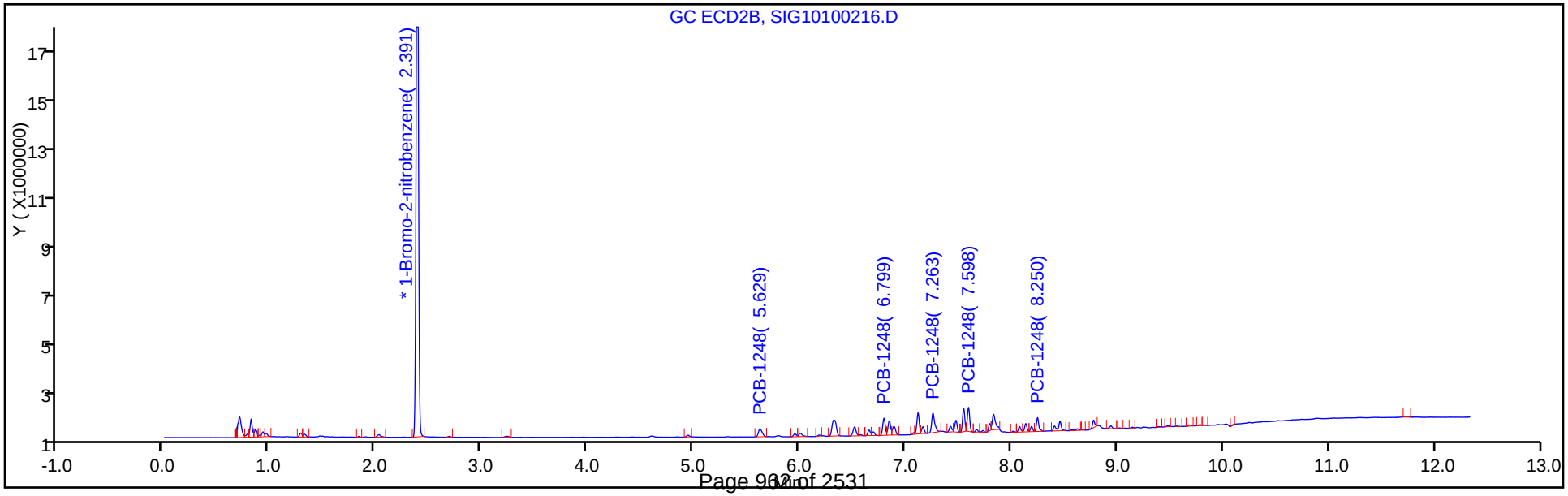
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100216.D

Injection Date:	02-Oct-2017 17:15:53	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1248			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100217.D
Lims ID: std01 1248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 17:34:19 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-017
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:33 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:08:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	201822802	0.0500	0.0500	
2	2.391	2.391	0.000	37390474	0.0500	0.0500	
7 PCB-1248							M
1	4.352	4.353	-0.001	9489336	0.1000	0.1182	
1	5.919	5.919	0.000	19867519	0.1000	0.1089	
1	6.542	6.541	0.001	14822018	0.1000	0.1041	
1	6.786	6.787	-0.001	15161792	0.1000	0.1097	
1	7.240	7.239	0.001	9176649	0.1000	0.1065	
		Average of Peak Amounts =				0.1095	
2	5.628	5.629	-0.001	1555625	0.1000	0.1081	
2	6.799	6.799	0.000	2233634	0.1000	0.1110	
2	7.262	7.263	-0.001	3612113	0.1000	0.1197	M
2	7.598	7.598	0.000	3463337	0.1000	0.1098	M
2	8.249	8.250	-0.001	1744173	0.1000	0.1037	M
		Average of Peak Amounts =				0.1105	
						RPD = 0.88	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248@0.1PPM_00025 Amount Added: 1.00 Units: mL

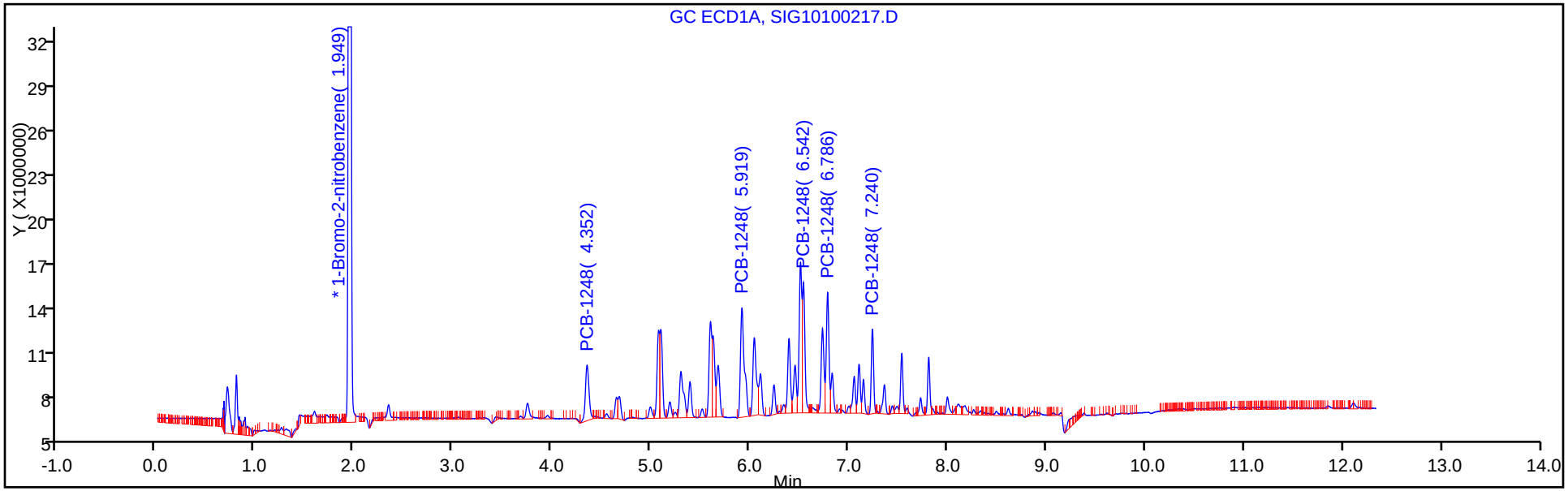
Report Date: 03-Oct-2017 08:46:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

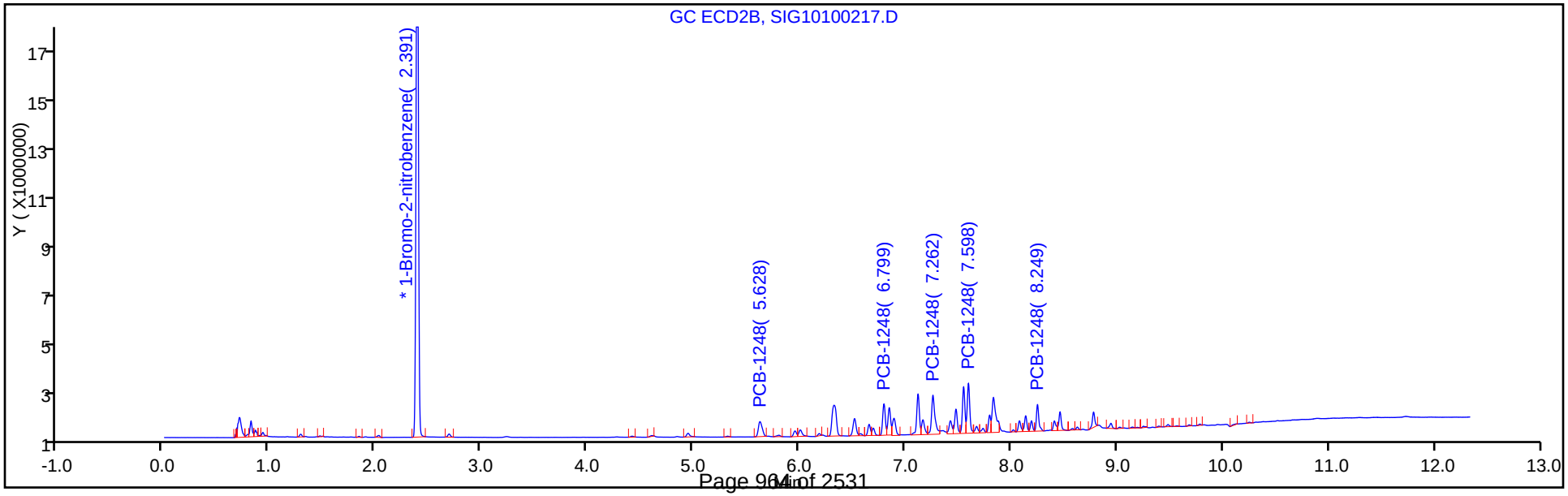
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100217.D

Injection Date:	02-Oct-2017 17:34:19	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1248			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100218.D
Lims ID: std02 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 17:52:34 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-018
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:43 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:08:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	198342426	0.0500	0.0500	
2	2.391	2.391	0.000	36455641	0.0500	0.0500	
7 PCB-1248							M
1	4.351	4.353	-0.002	16362928	0.2000	0.2074	
1	5.918	5.919	-0.001	38255613	0.2000	0.2134	
1	6.542	6.541	0.001	29195506	0.2000	0.2086	
1	6.786	6.787	-0.001	28263396	0.2000	0.2082	
1	7.239	7.239	0.000	17773934	0.2000	0.2100	
		Average of Peak Amounts =				0.2095	
2	5.628	5.629	-0.001	2919771	0.2000	0.2081	
2	6.799	6.799	0.000	4079925	0.2000	0.2079	
2	7.262	7.263	-0.001	6081814	0.2000	0.2068	M
2	7.598	7.598	0.000	6457950	0.2000	0.2100	M
2	8.250	8.250	0.000	3531359	0.2000	0.2153	M
		Average of Peak Amounts =				0.2096	
						RPD = 0.06	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248@0.2ppm_00021 Amount Added: 1.00 Units: mL

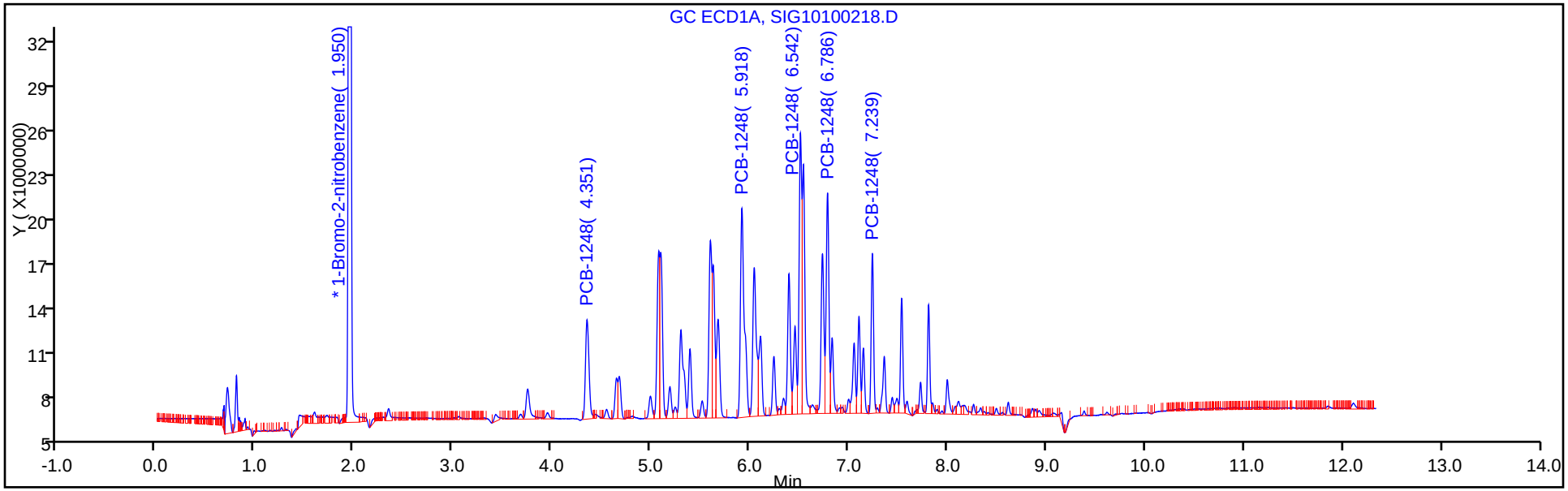
Report Date: 03-Oct-2017 08:46:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

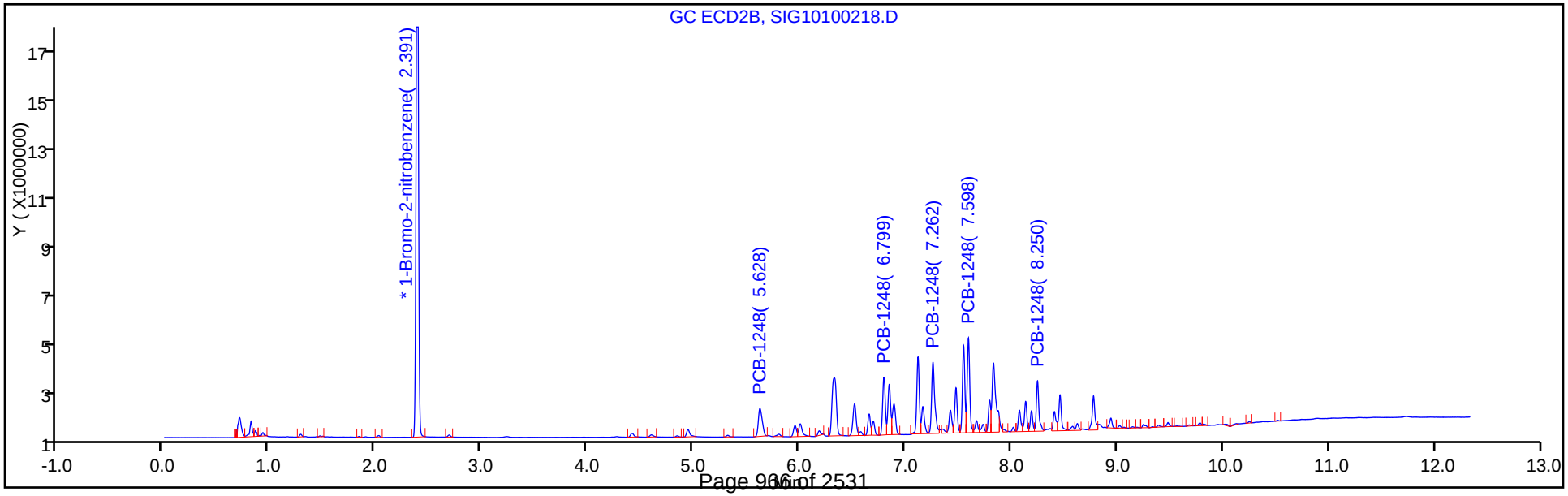
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100218.D

Injection Date:	02-Oct-2017 17:52:34	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1248			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100219.D
Lims ID: std05 1248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 18:10:55 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-019
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:49 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 07:38:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	204680764	0.0500	0.0500	
2	2.390	2.391	0.000	37836835	0.0500	0.0500	
7 PCB-1248							
1	4.351	4.353	-0.002	37057586	0.5000	0.4552	
1	5.919	5.919	0.000	88807430	0.5000	0.4800	
1	6.540	6.541	-0.001	68504665	0.5000	0.4742	
1	6.785	6.787	-0.002	65194688	0.5000	0.4653	
1	7.239	7.239	0.000	42476906	0.5000	0.4862	
		Average of Peak Amounts =				0.4722	
2	5.628	5.629	-0.001	6984346	0.5000	0.4797	
2	6.799	6.799	0.000	9343819	0.5000	0.4588	
2	7.261	7.263	-0.002	13968418	0.5000	0.4575	
2	7.597	7.598	-0.001	15467803	0.5000	0.4846	
2	8.249	8.250	-0.001	8151900	0.5000	0.4788	
		Average of Peak Amounts =				0.4719	
						RPD = 0.06	

Reagents:

SG1248@0.5ppm_00031 Amount Added: 1.00 Units: mL

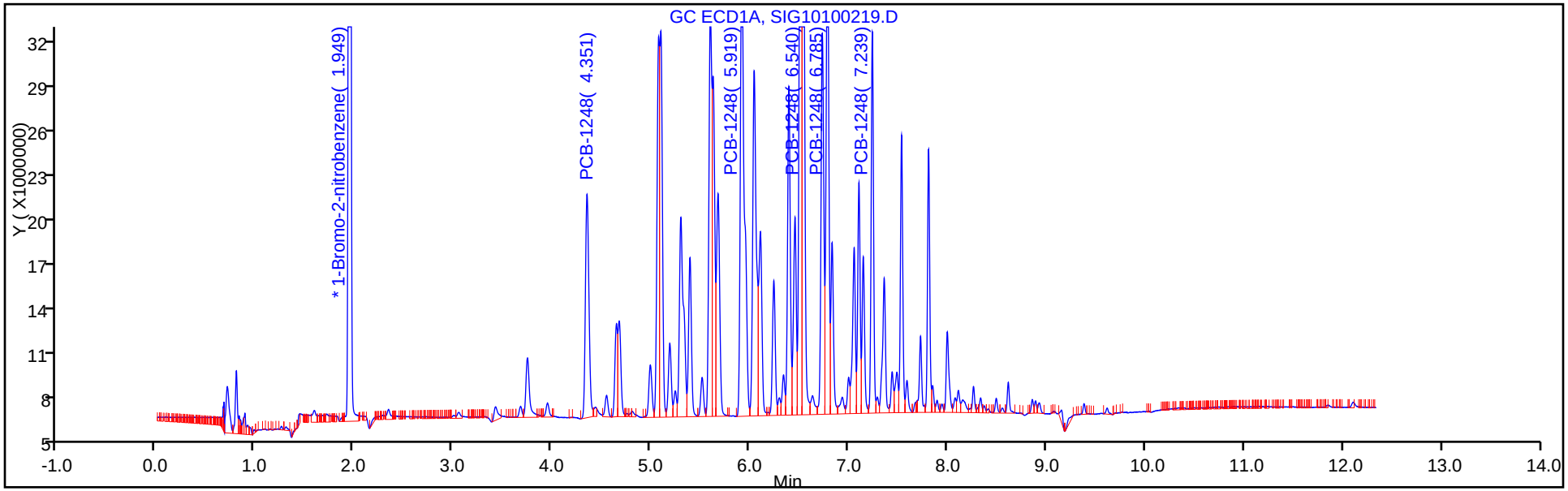
Report Date: 03-Oct-2017 08:46:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

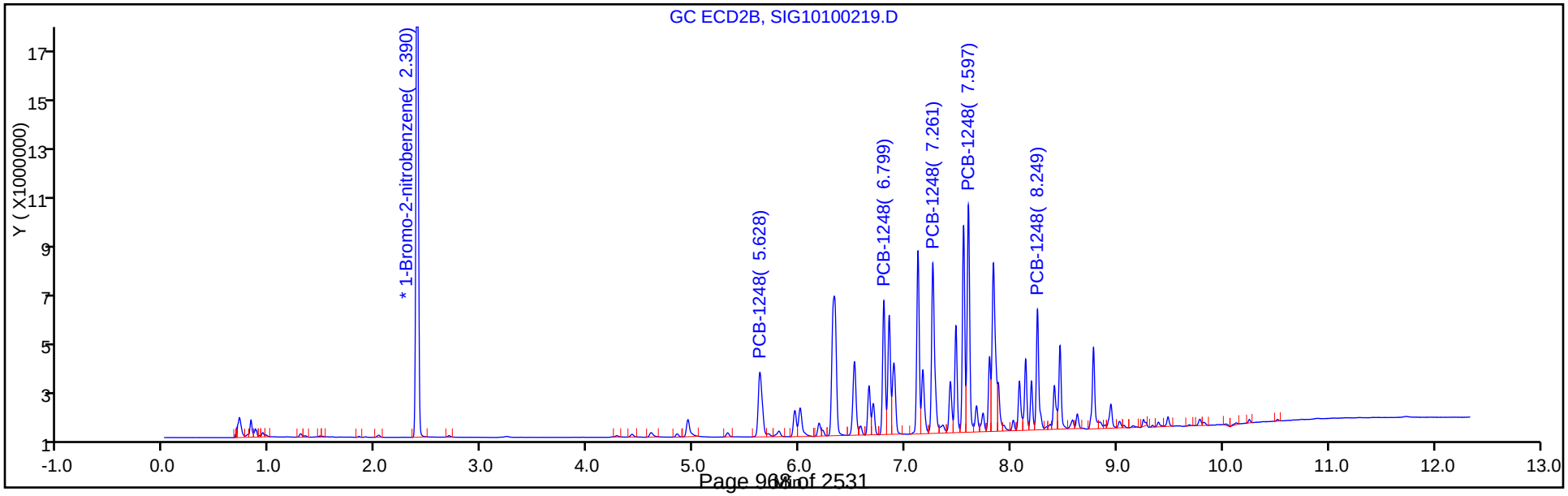
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100219.D

Injection Date:	02-Oct-2017 18:10:55	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1248			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100220.D
Lims ID: std1 1248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 18:29:14 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-020
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:54 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 07:38:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	202176288	0.0500	0.0500	
2	2.391	2.391	0.000	37212389	0.0500	0.0500	
7 PCB-1248							
1	4.351	4.353	-0.002	68354259	1.00	0.8500	
1	5.918	5.919	-0.001	164522213	1.00	0.9002	
1	6.541	6.541	0.000	124218040	1.00	0.8706	
1	6.786	6.787	-0.001	121358260	1.00	0.8768	
1	7.239	7.239	0.000	80076177	1.00	0.9280	
		Average of Peak Amounts =				0.8851	
2	5.628	5.629	-0.001	13063598	1.00	0.9122	
2	6.800	6.799	0.001	17585966	1.00	0.8780	
2	7.262	7.263	-0.001	26614151	1.00	0.8864	
2	7.598	7.598	0.000	30079727	1.00	0.9582	
2	8.250	8.250	0.000	15719940	1.00	0.9388	
		Average of Peak Amounts =				0.9147	
						RPD = 3.29	

Reagents:

SG1248@1.0ppm_00021 Amount Added: 1.00 Units: mL

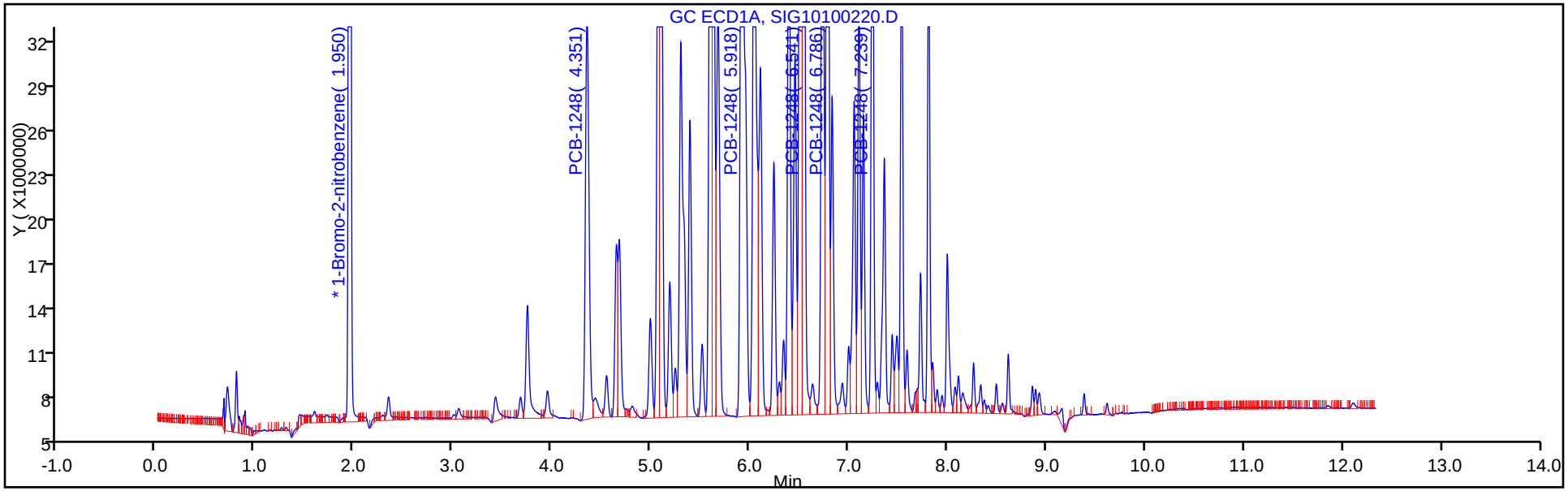
Report Date: 03-Oct-2017 08:46:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

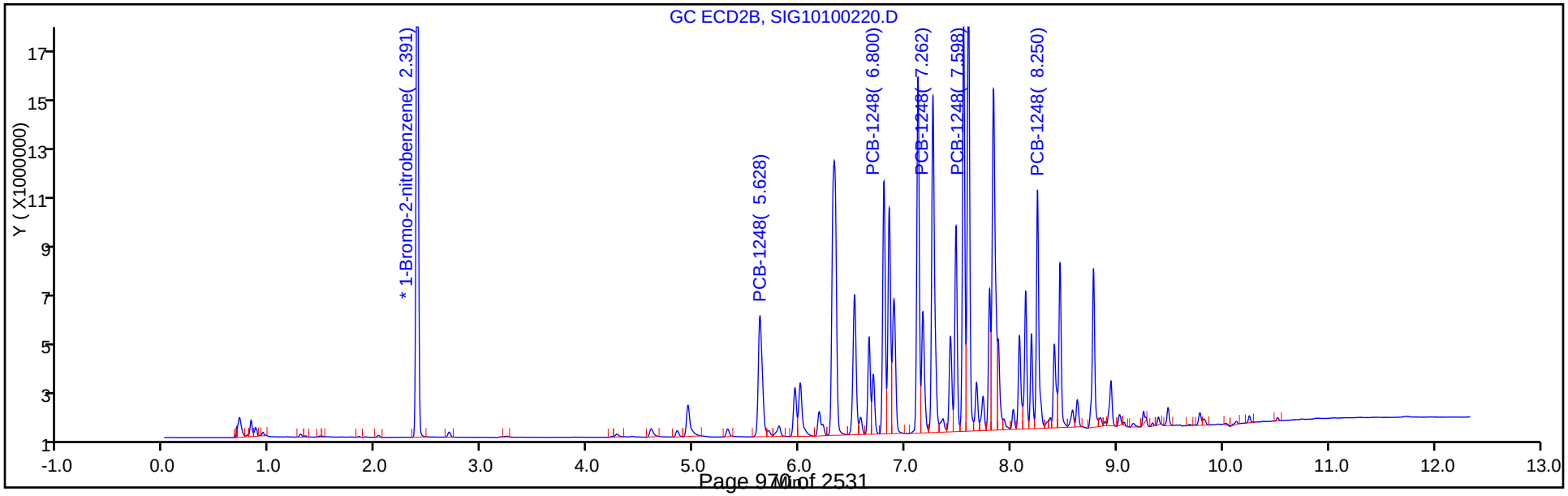
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100220.D

Injection Date:	02-Oct-2017 18:29:14	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1248			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100221.D
Lims ID: std15 1248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 18:47:41 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-021
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:02 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 07:38:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	202167736	0.0500	0.0500	
2	2.390	2.391	0.000	37487516	0.0500	0.0500	
7 PCB-1248							
1	4.351	4.353	-0.002	98734683	1.50	1.23	
1	5.919	5.919	0.000	236329541	1.50	1.29	
1	6.540	6.541	-0.001	177125454	1.50	1.24	
1	6.785	6.787	-0.002	172284160	1.50	1.24	
1	7.239	7.239	0.000	114072476	1.50	1.32	
		Average of Peak Amounts =				1.27	
2	5.628	5.629	-0.001	19135099	1.50	1.33	
2	6.798	6.799	-0.001	25528228	1.50	1.27	
2	7.262	7.263	-0.001	38816241	1.50	1.28	
2	7.597	7.598	-0.001	43783754	1.50	1.38	
2	8.249	8.250	-0.001	22702767	1.50	1.35	
		Average of Peak Amounts =				1.32	
						RPD = 4.27	

Reagents:

SG1248@1.5ppm_00002 Amount Added: 1.00 Units: mL

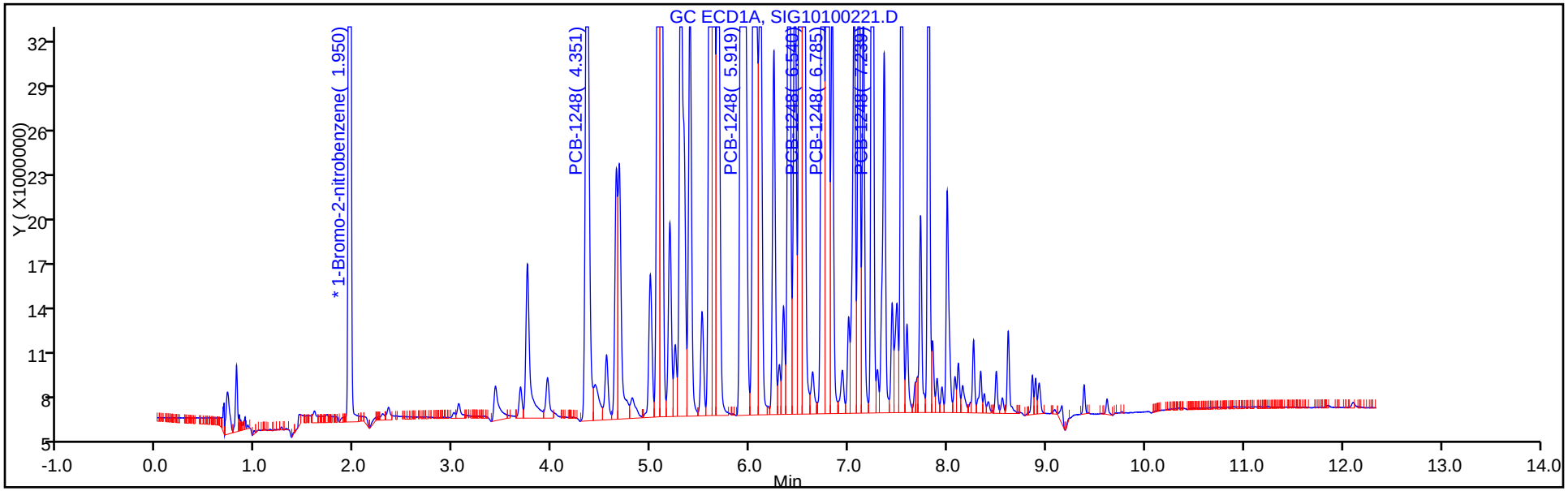
Report Date: 03-Oct-2017 08:47:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

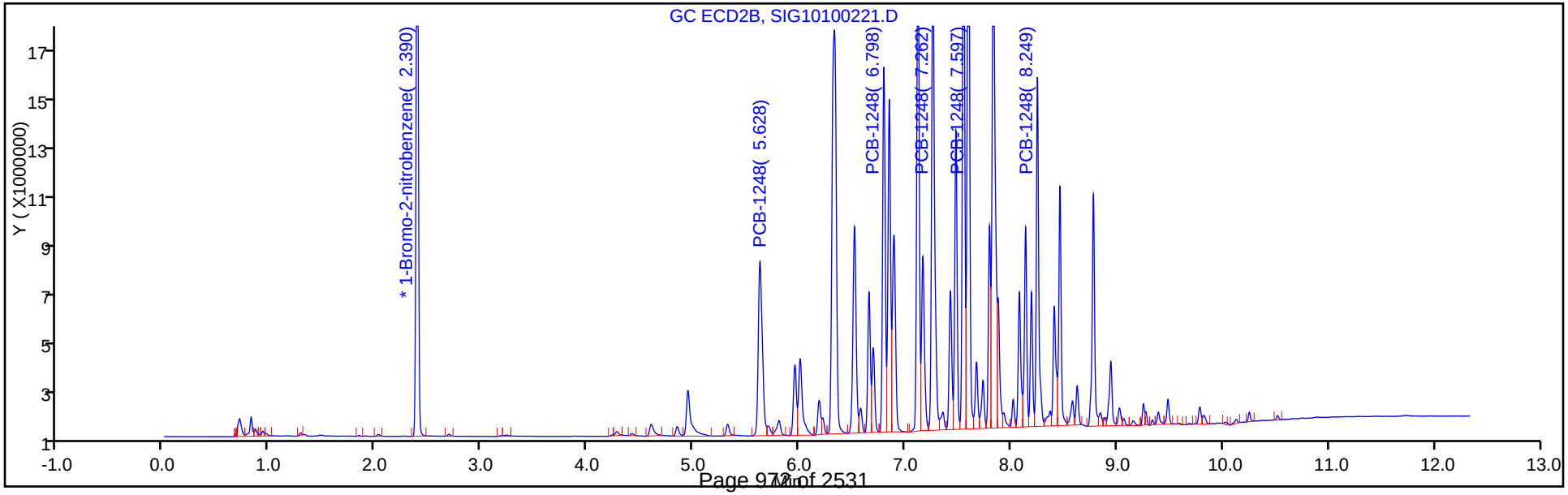
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100221.D

Injection Date:	02-Oct-2017 18:47:41	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std15 1248			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-2 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 17:15 | Calibration End Date: 10/02/2017 18:47 | Calibration ID: 41696

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/16	SIG10100216.D
Level 2	STD01 240-297169/17	SIG10100217.D
Level 3	STD02 240-297169/18	SIG10100218.D
Level 4	STD05 240-297169/19	SIG10100219.D
Level 5	STD1 240-297169/20	SIG10100220.D
Level 6	STD15 240-297169/21	SIG10100221.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.0216 0.0170	0.0208	0.0200	0.0185	0.0176	Ave		0.0192				9.6		20.0			
PCB-1248 Peak 2	0.0326 0.0227	0.0299	0.0280	0.0247	0.0236	Ave		0.0269				14.5		20.0			
PCB-1248 Peak 3	0.0449 0.0345	0.0483	0.0417	0.0369	0.0358	Ave		0.0403				13.7		20.0			
PCB-1248 Peak 4	0.0422 0.0389	0.0463	0.0443	0.0409	0.0404	Ave		0.0422				6.4		20.0			
PCB-1248 Peak 5	0.0246 0.0202	0.0233	0.0242	0.0215	0.0211	Ave		0.0225				8.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-2 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 17:15 | Calibration End Date: 10/02/2017 18:47 | Calibration ID: 41696

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/16	SIG10100216.D
Level 2	STD01 240-297169/17	SIG10100217.D
Level 3	STD02 240-297169/18	SIG10100218.D
Level 4	STD05 240-297169/19	SIG10100219.D
Level 5	STD1 240-297169/20	SIG10100220.D
Level 6	STD15 240-297169/21	SIG10100221.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Ave	790815 19135099	1555625	2919771	6984346	13063598	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	BNB	Ave	1194047 25528228	2233634	4079925	9343819	17585966	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	BNB	Ave	1642520 38816241	3612113	6081814	13968418	26614151	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	BNB	Ave	1546771 43783754	3463337	6457950	15467803	30079727	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	BNB	Ave	900635 22702767	1744173	3531359	8151900	15719940	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100216.D
Lims ID: std005 1248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 17:15:53 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-016
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:26 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:07:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	196794430	0.0500	0.0500	
2	2.391	2.391	0.000	36616990	0.0500	0.0500	
7 PCB-1248							
1	4.353	4.353	0.000	4704122	0.0500	0.0601	
1	5.919	5.919	0.000	9980915	0.0500	0.0561	
1	6.541	6.541	0.000	8818921	0.0500	0.0635	
1	6.787	6.787	0.000	8248188	0.0500	0.0612	
1	7.239	7.239	0.000	4632914	0.0500	0.0552	
		Average of Peak Amounts =				0.0592	
2	5.629	5.629	0.000	790815	0.0500	0.0561	
2	6.799	6.799	0.000	1194047	0.0500	0.0606	
2	7.263	7.263	0.000	1642520	0.0500	0.0556	
2	7.598	7.598	0.000	1546771	0.0500	0.0501	
2	8.250	8.250	0.000	900635	0.0500	0.0547	
		Average of Peak Amounts =				0.0554	
						RPD = 6.65	

Reagents:

SG1248@.05ppm_00023 Amount Added: 1.00 Units: mL

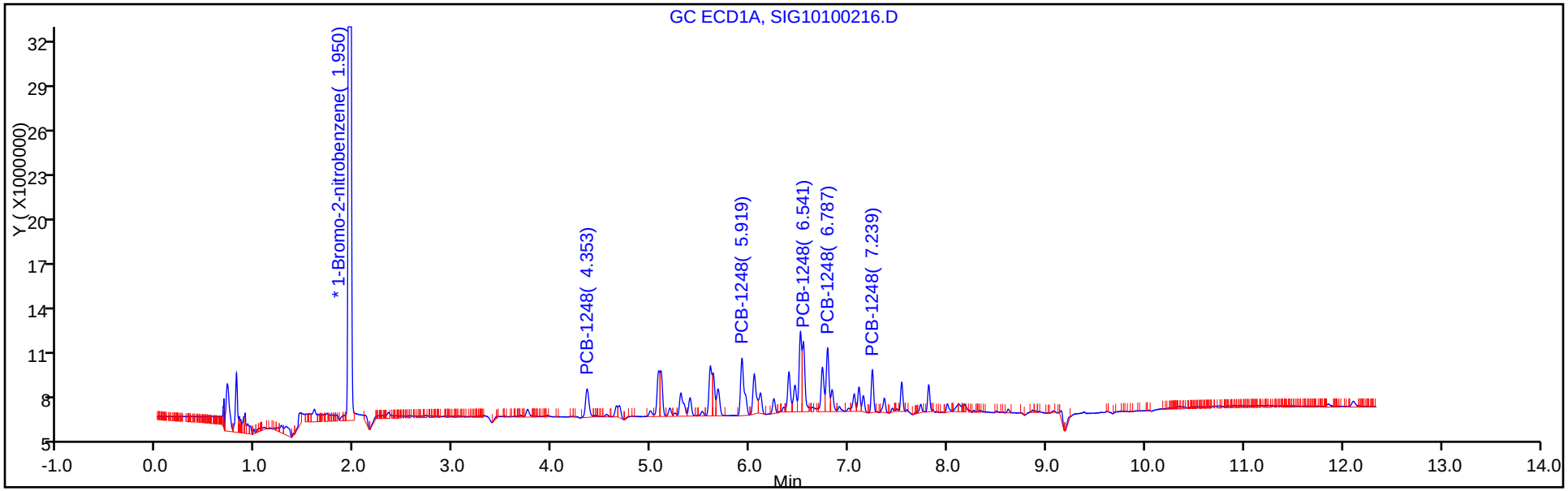
Report Date: 03-Oct-2017 08:46:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

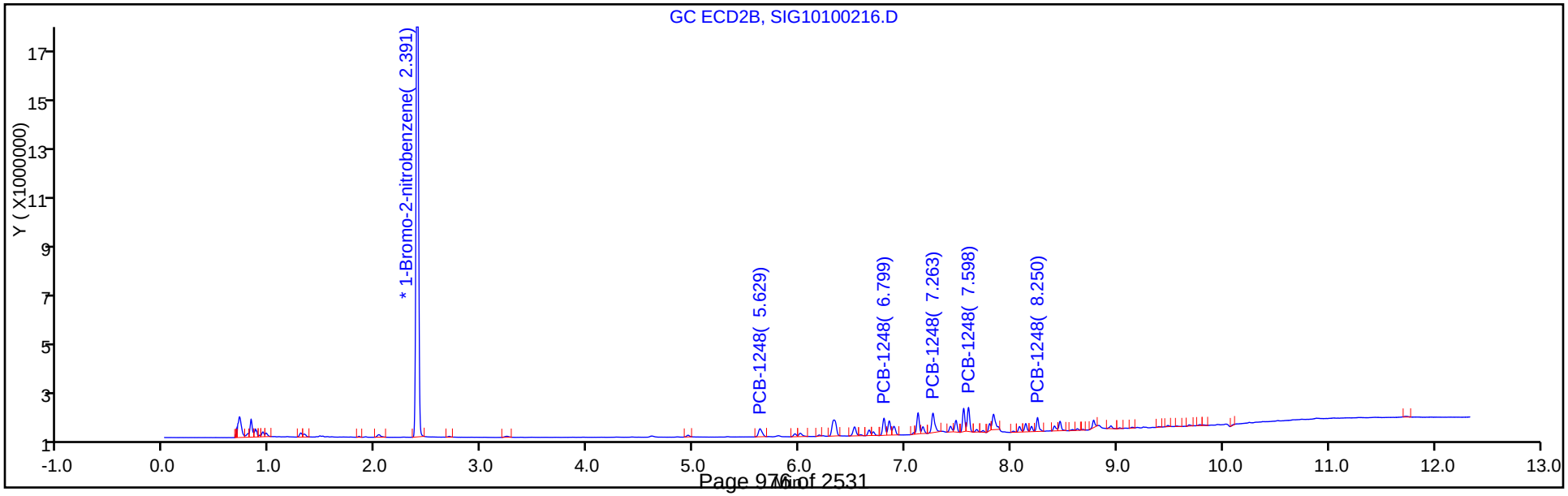
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100216.D

Injection Date:	02-Oct-2017 17:15:53	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1248			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100217.D
Lims ID: std01 1248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 17:34:19 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-017
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:33 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:08:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	201822802	0.0500	0.0500	
2	2.391	2.391	0.000	37390474	0.0500	0.0500	
7 PCB-1248							M
1	4.352	4.353	-0.001	9489336	0.1000	0.1182	
1	5.919	5.919	0.000	19867519	0.1000	0.1089	
1	6.542	6.541	0.001	14822018	0.1000	0.1041	
1	6.786	6.787	-0.001	15161792	0.1000	0.1097	
1	7.240	7.239	0.001	9176649	0.1000	0.1065	
		Average of Peak Amounts =				0.1095	
2	5.628	5.629	-0.001	1555625	0.1000	0.1081	
2	6.799	6.799	0.000	2233634	0.1000	0.1110	
2	7.262	7.263	-0.001	3612113	0.1000	0.1197	M
2	7.598	7.598	0.000	3463337	0.1000	0.1098	M
2	8.249	8.250	-0.001	1744173	0.1000	0.1037	M
		Average of Peak Amounts =				0.1105	
						RPD = 0.88	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248@0.1PPM_00025 Amount Added: 1.00 Units: mL

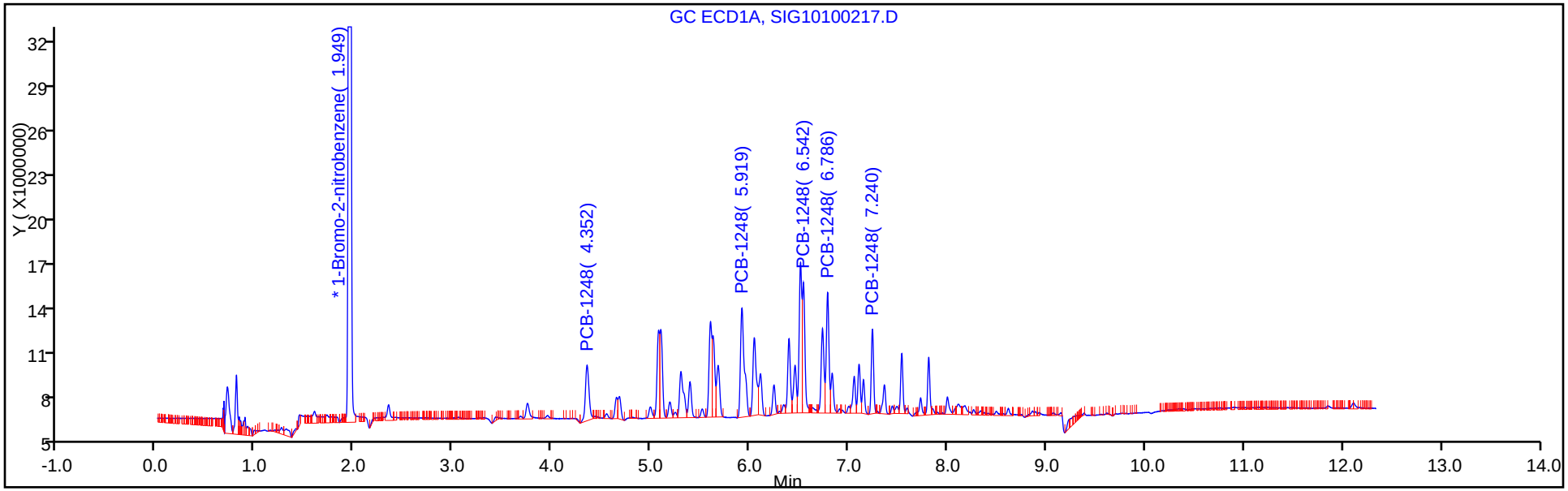
Report Date: 03-Oct-2017 08:46:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

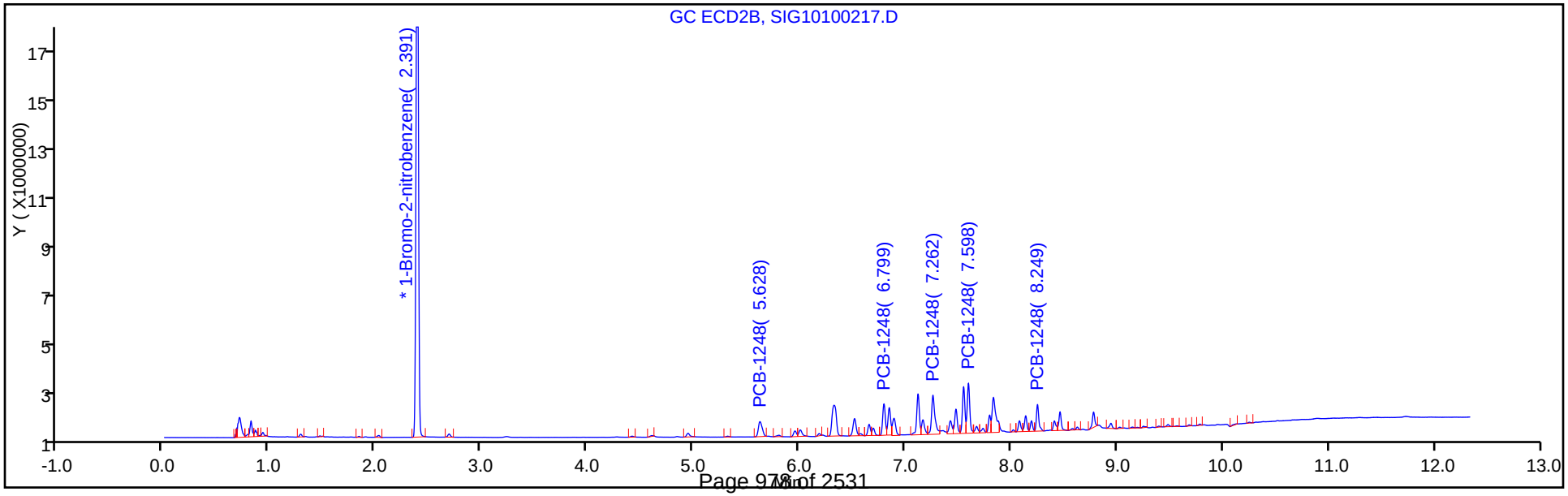
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100217.D

Injection Date:	02-Oct-2017 17:34:19	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1248			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:46:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100217.D

Injection Date: 02-Oct-2017 17:34:19 Instrument ID: A2HP13

Lims ID: std01 1248

Client ID:

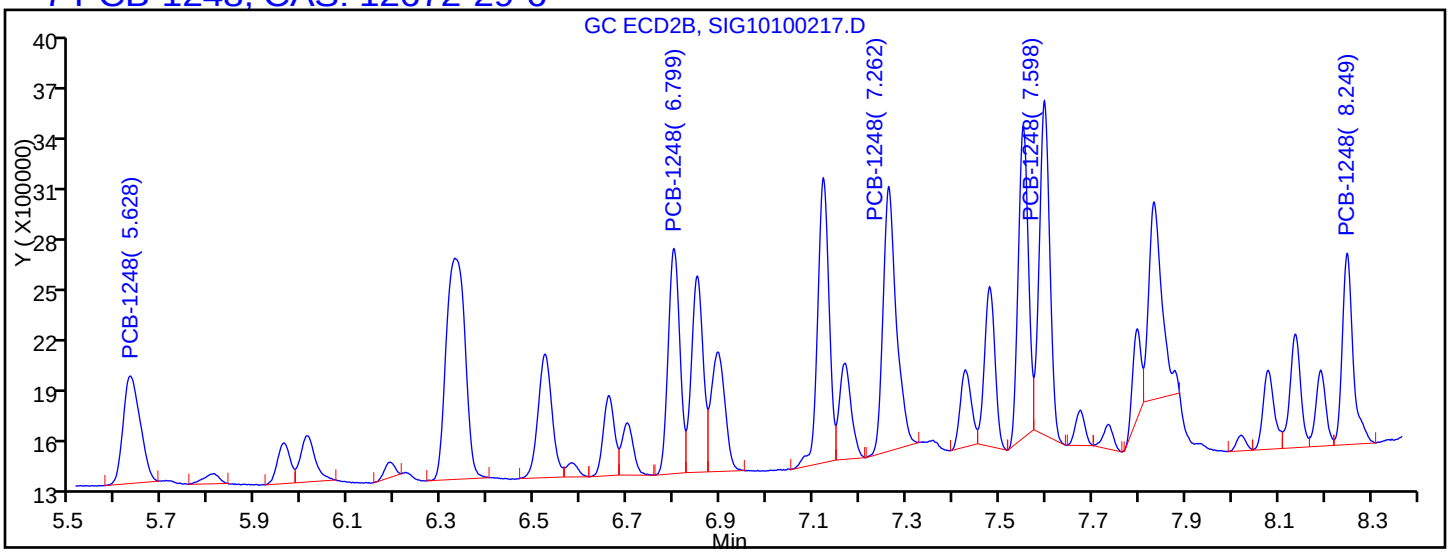
Operator ID: ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

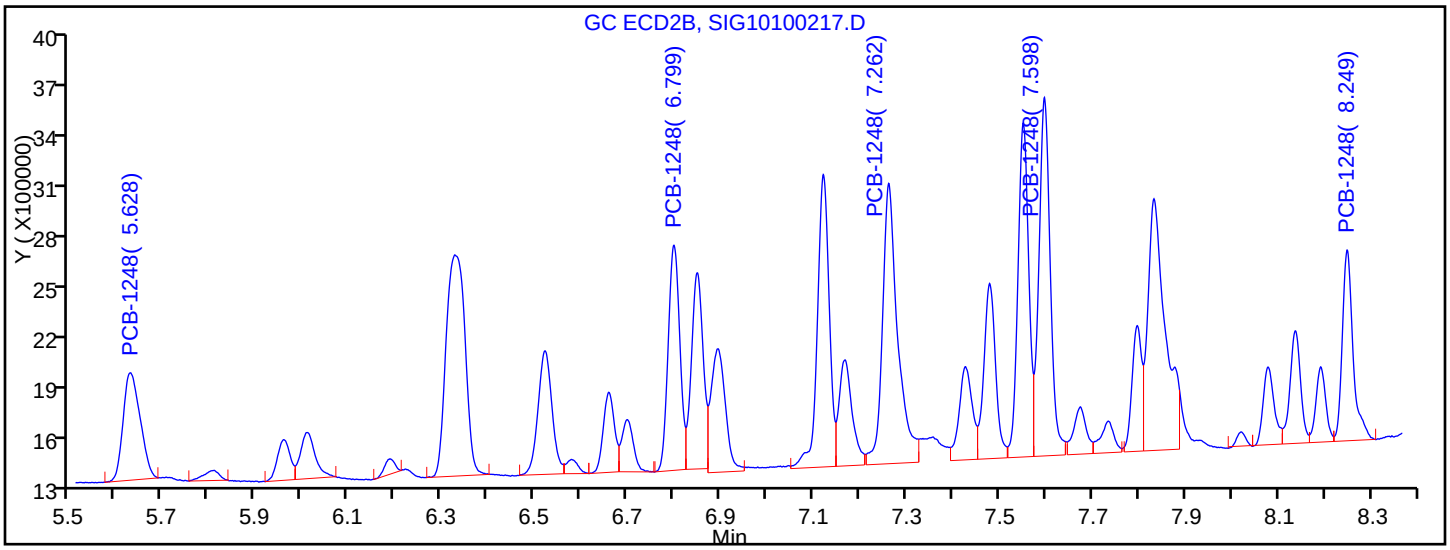
Column: Detector GC ecd2b

7 PCB-1248, CAS: 12672-29-6



Processing Integration Results

5.628	Response = 1555625
6.799	Response = 2233634
7.262	Response = 2970591
7.598	Response = 2965757
8.249	Response = 1758680



Manual Integration Results

5.628	Response = 1555625	
6.799	Response = 2233634	
7.262	Response = 3612113	M
7.598	Response = 3463337	M
8.249	Response = 1744173	M

Reviewer: hassl, 03-Oct-2017 06:08:07

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100218.D
Lims ID: std02 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 17:52:34 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-018
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:43 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:08:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	198342426	0.0500	0.0500	
2	2.391	2.391	0.000	36455641	0.0500	0.0500	
7 PCB-1248							M
1	4.351	4.353	-0.002	16362928	0.2000	0.2074	
1	5.918	5.919	-0.001	38255613	0.2000	0.2134	
1	6.542	6.541	0.001	29195506	0.2000	0.2086	
1	6.786	6.787	-0.001	28263396	0.2000	0.2082	
1	7.239	7.239	0.000	17773934	0.2000	0.2100	
		Average of Peak Amounts =				0.2095	
2	5.628	5.629	-0.001	2919771	0.2000	0.2081	
2	6.799	6.799	0.000	4079925	0.2000	0.2079	
2	7.262	7.263	-0.001	6081814	0.2000	0.2068	M
2	7.598	7.598	0.000	6457950	0.2000	0.2100	M
2	8.250	8.250	0.000	3531359	0.2000	0.2153	M
		Average of Peak Amounts =				0.2096	
					RPD =	0.06	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248@0.2ppm_00021 Amount Added: 1.00 Units: mL

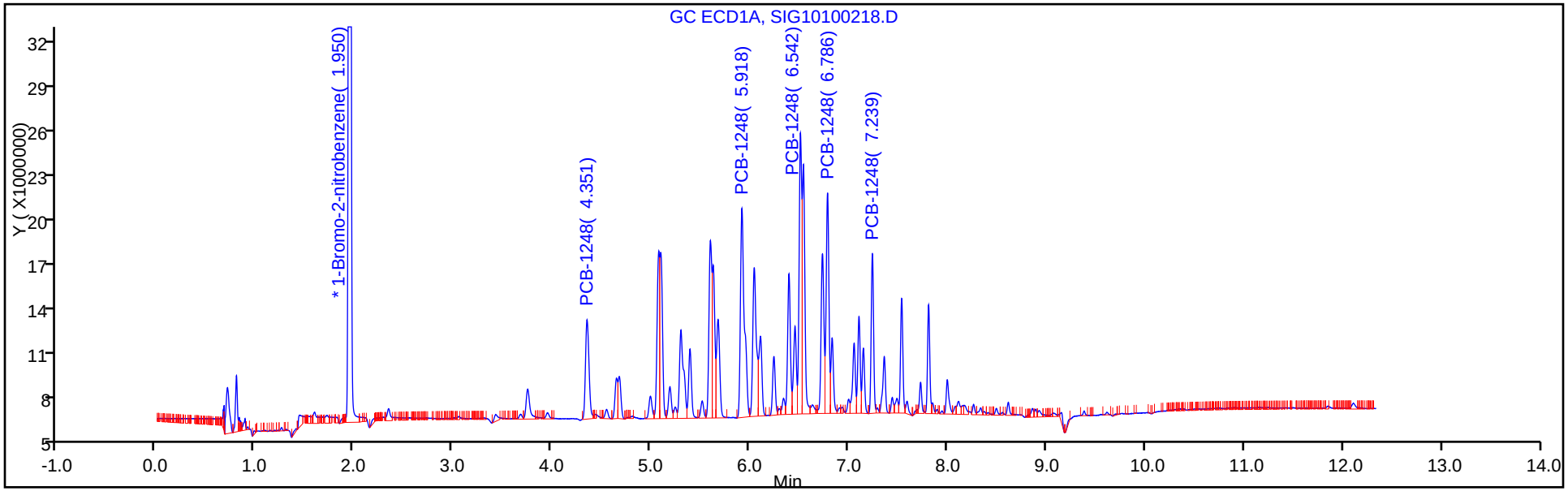
Report Date: 03-Oct-2017 08:46:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

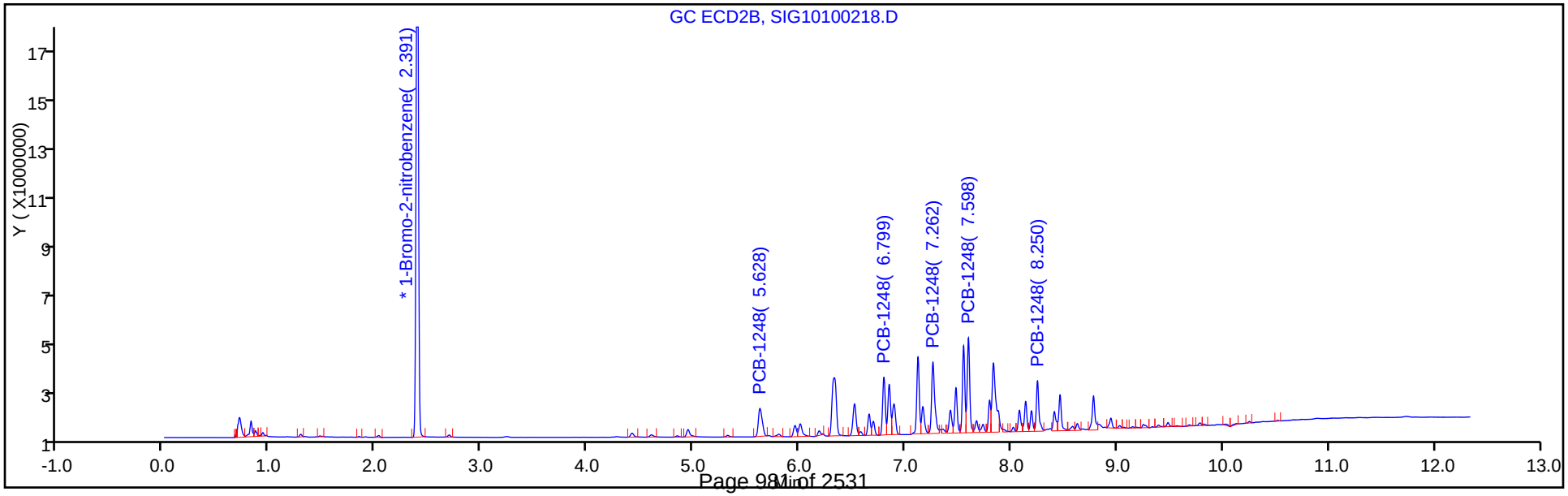
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100218.D

Injection Date:	02-Oct-2017 17:52:34	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1248			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:46:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100218.D

Injection Date: 02-Oct-2017 17:52:34 Instrument ID: A2HP13

Lims ID: std02 1248

Client ID:

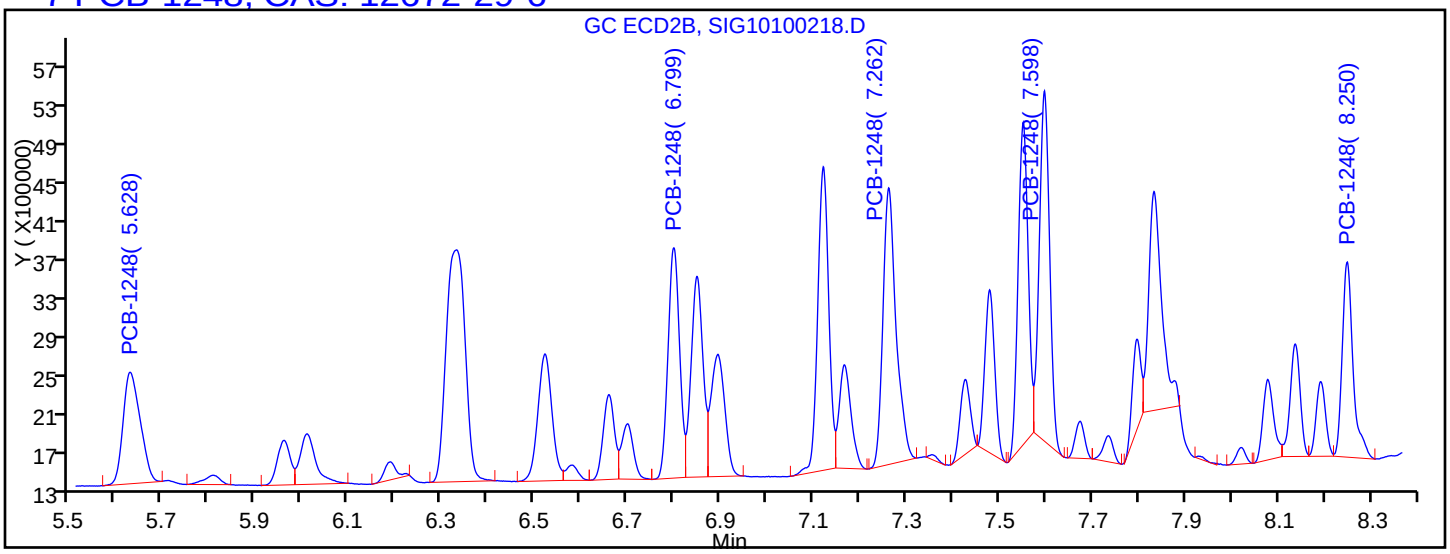
Operator ID: ALS Bottle#: 18 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

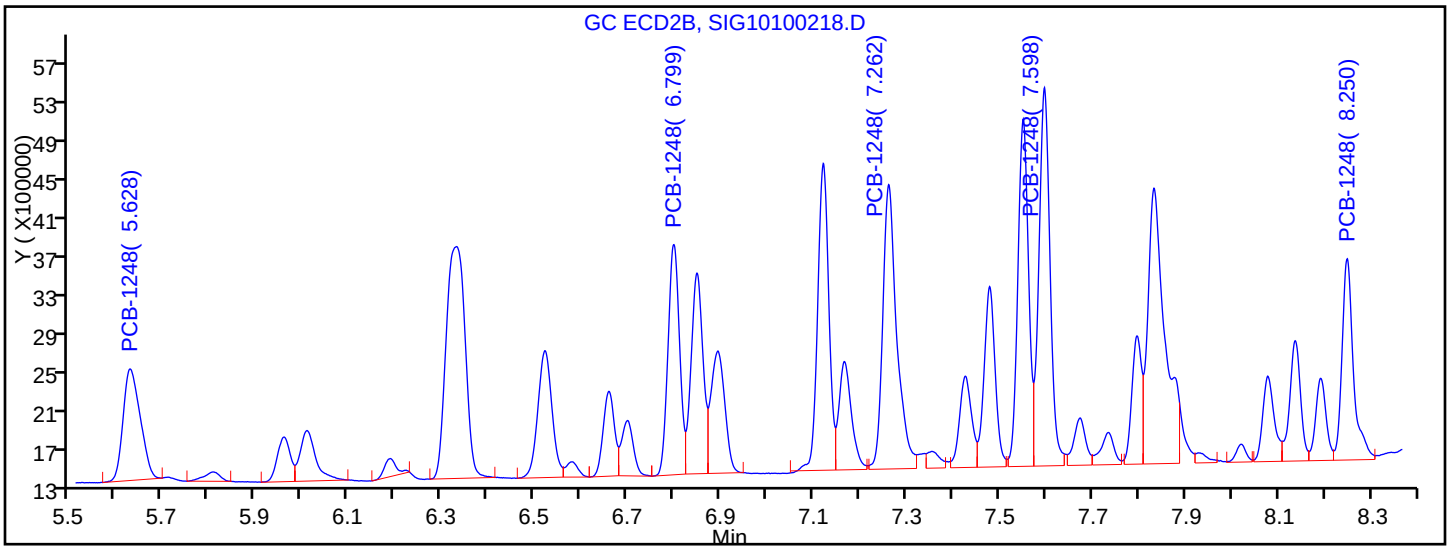
Column: Detector GC ecd2b

7 PCB-1248, CAS: 12672-29-6



Processing Integration Results

5.628	Response = 2919771
6.799	Response = 4079925
7.262	Response = 5541586
7.598	Response = 5487921
8.250	Response = 3232267



Manual Integration Results

5.628	Response = 2919771	
6.799	Response = 4079925	
7.262	Response = 6081814	M
7.598	Response = 6457950	M
8.250	Response = 3531359	M

Reviewer: hassl, 03-Oct-2017 06:08:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100219.D
Lims ID: std05 1248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 18:10:55 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-019
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:49 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 07:38:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	204680764	0.0500	0.0500	
2	2.390	2.391	0.000	37836835	0.0500	0.0500	
7 PCB-1248							
1	4.351	4.353	-0.002	37057586	0.5000	0.4552	
1	5.919	5.919	0.000	88807430	0.5000	0.4800	
1	6.540	6.541	-0.001	68504665	0.5000	0.4742	
1	6.785	6.787	-0.002	65194688	0.5000	0.4653	
1	7.239	7.239	0.000	42476906	0.5000	0.4862	
		Average of Peak Amounts =				0.4722	
2	5.628	5.629	-0.001	6984346	0.5000	0.4797	
2	6.799	6.799	0.000	9343819	0.5000	0.4588	
2	7.261	7.263	-0.002	13968418	0.5000	0.4575	
2	7.597	7.598	-0.001	15467803	0.5000	0.4846	
2	8.249	8.250	-0.001	8151900	0.5000	0.4788	
		Average of Peak Amounts =				0.4719	
						RPD = 0.06	

Reagents:

SG1248@0.5ppm_00031 Amount Added: 1.00 Units: mL

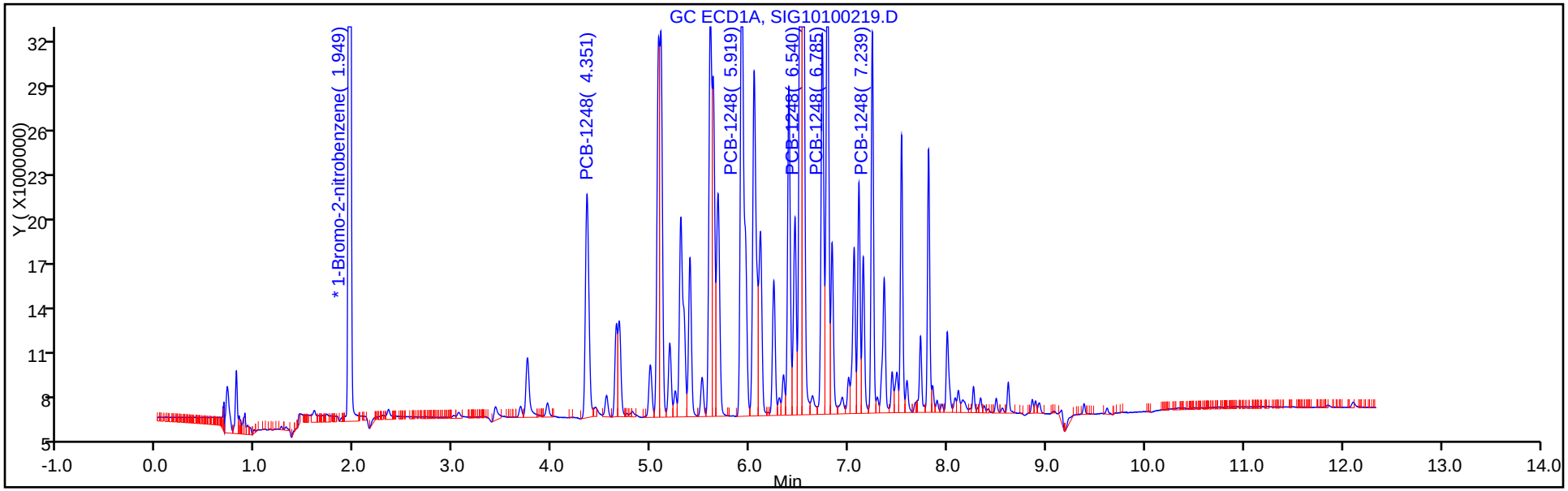
Report Date: 03-Oct-2017 08:46:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

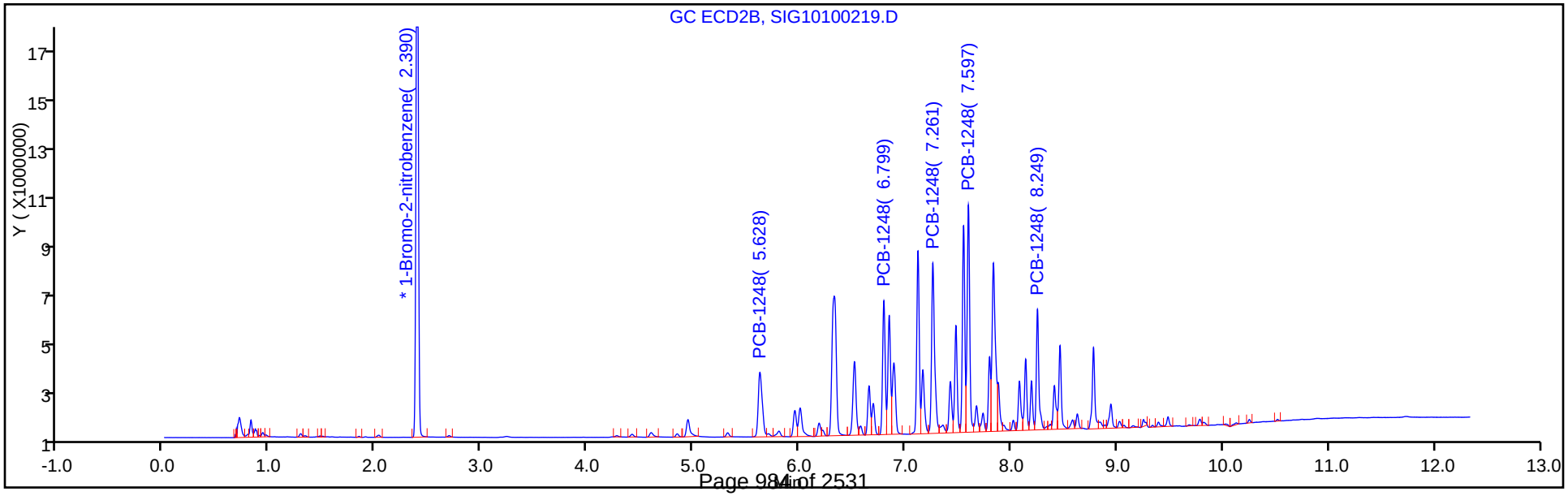
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100219.D

Injection Date:	02-Oct-2017 18:10:55	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1248			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100220.D
Lims ID: std1 1248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 18:29:14 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-020
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:46:54 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 07:38:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	202176288	0.0500	0.0500	
2	2.391	2.391	0.000	37212389	0.0500	0.0500	
7 PCB-1248							
1	4.351	4.353	-0.002	68354259	1.00	0.8500	
1	5.918	5.919	-0.001	164522213	1.00	0.9002	
1	6.541	6.541	0.000	124218040	1.00	0.8706	
1	6.786	6.787	-0.001	121358260	1.00	0.8768	
1	7.239	7.239	0.000	80076177	1.00	0.9280	
		Average of Peak Amounts =				0.8851	
2	5.628	5.629	-0.001	13063598	1.00	0.9122	
2	6.800	6.799	0.001	17585966	1.00	0.8780	
2	7.262	7.263	-0.001	26614151	1.00	0.8864	
2	7.598	7.598	0.000	30079727	1.00	0.9582	
2	8.250	8.250	0.000	15719940	1.00	0.9388	
		Average of Peak Amounts =				0.9147	
						RPD = 3.29	

Reagents:

SG1248@1.0ppm_00021 Amount Added: 1.00 Units: mL

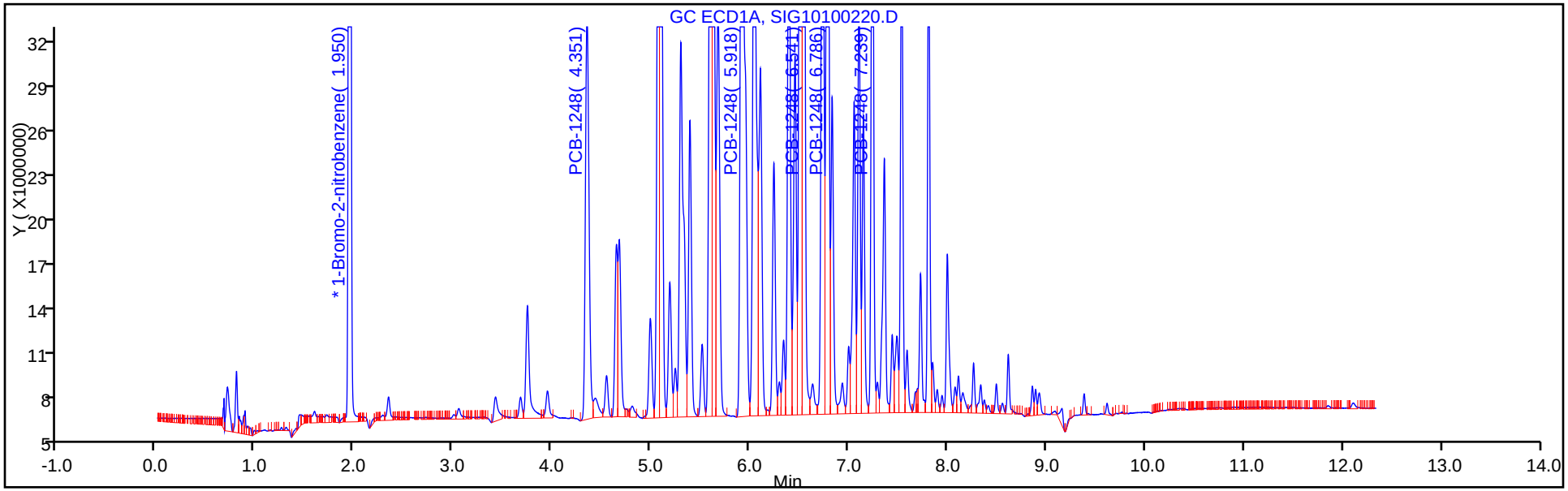
Report Date: 03-Oct-2017 08:46:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

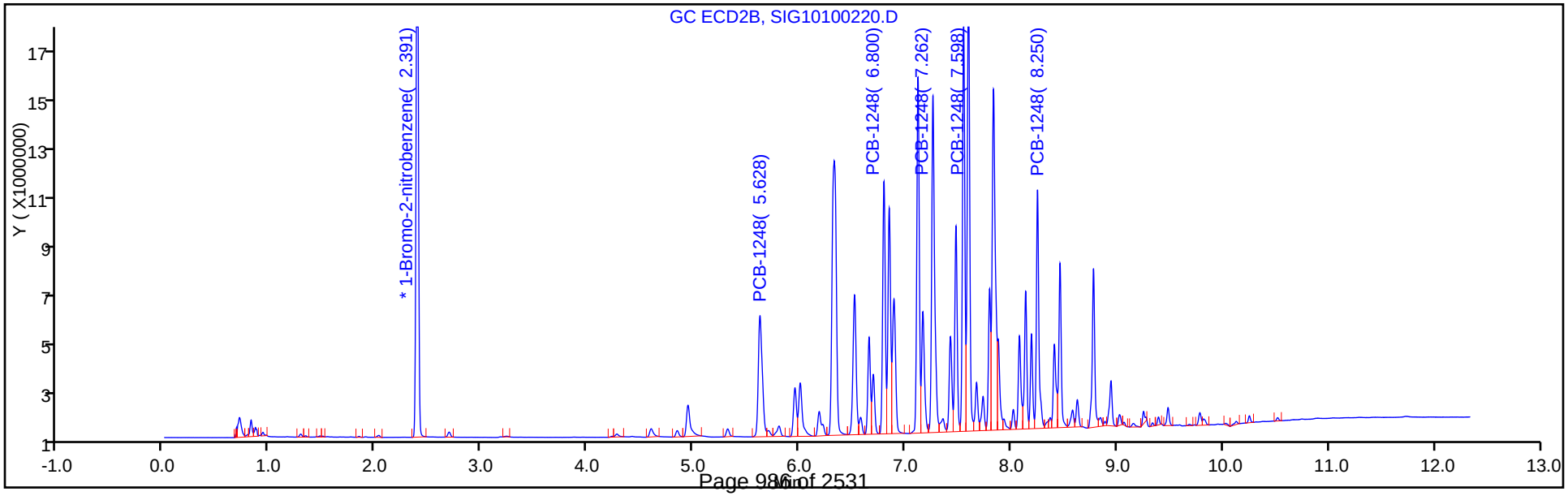
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100220.D

Injection Date:	02-Oct-2017 18:29:14	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1248			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100221.D
Lims ID: std15 1248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 18:47:41 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-021
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:02 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 07:38:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	202167736	0.0500	0.0500	
2	2.390	2.391	0.000	37487516	0.0500	0.0500	
7 PCB-1248							
1	4.351	4.353	-0.002	98734683	1.50	1.23	
1	5.919	5.919	0.000	236329541	1.50	1.29	
1	6.540	6.541	-0.001	177125454	1.50	1.24	
1	6.785	6.787	-0.002	172284160	1.50	1.24	
1	7.239	7.239	0.000	114072476	1.50	1.32	
		Average of Peak Amounts =				1.27	
2	5.628	5.629	-0.001	19135099	1.50	1.33	
2	6.798	6.799	-0.001	25528228	1.50	1.27	
2	7.262	7.263	-0.001	38816241	1.50	1.28	
2	7.597	7.598	-0.001	43783754	1.50	1.38	
2	8.249	8.250	-0.001	22702767	1.50	1.35	
		Average of Peak Amounts =				1.32	
						RPD = 4.27	

Reagents:

SG1248@1.5ppm_00002 Amount Added: 1.00 Units: mL

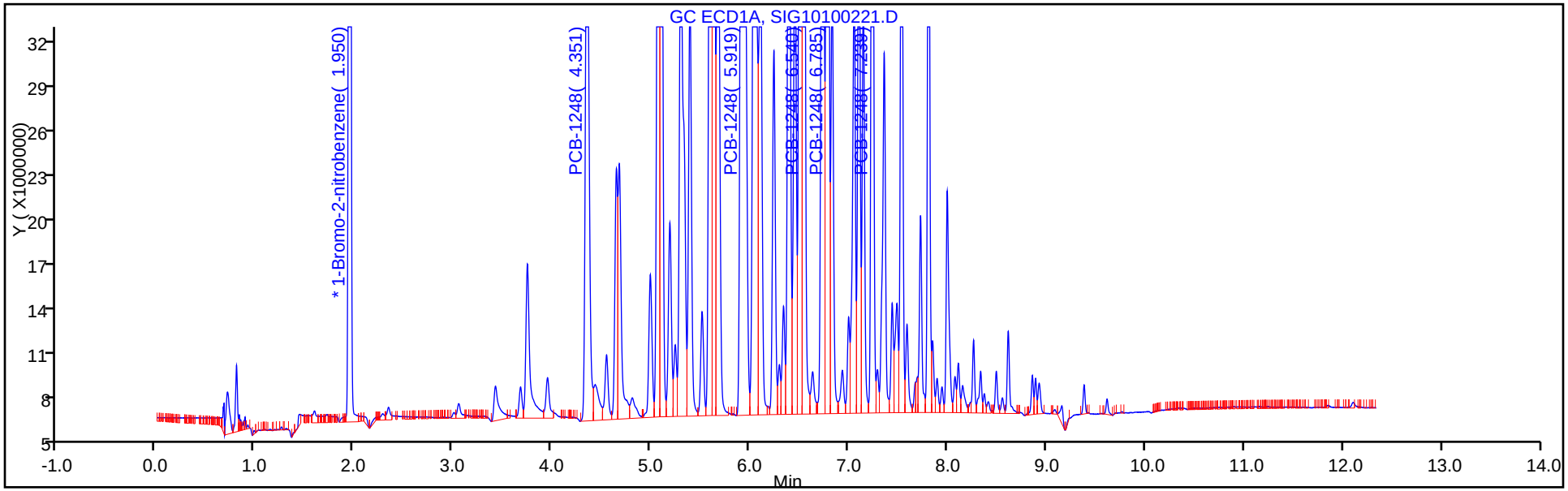
Report Date: 03-Oct-2017 08:47:06 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

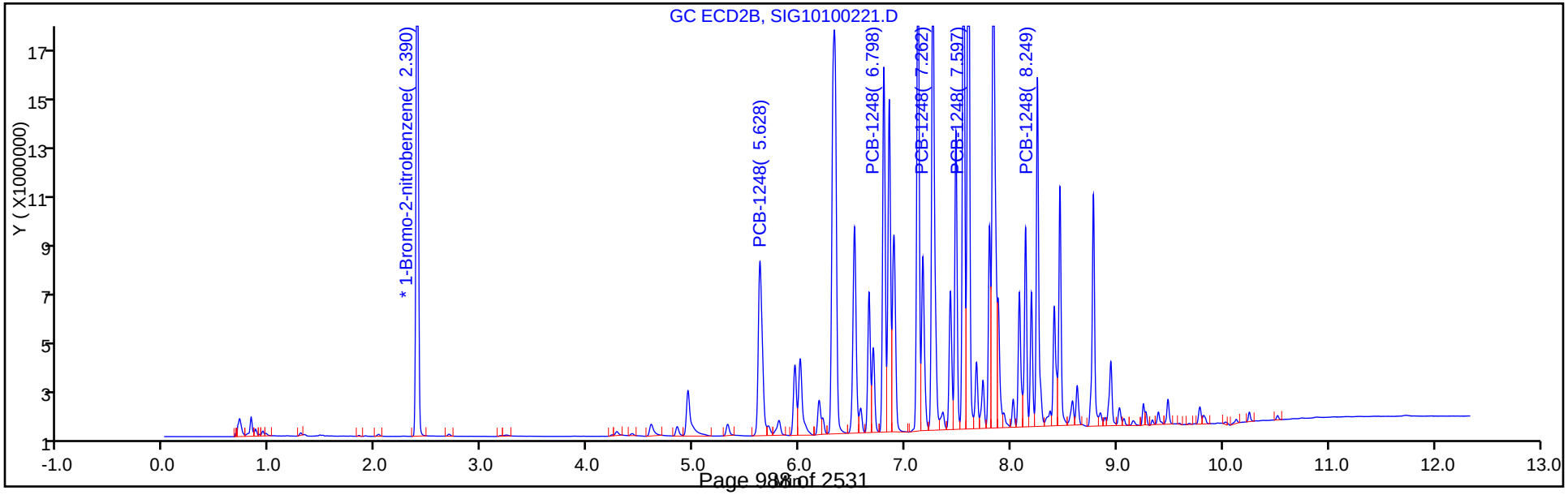
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100221.D

Injection Date:	02-Oct-2017 18:47:41	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std15 1248			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-1 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 19:06 | Calibration End Date: 10/02/2017 20:37 | Calibration ID: 41701

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/22	SIG10100222.D
Level 2	STD01 240-297169/23	SIG10100223.D
Level 3	STD02 240-297169/24	SIG10100224.D
Level 4	STD05 240-297169/25	SIG10100225.D
Level 5	STD1 240-297169/26	SIG10100226.D
Level 6	STD15 240-297169/27	SIG10100227.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.0155 0.0105	0.0148	0.0134	0.0116	0.0110	Ave		0.0128				16.1		20.0			
PCB-1221 Peak 2	0.0097 0.0067	0.0094	0.0089	0.0077	0.0071	Ave		0.0083				15.1		20.0			
PCB-1221 Peak 3	0.0365 0.0247	0.0340	0.0310	0.0279	0.0251	Ave		0.0298				16.1		20.0			
PCB-1254 Peak 1	0.0606 0.0413	0.0553	0.0512	0.0448	0.0423	Ave		0.0493				15.8		20.0			
PCB-1254 Peak 2	0.0741 0.0555	0.0690	0.0669	0.0591	0.0567	Ave		0.0636				11.9		20.0			
PCB-1254 Peak 3	0.0563 0.0422	0.0523	0.0512	0.0448	0.0431	Ave		0.0483				11.9		20.0			
PCB-1254 Peak 4	0.0529 0.0380	0.0490	0.0470	0.0408	0.0391	Ave		0.0445				13.5		20.0			
PCB-1254 Peak 5	0.0762 0.0552	0.0697	0.0677	0.0590	0.0568	Ave		0.0641				13.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-85941-1 | Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-1 (0.53 ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 19:06 | Calibration End Date: 10/02/2017 20:37 | Calibration ID: 41701

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/22	SIG10100222.D
Level 2	STD01 240-297169/23	SIG10100223.D
Level 3	STD02 240-297169/24	SIG10100224.D
Level 4	STD05 240-297169/25	SIG10100225.D
Level 5	STD1 240-297169/26	SIG10100226.D
Level 6	STD15 240-297169/27	SIG10100227.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Ave	3297184 62094587	5980738	11323574	23397975	45017638	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	BNB	Ave	2062583 39688186	3812127	7519160	15557980	28936987	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	BNB	Ave	7768076 145934248	13746792	26273188	56120335	102507448	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	BNB	Ave	12917876 243878198	22399347	43358413	90147574	172857412	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	BNB	Ave	15799157 327957205	27947995	56659853	119028022	231606605	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	BNB	Ave	11990520 249110357	21182416	43362803	90230592	176158603	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	BNB	Ave	11273764 224703569	19852450	39794055	82216765	159765940	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	BNB	Ave	16240107 326206554	28220952	57324341	118800637	231950638	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100222.D
Lims ID: std005 ar2154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 19:06:00 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-022
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:11 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:08:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	213115827	0.0500	0.0500	
2	2.391	2.391	0.000	39529983	0.0500	0.0500	
3 PCB-1221							
1	3.421	3.421	0.000	3297184	0.0500	0.0605	
1	3.680	3.680	0.000	2062583	0.0500	0.0587	
1	3.746	3.746	0.000	7768076	0.0500	0.0611	
		Average of Peak Amounts =				0.0601	
2	4.596	4.596	0.000	628273	0.0500	0.0609	
2	4.846	4.846	0.000	353472	0.0500	0.0554	
2	4.947	4.947	0.000	1330023	0.0500	0.0563	
		Average of Peak Amounts =				0.0575	
						RPD = 4.32	
8 PCB-1254							M
1	6.788	6.788	0.000	12917876	0.0500	0.0615	
1	7.239	7.239	0.000	15799157	0.0500	0.0583	
1	7.536	7.536	0.000	11990520	0.0500	0.0582	
1	7.726	7.726	0.000	11273764	0.0500	0.0595	
1	7.997	7.997	0.000	16240107	0.0500	0.0594	
		Average of Peak Amounts =				0.0594	
2	7.593	7.593	0.000	1812721	0.0500	0.0584	M
2	7.796	7.796	0.000	2061084	0.0500	0.0592	M
2	8.249	8.249	0.000	2990192	0.0500	0.0575	
2	8.462	8.462	0.000	2094889	0.0500	0.0556	
2	8.943	8.943	0.000	2901764	0.0500	0.0574	
		Average of Peak Amounts =				0.0576	
						RPD = 3.05	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.05PP_00016 Amount Added: 1.00 Units: mL

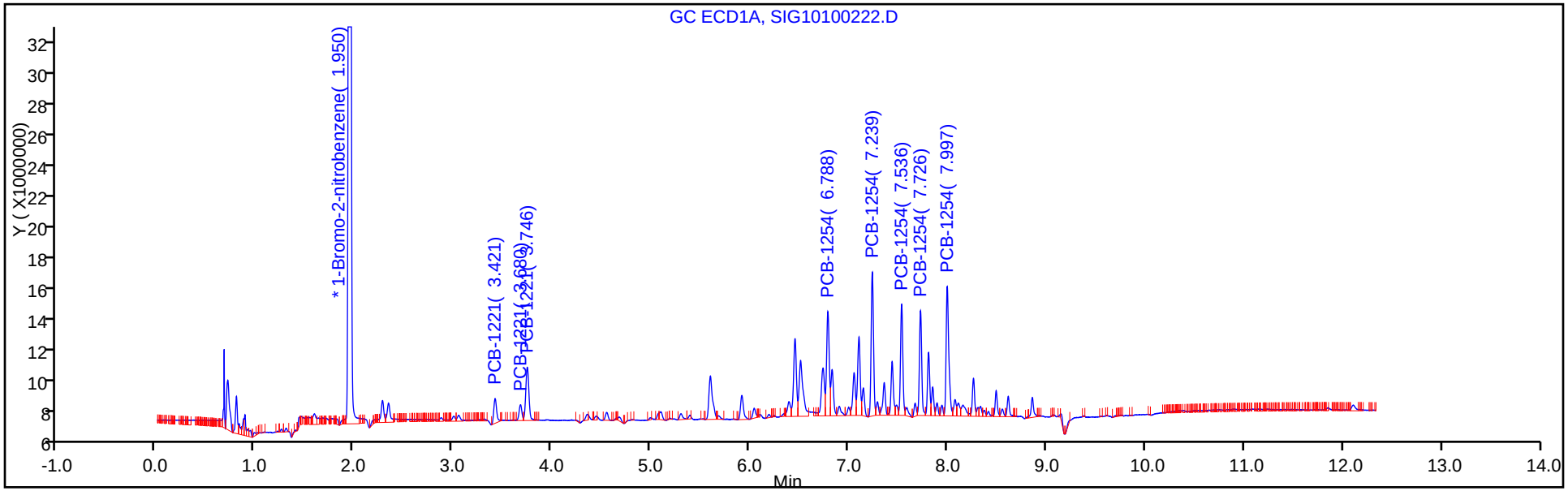
Report Date: 03-Oct-2017 08:47:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

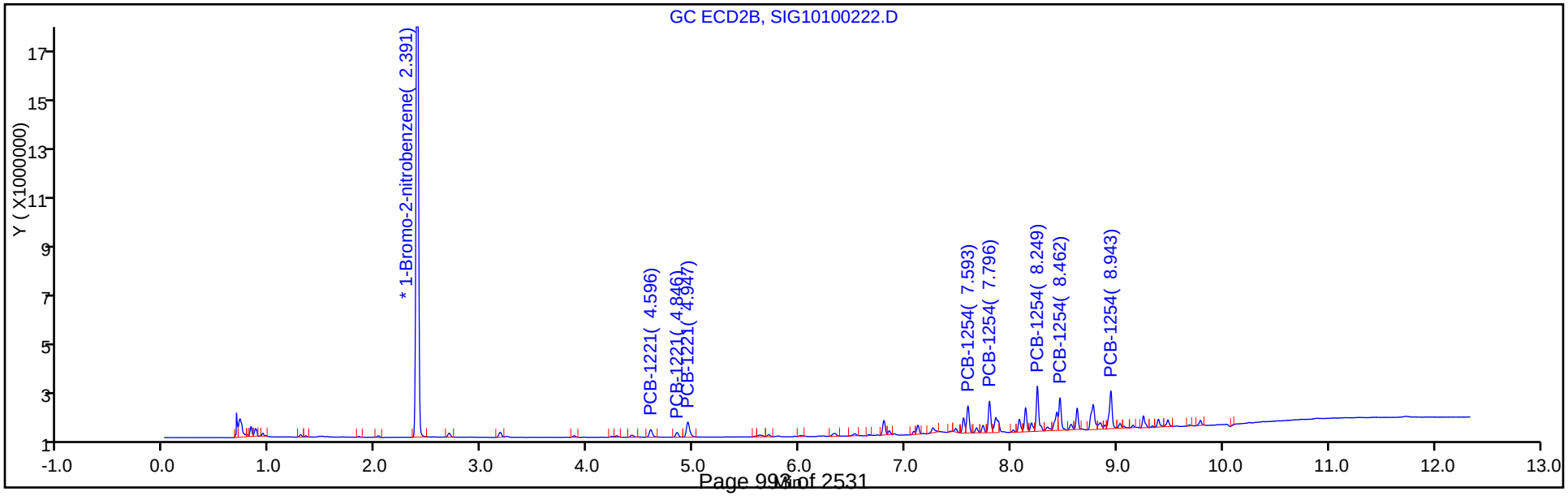
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100222.D

Injection Date:	02-Oct-2017 19:06:00	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 ar2154			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100223.D
Lims ID: std01 ar2154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 19:24:18 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-023
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:17 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:09:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	202452560	0.0500	0.0500	
2	2.391	2.391	0.000	37277060	0.0500	0.0500	
3 PCB-1221							
1	3.420	3.421	-0.001	5980738	0.1000	0.1154	
1	3.676	3.680	-0.004	3812127	0.1000	0.1141	
1	3.745	3.746	-0.001	13746792	0.1000	0.1137	
		Average of Peak Amounts =				0.1144	
2	4.596	4.596	0.000	1097305	0.1000	0.1128	
2	4.845	4.846	-0.001	663500	0.1000	0.1102	
2	4.947	4.947	0.000	2410832	0.1000	0.1082	
		Average of Peak Amounts =				0.1104	
						RPD = 3.59	
8 PCB-1254							M
1	6.789	6.788	0.001	22399347	0.1000	0.1123	
1	7.240	7.239	0.001	27947995	0.1000	0.1086	
1	7.536	7.536	0.000	21182416	0.1000	0.1083	
1	7.728	7.726	0.002	19852450	0.1000	0.1102	
1	7.997	7.997	0.000	28220952	0.1000	0.1087	
		Average of Peak Amounts =				0.1096	
2	7.593	7.593	0.000	3016532	0.1000	0.1031	
2	7.796	7.796	0.000	3519115	0.1000	0.1071	M
2	8.250	8.249	0.001	5205155	0.1000	0.1061	M
2	8.463	8.462	0.001	3762957	0.1000	0.1060	M
2	8.943	8.943	0.000	5018262	0.1000	0.1052	
		Average of Peak Amounts =				0.1055	
						RPD = 3.84	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@O.1PPM_00018 Amount Added: 1.00 Units: mL

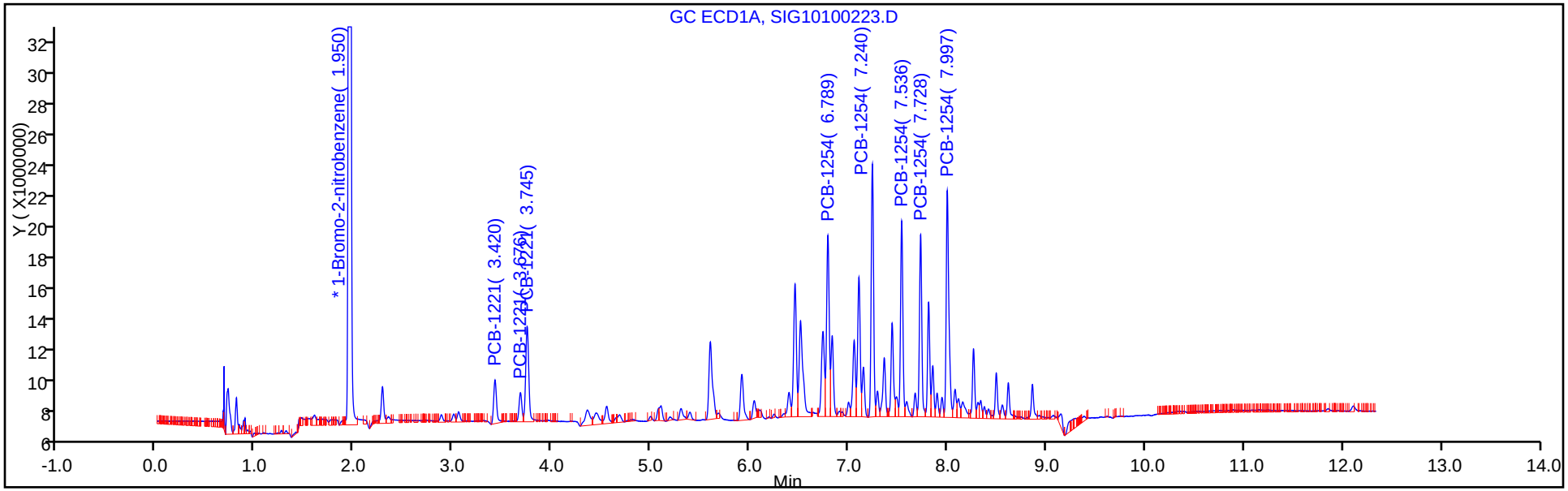
Report Date: 03-Oct-2017 08:47:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

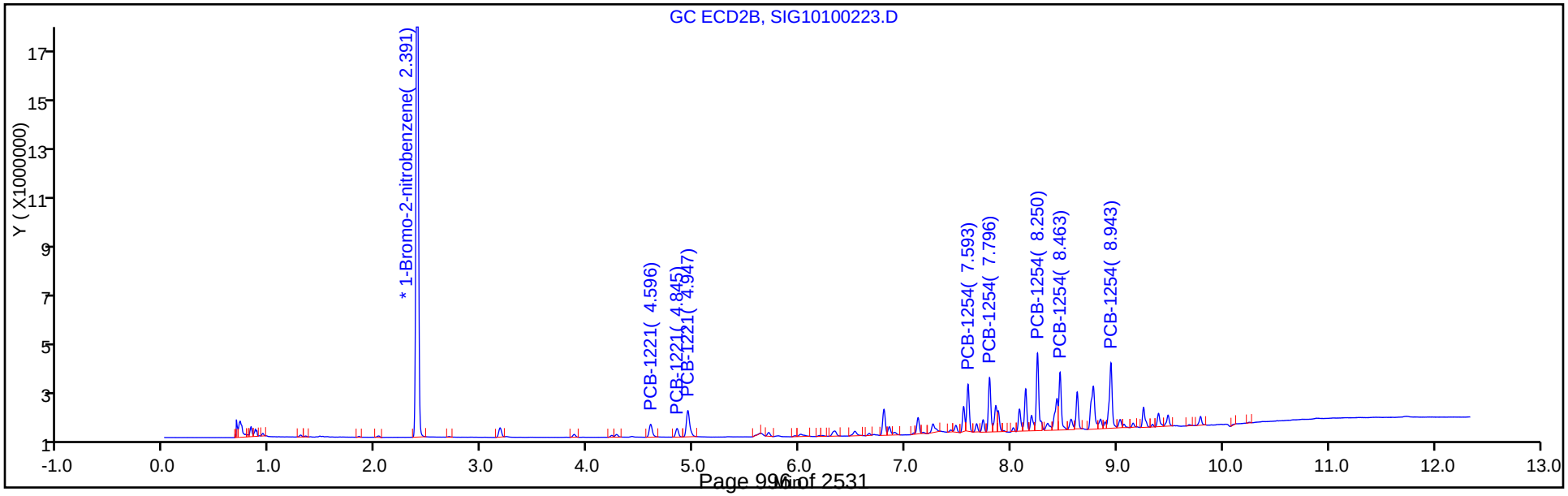
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100223.D

Injection Date:	02-Oct-2017 19:24:18	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 ar2154			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100224.D
Lims ID: std02 ar2154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 19:42:39 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-024
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:25 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:11:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	211700354	0.0500	0.0500	
2	2.390	2.391	0.000	39115983	0.0500	0.0500	
3 PCB-1221							
1	3.420	3.421	-0.001	11323574	0.2000	0.2090	
1	3.678	3.680	-0.002	7519160	0.2000	0.2153	
1	3.745	3.746	-0.001	26273188	0.2000	0.2079	
		Average of Peak Amounts =				0.2107	
2	4.596	4.596	0.000	2144026	0.2000	0.2100	
2	4.845	4.846	-0.001	1336798	0.2000	0.2116	
2	4.947	4.947	0.000	4725410	0.2000	0.2021	
		Average of Peak Amounts =				0.2079	
						RPD = 1.35	
8 PCB-1254							M
1	6.788	6.788	0.000	43358413	0.2000	0.2079	
1	7.238	7.239	-0.001	56659853	0.2000	0.2105	
1	7.535	7.536	-0.001	43362803	0.2000	0.2120	
1	7.726	7.726	0.000	39794055	0.2000	0.2113	
1	7.996	7.997	-0.001	57324341	0.2000	0.2112	
		Average of Peak Amounts =				0.2106	
2	7.593	7.593	0.000	6103866	0.2000	0.1988	
2	7.796	7.796	0.000	6983343	0.2000	0.2026	M
2	8.249	8.249	0.000	10709259	0.2000	0.2080	M
2	8.461	8.462	-0.001	7708358	0.2000	0.2068	M
2	8.942	8.943	-0.001	10395849	0.2000	0.2077	
		Average of Peak Amounts =				0.2048	
						RPD = 2.79	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.2PPM_00017 Amount Added: 1.00 Units: mL

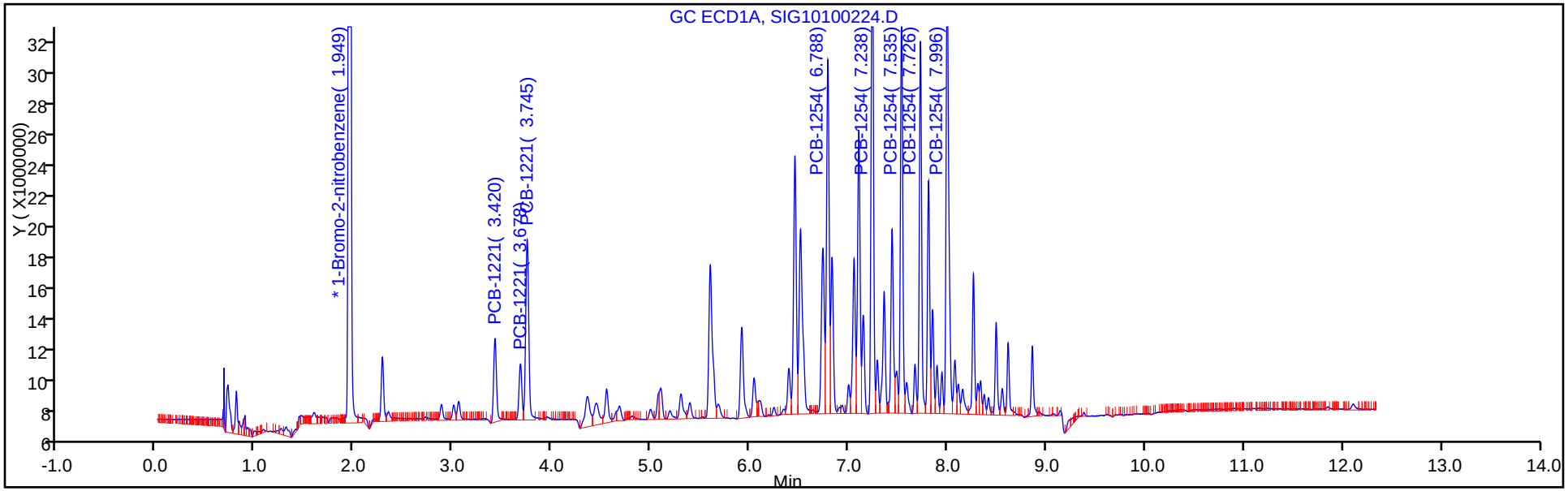
Report Date: 03-Oct-2017 08:47:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

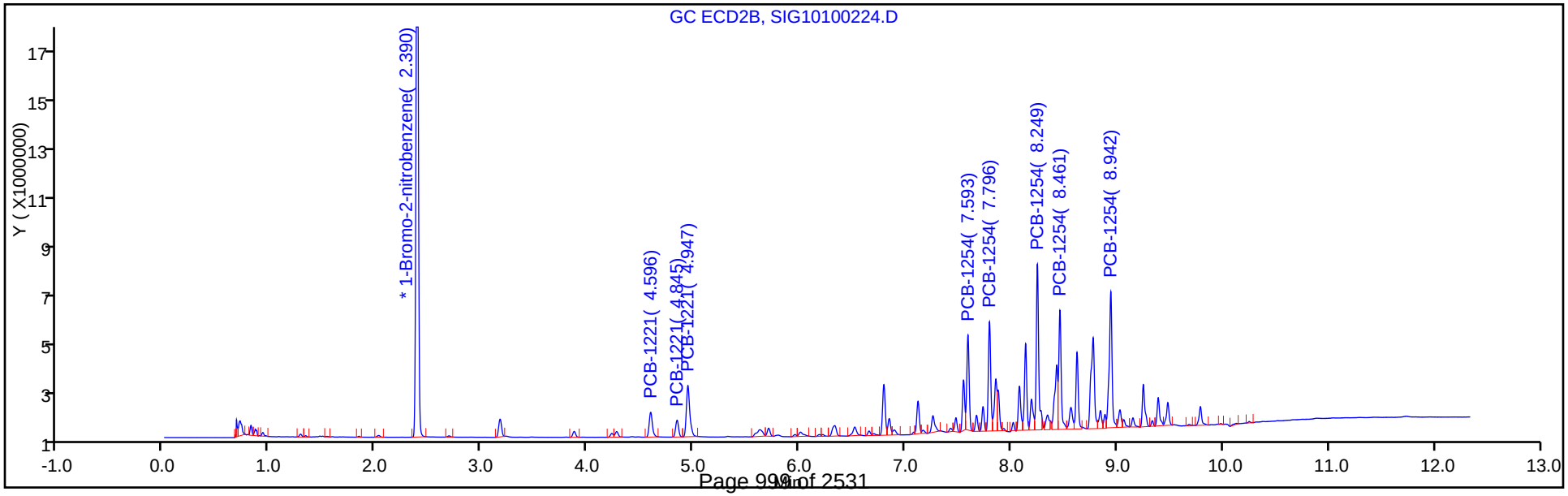
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100224.D

Injection Date:	02-Oct-2017 19:42:39	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 ar2154			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100225.D
Lims ID: std05 ar2154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 20:01:05 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-025
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:31 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:11:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	201298917	0.0500	0.0500	
2	2.391	2.391	0.000	37250319	0.0500	0.0500	
3 PCB-1221							
1	3.421	3.421	0.000	23397975	0.5000	0.4542	
1	3.678	3.680	-0.002	15557980	0.5000	0.4684	
1	3.746	3.746	0.000	56120335	0.5000	0.4670	
		Average of Peak Amounts =				0.4632	
2	4.597	4.596	0.001	4452861	0.5000	0.4581	
2	4.846	4.846	0.000	2860507	0.5000	0.4754	
2	4.947	4.947	0.000	10397108	0.5000	0.4670	
		Average of Peak Amounts =				0.4668	
						RPD = 0.77	
8 PCB-1254							M
1	6.790	6.788	0.002	90147574	0.5000	0.4546	
1	7.239	7.239	0.000	119028022	0.5000	0.4651	
1	7.536	7.536	0.000	90230592	0.5000	0.4639	
1	7.727	7.726	0.001	82216765	0.5000	0.4591	
1	7.997	7.997	0.000	118800637	0.5000	0.4604	
		Average of Peak Amounts =				0.4606	
2	7.593	7.593	0.000	13759403	0.5000	0.4707	
2	7.797	7.796	0.001	15049035	0.5000	0.4584	
2	8.249	8.249	0.000	23153110	0.5000	0.4721	M
2	8.462	8.462	0.000	16300165	0.5000	0.4593	M
2	8.943	8.943	0.000	21573334	0.5000	0.4527	
		Average of Peak Amounts =				0.4626	
						RPD = 0.44	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.5PPM_00033 Amount Added: 1.00 Units: mL

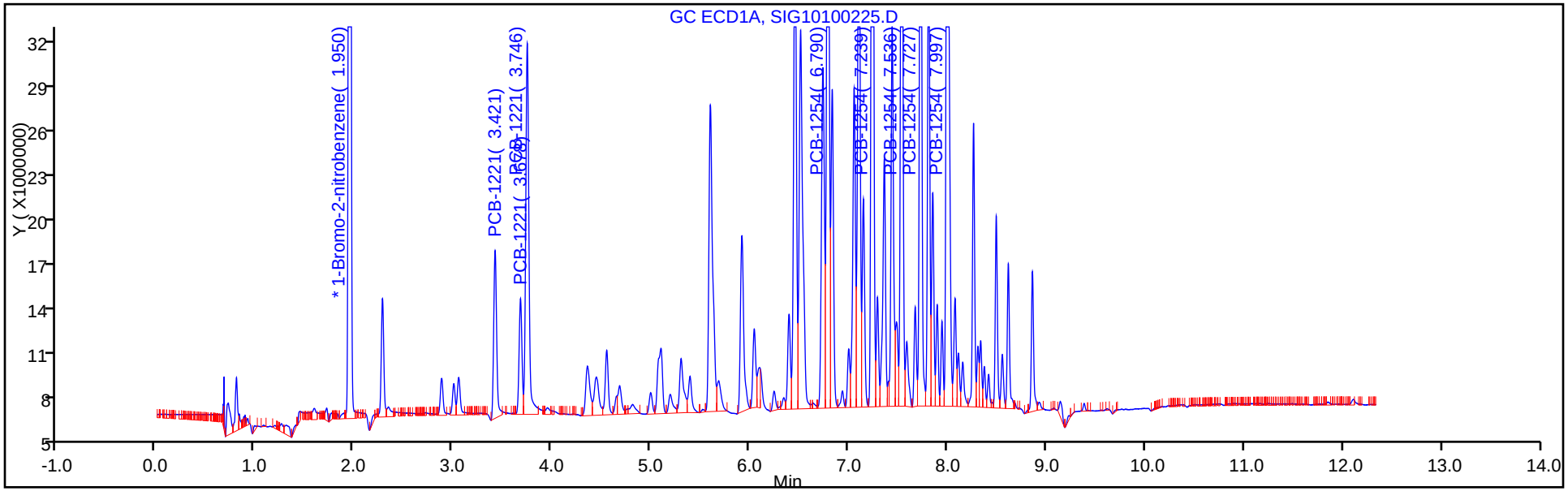
Report Date: 03-Oct-2017 08:47:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

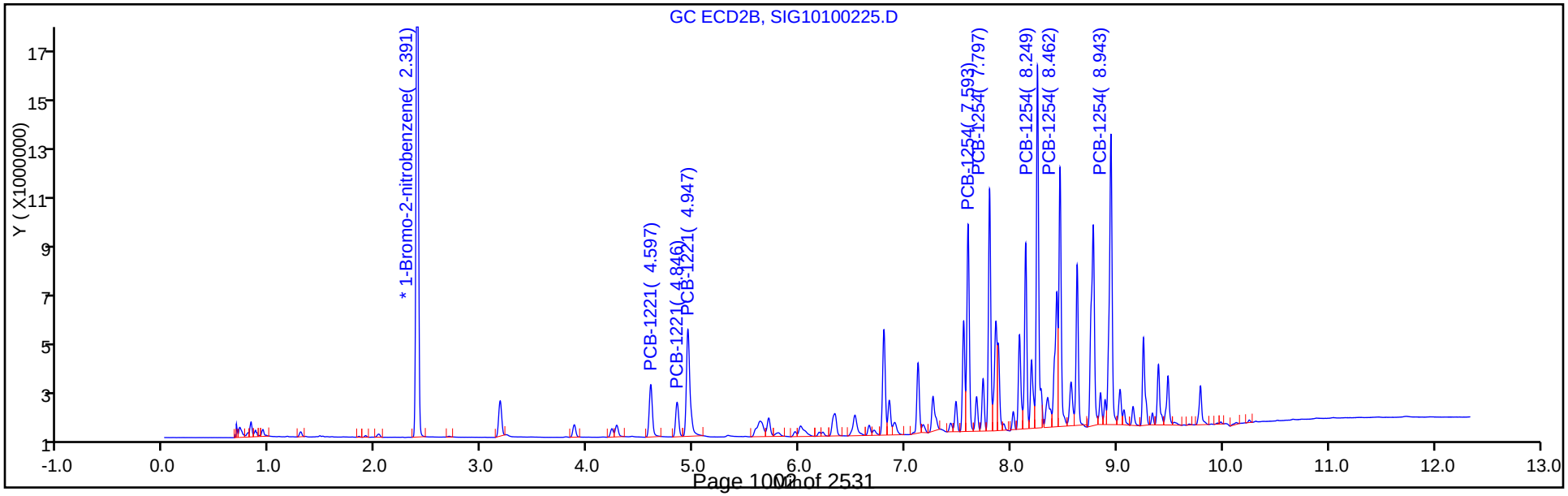
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100225.D

Injection Date:	02-Oct-2017 20:01:05	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 ar2154			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100226.D
Lims ID: std1 ar2154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 20:19:27 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-026
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:37 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:28:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	204273869	0.0500	0.0500	
2	2.390	2.391	0.000	37707517	0.0500	0.0500	
3 PCB-1221							
1	3.419	3.421	-0.002	45017638	1.00	0.8612	
1	3.677	3.680	-0.003	28936987	1.00	0.8585	
1	3.745	3.746	-0.001	102507448	1.00	0.8406	
		Average of Peak Amounts =				0.8534	
2	4.595	4.596	-0.001	8354998	1.00	0.8491	
2	4.845	4.846	-0.001	5504249	1.00	0.9036	
2	4.947	4.947	0.000	20855918	1.00	0.9253	
		Average of Peak Amounts =				0.8927	
						RPD = 4.49	
8 PCB-1254							
1	6.789	6.788	0.001	172857412	1.00	0.8591	
1	7.238	7.239	-0.001	231606605	1.00	0.8918	
1	7.535	7.536	-0.001	176158603	1.00	0.8924	
1	7.725	7.726	-0.001	159765940	1.00	0.8791	
1	7.996	7.997	-0.001	231950638	1.00	0.8857	
		Average of Peak Amounts =				0.8816	
2	7.592	7.593	-0.001	27520958	1.00	0.9300	
2	7.795	7.796	-0.001	30080091	1.00	0.9051	
2	8.248	8.249	-0.001	44590901	1.00	0.8982	
2	8.461	8.462	-0.001	33378992	1.00	0.9291	
2	8.941	8.943	-0.002	44589169	1.00	0.9243	
		Average of Peak Amounts =				0.9173	
						RPD = 3.97	

Reagents:

SG2154@1.0PPM_00021 Amount Added: 1.00 Units: mL

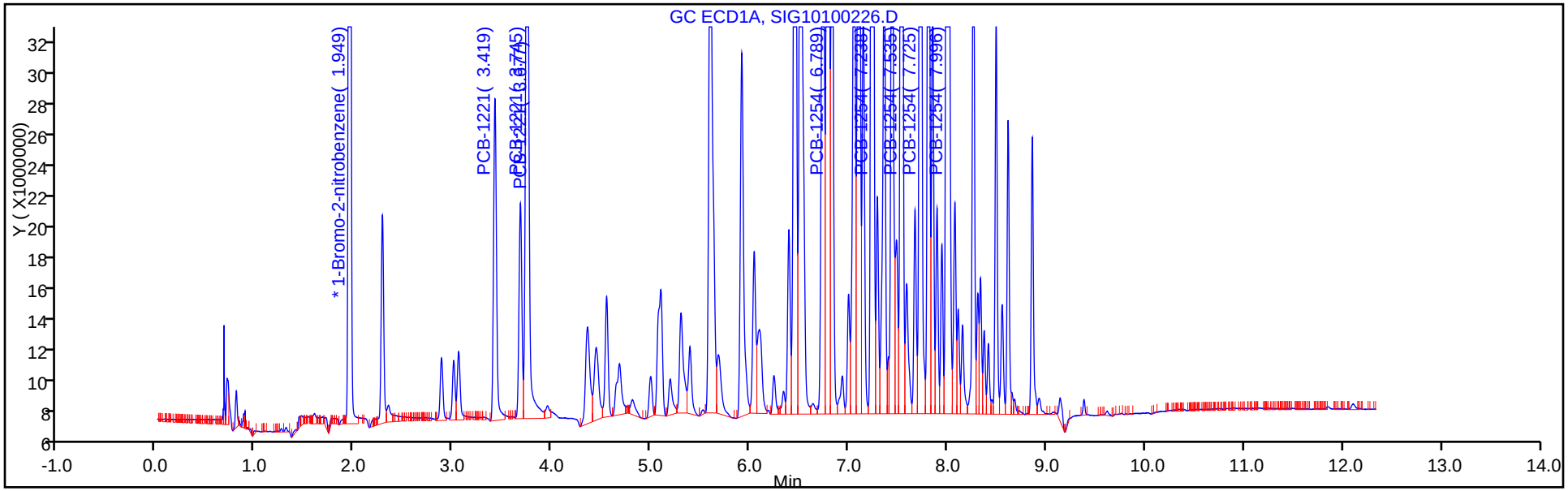
Report Date: 03-Oct-2017 08:47:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

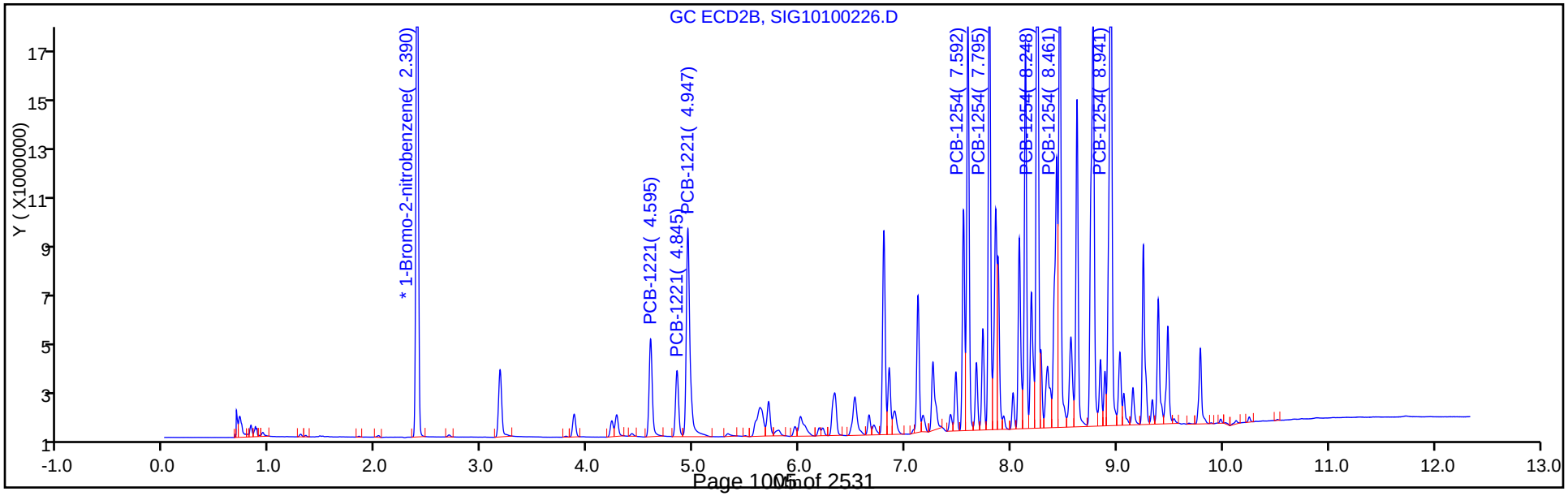
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100226.D

Injection Date:	02-Oct-2017 20:19:27	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 ar2154			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100227.D
Lims ID: std15 ar2154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 20:37:45 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-027
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:43 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:31:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	196939512	0.0500	0.0500	
2	2.390	2.391	-0.001	36134431	0.0500	0.0500	
3 PCB-1221							
1	3.420	3.421	-0.001	62094587	1.50	1.23	
1	3.677	3.680	-0.003	39688186	1.50	1.22	
1	3.745	3.746	-0.001	145934248	1.50	1.24	
		Average of Peak Amounts =				1.23	
2	4.596	4.596	0.000	11856936	1.50	1.26	
2	4.845	4.846	-0.001	7697108	1.50	1.32	
2	4.947	4.947	0.000	29885937	1.50	1.38	
		Average of Peak Amounts =				1.32	
						RPD = 6.92	
8 PCB-1254							
1	6.788	6.788	0.000	243878198	1.50	1.26	
1	7.237	7.239	-0.002	327957205	1.50	1.31	
1	7.534	7.536	-0.002	249110357	1.50	1.31	
1	7.726	7.726	0.000	224703569	1.50	1.28	
1	7.997	7.997	0.000	326206554	1.50	1.29	
		Average of Peak Amounts =				1.29	
2	7.593	7.593	0.000	39754397	1.50	1.40	
2	7.796	7.796	0.000	43534636	1.50	1.37	
2	8.248	8.249	-0.001	64787453	1.50	1.36	
2	8.462	8.462	0.000	48857689	1.50	1.42	
2	8.942	8.943	-0.001	64615814	1.50	1.40	
		Average of Peak Amounts =				1.39	
						RPD = 7.42	

Reagents:

SG2154@1.5PPM_00001 Amount Added: 1.00 Units: mL

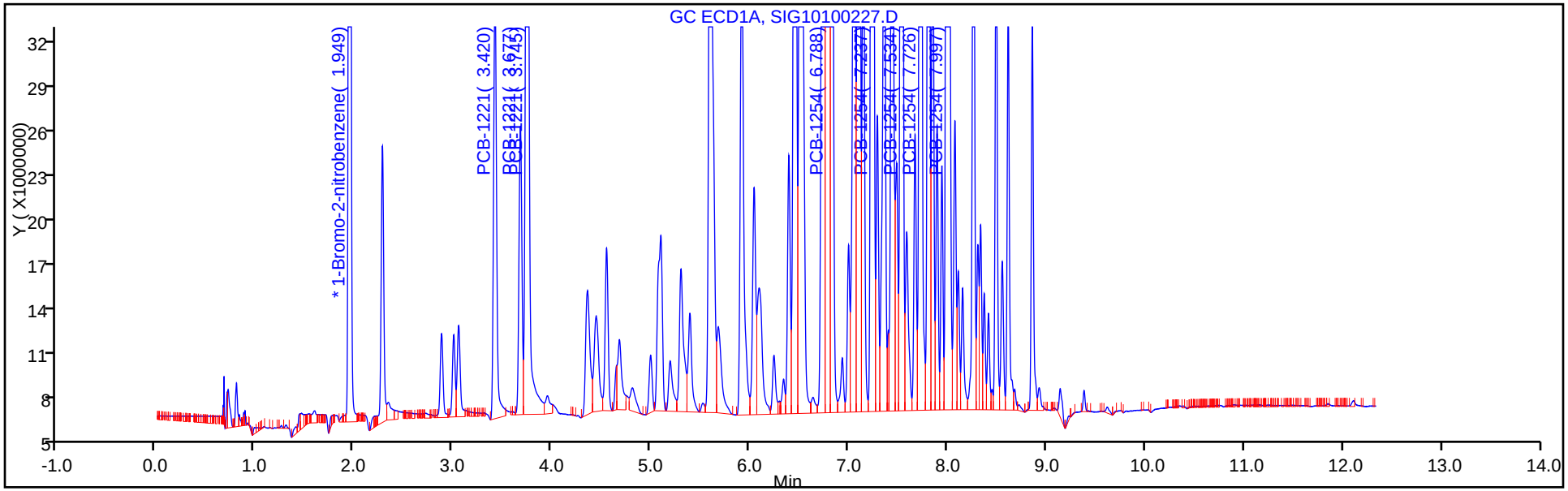
Report Date: 03-Oct-2017 08:47:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

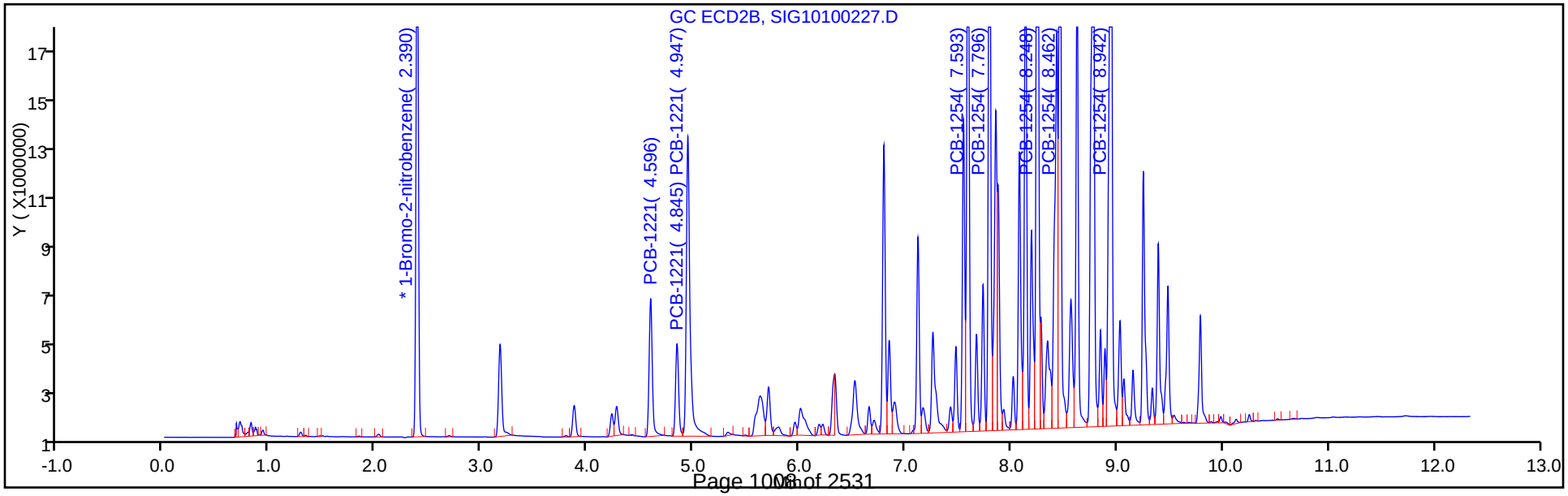
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100227.D

Injection Date:	02-Oct-2017 20:37:45	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std15 ar2154			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 19:06 Calibration End Date: 10/02/2017 20:37 Calibration ID: 41702

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/22	SIG10100222.D
Level 2	STD01 240-297169/23	SIG10100223.D
Level 3	STD02 240-297169/24	SIG10100224.D
Level 4	STD05 240-297169/25	SIG10100225.D
Level 5	STD1 240-297169/26	SIG10100226.D
Level 6	STD15 240-297169/27	SIG10100227.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.0159 0.0109	0.0147	0.0137	0.0120	0.0111	Ave		0.0130				15.6		20.0			
PCB-1221 Peak 2	0.0089 0.0071	0.0089	0.0085	0.0077	0.0073	Ave		0.0081				10.1		20.0			
PCB-1221 Peak 3	0.0336 0.0276	0.0323	0.0302	0.0279	0.0277	Ave		0.0299				8.8		20.0			
PCB-1254 Peak 1	0.0459 0.0367	0.0405	0.0390	0.0369	0.0365	Ave		0.0392				9.2		20.0			
PCB-1254 Peak 2	0.0521 0.0402	0.0472	0.0446	0.0404	0.0399	Ave		0.0441				11.2		20.0			
PCB-1254 Peak 3	0.0756 0.0598	0.0698	0.0684	0.0622	0.0591	Ave		0.0658				9.9		20.0			
PCB-1254 Peak 4	0.0530 0.0451	0.0505	0.0493	0.0438	0.0443	Ave		0.0476				8.0		20.0			
PCB-1254 Peak 5	0.0734 0.0596	0.0673	0.0664	0.0579	0.0591	Ave		0.0640				9.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 19:06 Calibration End Date: 10/02/2017 20:37 Calibration ID: 41702

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/22	SIG10100222.D
Level 2	STD01 240-297169/23	SIG10100223.D
Level 3	STD02 240-297169/24	SIG10100224.D
Level 4	STD05 240-297169/25	SIG10100225.D
Level 5	STD1 240-297169/26	SIG10100226.D
Level 6	STD15 240-297169/27	SIG10100227.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Ave	628273 11856936	1097305	2144026	4452861	8354998	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	BNB	Ave	353472 7697108	663500	1336798	2860507	5504249	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	BNB	Ave	1330023 29885937	2410832	4725410	10397108	20855918	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	BNB	Ave	1812721 39754397	3016532	6103866	13759403	27520958	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	BNB	Ave	2061084 43534636	3519115	6983343	15049035	30080091	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	BNB	Ave	2990192 64787453	5205155	10709259	23153110	44590901	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	BNB	Ave	2094889 48857689	3762957	7708358	16300165	33378992	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	BNB	Ave	2901764 64615814	5018262	10395849	21573334	44589169	0.0500 1.50	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100222.D
Lims ID: std005 ar2154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 19:06:00 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-022
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:11 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:08:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	213115827	0.0500	0.0500	
2	2.391	2.391	0.000	39529983	0.0500	0.0500	
3 PCB-1221							
1	3.421	3.421	0.000	3297184	0.0500	0.0605	
1	3.680	3.680	0.000	2062583	0.0500	0.0587	
1	3.746	3.746	0.000	7768076	0.0500	0.0611	
		Average of Peak Amounts =				0.0601	
2	4.596	4.596	0.000	628273	0.0500	0.0609	
2	4.846	4.846	0.000	353472	0.0500	0.0554	
2	4.947	4.947	0.000	1330023	0.0500	0.0563	
		Average of Peak Amounts =				0.0575	
						RPD = 4.32	
8 PCB-1254							M
1	6.788	6.788	0.000	12917876	0.0500	0.0615	
1	7.239	7.239	0.000	15799157	0.0500	0.0583	
1	7.536	7.536	0.000	11990520	0.0500	0.0582	
1	7.726	7.726	0.000	11273764	0.0500	0.0595	
1	7.997	7.997	0.000	16240107	0.0500	0.0594	
		Average of Peak Amounts =				0.0594	
2	7.593	7.593	0.000	1812721	0.0500	0.0584	M
2	7.796	7.796	0.000	2061084	0.0500	0.0592	M
2	8.249	8.249	0.000	2990192	0.0500	0.0575	
2	8.462	8.462	0.000	2094889	0.0500	0.0556	
2	8.943	8.943	0.000	2901764	0.0500	0.0574	
		Average of Peak Amounts =				0.0576	
						RPD = 3.05	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.05PP_00016 Amount Added: 1.00 Units: mL

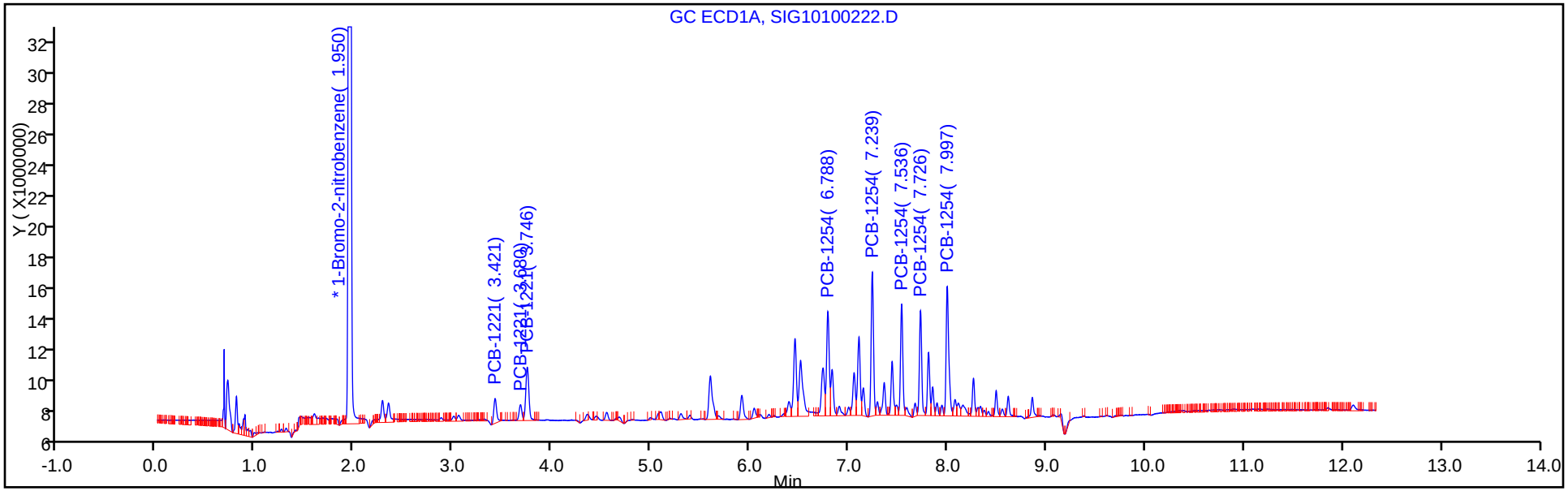
Report Date: 03-Oct-2017 08:47:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

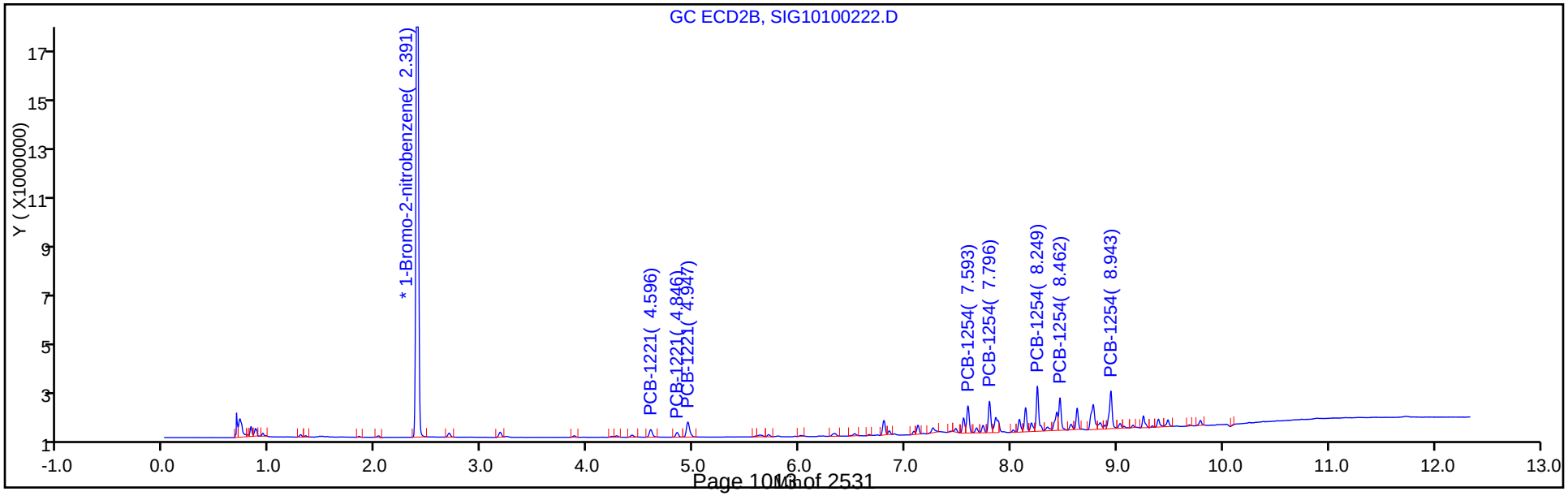
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100222.D

Injection Date:	02-Oct-2017 19:06:00	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 ar2154			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:47:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100222.D

Injection Date: 02-Oct-2017 19:06:00 Instrument ID: A2HP13

Lims ID: std005 ar2154

Client ID:

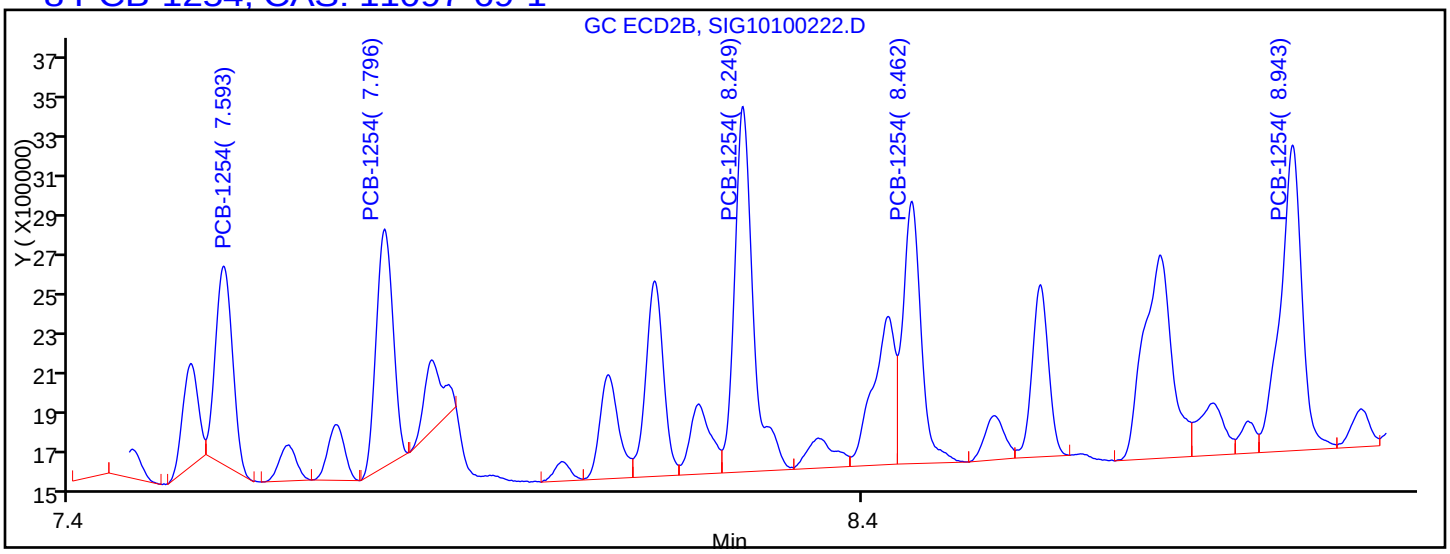
Operator ID: ALS Bottle#: 22 Worklist Smp#: 22

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

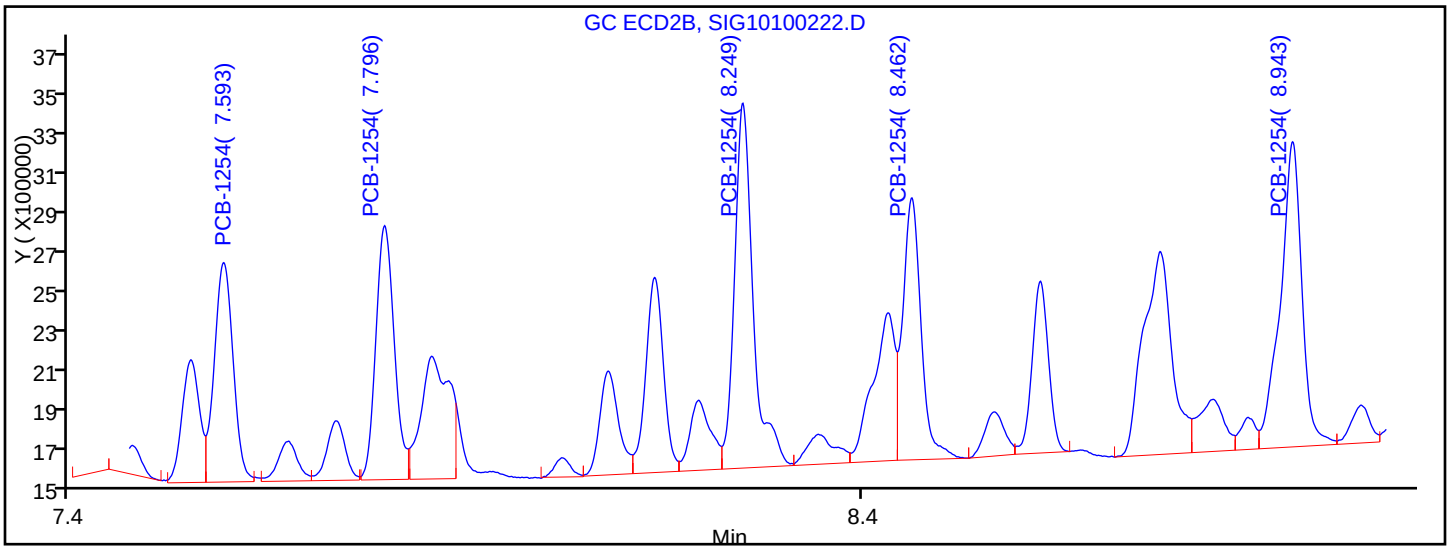
Column: Detector GC ecd2b

8 PCB-1254, CAS: 11097-69-1



Processing Integration Results

7.593	Response = 1493016
7.796	Response = 1758697
8.249	Response = 2990192
8.462	Response = 2094889
8.943	Response = 2901764



Manual Integration Results

7.593	Response = 1812721	M
7.796	Response = 2061084	M
8.249	Response = 2990192	
8.462	Response = 2094889	
8.943	Response = 2901764	

Reviewer: hassl, 03-Oct-2017 06:09:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100223.D
Lims ID: std01 ar2154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 19:24:18 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-023
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:17 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:09:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	202452560	0.0500	0.0500	
2	2.391	2.391	0.000	37277060	0.0500	0.0500	
3 PCB-1221							
1	3.420	3.421	-0.001	5980738	0.1000	0.1154	
1	3.676	3.680	-0.004	3812127	0.1000	0.1141	
1	3.745	3.746	-0.001	13746792	0.1000	0.1137	
		Average of Peak Amounts =				0.1144	
2	4.596	4.596	0.000	1097305	0.1000	0.1128	
2	4.845	4.846	-0.001	663500	0.1000	0.1102	
2	4.947	4.947	0.000	2410832	0.1000	0.1082	
		Average of Peak Amounts =				0.1104	
						RPD = 3.59	
8 PCB-1254							M
1	6.789	6.788	0.001	22399347	0.1000	0.1123	
1	7.240	7.239	0.001	27947995	0.1000	0.1086	
1	7.536	7.536	0.000	21182416	0.1000	0.1083	
1	7.728	7.726	0.002	19852450	0.1000	0.1102	
1	7.997	7.997	0.000	28220952	0.1000	0.1087	
		Average of Peak Amounts =				0.1096	
2	7.593	7.593	0.000	3016532	0.1000	0.1031	
2	7.796	7.796	0.000	3519115	0.1000	0.1071	M
2	8.250	8.249	0.001	5205155	0.1000	0.1061	M
2	8.463	8.462	0.001	3762957	0.1000	0.1060	M
2	8.943	8.943	0.000	5018262	0.1000	0.1052	
		Average of Peak Amounts =				0.1055	
						RPD = 3.84	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@O.1PPM_00018 Amount Added: 1.00 Units: mL

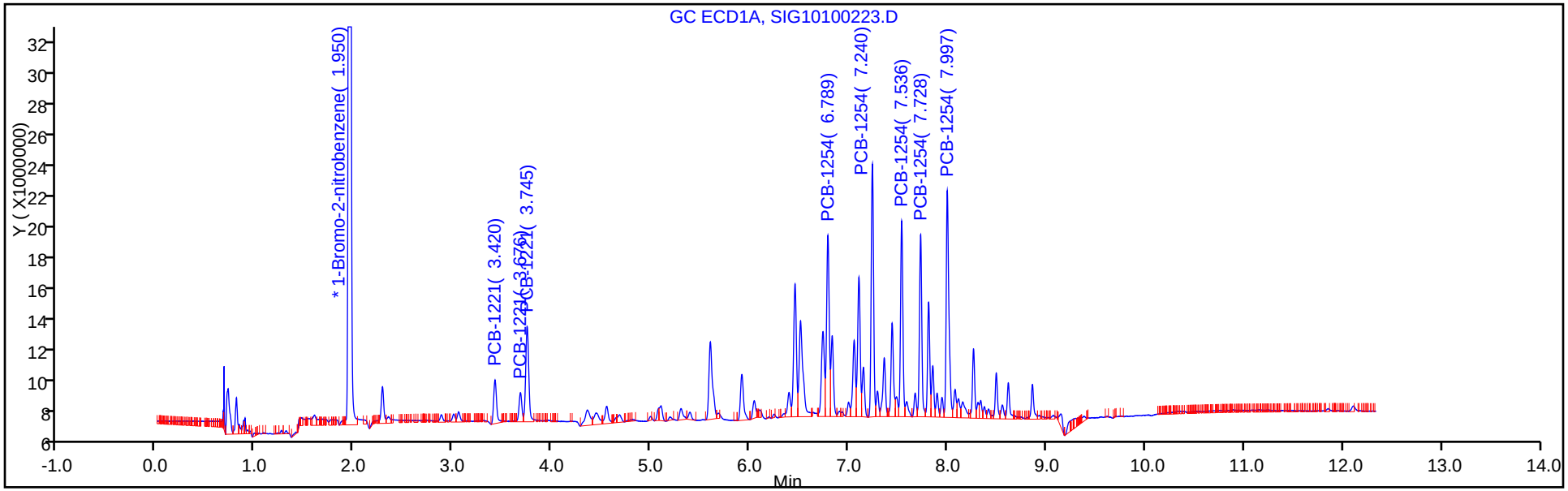
Report Date: 03-Oct-2017 08:47:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

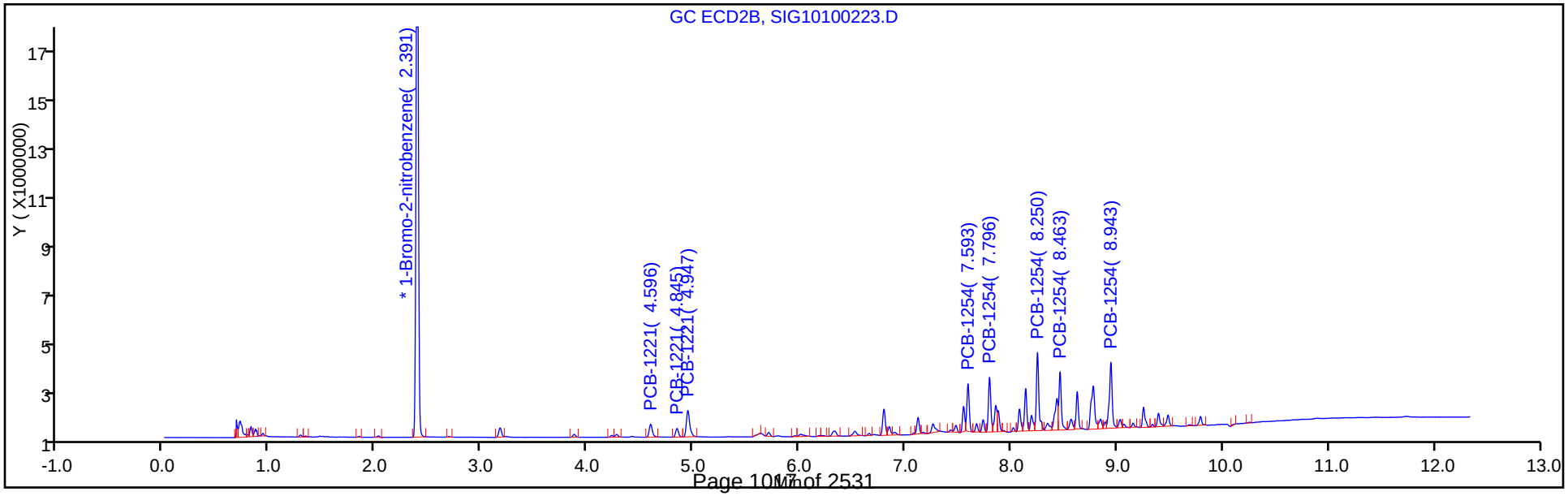
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100223.D

Injection Date:	02-Oct-2017 19:24:18	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 ar2154			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:47:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100223.D

Injection Date: 02-Oct-2017 19:24:18 Instrument ID: A2HP13

Lims ID: std01 ar2154

Client ID:

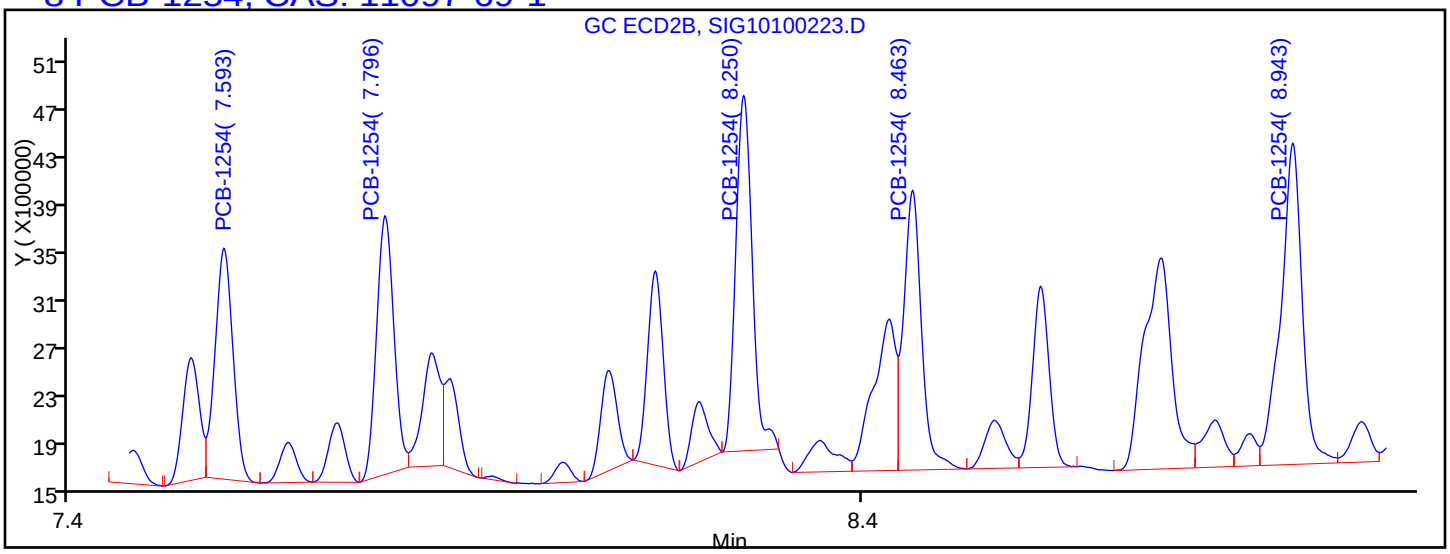
Operator ID: ALS Bottle#: 23 Worklist Smp#: 23

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

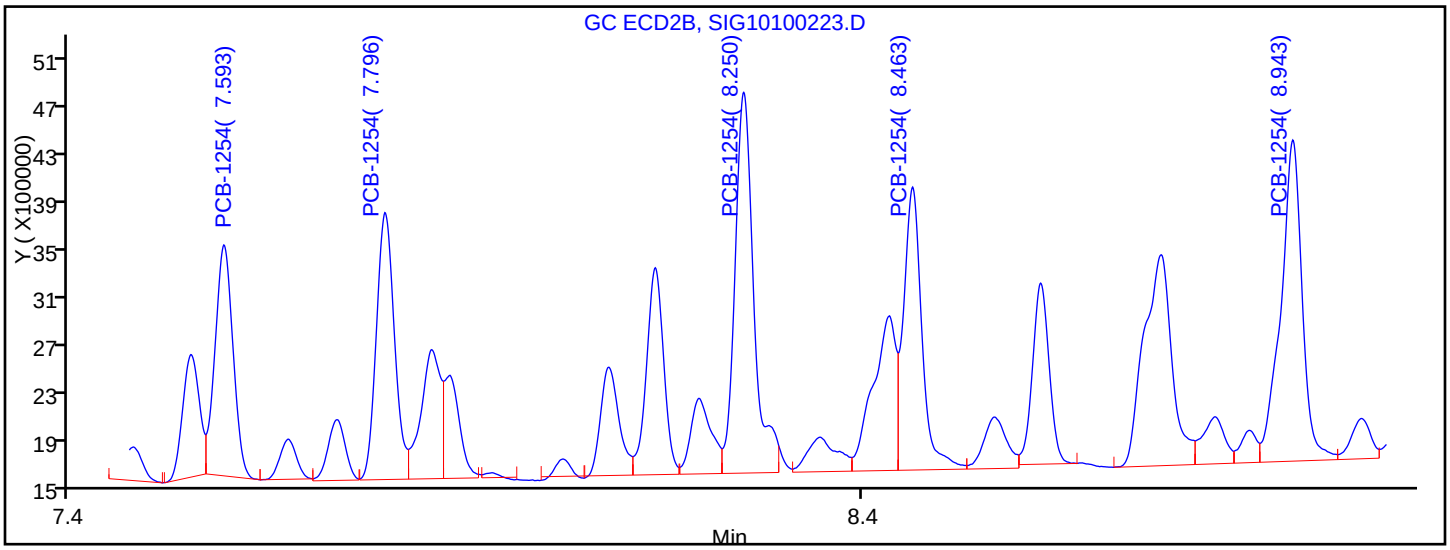
Column: Detector GC ecd2b

8 PCB-1254, CAS: 11097-69-1



Processing Integration Results

7.593	Response = 3016532
7.796	Response = 3271659
8.250	Response = 4287883
8.463	Response = 3619006
8.943	Response = 5018262



Manual Integration Results

7.593	Response = 3016532	
7.796	Response = 3519115	M
8.250	Response = 5205155	M
8.463	Response = 3762957	M
8.943	Response = 5018262	

Reviewer: hassl, 03-Oct-2017 06:09:50

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100224.D
Lims ID: std02 ar2154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 19:42:39 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-024
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:25 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:11:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	211700354	0.0500	0.0500	
2	2.390	2.391	0.000	39115983	0.0500	0.0500	
3 PCB-1221							
1	3.420	3.421	-0.001	11323574	0.2000	0.2090	
1	3.678	3.680	-0.002	7519160	0.2000	0.2153	
1	3.745	3.746	-0.001	26273188	0.2000	0.2079	
		Average of Peak Amounts =				0.2107	
2	4.596	4.596	0.000	2144026	0.2000	0.2100	
2	4.845	4.846	-0.001	1336798	0.2000	0.2116	
2	4.947	4.947	0.000	4725410	0.2000	0.2021	
		Average of Peak Amounts =				0.2079	
						RPD = 1.35	
8 PCB-1254							M
1	6.788	6.788	0.000	43358413	0.2000	0.2079	
1	7.238	7.239	-0.001	56659853	0.2000	0.2105	
1	7.535	7.536	-0.001	43362803	0.2000	0.2120	
1	7.726	7.726	0.000	39794055	0.2000	0.2113	
1	7.996	7.997	-0.001	57324341	0.2000	0.2112	
		Average of Peak Amounts =				0.2106	
2	7.593	7.593	0.000	6103866	0.2000	0.1988	
2	7.796	7.796	0.000	6983343	0.2000	0.2026	M
2	8.249	8.249	0.000	10709259	0.2000	0.2080	M
2	8.461	8.462	-0.001	7708358	0.2000	0.2068	M
2	8.942	8.943	-0.001	10395849	0.2000	0.2077	
		Average of Peak Amounts =				0.2048	
						RPD = 2.79	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.2PPM_00017 Amount Added: 1.00 Units: mL

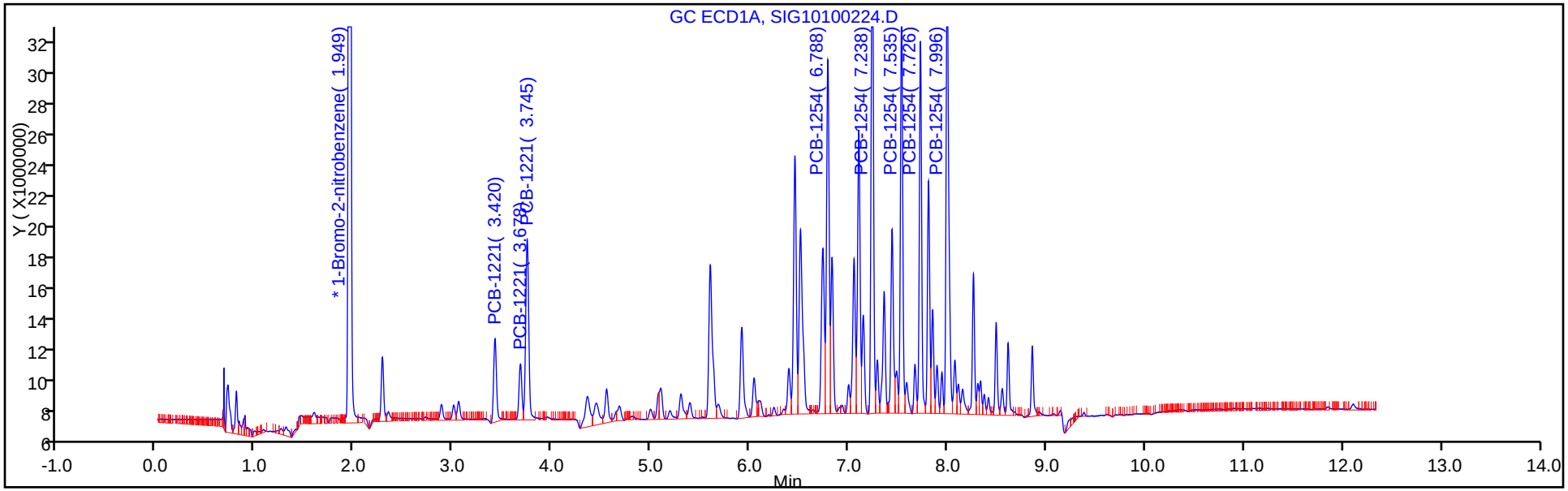
Report Date: 03-Oct-2017 08:47:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

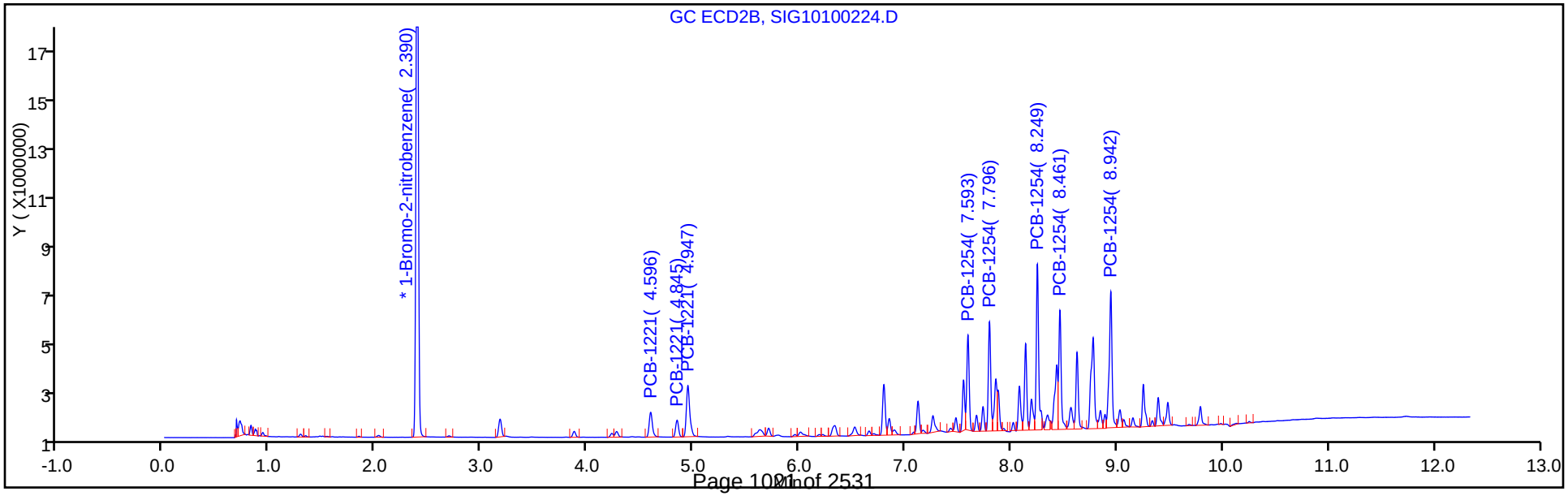
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100224.D

Injection Date:	02-Oct-2017 19:42:39	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 ar2154			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:47:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100224.D

Injection Date: 02-Oct-2017 19:42:39 Instrument ID: A2HP13

Lims ID: std02 ar2154

Client ID:

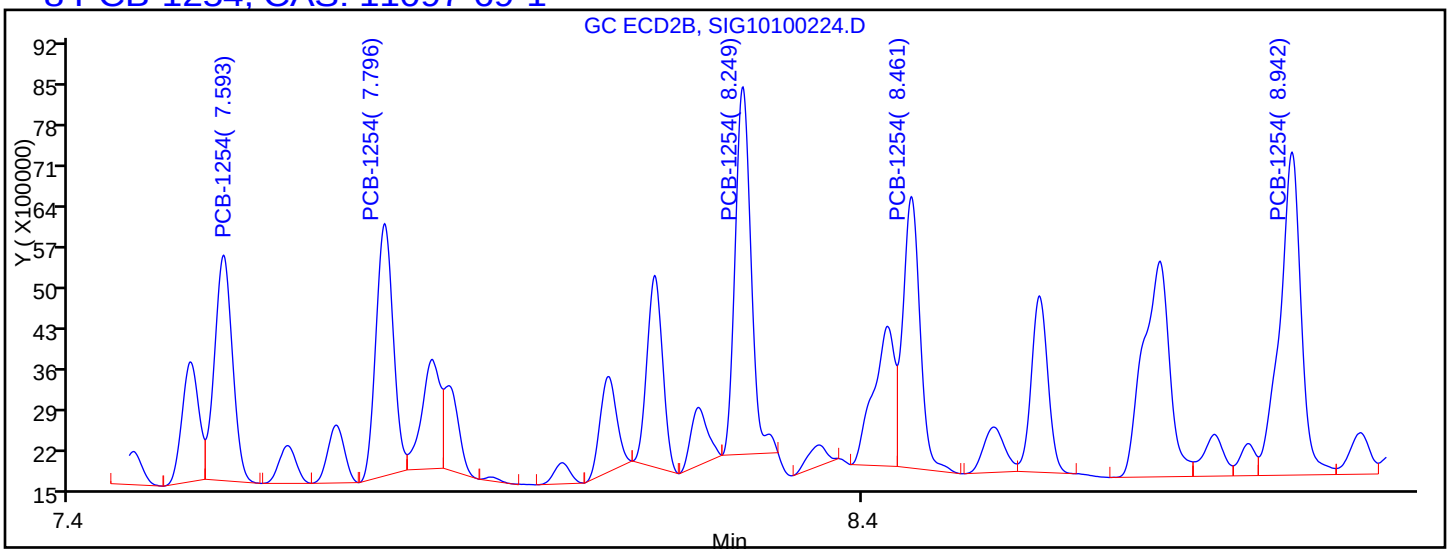
Operator ID: ALS Bottle#: 24 Worklist Smp#: 24

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

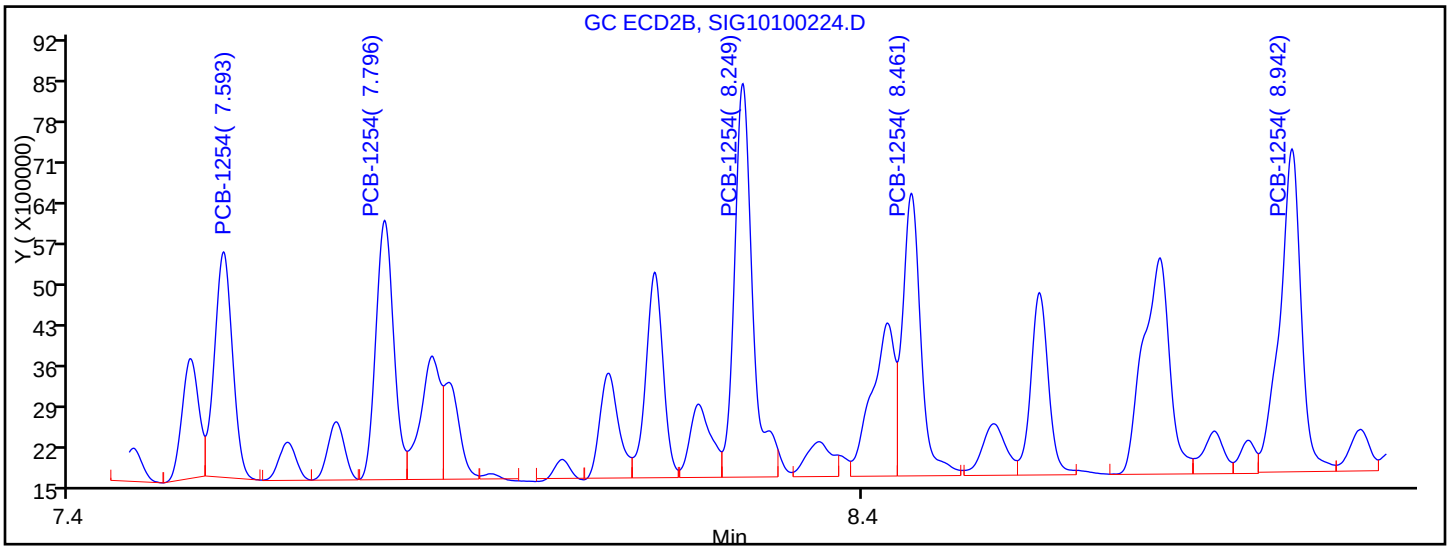
Column: Detector GC ecd2b

8 PCB-1254, CAS: 11097-69-1



Processing Integration Results

7.593	Response = 6103866
7.796	Response = 6568940
8.249	Response = 8793580
8.461	Response = 6972245
8.942	Response = 10395849



Manual Integration Results

7.593	Response = 6103866	
7.796	Response = 6983343	M
8.249	Response = 10709259	M
8.461	Response = 7708358	M
8.942	Response = 10395849	

Reviewer: hassl, 03-Oct-2017 06:10:53

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100225.D
Lims ID: std05 ar2154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2017 20:01:05 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-025
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:31 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:11:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	201298917	0.0500	0.0500	
2	2.391	2.391	0.000	37250319	0.0500	0.0500	
3 PCB-1221							
1	3.421	3.421	0.000	23397975	0.5000	0.4542	
1	3.678	3.680	-0.002	15557980	0.5000	0.4684	
1	3.746	3.746	0.000	56120335	0.5000	0.4670	
		Average of Peak Amounts =				0.4632	
2	4.597	4.596	0.001	4452861	0.5000	0.4581	
2	4.846	4.846	0.000	2860507	0.5000	0.4754	
2	4.947	4.947	0.000	10397108	0.5000	0.4670	
		Average of Peak Amounts =				0.4668	
						RPD = 0.77	
8 PCB-1254							M
1	6.790	6.788	0.002	90147574	0.5000	0.4546	
1	7.239	7.239	0.000	119028022	0.5000	0.4651	
1	7.536	7.536	0.000	90230592	0.5000	0.4639	
1	7.727	7.726	0.001	82216765	0.5000	0.4591	
1	7.997	7.997	0.000	118800637	0.5000	0.4604	
		Average of Peak Amounts =				0.4606	
2	7.593	7.593	0.000	13759403	0.5000	0.4707	
2	7.797	7.796	0.001	15049035	0.5000	0.4584	
2	8.249	8.249	0.000	23153110	0.5000	0.4721	M
2	8.462	8.462	0.000	16300165	0.5000	0.4593	M
2	8.943	8.943	0.000	21573334	0.5000	0.4527	
		Average of Peak Amounts =				0.4626	
						RPD = 0.44	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG2154@0.5PPM_00033 Amount Added: 1.00 Units: mL

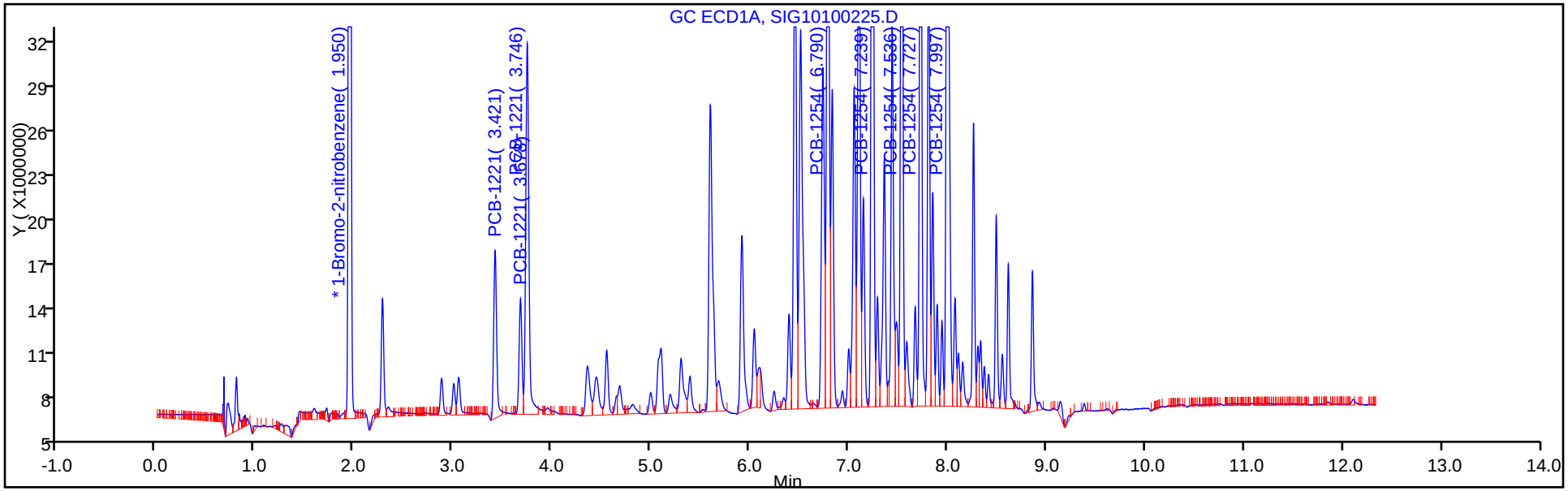
Report Date: 03-Oct-2017 08:47:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

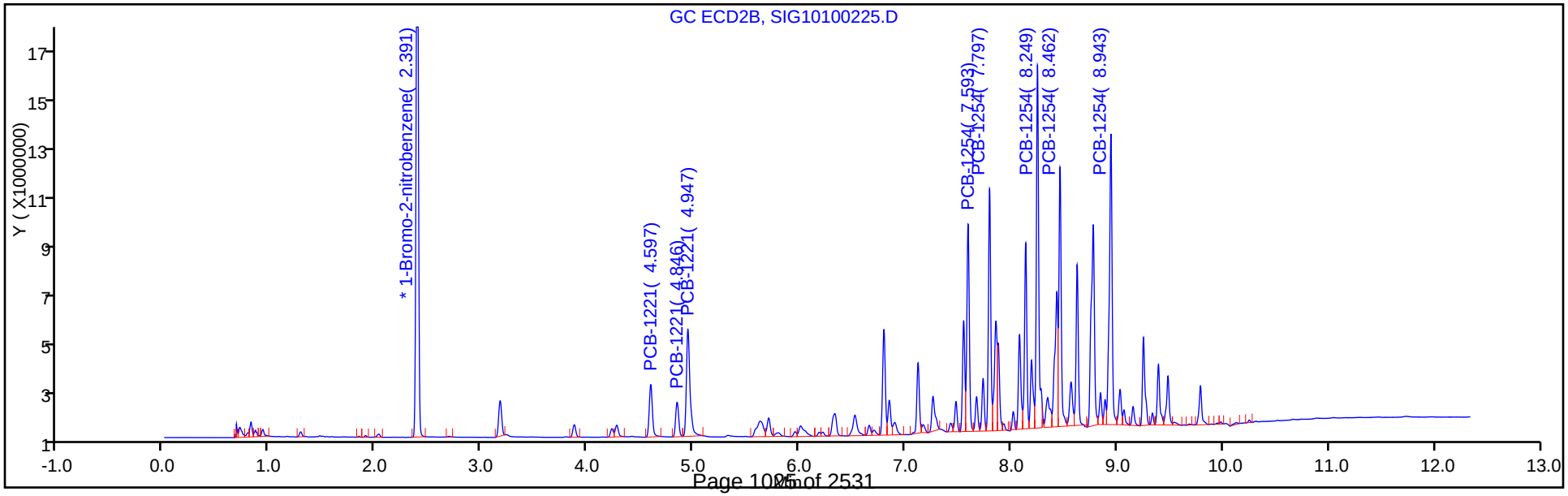
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100225.D

Injection Date:	02-Oct-2017 20:01:05	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 ar2154			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:47:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100225.D

Injection Date: 02-Oct-2017 20:01:05 Instrument ID: A2HP13

Lims ID: std05 ar2154

Client ID:

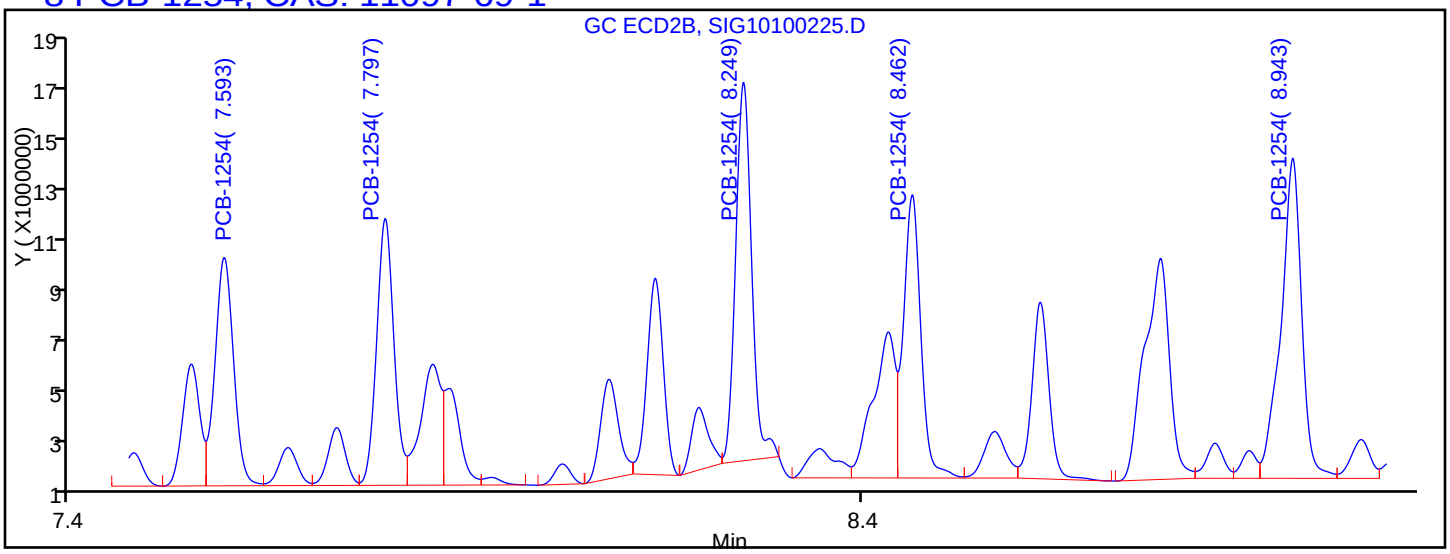
Operator ID: ALS Bottle#: 25 Worklist Smp#: 25

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

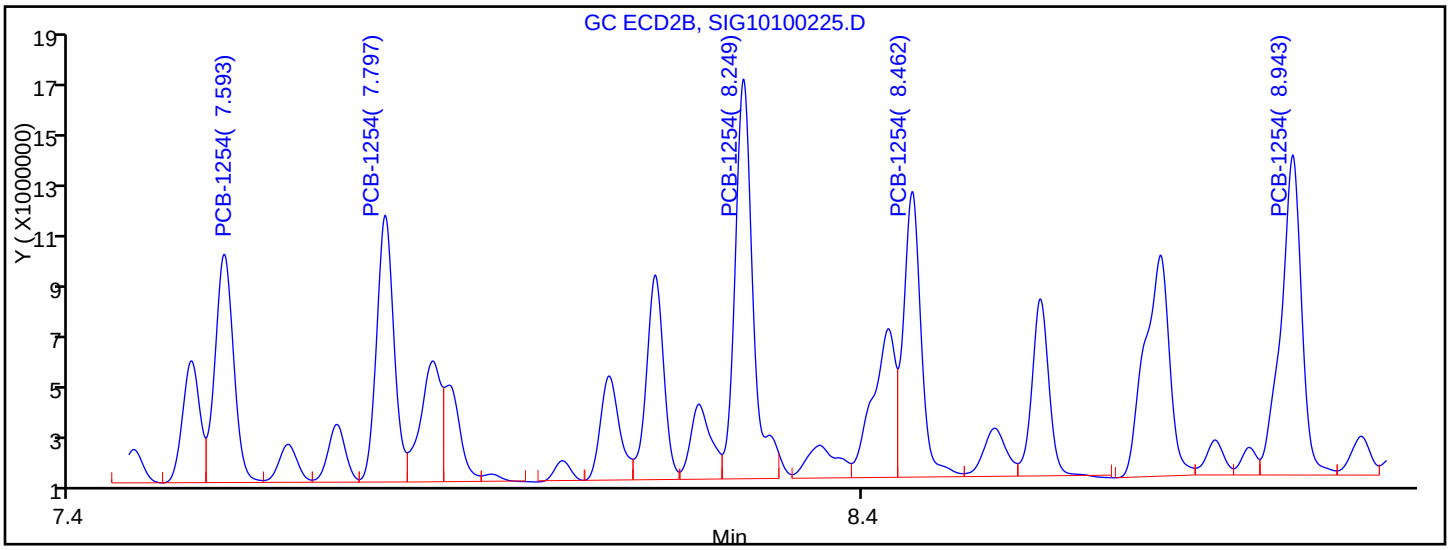
Column: Detector GC ecd2b

8 PCB-1254, CAS: 11097-69-1



Processing Integration Results

7.593	Response = 13759403	
7.797	Response = 15049035	
8.249	Response = 19660353	
8.462	Response = 15881818	
8.943	Response = 21573334	



Manual Integration Results

7.593	Response = 13759403	
7.797	Response = 15049035	
8.249	Response = 23153110	M
8.462	Response = 16300165	M
8.943	Response = 21573334	

Reviewer: hassl, 03-Oct-2017 06:11:35

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100226.D
Lims ID: std1 ar2154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 20:19:27 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-026
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:37 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:28:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	204273869	0.0500	0.0500	
2	2.390	2.391	0.000	37707517	0.0500	0.0500	
3 PCB-1221							
1	3.419	3.421	-0.002	45017638	1.00	0.8612	
1	3.677	3.680	-0.003	28936987	1.00	0.8585	
1	3.745	3.746	-0.001	102507448	1.00	0.8406	
		Average of Peak Amounts =				0.8534	
2	4.595	4.596	-0.001	8354998	1.00	0.8491	
2	4.845	4.846	-0.001	5504249	1.00	0.9036	
2	4.947	4.947	0.000	20855918	1.00	0.9253	
		Average of Peak Amounts =				0.8927	
						RPD = 4.49	
8 PCB-1254							
1	6.789	6.788	0.001	172857412	1.00	0.8591	
1	7.238	7.239	-0.001	231606605	1.00	0.8918	
1	7.535	7.536	-0.001	176158603	1.00	0.8924	
1	7.725	7.726	-0.001	159765940	1.00	0.8791	
1	7.996	7.997	-0.001	231950638	1.00	0.8857	
		Average of Peak Amounts =				0.8816	
2	7.592	7.593	-0.001	27520958	1.00	0.9300	
2	7.795	7.796	-0.001	30080091	1.00	0.9051	
2	8.248	8.249	-0.001	44590901	1.00	0.8982	
2	8.461	8.462	-0.001	33378992	1.00	0.9291	
2	8.941	8.943	-0.002	44589169	1.00	0.9243	
		Average of Peak Amounts =				0.9173	
						RPD = 3.97	

Reagents:

SG2154@1.0PPM_00021 Amount Added: 1.00 Units: mL

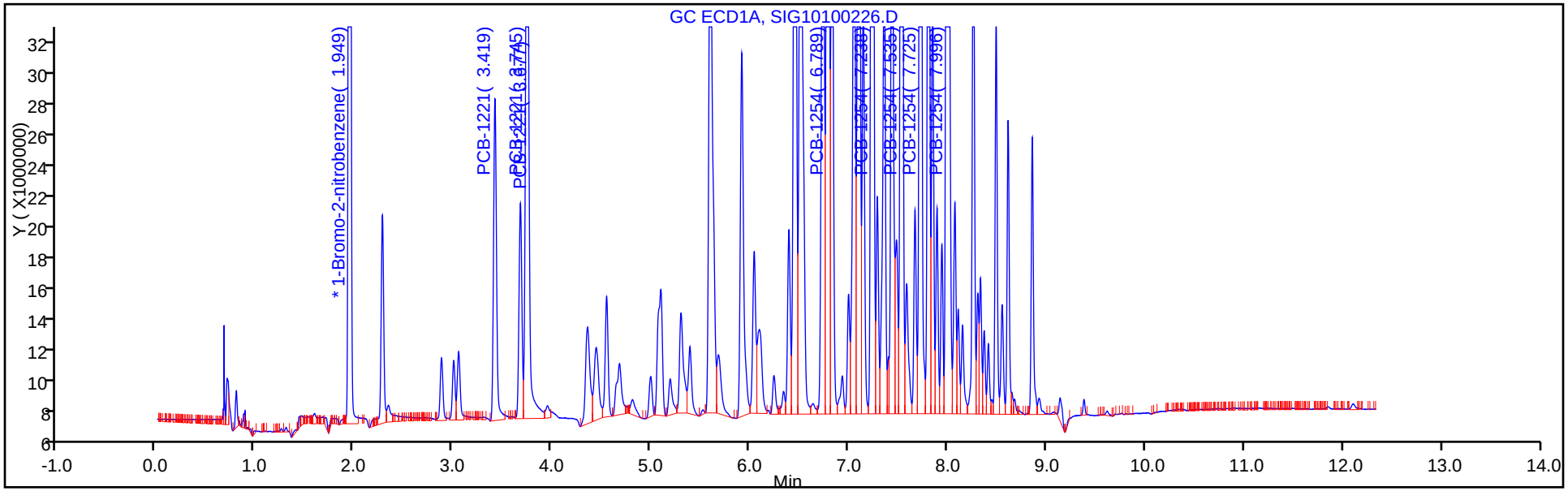
Report Date: 03-Oct-2017 08:47:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

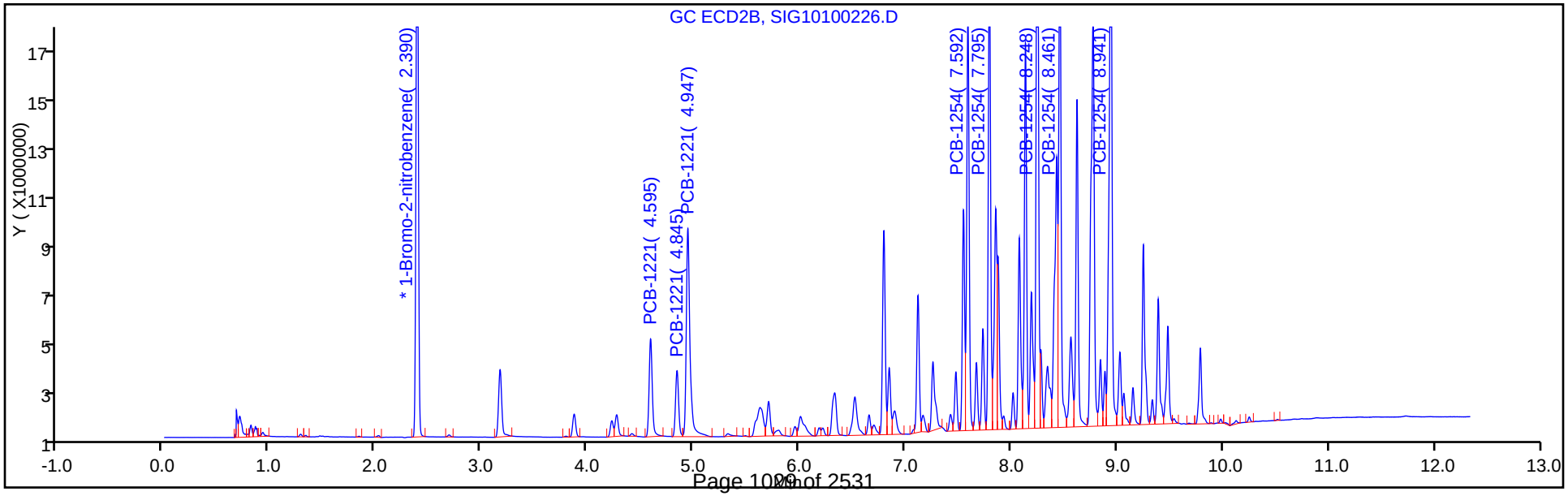
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100226.D

Injection Date:	02-Oct-2017 20:19:27	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 ar2154			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100227.D
Lims ID: std15 ar2154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 20:37:45 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-027
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:43 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:31:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	196939512	0.0500	0.0500	
2	2.390	2.391	-0.001	36134431	0.0500	0.0500	
3 PCB-1221							
1	3.420	3.421	-0.001	62094587	1.50	1.23	
1	3.677	3.680	-0.003	39688186	1.50	1.22	
1	3.745	3.746	-0.001	145934248	1.50	1.24	
		Average of Peak Amounts =				1.23	
2	4.596	4.596	0.000	11856936	1.50	1.26	
2	4.845	4.846	-0.001	7697108	1.50	1.32	
2	4.947	4.947	0.000	29885937	1.50	1.38	
		Average of Peak Amounts =				1.32	
						RPD = 6.92	
8 PCB-1254							
1	6.788	6.788	0.000	243878198	1.50	1.26	
1	7.237	7.239	-0.002	327957205	1.50	1.31	
1	7.534	7.536	-0.002	249110357	1.50	1.31	
1	7.726	7.726	0.000	224703569	1.50	1.28	
1	7.997	7.997	0.000	326206554	1.50	1.29	
		Average of Peak Amounts =				1.29	
2	7.593	7.593	0.000	39754397	1.50	1.40	
2	7.796	7.796	0.000	43534636	1.50	1.37	
2	8.248	8.249	-0.001	64787453	1.50	1.36	
2	8.462	8.462	0.000	48857689	1.50	1.42	
2	8.942	8.943	-0.001	64615814	1.50	1.40	
		Average of Peak Amounts =				1.39	
						RPD = 7.42	

Reagents:

SG2154@1.5PPM_00001 Amount Added: 1.00 Units: mL

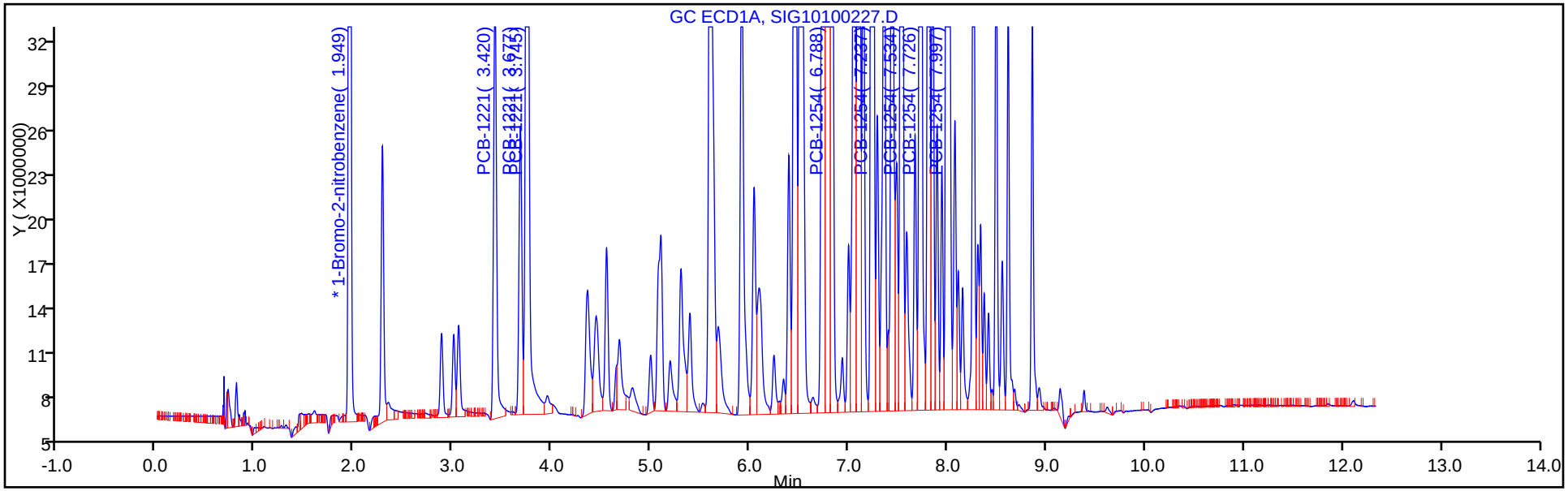
Report Date: 03-Oct-2017 08:47:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

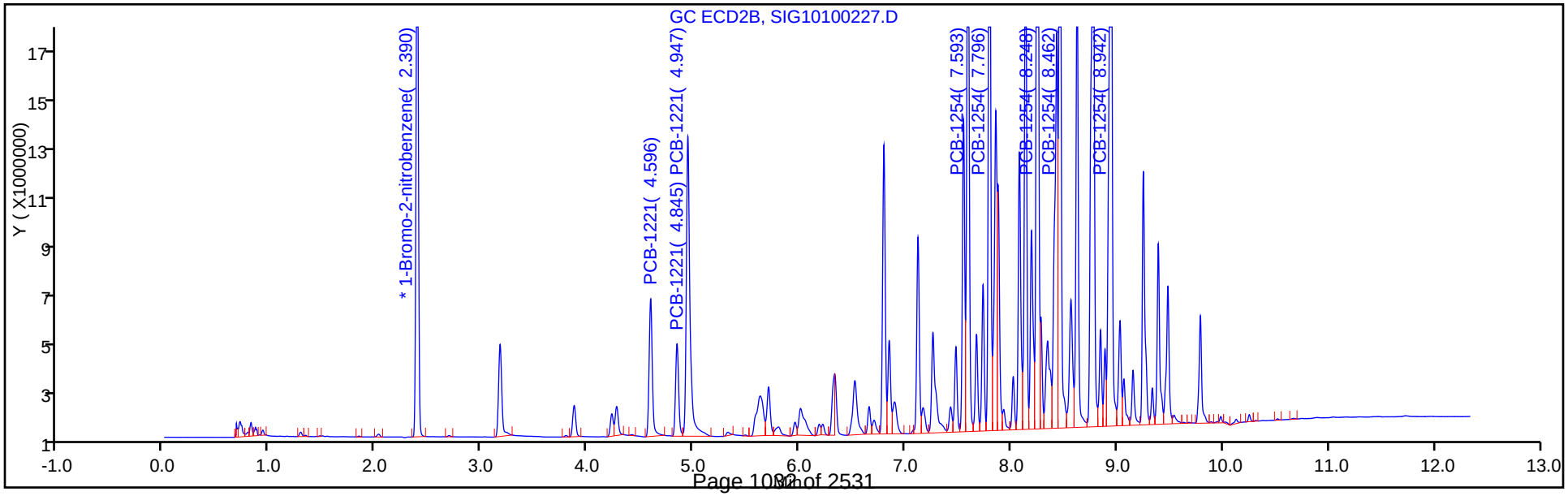
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100227.D

Injection Date:	02-Oct-2017 20:37:45	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std15 ar2154			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 20:56 Calibration End Date: 10/02/2017 22:27 Calibration ID: 41683

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/28	SIG10100228.D
Level 2	STD01 240-297169/29	SIG10100229.D
Level 3	STD02 240-297169/30	SIG10100230.D
Level 4	STD05 240-297169/31	SIG10100231.D
Level 5	STD1 240-297169/32	SIG10100232.D
Level 6	STD151660 240-297169/33	SIG10100233.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.0345 0.0224	0.0308	0.0280	0.0274	0.0242	Ave		0.0279				15.7		20.0			
PCB-1016 Peak 2	0.0625 0.0373	0.0559	0.0506	0.0453	0.0400	Ave		0.0486				19.8		20.0			
PCB-1016 Peak 3	0.1139 0.0842	0.1093	0.1018	0.0940	0.0887	Ave		0.0987				11.9		20.0			
PCB-1016 Peak 4	0.0496 0.0370	0.0492	0.0459	0.0424	0.0393	Ave		0.0439				11.9		20.0			
PCB-1016 Peak 5	0.0231 0.0168	0.0216	0.0201	0.0212	0.0173	Ave		0.0200				12.5		20.0			
PCB-1260 Peak 1	0.0658 0.0502	0.0620	0.0596	0.0547	0.0525	Ave		0.0575				10.4		20.0			
PCB-1260 Peak 2	0.1004 0.0776	0.0922	0.0899	0.0823	0.0809	Ave		0.0872				9.8		20.0			
PCB-1260 Peak 3	0.1090 0.0870	0.1009	0.0995	0.0912	0.0906	Ave		0.0964				8.5		20.0			
PCB-1260 Peak 4	0.1316 0.1078	0.1229	0.1179	0.1092	0.1111	Ave		0.1167				7.9		20.0			
PCB-1260 Peak 5	0.0735 0.0554	0.0653	0.0604	0.0560	0.0570	Ave		0.0613				11.5		20.0			
Tetrachloro-m-xylene	1.3961 0.9591	1.2772	1.2130	1.1150	1.0649	Ave		1.1709				13.4		20.0			
DCB Decachlorobiphenyl	0.9392 0.7818	0.9590	0.8836	0.7826	0.8271	Ave		0.8622				9.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 20:56 Calibration End Date: 10/02/2017 22:27 Calibration ID: 41683

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/28	SIG10100228.D
Level 2	STD01 240-297169/29	SIG10100229.D
Level 3	STD02 240-297169/30	SIG10100230.D
Level 4	STD05 240-297169/31	SIG10100231.D
Level 5	STD1 240-297169/32	SIG10100232.D
Level 6	STD151660 240-297169/33	SIG10100233.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Ave	7076099 144658035	12934284	23341077	56302128	102013897	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	BNB	Ave	12818305 241271250	23509183	42180206	93218465	168323690	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	BNB	Ave	23388708 544439328	45931896	84810204	193221367	373789349	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	BNB	Ave	10172172 239313863	20701319	38217932	87158197	165367583	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	BNB	Ave	4737885 108325953	9087384	16770092	43592684	73042260	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	BNB	Ave	13500810 324761865	26072420	49625471	112363570	221116227	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	BNB	Ave	20615678 501440084	38751368	74858078	169211006	340623035	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	BNB	Ave	22368403 562491823	42412413	82879577	187434133	381711158	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	BNB	Ave	27013864 696744466	51667339	98202766	224391338	468011477	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	BNB	Ave	15090169 357960229	27461225	50297203	115198828	240205301	0.0500 1.50	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	BNB	Ave	14328193 413262560	26844729	50522169	114606359	224287101	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl	BNB	Ave	9638877 336890288	20156253	36803851	80438802	174203586	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100228.D
Lims ID: std005 1660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 20:56:03 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-028
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:49 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:32:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	205254849	0.0500	0.0500	
2	2.392	2.391	0.001	37718620	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.070	3.069	0.001	14328193	0.002500	0.002981	
2	4.016	4.016	0.000	2118546	0.002500	0.002638	
						RPD = 12.20	
6 PCB-1016							
1	3.748	3.746	0.002	7076099	0.0500	0.0618	
1	4.353	4.352	0.001	12818305	0.0500	0.0642	
1	5.098	5.097	0.001	23388708	0.0500	0.0577	
1	5.300	5.300	0.000	10172172	0.0500	0.0565	
1	5.677	5.678	-0.001	4737885	0.0500	0.0576	
		Average of Peak Amounts =				0.0596	
2	4.948	4.947	0.001	1075623	0.0500	0.0533	
2	5.629	5.629	0.000	2236964	0.0500	0.0591	
2	6.334	6.335	-0.001	4018510	0.0500	0.0545	
2	6.522	6.522	0.000	1645287	0.0500	0.0543	
2	6.896	6.895	0.001	872628	0.0500	0.0577	
		Average of Peak Amounts =				0.0558	
						RPD = 6.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.440	7.438	0.002	13500810	0.0500	0.0572	
1	7.728	7.726	0.002	20615678	0.0500	0.0576	
1	7.997	7.996	0.001	22368403	0.0500	0.0565	
1	8.616	8.614	0.002	27013864	0.0500	0.0564	
1	8.859	8.857	0.002	15090169	0.0500	0.0600	
		Average of Peak Amounts =				0.0575	
2	8.434	8.432	0.002	2580157	0.0500	0.0557	
2	8.625	8.623	0.002	2984891	0.0500	0.0552	
2	9.022	9.020	0.002	2229955	0.0500	0.0534	
2	9.482	9.481	0.001	5007740	0.0500	0.0510	
2	9.786	9.785	0.001	3649972	0.0500	0.0542	
		Average of Peak Amounts =				0.0539	
						RPD = 6.56	
$ 12 DCB Decachlorobiphenyl							
1	9.766	9.766	0.000	9638877	0.002500	0.002723	
2	10.745	10.744	0.001	2126341	0.002500	0.002894	
						RPD = 6.07	

Reagents:

SG1660@.05PPM_00020 Amount Added: 1.00 Units: mL

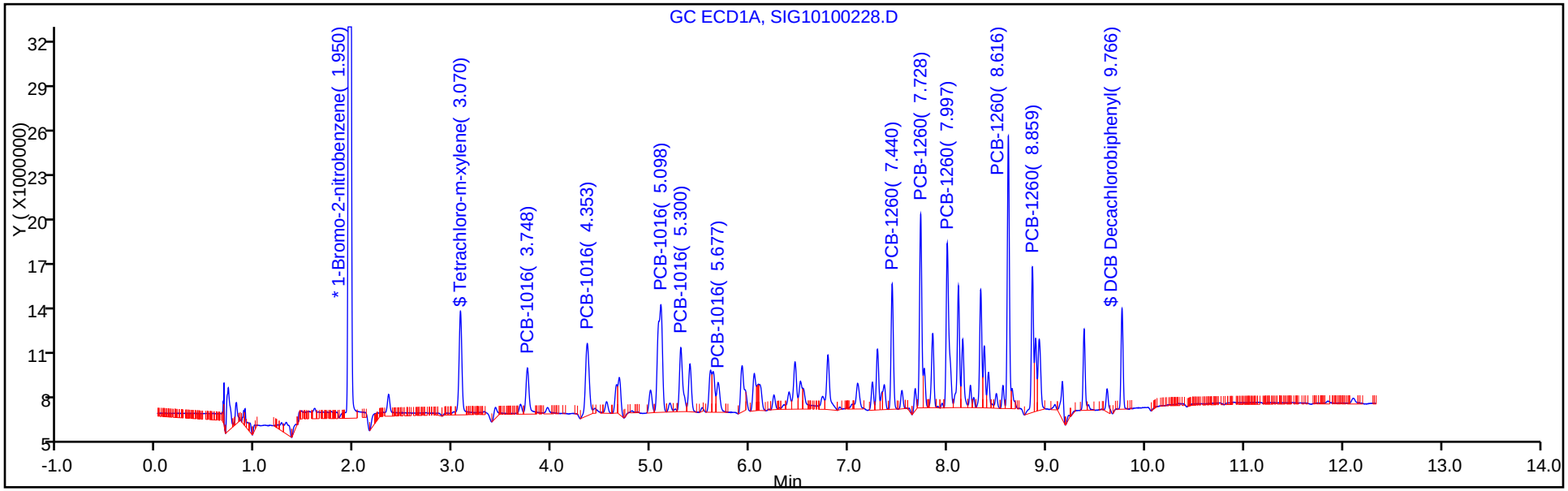
Report Date: 03-Oct-2017 08:47:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

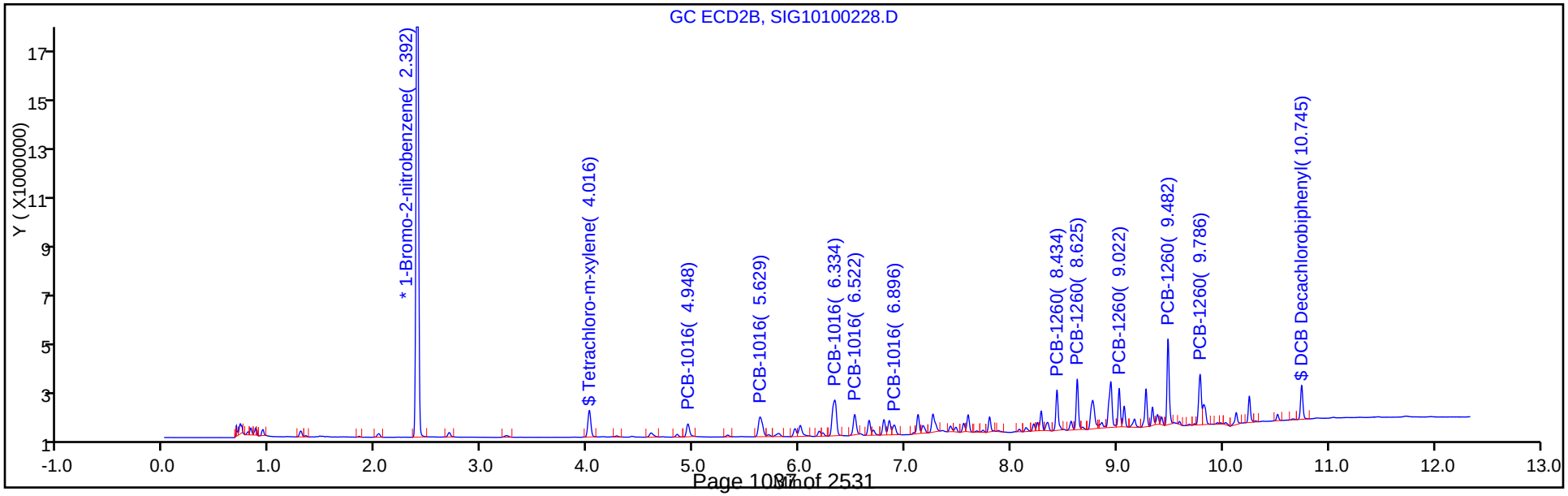
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100228.D

Injection Date:	02-Oct-2017 20:56:03	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1660			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100229.D
Lims ID: std01 1660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 21:14:29 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-029
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:54 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	210181088	0.0500	0.0500	
2	2.390	2.391	0.000	38919668	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	26844729	0.005000	0.005454	
2	4.015	4.016	-0.001	4183096	0.005000	0.005048	
						RPD = 7.73	
6 PCB-1016							
1	3.747	3.746	0.001	12934284	0.1000	0.1104	
1	4.351	4.352	-0.001	23509183	0.1000	0.1151	
1	5.098	5.097	0.001	45931896	0.1000	0.1107	
1	5.299	5.300	-0.001	20701319	0.1000	0.1122	
1	5.678	5.678	0.000	9087384	0.1000	0.1080	
		Average of Peak Amounts =				0.1113	
2	4.947	4.947	0.000	2197704	0.1000	0.1055	
2	5.629	5.629	0.000	4292310	0.1000	0.1099	
2	6.335	6.335	0.000	7989142	0.1000	0.1050	
2	6.522	6.522	0.000	3251652	0.1000	0.1040	
2	6.895	6.895	0.000	1759617	0.1000	0.1128	
		Average of Peak Amounts =				0.1074	
						RPD = 3.51	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.439	7.438	0.001	26072420	0.1000	0.1079	
1	7.727	7.726	0.001	38751368	0.1000	0.1057	
1	7.997	7.996	0.001	42412413	0.1000	0.1047	
1	8.614	8.614	0.000	51667339	0.1000	0.1053	
1	8.859	8.857	0.002	27461225	0.1000	0.1066	
		Average of Peak Amounts =				0.1060	
2	8.432	8.432	0.000	5137357	0.1000	0.1074	
2	8.624	8.623	0.001	5828701	0.1000	0.1044	
2	9.020	9.020	0.000	4609279	0.1000	0.1070	
2	9.482	9.481	0.001	10340622	0.1000	0.1021	
2	9.785	9.785	0.000	7151614	0.1000	0.1029	
		Average of Peak Amounts =				0.1048	
						RPD = 1.23	
$ 12 DCB Decachlorobiphenyl							
1	9.765	9.766	-0.001	20156253	0.005000	0.005561	
2	10.744	10.744	0.000	4017030	0.005000	0.005298	
						RPD = 4.85	

Reagents:

SG1660STD@0.1_00020 Amount Added: 1.00 Units: mL

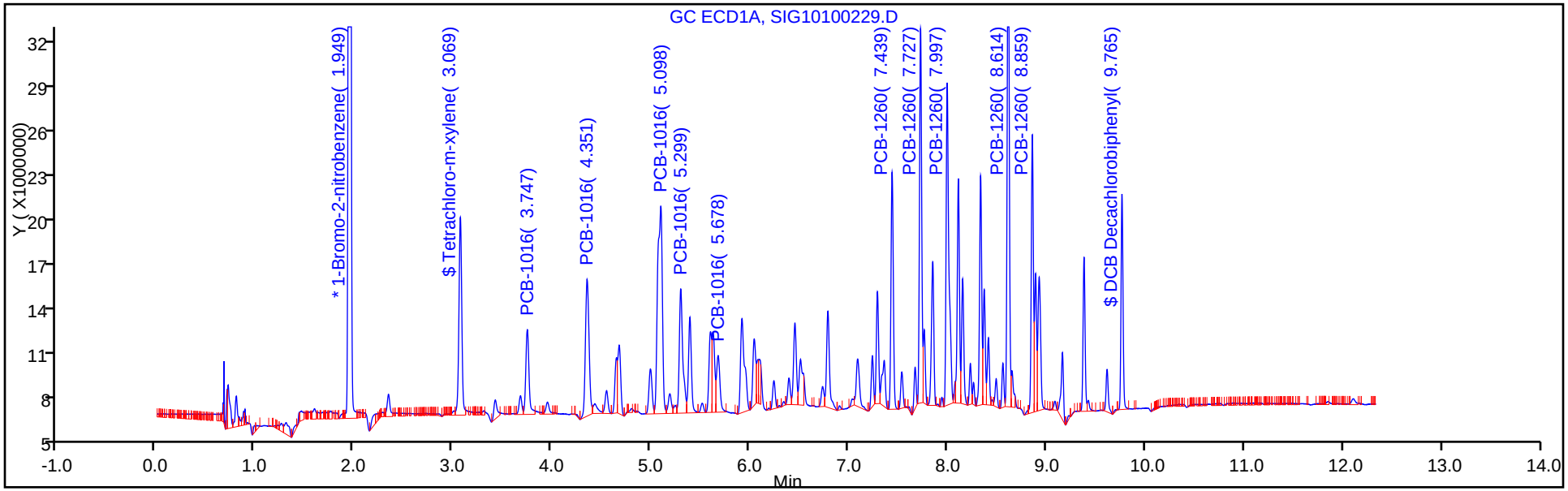
Report Date: 03-Oct-2017 08:47:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

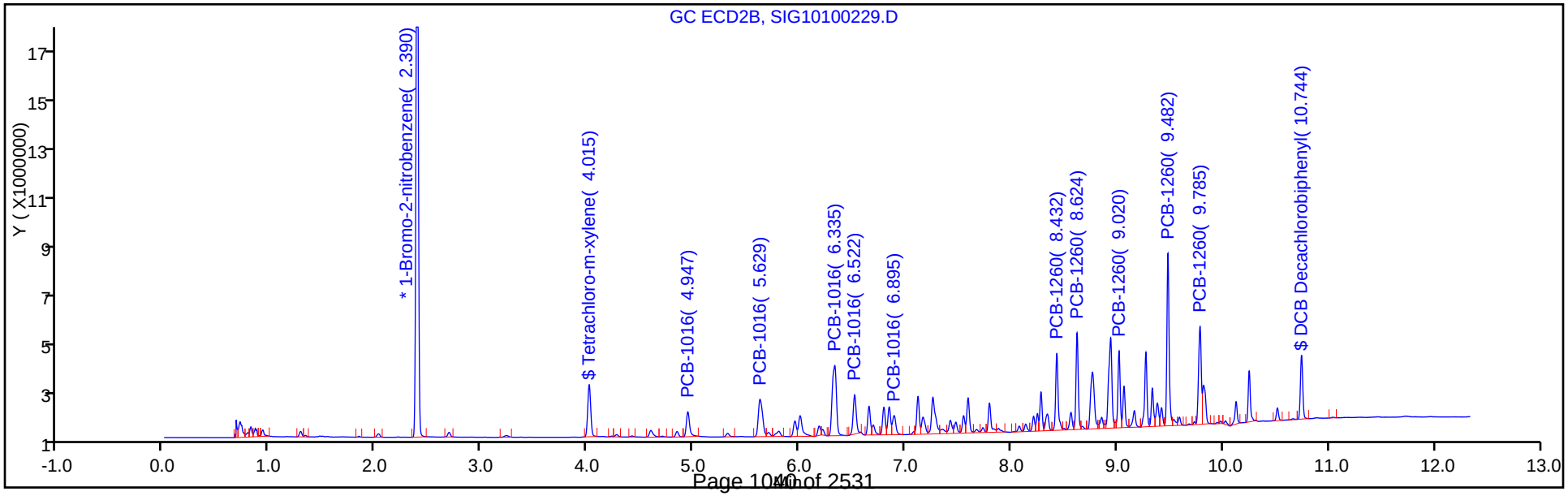
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100229.D

Injection Date:	02-Oct-2017 21:14:29	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1660			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100230.D
Lims ID: std02 1660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 21:32:45 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-030
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:48:01 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:16:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	208254142	0.0500	0.0500	
2	2.391	2.391	0.000	38832324	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.070	3.069	0.001	50522169	0.0100	0.0104	
2	4.016	4.016	0.000	7951358	0.0100	0.009617	
						RPD = 7.43	
6 PCB-1016							
1	3.747	3.746	0.001	23341077	0.2000	0.2010	
1	4.354	4.352	0.002	42180206	0.2000	0.2083	
1	5.097	5.097	0.000	84810204	0.2000	0.2064	
1	5.300	5.300	0.000	38217932	0.2000	0.2090	
1	5.679	5.678	0.001	16770092	0.2000	0.2011	
		Average of Peak Amounts =				0.2052	
2	4.947	4.947	0.000	4135899	0.2000	0.1990	
2	5.628	5.629	-0.001	7977153	0.2000	0.2048	
2	6.334	6.335	-0.001	15034050	0.2000	0.1980	
2	6.522	6.522	0.000	6098293	0.2000	0.1954	
2	6.894	6.895	-0.001	3247393	0.2000	0.2087	
		Average of Peak Amounts =				0.2012	
						RPD = 1.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.439	7.438	0.001	49625471	0.2000	0.2073	M
1	7.727	7.726	0.001	74858078	0.2000	0.2061	M
1	7.997	7.996	0.001	82879577	0.2000	0.2065	M
1	8.613	8.614	-0.001	98202766	0.2000	0.2020	M
1	8.857	8.857	0.000	50297203	0.2000	0.1971	M
		Average of Peak Amounts =				0.2038	
2	8.432	8.432	0.000	9572536	0.2000	0.2006	
2	8.623	8.623	0.000	11129417	0.2000	0.1999	
2	9.020	9.020	0.000	8577143	0.2000	0.1995	
2	9.481	9.481	0.000	19630367	0.2000	0.1942	
2	9.785	9.785	0.000	13496125	0.2000	0.1946	
		Average of Peak Amounts =				0.1978	
						RPD = 3.01	
$ 12 DCB Decachlorobiphenyl							
1	9.767	9.766	0.001	36803851	0.0100	0.0102	
2	10.744	10.744	0.000	7417485	0.0100	0.009805	
						RPD = 4.42	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.2ppm_00022 Amount Added: 1.00 Units: mL

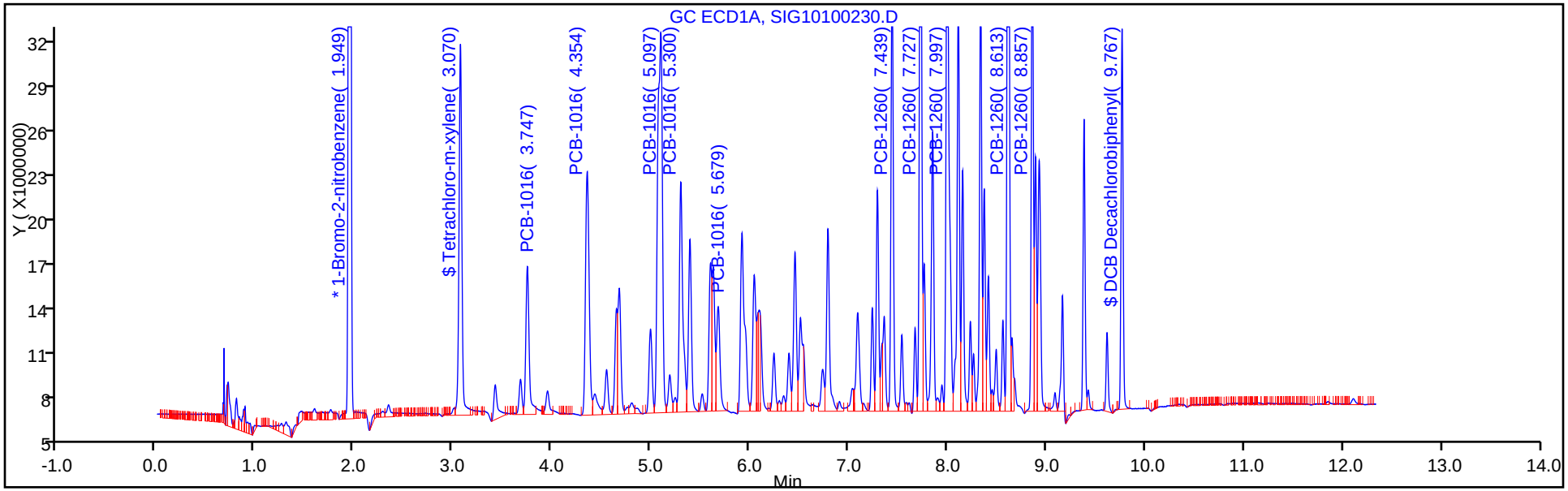
Report Date: 03-Oct-2017 08:48:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

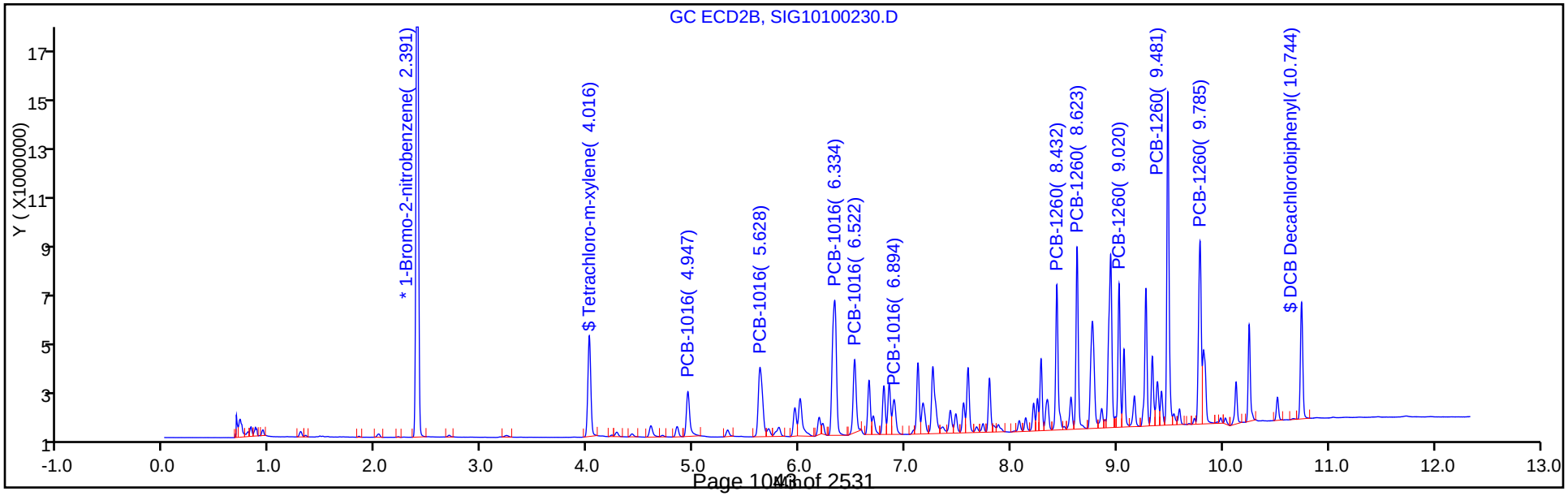
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100230.D

Injection Date:	02-Oct-2017 21:32:45	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1660			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



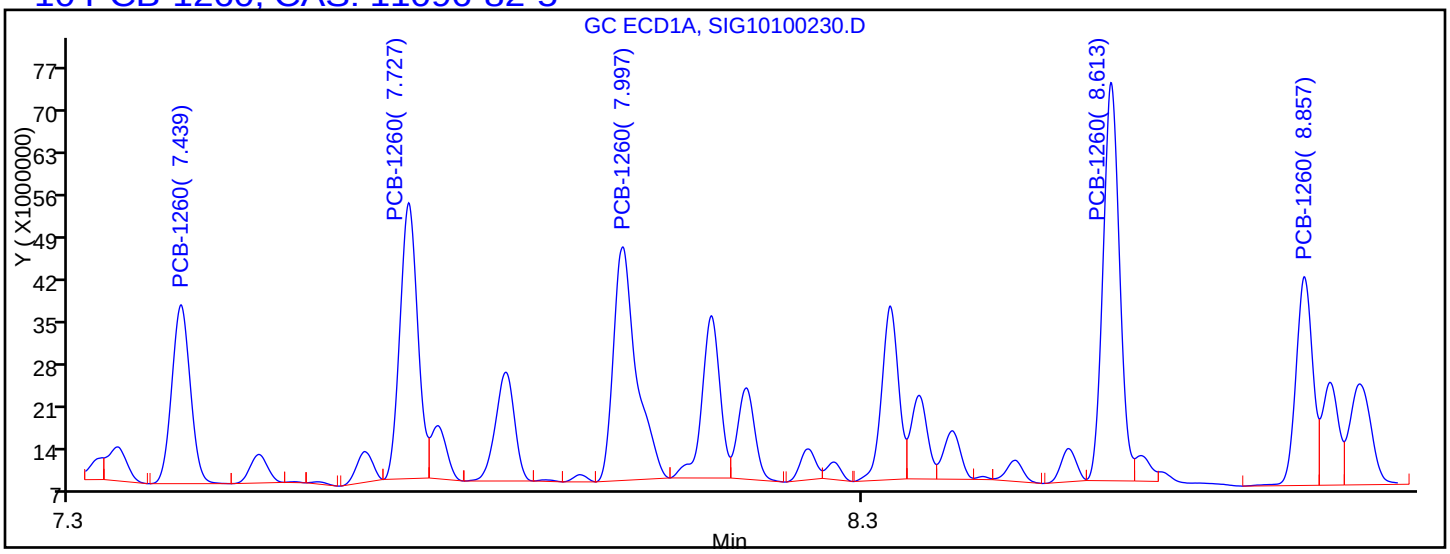
Report Date: 03-Oct-2017 08:48:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100230.D

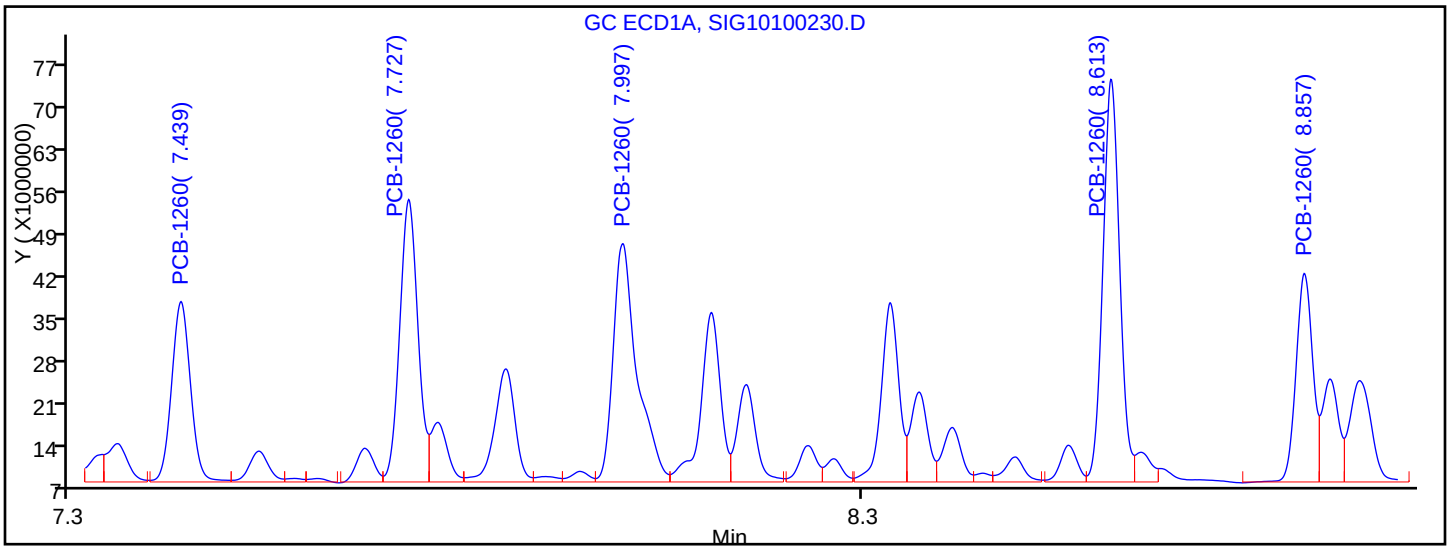
Injection Date:	02-Oct-2017 21:32:45	Instrument ID:	A2HP13		
Lims ID:	std02 1660				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

7.439	Response = 48015764
7.727	Response = 71096722
7.997	Response = 77914893
8.613	Response = 95503965
8.857	Response = 50738737



Manual Integration Results

7.439	Response = 49625471	M
7.727	Response = 74858078	M
7.997	Response = 82879577	M
8.613	Response = 98202766	M
8.857	Response = 50297203	M

Reviewer: hassl, 03-Oct-2017 06:16:09

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100231.D
Lims ID: std05 1660
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 02-Oct-2017 21:51:05 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-031
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:48:12 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:17:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	205572400	0.0500	0.0500	
2	2.391	2.391	0.000	37848291	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	114606359	0.0250	0.0238	
2	4.016	4.016	0.000	20023249	0.0250	0.0248	
						RPD = 4.28	
6 PCB-1016							M
1	3.746	3.746	0.000	56302128	0.5000	0.4913	
1	4.352	4.352	0.000	93218465	0.5000	0.4664	
1	5.097	5.097	0.000	193221367	0.5000	0.4763	
1	5.300	5.300	0.000	87158197	0.5000	0.4830	
1	5.678	5.678	0.000	43592684	0.5000	0.5295	M
		Average of Peak Amounts =				0.4893	
2	4.947	4.947	0.000	10603305	0.5000	0.5233	
2	5.629	5.629	0.000	18093322	0.5000	0.4765	
2	6.335	6.335	0.000	36067484	0.5000	0.4873	
2	6.522	6.522	0.000	15379273	0.5000	0.5056	
2	6.895	6.895	0.000	7248830	0.5000	0.4780	
		Average of Peak Amounts =				0.4941	
						RPD = 0.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.438	7.438	0.000	112363570	0.5000	0.4756	M
1	7.726	7.726	0.000	169211006	0.5000	0.4719	M
1	7.996	7.996	0.000	187434133	0.5000	0.4731	M
1	8.614	8.614	0.000	224391338	0.5000	0.4675	M
1	8.857	8.857	0.000	115198828	0.5000	0.4572	M
		Average of Peak Amounts =				0.4691	
2	8.432	8.432	0.000	21897006	0.5000	0.4707	
2	8.623	8.623	0.000	25634715	0.5000	0.4723	
2	9.020	9.020	0.000	19856823	0.5000	0.4739	
2	9.481	9.481	0.000	47264752	0.5000	0.4798	
2	9.785	9.785	0.000	31590712	0.5000	0.4673	
		Average of Peak Amounts =				0.4728	
						RPD = 0.79	
$ 12 DCB Decachlorobiphenyl							
1	9.766	9.766	0.000	80438802	0.0250	0.0227	
2	10.744	10.744	0.000	16654031	0.0250	0.0226	
						RPD = 0.46	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.5PPM_00072 Amount Added: 1.00 Units: mL

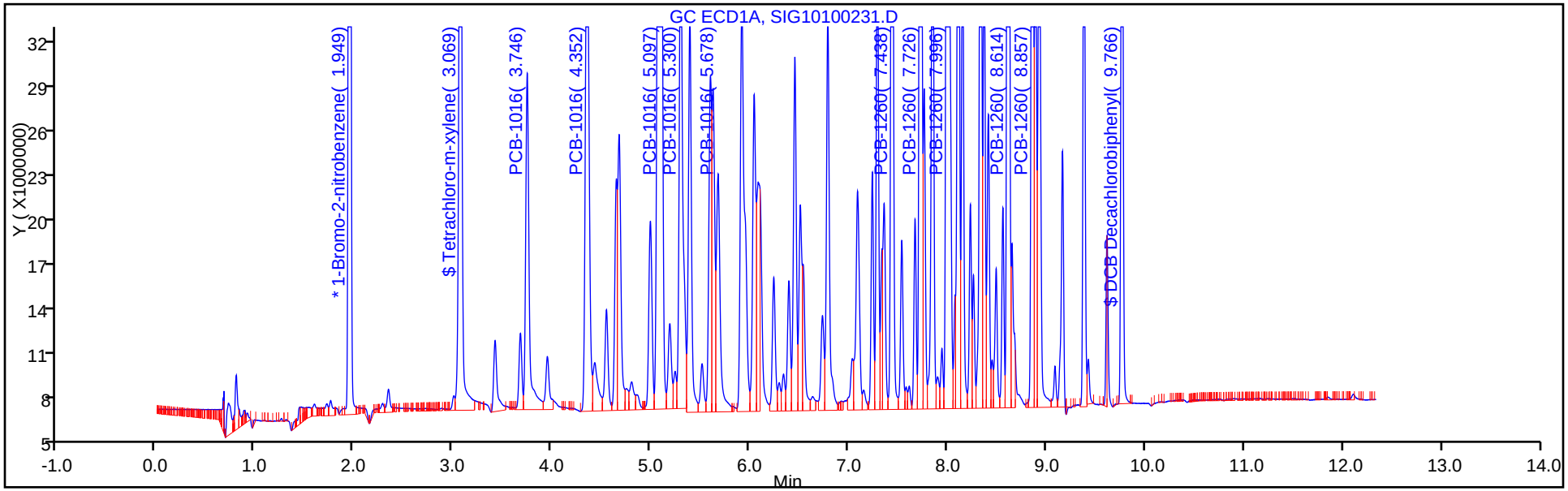
Report Date: 03-Oct-2017 08:48:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

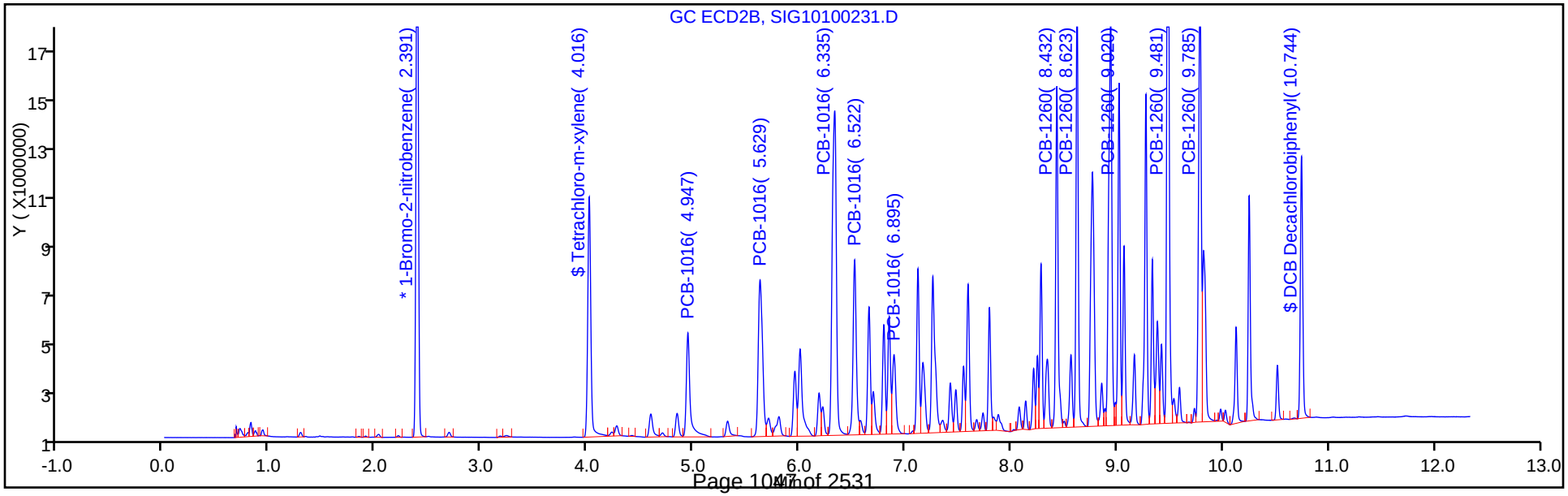
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100231.D

Injection Date:	02-Oct-2017 21:51:05	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1660			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:48:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100231.D

Injection Date: 02-Oct-2017 21:51:05 Instrument ID: A2HP13

Lims ID: std05 1660

Client ID:

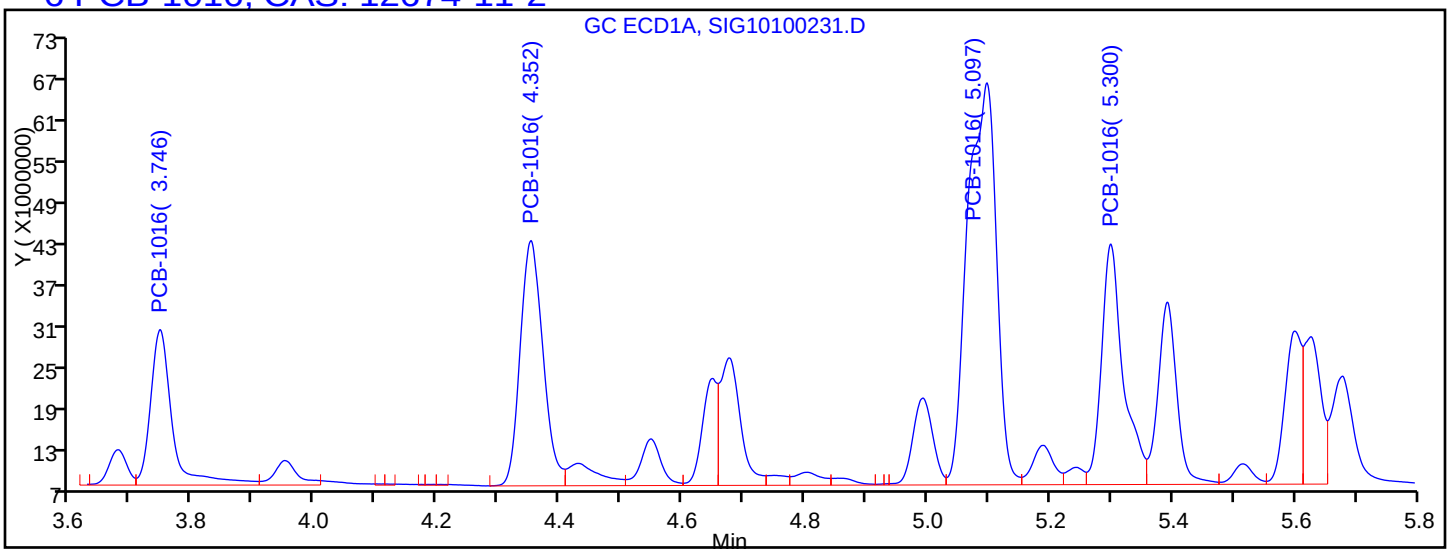
Operator ID: ALS Bottle#: 31 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

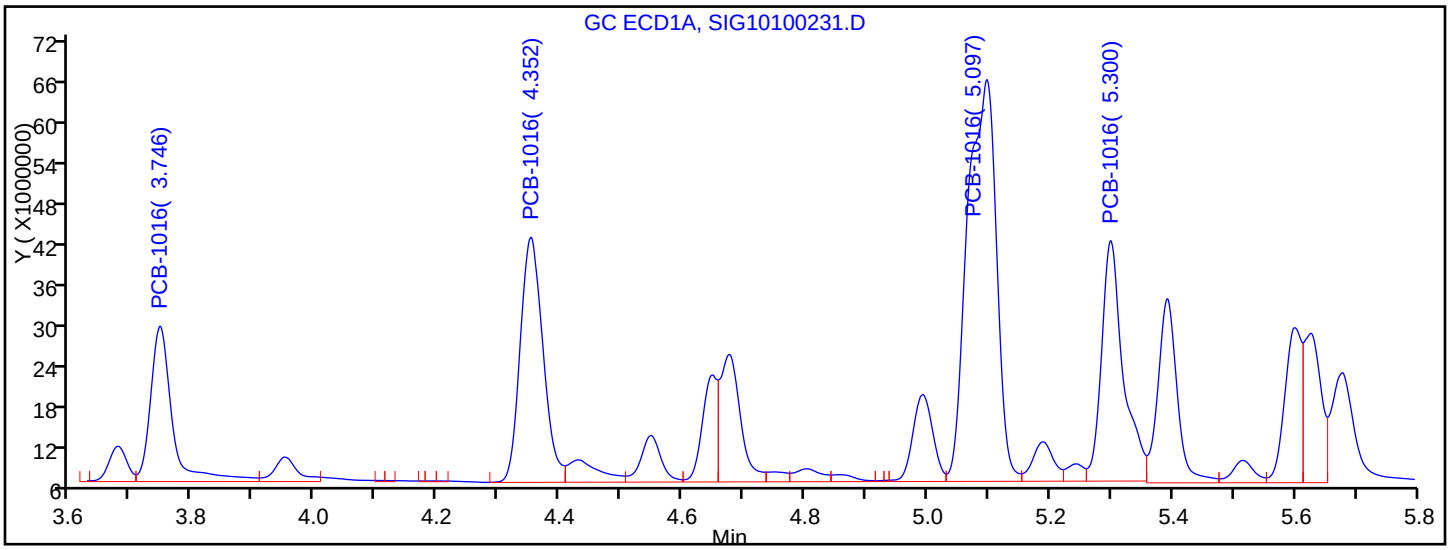
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

3.746	Response = 56302128
4.352	Response = 93218465
5.097	Response = 193221367
5.300	Response = 87158197
5.678	Response = 40513497



Manual Integration Results

3.746	Response = 56302128	
4.352	Response = 93218465	
5.097	Response = 193221367	
5.300	Response = 87158197	
5.678	Response = 43592684	M

Reviewer: hassl, 03-Oct-2017 06:16:35

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Report Date: 03-Oct-2017 08:48:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100231.D

Injection Date: 02-Oct-2017 21:51:05 Instrument ID: A2HP13

Lims ID: std05 1660

Client ID:

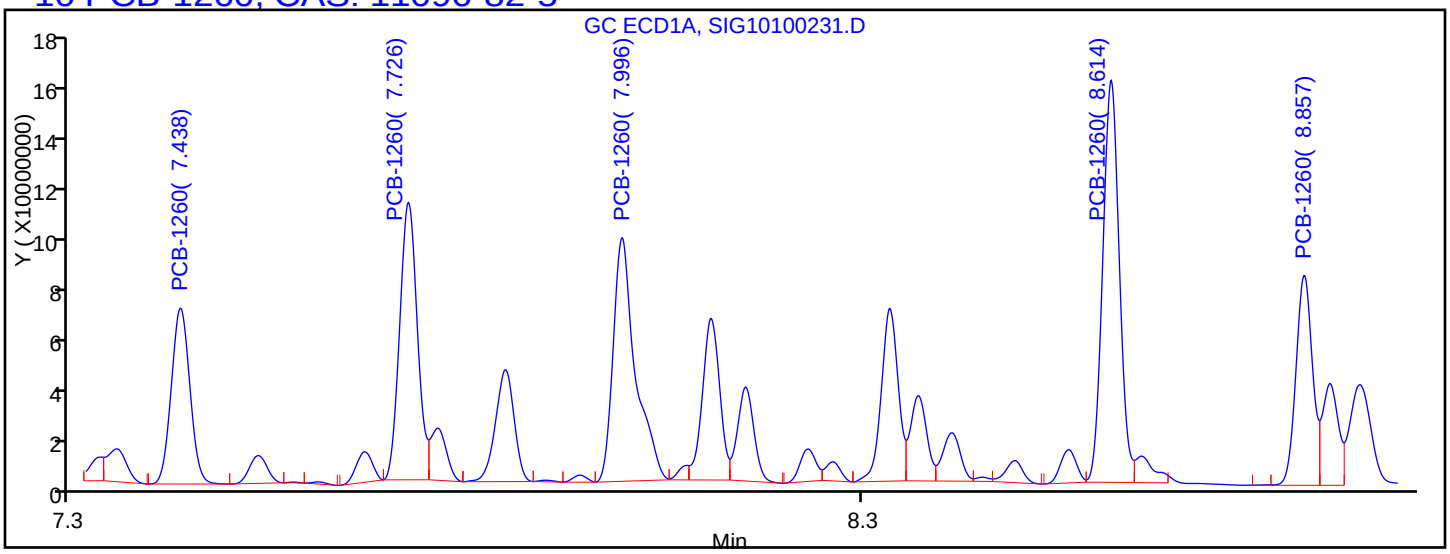
Operator ID: ALS Bottle#: 31 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

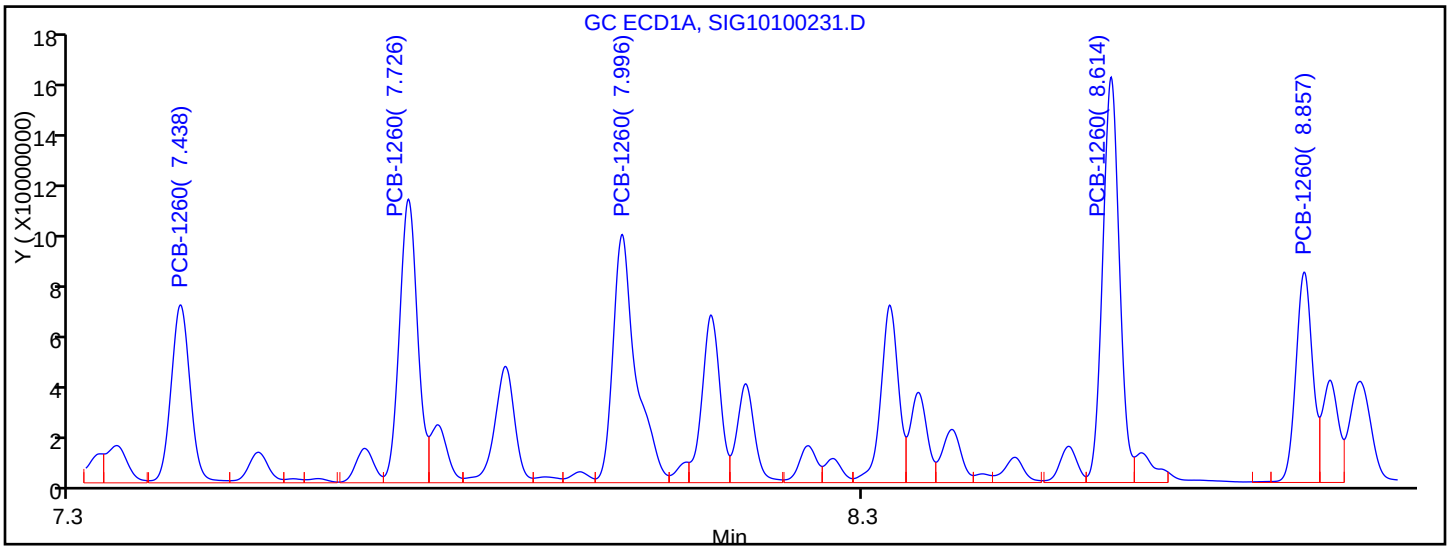
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

7.438	Response = 107511970
7.726	Response = 161161350
7.996	Response = 176961335
8.614	Response = 219644225
8.857	Response = 114528190



Manual Integration Results

7.438	Response = 112363570	M
7.726	Response = 169211006	M
7.996	Response = 187434133	M
8.614	Response = 224391338	M
8.857	Response = 115198828	M

Reviewer: hassl, 03-Oct-2017 06:16:35

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100232.D
Lims ID: std1 1660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 22:09:21 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-032
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:48:23 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:17:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	210618141	0.0500	0.0500	
2	2.390	2.391	-0.001	39692761	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.071	3.069	0.002	224287101	0.0500	0.0455	
2	4.016	4.016	0.000	41990462	0.0500	0.0497	
						RPD = 8.85	
6 PCB-1016							M
1	3.746	3.746	0.000	102013897	1.00	0.8688	
1	4.352	4.352	0.000	168323690	1.00	0.8221	M
1	5.099	5.097	0.002	373789349	1.00	0.8994	M
1	5.301	5.300	0.001	165367583	1.00	0.8944	M
1	5.677	5.678	-0.001	73042260	1.00	0.8660	M
		Average of Peak Amounts =				0.8701	
2	4.947	4.947	0.000	20030407	1.00	0.9426	
2	5.628	5.629	-0.001	35361551	1.00	0.8880	
2	6.335	6.335	0.000	74109716	1.00	0.9548	
2	6.522	6.522	0.000	30590273	1.00	0.9590	
2	6.896	6.895	0.001	13982403	1.00	0.8792	
		Average of Peak Amounts =				0.9247	
						RPD = 6.08	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.439	7.438	0.001	221116227	1.00	0.9135	M
1	7.726	7.726	0.000	340623035	1.00	0.9272	M
1	7.996	7.996	0.000	381711158	1.00	0.9404	M
1	8.612	8.614	-0.002	468011477	1.00	0.9517	M
1	8.856	8.857	-0.001	240205301	1.00	0.9306	M
		Average of Peak Amounts =				0.9327	
2	8.432	8.432	0.000	45777187	1.00	0.9383	
2	8.623	8.623	0.000	54383039	1.00	0.9555	
2	9.020	9.020	0.000	42167251	1.00	0.9596	
2	9.481	9.481	0.000	104023305	1.00	1.01	
2	9.785	9.785	0.000	69622551	1.00	0.9820	
		Average of Peak Amounts =				0.9685	
						RPD = 3.77	
$ 12 DCB Decachlorobiphenyl							
1	9.766	9.766	0.000	174203586	0.0500	0.0480	
2	10.744	10.744	0.000	36849346	0.0500	0.0477	
						RPD = 0.65	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.0PPM_00023 Amount Added: 1.00 Units: mL

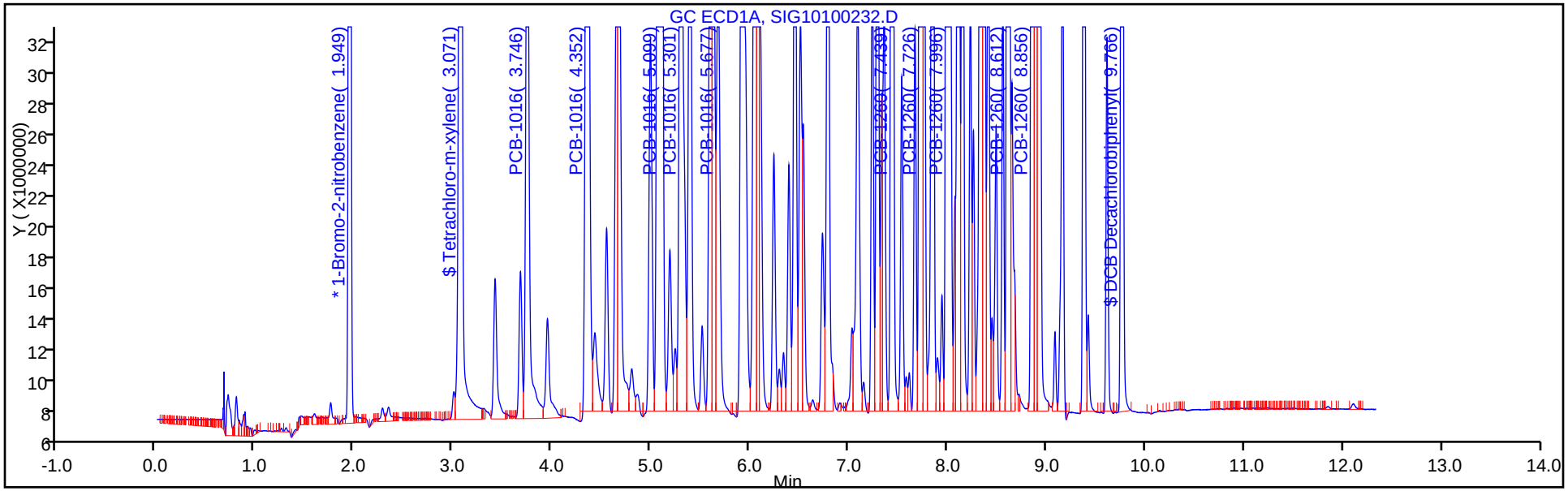
Report Date: 03-Oct-2017 08:48:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

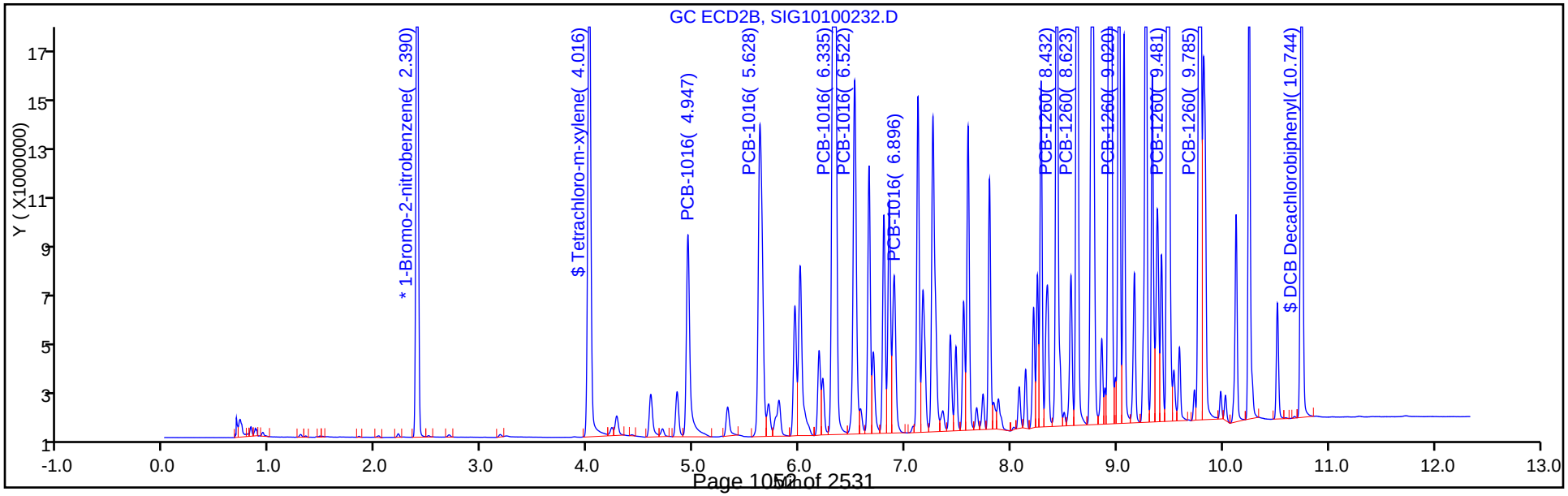
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100232.D

Injection Date:	02-Oct-2017 22:09:21	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1660			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:48:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100232.D

Injection Date: 02-Oct-2017 22:09:21 Instrument ID: A2HP13

Lims ID: std1 1660

Client ID:

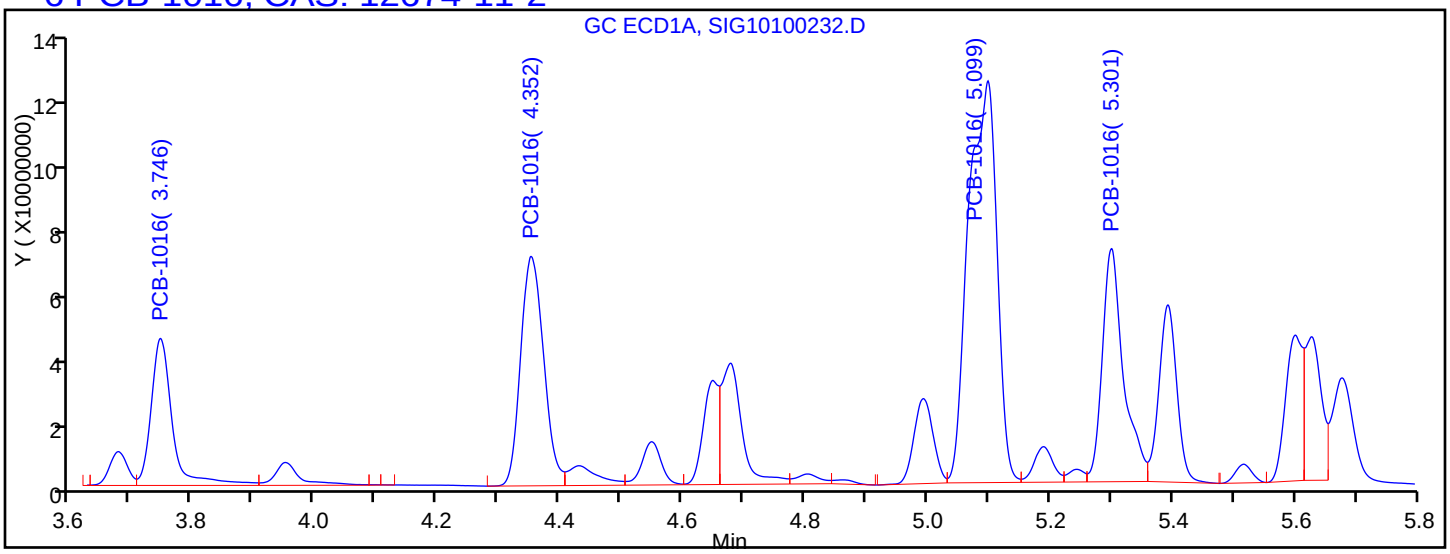
Operator ID: ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

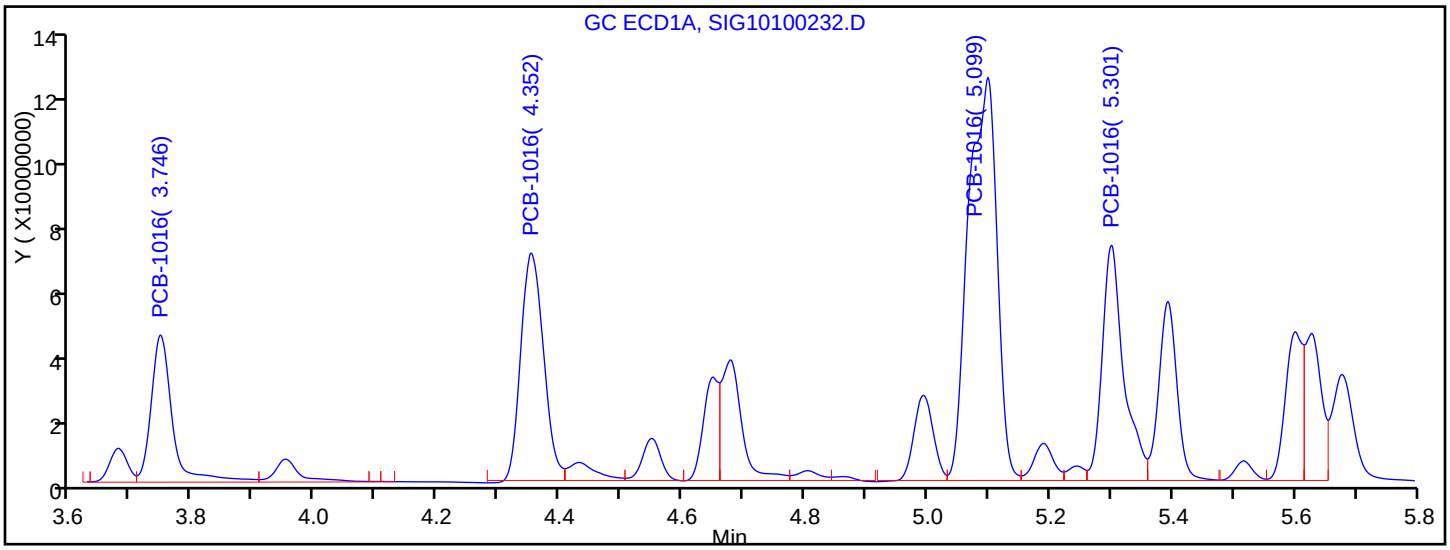
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

3.746	Response = 102013897	
4.352	Response = 172987407	
5.099	Response = 371485680	
5.301	Response = 161867183	
5.677	Response = 69292351	



Manual Integration Results

3.746	Response = 102013897	
4.352	Response = 168323690	M
5.099	Response = 373789349	M
5.301	Response = 165367583	M
5.677	Response = 73042260	M

Reviewer: hassl, 03-Oct-2017 06:17:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Report Date: 03-Oct-2017 08:48:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100232.D

Injection Date: 02-Oct-2017 22:09:21 Instrument ID: A2HP13

Lims ID: std1 1660

Client ID:

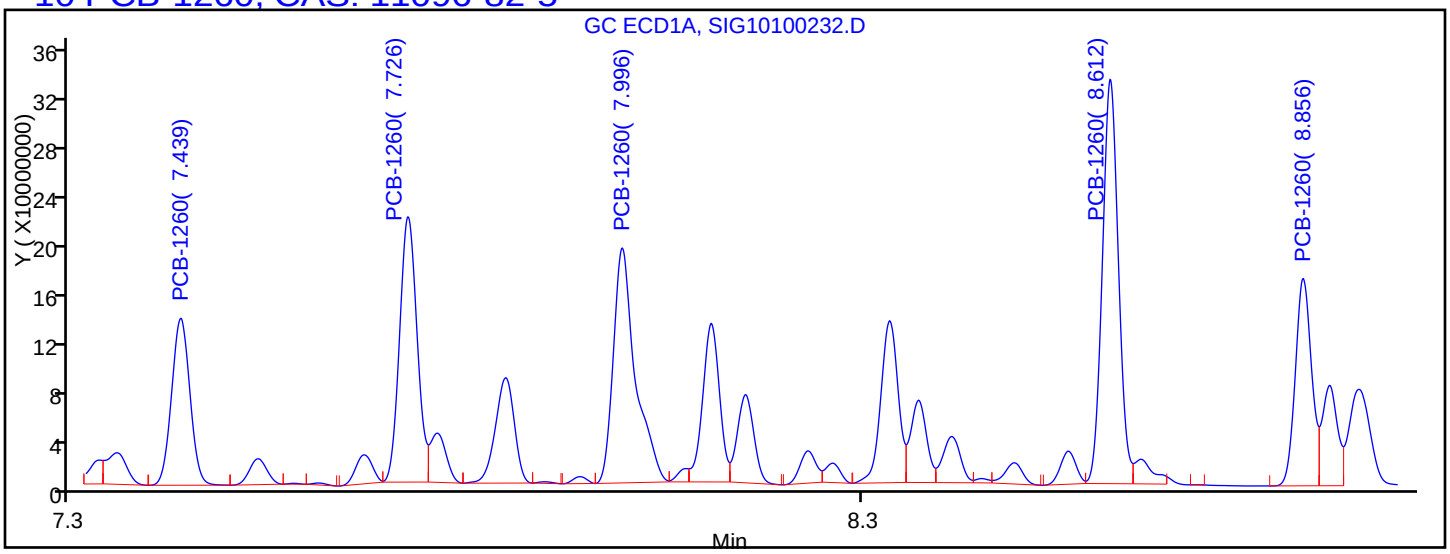
Operator ID: ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

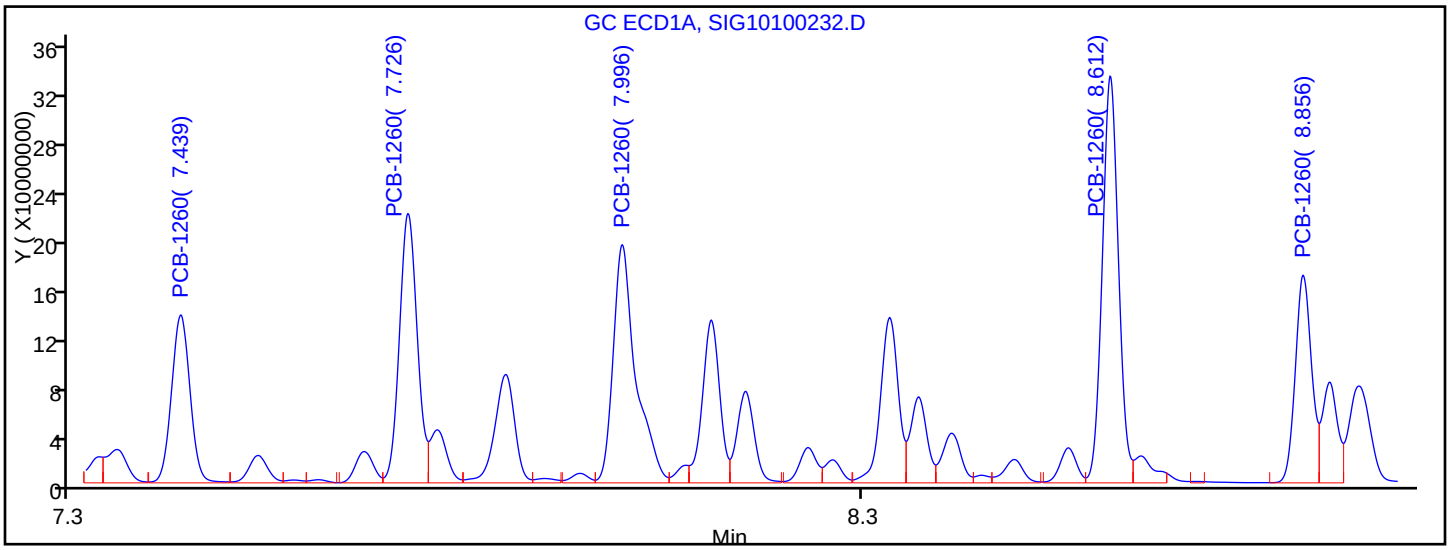
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

7.439	Response = 216558615
7.726	Response = 329370648
7.996	Response = 366077400
8.612	Response = 460750061
8.856	Response = 239311149



Manual Integration Results

7.439	Response = 221116227	M
7.726	Response = 340623035	M
7.996	Response = 381711158	M
8.612	Response = 468011477	M
8.856	Response = 240205301	M

Reviewer: hassl, 03-Oct-2017 06:17:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D
Lims ID: std151660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 22:27:48 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-033
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:20:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	215447070	0.0500	0.0500	
2	2.390	2.391	-0.001	40011581	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.070	3.069	0.001	413262560	0.1000	0.0819	
2	4.016	4.016	0.000	83977186	0.1000	0.0986	
						RPD = 18.47	
6 PCB-1016							M
1	3.746	3.746	0.000	144658035	1.50	1.20	M
1	4.352	4.352	0.000	241271250	1.50	1.15	M
1	5.098	5.097	0.001	544439328	1.50	1.28	M
1	5.300	5.300	0.000	239313863	1.50	1.27	M
1	5.678	5.678	0.000	108325953	1.50	1.26	M
		Average of Peak Amounts =				1.23	
2	4.948	4.947	0.001	28780854	1.50	1.34	
2	5.629	5.629	0.000	51411999	1.50	1.28	
2	6.334	6.335	-0.001	110483774	1.50	1.41	
2	6.522	6.522	0.000	44746416	1.50	1.39	
2	6.895	6.895	0.000	20155935	1.50	1.26	
		Average of Peak Amounts =				1.34	
						RPD = 8.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.439	7.438	0.001	324761865	1.50	1.31	M
1	7.725	7.726	-0.001	501440084	1.50	1.33	M
1	7.995	7.996	-0.001	562491823	1.50	1.35	M
1	8.613	8.614	-0.001	696744466	1.50	1.39	M
1	8.856	8.857	-0.001	357960229	1.50	1.36	M
		Average of Peak Amounts =				1.35	
2	8.432	8.432	0.000	68628324	1.50	1.40	
2	8.624	8.623	0.001	81954025	1.50	1.43	
2	9.020	9.020	0.000	63604935	1.50	1.44	
2	9.482	9.481	0.001	159517201	1.50	1.53	
2	9.785	9.785	0.000	106996758	1.50	1.50	
		Average of Peak Amounts =				1.46	
						RPD = 7.80	
$ 12 DCB Decachlorobiphenyl							M
1	9.765	9.766	-0.001	336890288	0.1000	0.0907	M
2	10.744	10.744	0.000	73732952	0.1000	0.0946	
						RPD = 4.23	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.5PPM_00001 Amount Added: 1.00 Units: mL

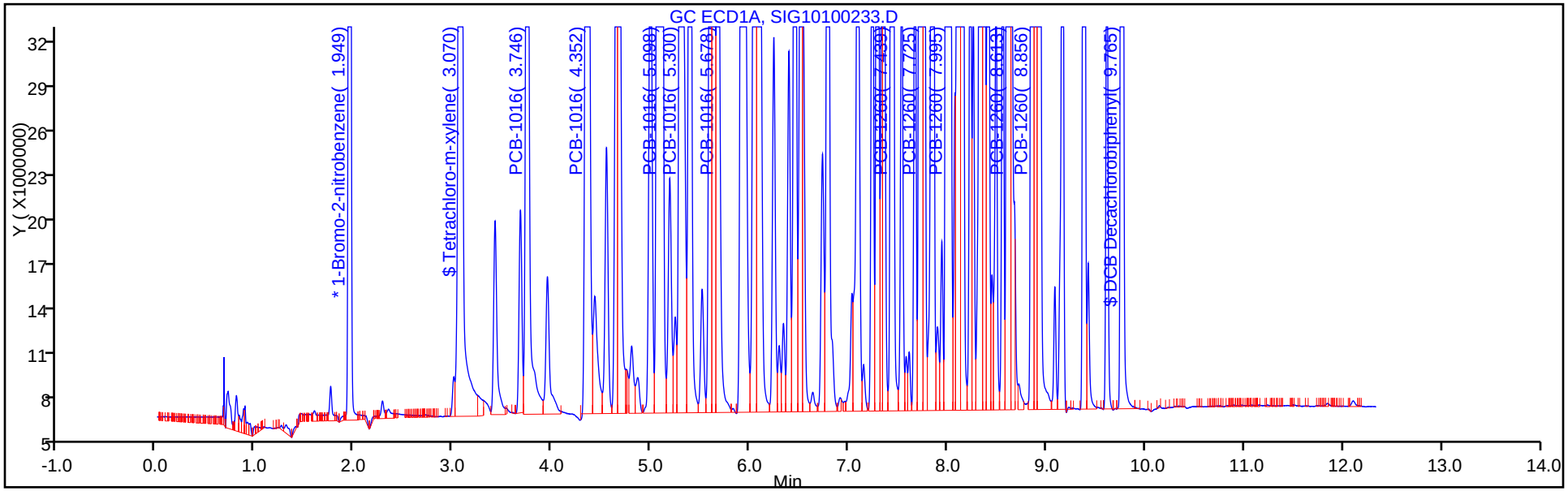
Report Date: 03-Oct-2017 08:44:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

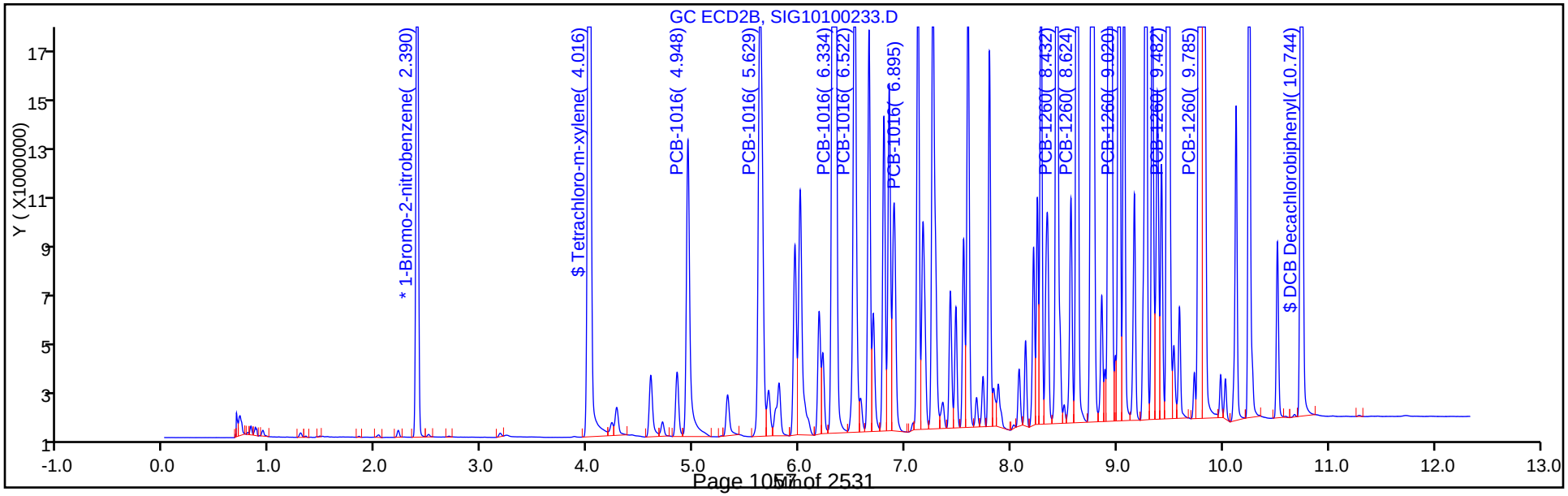
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Injection Date:	02-Oct-2017 22:27:48	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std151660			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:44:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Injection Date: 02-Oct-2017 22:27:48 Instrument ID: A2HP13

Lims ID: std151660

Client ID:

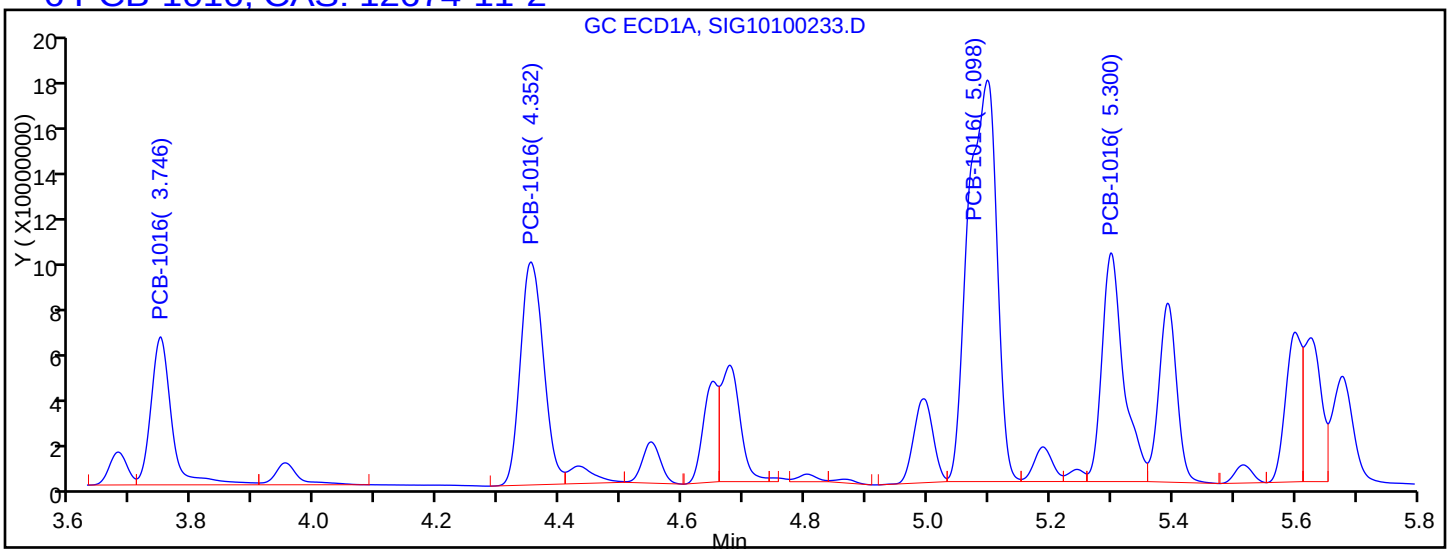
Operator ID: ALS Bottle#: 33 Worklist Smp#: 33

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

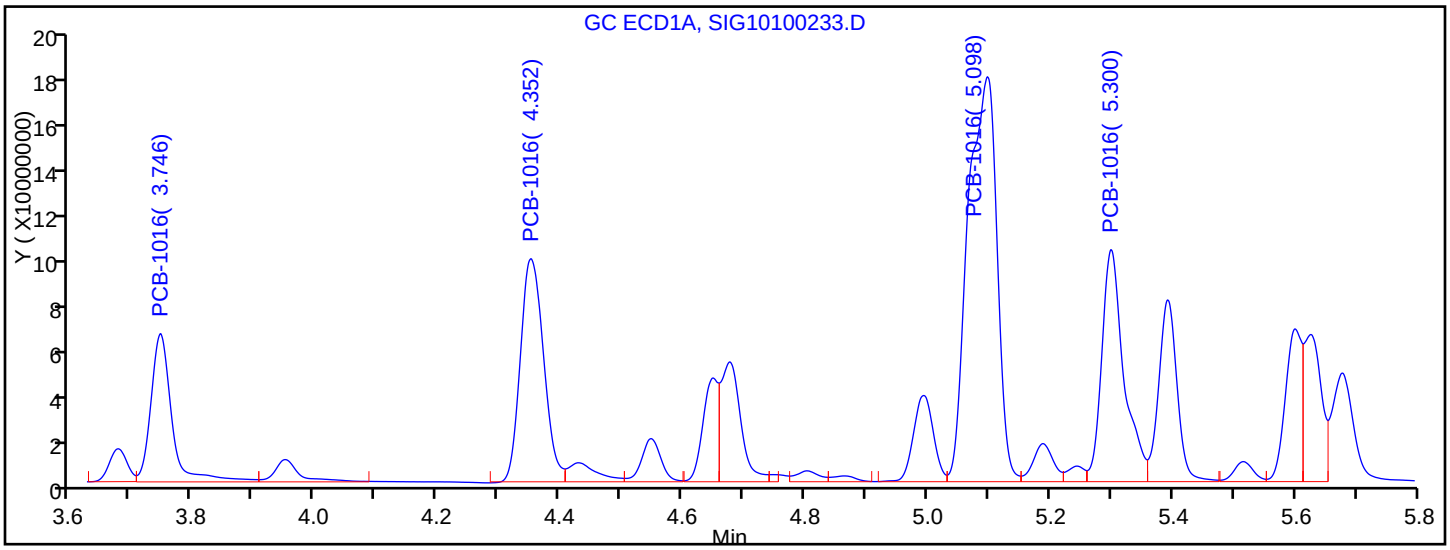
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

3.746	Response = 142992579
4.352	Response = 241118954
5.098	Response = 534355676
5.300	Response = 231109893
5.678	Response = 101384475



Manual Integration Results

3.746	Response = 144658035	M
4.352	Response = 241271250	M
5.098	Response = 544439328	M
5.300	Response = 239313863	M
5.678	Response = 108325953	M

Reviewer: hassl, 03-Oct-2017 06:20:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

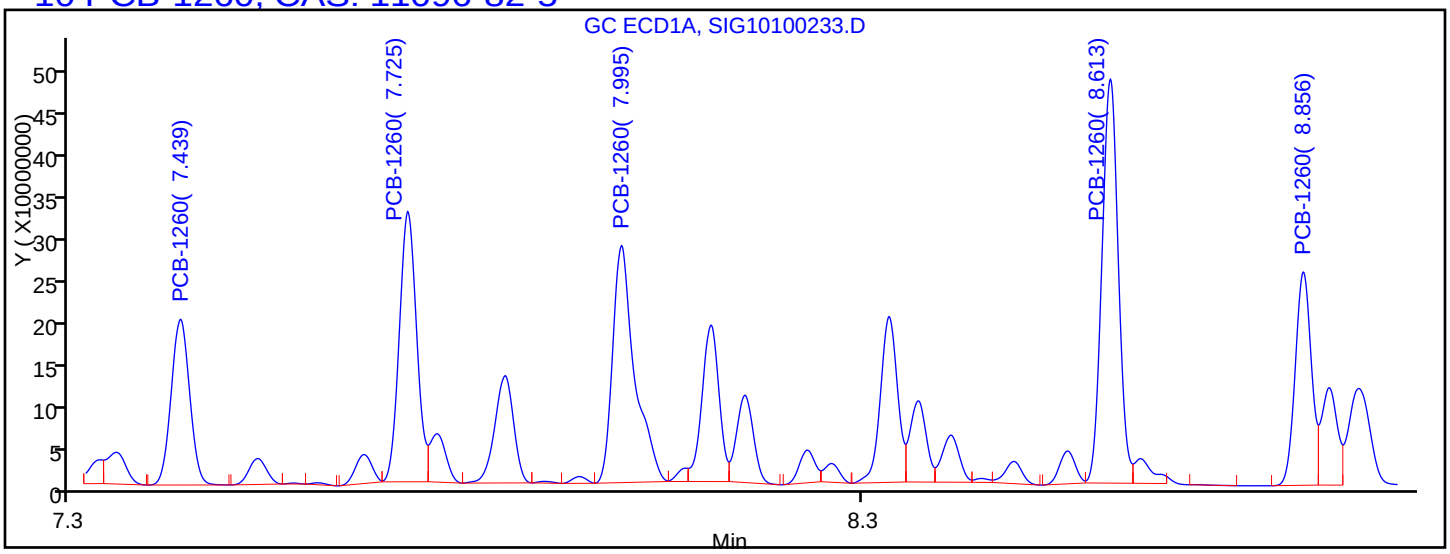
Report Date: 03-Oct-2017 08:44:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

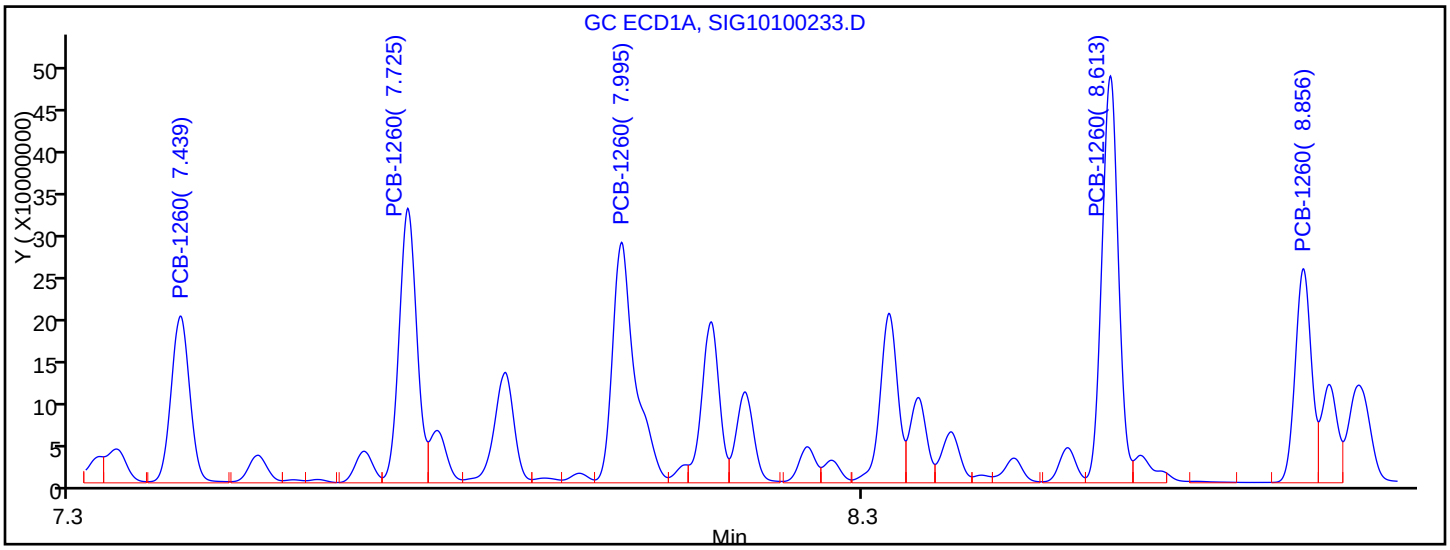
Injection Date:	02-Oct-2017 22:27:48	Instrument ID:	A2HP13		
Lims ID:	std151660				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

7.439	Response = 316421754
7.725	Response = 483682372
7.995	Response = 537914932
8.613	Response = 684178829
8.856	Response = 355130070



Manual Integration Results

7.439	Response = 324761865	M
7.725	Response = 501440084	M
7.995	Response = 562491823	M
8.613	Response = 696744466	M
8.856	Response = 357960229	M

Reviewer: hassl, 03-Oct-2017 06:20:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

TestAmerica Canton

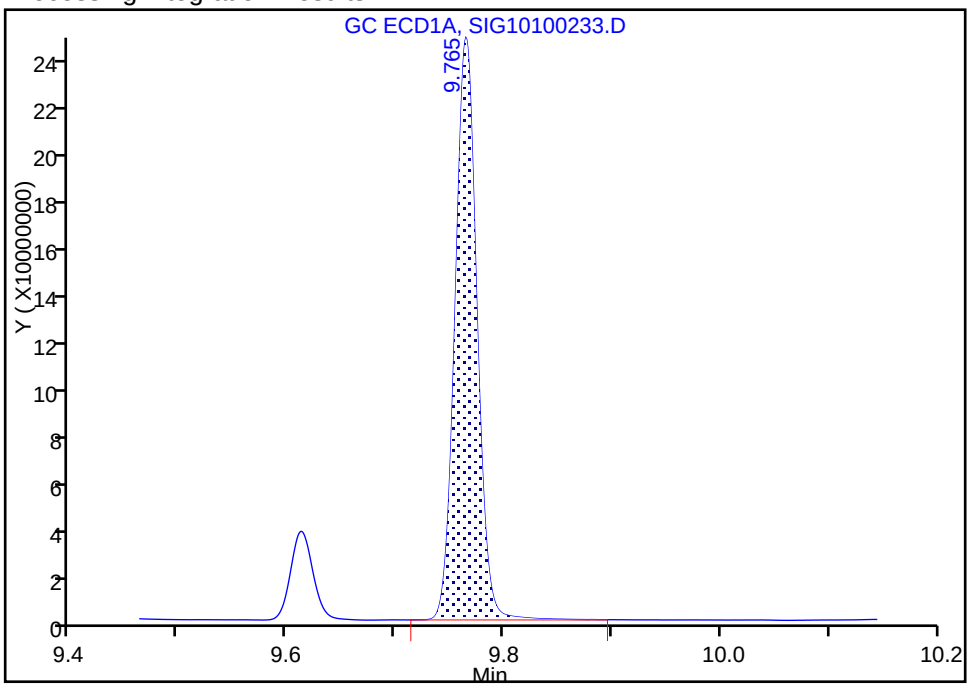
Data File:	\\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D				
Injection Date:	02-Oct-2017 22:27:48	Instrument ID:	A2HP13		
Lims ID:	std151660				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

$ 12 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

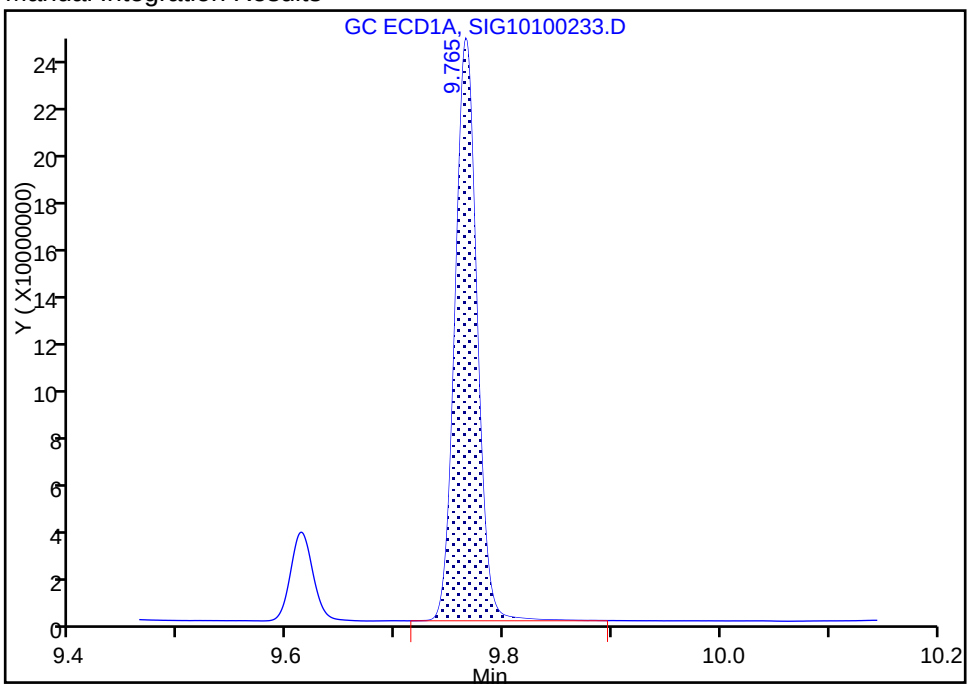
Processing Integration Results

RT: 9.76
Area: 337037634
Amount: 0.090710
Amount Units: ng/ul



Manual Integration Results

RT: 9.76
Area: 336890288
Amount: 0.090677
Amount Units: ng/ul



Reviewer: hassl, 03-Oct-2017 06:20:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 20:56 Calibration End Date: 10/02/2017 22:27 Calibration ID: 41684

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/28	SIG10100228.D
Level 2	STD01 240-297169/29	SIG10100229.D
Level 3	STD02 240-297169/30	SIG10100230.D
Level 4	STD05 240-297169/31	SIG10100231.D
Level 5	STD1 240-297169/32	SIG10100232.D
Level 6	STD151660 240-297169/33	SIG10100233.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.0285 0.0240	0.0282	0.0266	0.0280	0.0252	Ave		0.0268				6.9		20.0			
PCB-1016 Peak 2	0.0593 0.0428	0.0551	0.0514	0.0478	0.0445	Ave		0.0502				12.6		20.0			
PCB-1016 Peak 3	0.1065 0.0920	0.1026	0.0968	0.0953	0.0934	Ave		0.0978				5.8		20.0			
PCB-1016 Peak 4	0.0436 0.0373	0.0418	0.0393	0.0406	0.0385	Ave		0.0402				5.7		20.0			
PCB-1016 Peak 5	0.0231 0.0168	0.0226	0.0209	0.0192	0.0176	Ave		0.0200				13.0		20.0			
PCB-1260 Peak 1	0.0684 0.0572	0.0660	0.0616	0.0579	0.0577	Ave		0.0615				7.8		20.0			
PCB-1260 Peak 2	0.0791 0.0683	0.0749	0.0717	0.0677	0.0685	Ave		0.0717				6.3		20.0			
PCB-1260 Peak 3	0.0591 0.0530	0.0592	0.0552	0.0525	0.0531	Ave		0.0554				5.6		20.0			
PCB-1260 Peak 4	0.1328 0.1329	0.1328	0.1264	0.1249	0.1310	Ave		0.1301				2.8		20.0			
PCB-1260 Peak 5	0.0968 0.0891	0.0919	0.0869	0.0835	0.0877	Ave		0.0893				5.1		20.0			
Tetrachloro-m-xylene	1.1233 1.0494	1.0748	1.0238	1.0581	1.0579	Ave		1.0646				3.1		20.0			
DCB Decachlorobiphenyl	1.1275 0.9214	1.0321	0.9551	0.8800	0.9284	Ave		0.9741				9.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-85941-1 Analy Batch No.: 297169

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 (0.53 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2017 20:56 Calibration End Date: 10/02/2017 22:27 Calibration ID: 41684

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-297169/28	SIG10100228.D
Level 2	STD01 240-297169/29	SIG10100229.D
Level 3	STD02 240-297169/30	SIG10100230.D
Level 4	STD05 240-297169/31	SIG10100231.D
Level 5	STD1 240-297169/32	SIG10100232.D
Level 6	STD151660 240-297169/33	SIG10100233.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Ave	1075623 28780854	2197704	4135899	10603305	20030407	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	BNB	Ave	2236964 51411999	4292310	7977153	18093322	35361551	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	BNB	Ave	4018510 110483774	7989142	15034050	36067484	74109716	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	BNB	Ave	1645287 44746416	3251652	6098293	15379273	30590273	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	BNB	Ave	872628 20155935	1759617	3247393	7248830	13982403	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	BNB	Ave	2580157 68628324	5137357	9572536	21897006	45777187	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	BNB	Ave	2984891 81954025	5828701	11129417	25634715	54383039	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	BNB	Ave	2229955 63604935	4609279	8577143	19856823	42167251	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	BNB	Ave	5007740 159517201	10340622	19630367	47264752	104023305	0.0500 1.50	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	BNB	Ave	3649972 106996758	7151614	13496125	31590712	69622551	0.0500 1.50	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	BNB	Ave	2118546 83977186	4183096	7951358	20023249	41990462	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl	BNB	Ave	2126341 73732952	4017030	7417485	16654031	36849346	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100228.D
Lims ID: std005 1660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2017 20:56:03 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-028
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:49 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:32:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	205254849	0.0500	0.0500	
2	2.392	2.391	0.001	37718620	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.070	3.069	0.001	14328193	0.002500	0.002981	
2	4.016	4.016	0.000	2118546	0.002500	0.002638	
						RPD = 12.20	
6 PCB-1016							
1	3.748	3.746	0.002	7076099	0.0500	0.0618	
1	4.353	4.352	0.001	12818305	0.0500	0.0642	
1	5.098	5.097	0.001	23388708	0.0500	0.0577	
1	5.300	5.300	0.000	10172172	0.0500	0.0565	
1	5.677	5.678	-0.001	4737885	0.0500	0.0576	
		Average of Peak Amounts =				0.0596	
2	4.948	4.947	0.001	1075623	0.0500	0.0533	
2	5.629	5.629	0.000	2236964	0.0500	0.0591	
2	6.334	6.335	-0.001	4018510	0.0500	0.0545	
2	6.522	6.522	0.000	1645287	0.0500	0.0543	
2	6.896	6.895	0.001	872628	0.0500	0.0577	
		Average of Peak Amounts =				0.0558	
						RPD = 6.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.440	7.438	0.002	13500810	0.0500	0.0572	
1	7.728	7.726	0.002	20615678	0.0500	0.0576	
1	7.997	7.996	0.001	22368403	0.0500	0.0565	
1	8.616	8.614	0.002	27013864	0.0500	0.0564	
1	8.859	8.857	0.002	15090169	0.0500	0.0600	
		Average of Peak Amounts =				0.0575	
2	8.434	8.432	0.002	2580157	0.0500	0.0557	
2	8.625	8.623	0.002	2984891	0.0500	0.0552	
2	9.022	9.020	0.002	2229955	0.0500	0.0534	
2	9.482	9.481	0.001	5007740	0.0500	0.0510	
2	9.786	9.785	0.001	3649972	0.0500	0.0542	
		Average of Peak Amounts =				0.0539	
						RPD = 6.56	
$ 12 DCB Decachlorobiphenyl							
1	9.766	9.766	0.000	9638877	0.002500	0.002723	
2	10.745	10.744	0.001	2126341	0.002500	0.002894	
						RPD = 6.07	

Reagents:

SG1660@.05PPM_00020 Amount Added: 1.00 Units: mL

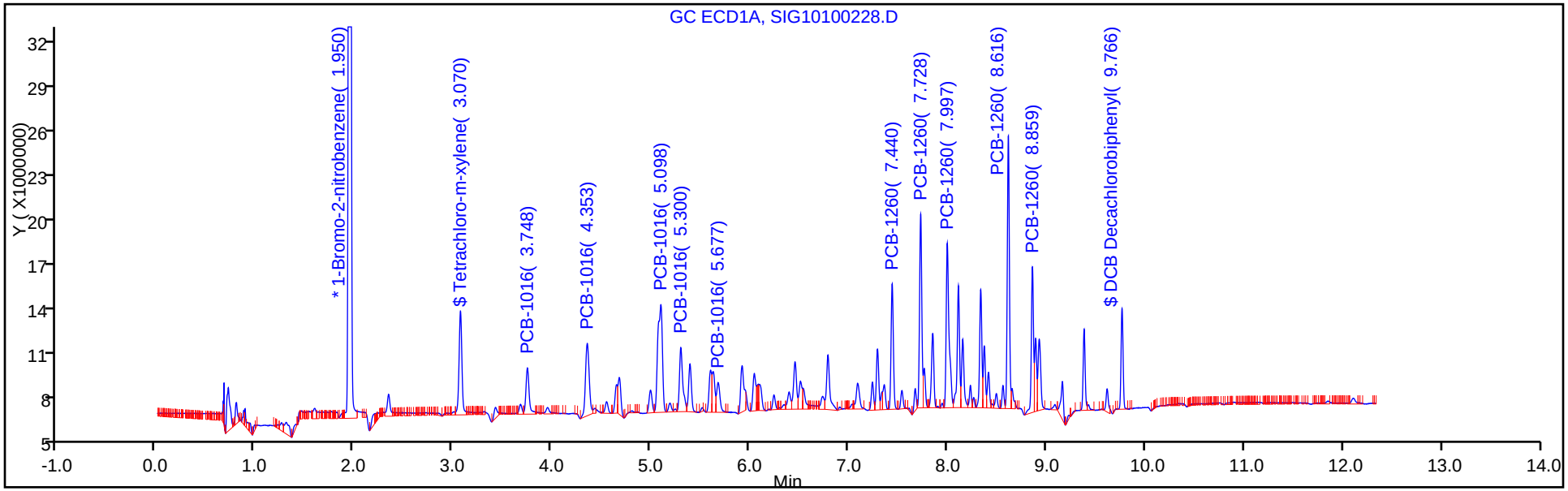
Report Date: 03-Oct-2017 08:47:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

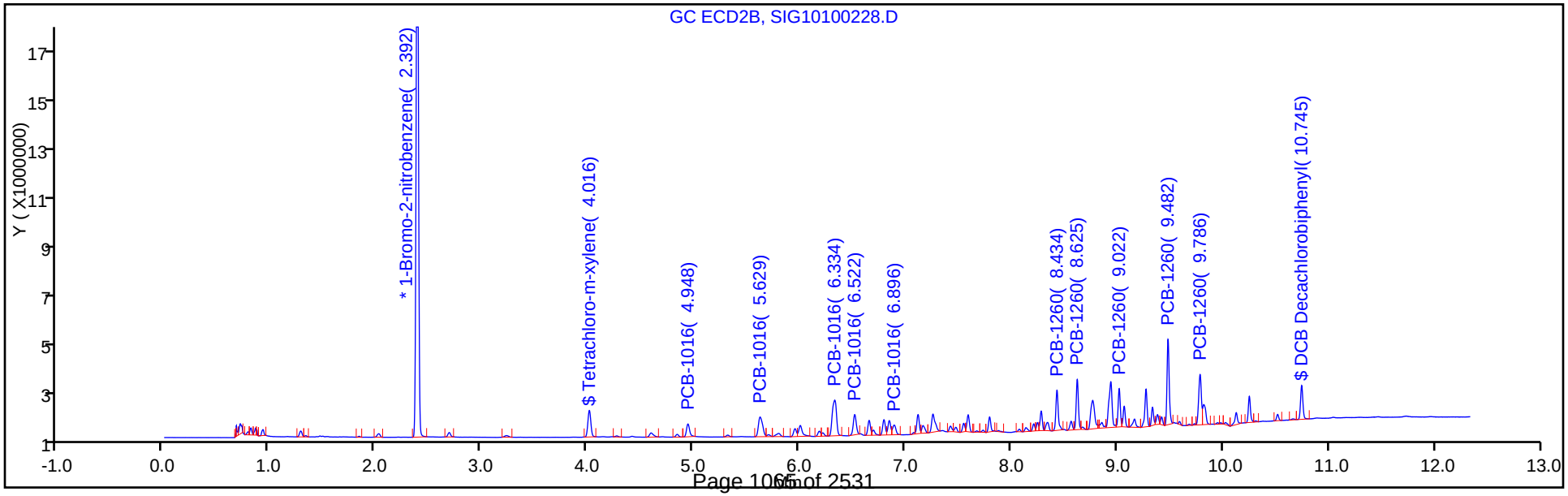
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100228.D

Injection Date:	02-Oct-2017 20:56:03	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std005 1660			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100229.D
Lims ID: std01 1660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2017 21:14:29 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-029
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:47:54 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	210181088	0.0500	0.0500	
2	2.390	2.391	0.000	38919668	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	26844729	0.005000	0.005454	
2	4.015	4.016	-0.001	4183096	0.005000	0.005048	
						RPD = 7.73	
6 PCB-1016							
1	3.747	3.746	0.001	12934284	0.1000	0.1104	
1	4.351	4.352	-0.001	23509183	0.1000	0.1151	
1	5.098	5.097	0.001	45931896	0.1000	0.1107	
1	5.299	5.300	-0.001	20701319	0.1000	0.1122	
1	5.678	5.678	0.000	9087384	0.1000	0.1080	
		Average of Peak Amounts =				0.1113	
2	4.947	4.947	0.000	2197704	0.1000	0.1055	
2	5.629	5.629	0.000	4292310	0.1000	0.1099	
2	6.335	6.335	0.000	7989142	0.1000	0.1050	
2	6.522	6.522	0.000	3251652	0.1000	0.1040	
2	6.895	6.895	0.000	1759617	0.1000	0.1128	
		Average of Peak Amounts =				0.1074	
						RPD = 3.51	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.439	7.438	0.001	26072420	0.1000	0.1079	
1	7.727	7.726	0.001	38751368	0.1000	0.1057	
1	7.997	7.996	0.001	42412413	0.1000	0.1047	
1	8.614	8.614	0.000	51667339	0.1000	0.1053	
1	8.859	8.857	0.002	27461225	0.1000	0.1066	
		Average of Peak Amounts =				0.1060	
2	8.432	8.432	0.000	5137357	0.1000	0.1074	
2	8.624	8.623	0.001	5828701	0.1000	0.1044	
2	9.020	9.020	0.000	4609279	0.1000	0.1070	
2	9.482	9.481	0.001	10340622	0.1000	0.1021	
2	9.785	9.785	0.000	7151614	0.1000	0.1029	
		Average of Peak Amounts =				0.1048	
						RPD = 1.23	
$ 12 DCB Decachlorobiphenyl							
1	9.765	9.766	-0.001	20156253	0.005000	0.005561	
2	10.744	10.744	0.000	4017030	0.005000	0.005298	
						RPD = 4.85	

Reagents:

SG1660STD@0.1_00020 Amount Added: 1.00 Units: mL

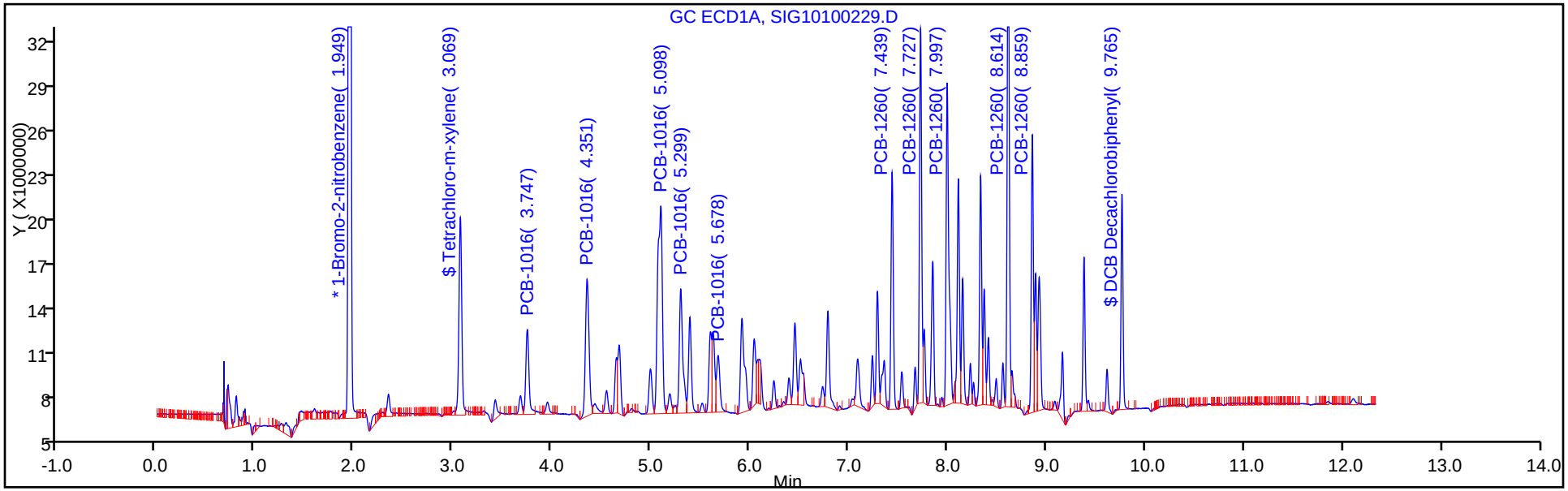
Report Date: 03-Oct-2017 08:47:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

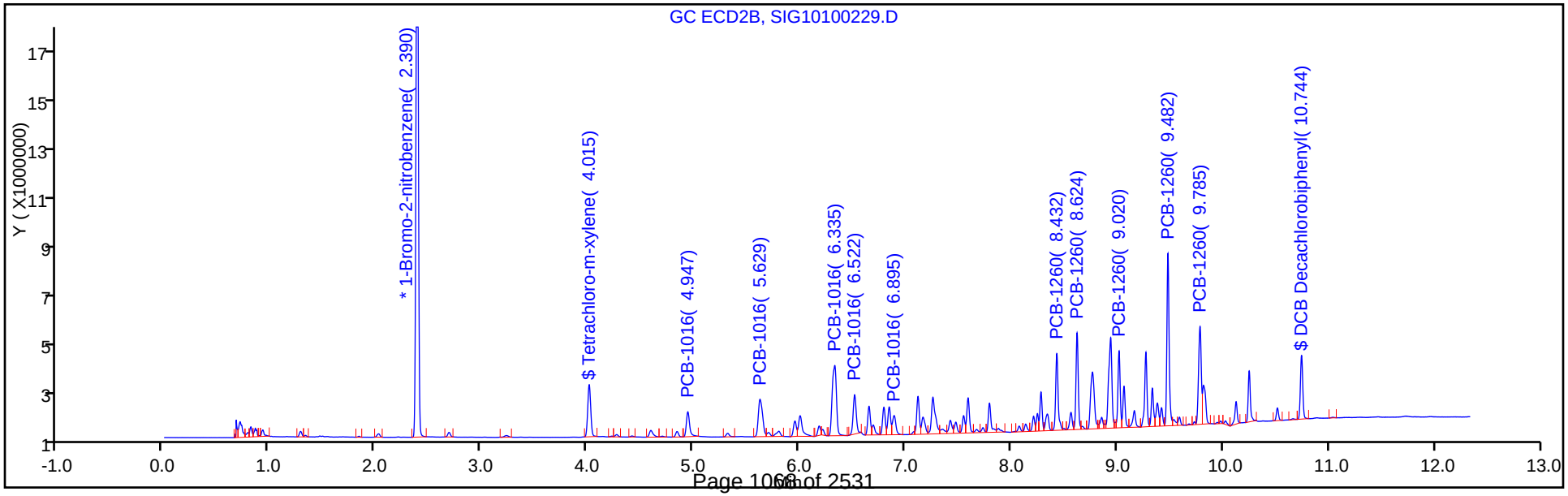
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100229.D

Injection Date:	02-Oct-2017 21:14:29	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std01 1660			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100230.D
Lims ID: std02 1660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2017 21:32:45 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-030
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:48:01 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:16:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	208254142	0.0500	0.0500	
2	2.391	2.391	0.000	38832324	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.070	3.069	0.001	50522169	0.0100	0.0104	
2	4.016	4.016	0.000	7951358	0.0100	0.009617	
						RPD = 7.43	
6 PCB-1016							
1	3.747	3.746	0.001	23341077	0.2000	0.2010	
1	4.354	4.352	0.002	42180206	0.2000	0.2083	
1	5.097	5.097	0.000	84810204	0.2000	0.2064	
1	5.300	5.300	0.000	38217932	0.2000	0.2090	
1	5.679	5.678	0.001	16770092	0.2000	0.2011	
		Average of Peak Amounts =				0.2052	
2	4.947	4.947	0.000	4135899	0.2000	0.1990	
2	5.628	5.629	-0.001	7977153	0.2000	0.2048	
2	6.334	6.335	-0.001	15034050	0.2000	0.1980	
2	6.522	6.522	0.000	6098293	0.2000	0.1954	
2	6.894	6.895	-0.001	3247393	0.2000	0.2087	
		Average of Peak Amounts =				0.2012	
						RPD = 1.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.439	7.438	0.001	49625471	0.2000	0.2073	M
1	7.727	7.726	0.001	74858078	0.2000	0.2061	M
1	7.997	7.996	0.001	82879577	0.2000	0.2065	M
1	8.613	8.614	-0.001	98202766	0.2000	0.2020	M
1	8.857	8.857	0.000	50297203	0.2000	0.1971	M
		Average of Peak Amounts =				0.2038	
2	8.432	8.432	0.000	9572536	0.2000	0.2006	
2	8.623	8.623	0.000	11129417	0.2000	0.1999	
2	9.020	9.020	0.000	8577143	0.2000	0.1995	
2	9.481	9.481	0.000	19630367	0.2000	0.1942	
2	9.785	9.785	0.000	13496125	0.2000	0.1946	
		Average of Peak Amounts =				0.1978	
						RPD = 3.01	
$ 12 DCB Decachlorobiphenyl							
1	9.767	9.766	0.001	36803851	0.0100	0.0102	
2	10.744	10.744	0.000	7417485	0.0100	0.009805	
						RPD = 4.42	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.2ppm_00022 Amount Added: 1.00 Units: mL

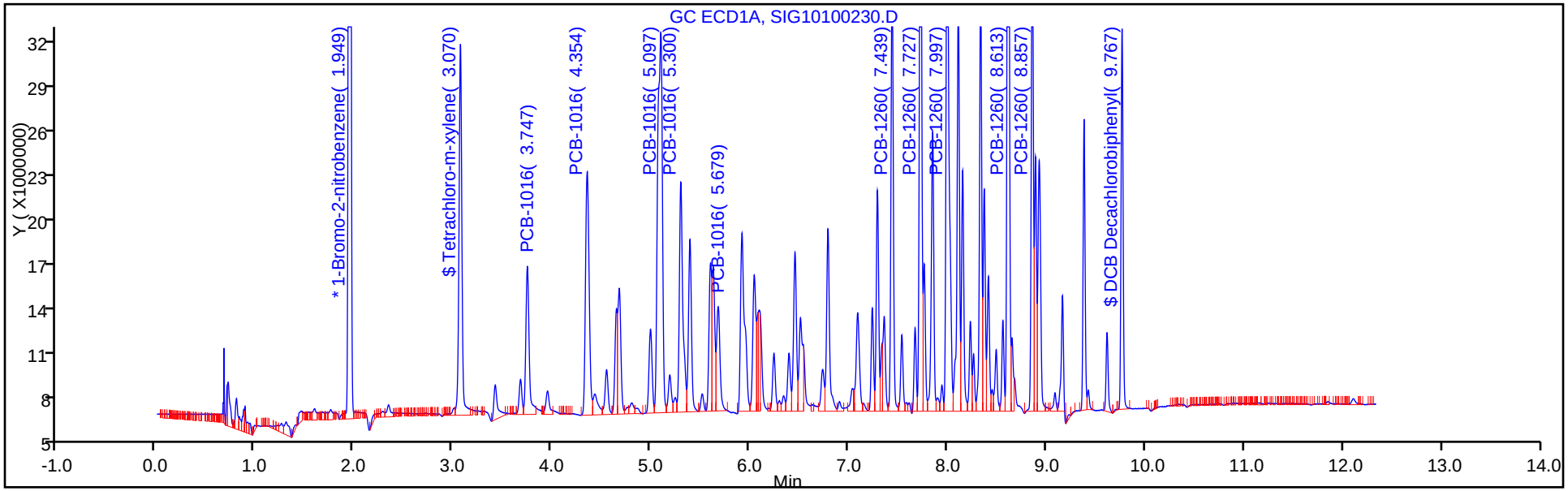
Report Date: 03-Oct-2017 08:48:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

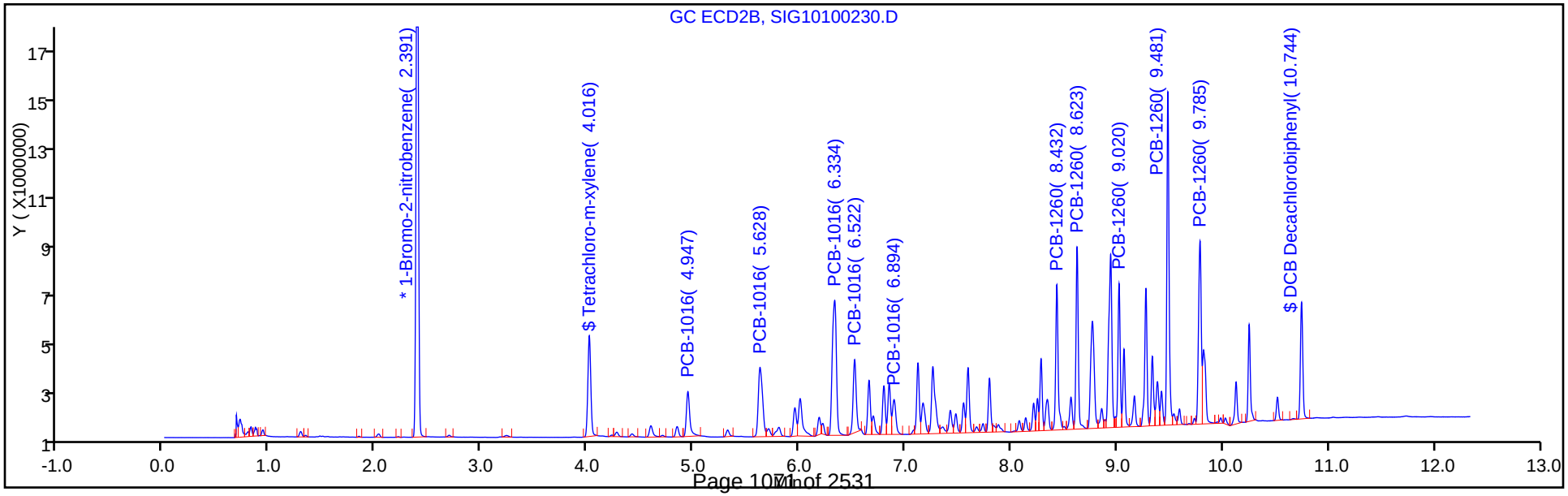
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100230.D

Injection Date:	02-Oct-2017 21:32:45	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std02 1660			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100231.D
Lims ID: std05 1660
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 02-Oct-2017 21:51:05 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-031
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:48:12 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:17:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	205572400	0.0500	0.0500	
2	2.391	2.391	0.000	37848291	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	114606359	0.0250	0.0238	
2	4.016	4.016	0.000	20023249	0.0250	0.0248	
						RPD = 4.28	
6 PCB-1016							M
1	3.746	3.746	0.000	56302128	0.5000	0.4913	
1	4.352	4.352	0.000	93218465	0.5000	0.4664	
1	5.097	5.097	0.000	193221367	0.5000	0.4763	
1	5.300	5.300	0.000	87158197	0.5000	0.4830	
1	5.678	5.678	0.000	43592684	0.5000	0.5295	M
		Average of Peak Amounts =				0.4893	
2	4.947	4.947	0.000	10603305	0.5000	0.5233	
2	5.629	5.629	0.000	18093322	0.5000	0.4765	
2	6.335	6.335	0.000	36067484	0.5000	0.4873	
2	6.522	6.522	0.000	15379273	0.5000	0.5056	
2	6.895	6.895	0.000	7248830	0.5000	0.4780	
		Average of Peak Amounts =				0.4941	
						RPD = 0.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.438	7.438	0.000	112363570	0.5000	0.4756	M
1	7.726	7.726	0.000	169211006	0.5000	0.4719	M
1	7.996	7.996	0.000	187434133	0.5000	0.4731	M
1	8.614	8.614	0.000	224391338	0.5000	0.4675	M
1	8.857	8.857	0.000	115198828	0.5000	0.4572	M
		Average of Peak Amounts =				0.4691	
2	8.432	8.432	0.000	21897006	0.5000	0.4707	
2	8.623	8.623	0.000	25634715	0.5000	0.4723	
2	9.020	9.020	0.000	19856823	0.5000	0.4739	
2	9.481	9.481	0.000	47264752	0.5000	0.4798	
2	9.785	9.785	0.000	31590712	0.5000	0.4673	
		Average of Peak Amounts =				0.4728	
						RPD = 0.79	
$ 12 DCB Decachlorobiphenyl							
1	9.766	9.766	0.000	80438802	0.0250	0.0227	
2	10.744	10.744	0.000	16654031	0.0250	0.0226	
						RPD = 0.46	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.5PPM_00072 Amount Added: 1.00 Units: mL

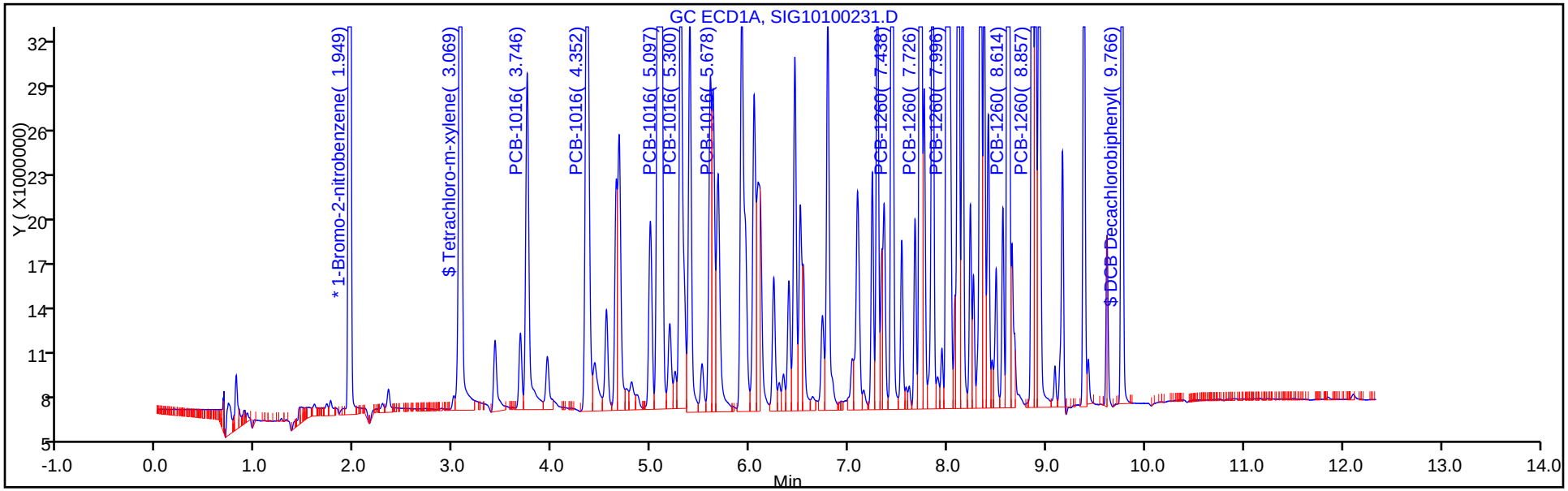
Report Date: 03-Oct-2017 08:48:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

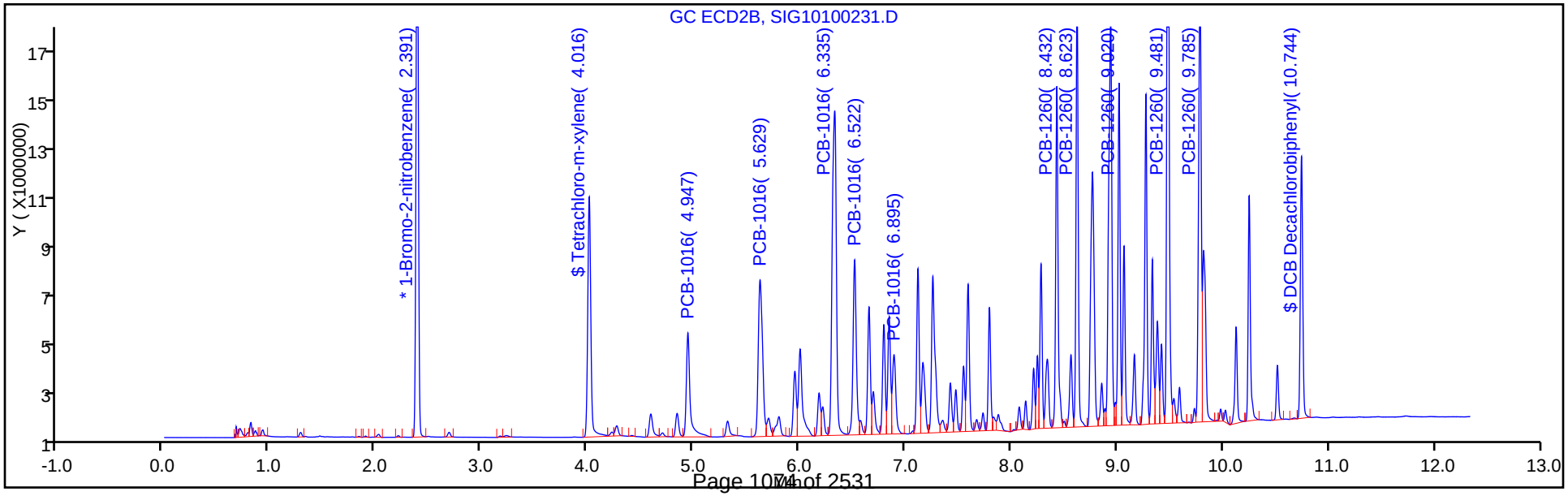
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100231.D

Injection Date:	02-Oct-2017 21:51:05	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std05 1660			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100232.D
Lims ID: std1 1660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Oct-2017 22:09:21 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-032
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:48:23 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:17:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	210618141	0.0500	0.0500	
2	2.390	2.391	-0.001	39692761	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.071	3.069	0.002	224287101	0.0500	0.0455	
2	4.016	4.016	0.000	41990462	0.0500	0.0497	
						RPD = 8.85	
6 PCB-1016							M
1	3.746	3.746	0.000	102013897	1.00	0.8688	
1	4.352	4.352	0.000	168323690	1.00	0.8221	M
1	5.099	5.097	0.002	373789349	1.00	0.8994	M
1	5.301	5.300	0.001	165367583	1.00	0.8944	M
1	5.677	5.678	-0.001	73042260	1.00	0.8660	M
		Average of Peak Amounts =				0.8701	
2	4.947	4.947	0.000	20030407	1.00	0.9426	
2	5.628	5.629	-0.001	35361551	1.00	0.8880	
2	6.335	6.335	0.000	74109716	1.00	0.9548	
2	6.522	6.522	0.000	30590273	1.00	0.9590	
2	6.896	6.895	0.001	13982403	1.00	0.8792	
		Average of Peak Amounts =				0.9247	
						RPD = 6.08	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.439	7.438	0.001	221116227	1.00	0.9135	M
1	7.726	7.726	0.000	340623035	1.00	0.9272	M
1	7.996	7.996	0.000	381711158	1.00	0.9404	M
1	8.612	8.614	-0.002	468011477	1.00	0.9517	M
1	8.856	8.857	-0.001	240205301	1.00	0.9306	M
		Average of Peak Amounts =				0.9327	
2	8.432	8.432	0.000	45777187	1.00	0.9383	
2	8.623	8.623	0.000	54383039	1.00	0.9555	
2	9.020	9.020	0.000	42167251	1.00	0.9596	
2	9.481	9.481	0.000	104023305	1.00	1.01	
2	9.785	9.785	0.000	69622551	1.00	0.9820	
		Average of Peak Amounts =				0.9685	
						RPD = 3.77	
$ 12 DCB Decachlorobiphenyl							
1	9.766	9.766	0.000	174203586	0.0500	0.0480	
2	10.744	10.744	0.000	36849346	0.0500	0.0477	
						RPD = 0.65	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.0PPM_00023 Amount Added: 1.00 Units: mL

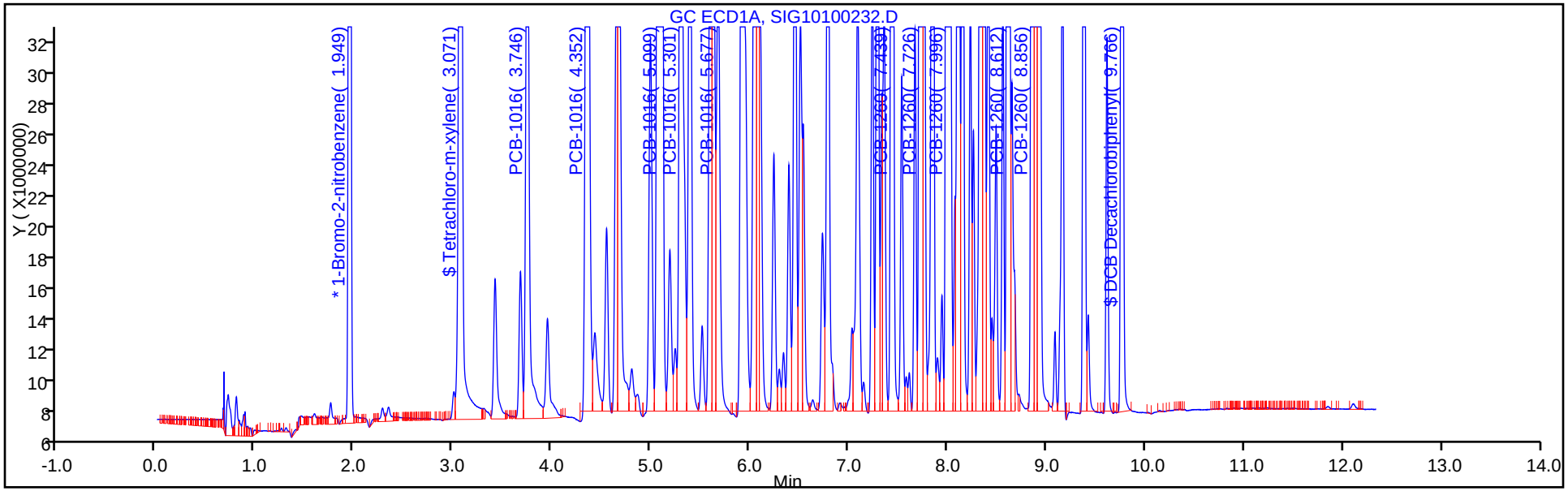
Report Date: 03-Oct-2017 08:48:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

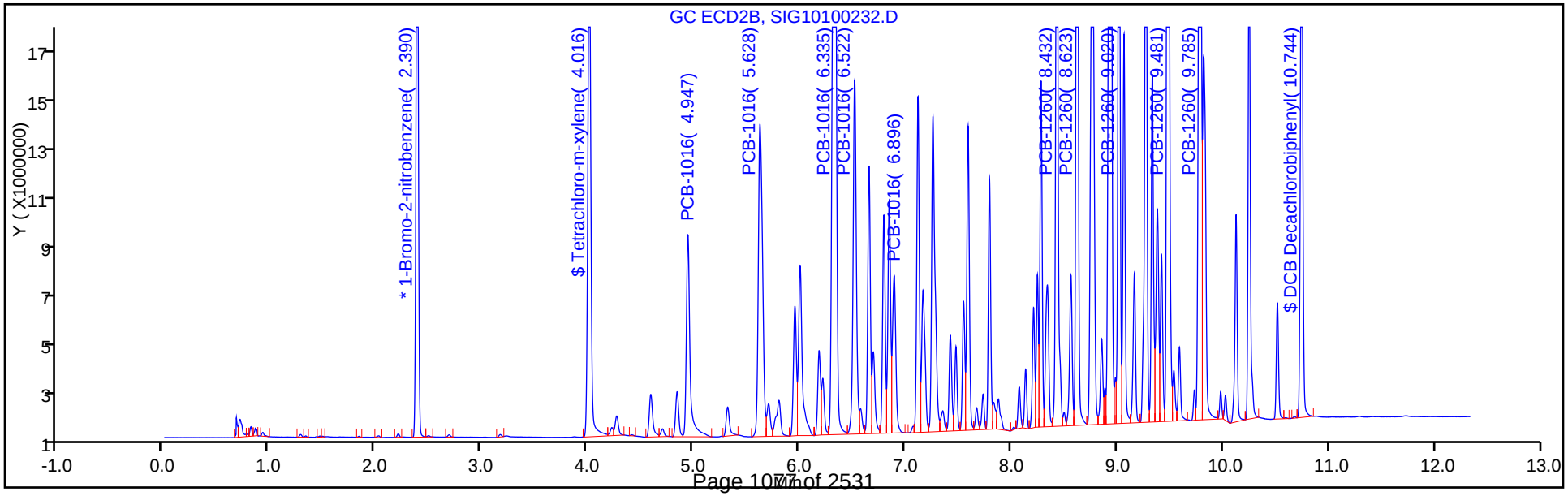
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100232.D

Injection Date:	02-Oct-2017 22:09:21	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std1 1660			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D
Lims ID: std151660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2017 22:27:48 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-033
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:20:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	215447070	0.0500	0.0500	
2	2.390	2.391	-0.001	40011581	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.070	3.069	0.001	413262560	0.1000	0.0819	
2	4.016	4.016	0.000	83977186	0.1000	0.0986	
						RPD = 18.47	
6 PCB-1016							M
1	3.746	3.746	0.000	144658035	1.50	1.20	M
1	4.352	4.352	0.000	241271250	1.50	1.15	M
1	5.098	5.097	0.001	544439328	1.50	1.28	M
1	5.300	5.300	0.000	239313863	1.50	1.27	M
1	5.678	5.678	0.000	108325953	1.50	1.26	M
		Average of Peak Amounts =				1.23	
2	4.948	4.947	0.001	28780854	1.50	1.34	
2	5.629	5.629	0.000	51411999	1.50	1.28	
2	6.334	6.335	-0.001	110483774	1.50	1.41	
2	6.522	6.522	0.000	44746416	1.50	1.39	
2	6.895	6.895	0.000	20155935	1.50	1.26	
		Average of Peak Amounts =				1.34	
						RPD = 8.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	7.439	7.438	0.001	324761865	1.50	1.31	M
1	7.725	7.726	-0.001	501440084	1.50	1.33	M
1	7.995	7.996	-0.001	562491823	1.50	1.35	M
1	8.613	8.614	-0.001	696744466	1.50	1.39	M
1	8.856	8.857	-0.001	357960229	1.50	1.36	M
		Average of Peak Amounts =				1.35	
2	8.432	8.432	0.000	68628324	1.50	1.40	
2	8.624	8.623	0.001	81954025	1.50	1.43	
2	9.020	9.020	0.000	63604935	1.50	1.44	
2	9.482	9.481	0.001	159517201	1.50	1.53	
2	9.785	9.785	0.000	106996758	1.50	1.50	
		Average of Peak Amounts =				1.46	
						RPD = 7.80	
$ 12 DCB Decachlorobiphenyl							M
1	9.765	9.766	-0.001	336890288	0.1000	0.0907	M
2	10.744	10.744	0.000	73732952	0.1000	0.0946	
						RPD = 4.23	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660@1.5PPM_00001 Amount Added: 1.00 Units: mL

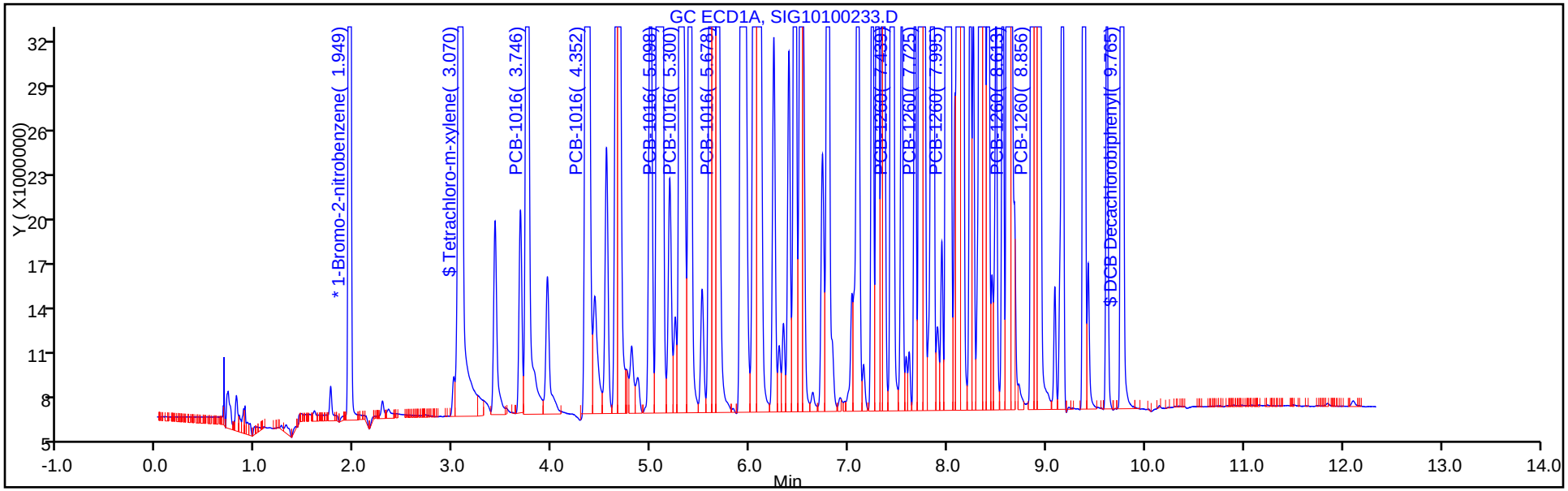
Report Date: 03-Oct-2017 08:44:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

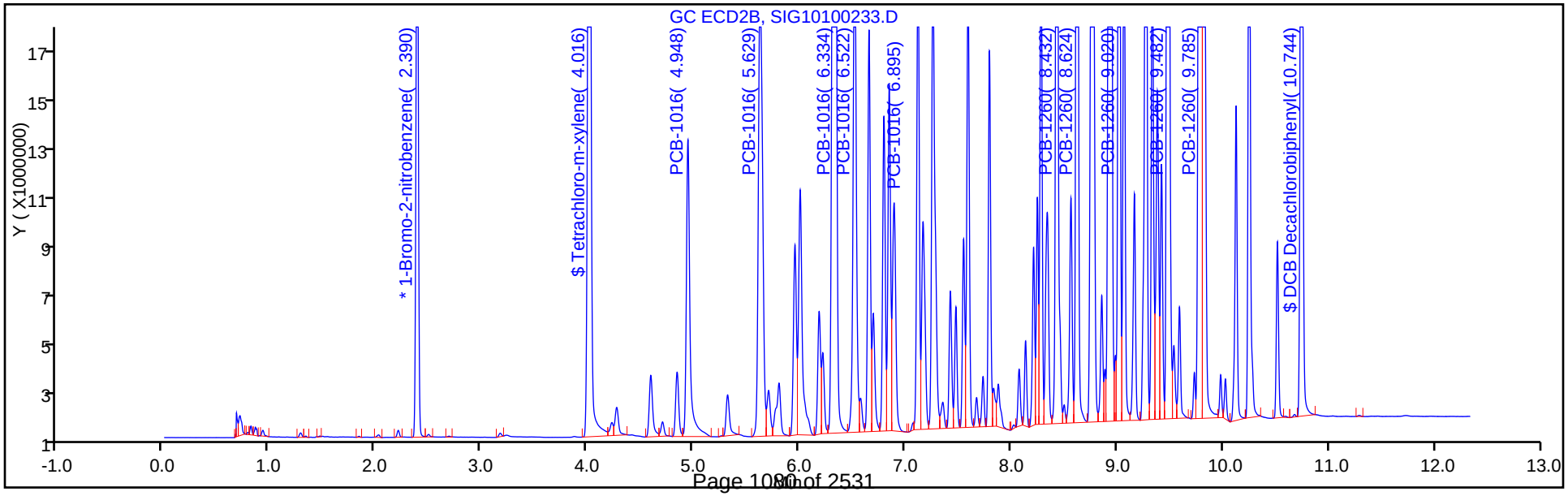
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Injection Date:	02-Oct-2017 22:27:48	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	std151660			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/34 Calibration Date: 10/03/2017 23:22

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100334.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0100	0.0115		0.571	0.500	14.2	20.0
PCB-1221 Peak 2	Ave	0.0064	0.0072		0.556	0.500	11.2	20.0
PCB-1221 Peak 3	Ave	0.0245	0.0272		0.555	0.500	11.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/34 Calibration Date: 10/03/2017 23:22

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100334.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	4.62	4.60	4.64
PCB-1221 Peak 2	4.84	4.82	4.86
PCB-1221 Peak 3	4.90	4.88	4.92

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100334.D
Lims ID: icv 1221
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 23:22:21 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-034
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:24:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	80540984	0.0500	0.0500	
2	3.619	3.619	0.000	251892265	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	9228738	0.5000	0.5708	
1	4.838	4.840	-0.002	5770188	0.5000	0.5558	
1	4.895	4.897	-0.002	21893185	0.5000	0.5550	
		Average of Peak Amounts =				0.5606	
2	5.518	5.520	-0.002	28615067	0.5000	0.6175	
2	5.728	5.729	-0.001	19396192	0.5000	0.5547	
2	5.815	5.816	-0.001	68262971	0.5000	0.5613	
		Average of Peak Amounts =				0.5778	
						RPD = 3.04	

Reagents:

SG1221ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

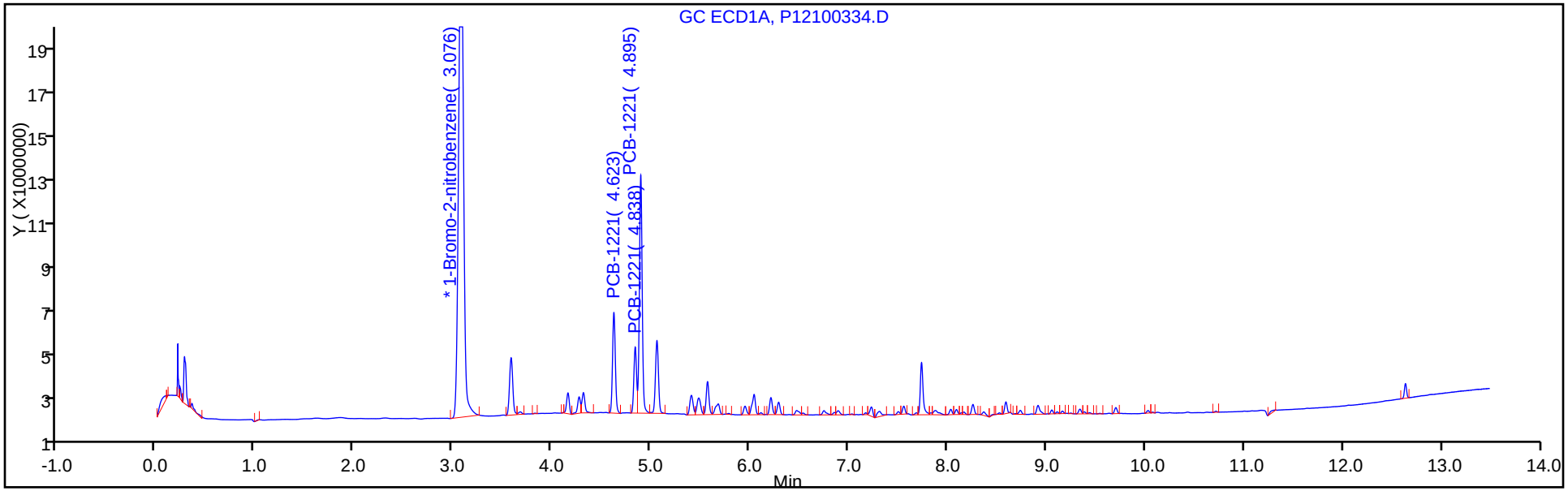
Report Date: 04-Oct-2017 08:19:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

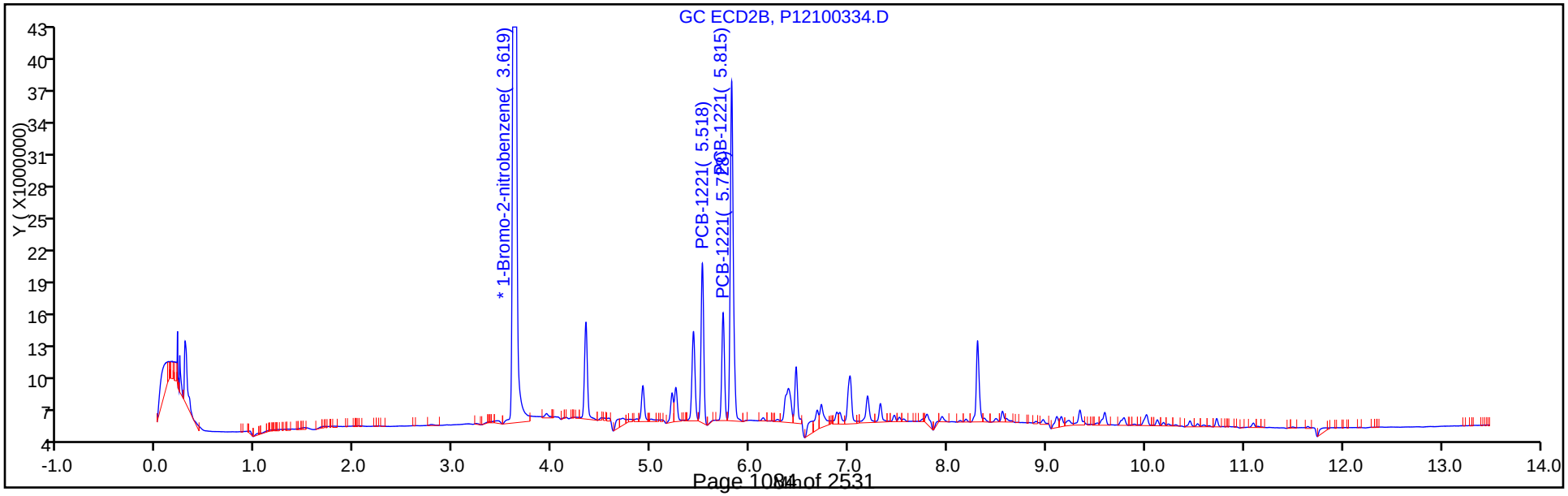
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100334.D

Injection Date:	03-Oct-2017 23:22:21	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1221			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/34 Calibration Date: 10/03/2017 23:22

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100334.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.0114		0.618	0.500	23.5*	20.0
PCB-1221 Peak 2	Ave	0.0069	0.0077		0.555	0.500	10.9	20.0
PCB-1221 Peak 3	Ave	0.0241	0.0271		0.561	0.500	12.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/34 Calibration Date: 10/03/2017 23:22

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100334.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	5.52	5.50	5.54
PCB-1221 Peak 2	5.73	5.71	5.75
PCB-1221 Peak 3	5.82	5.80	5.84

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100334.D
Lims ID: icv 1221
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 23:22:21 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-034
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:24:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.076	3.076	0.000	80540984	0.0500	0.0500	
2	3.619	3.619	0.000	251892265	0.0500	0.0500	
3 PCB-1221							
1	4.623	4.623	0.000	9228738	0.5000	0.5708	
1	4.838	4.840	-0.002	5770188	0.5000	0.5558	
1	4.895	4.897	-0.002	21893185	0.5000	0.5550	
		Average of Peak Amounts =				0.5606	
2	5.518	5.520	-0.002	28615067	0.5000	0.6175	
2	5.728	5.729	-0.001	19396192	0.5000	0.5547	
2	5.815	5.816	-0.001	68262971	0.5000	0.5613	
		Average of Peak Amounts =				0.5778	
						RPD = 3.04	

Reagents:

SG1221ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

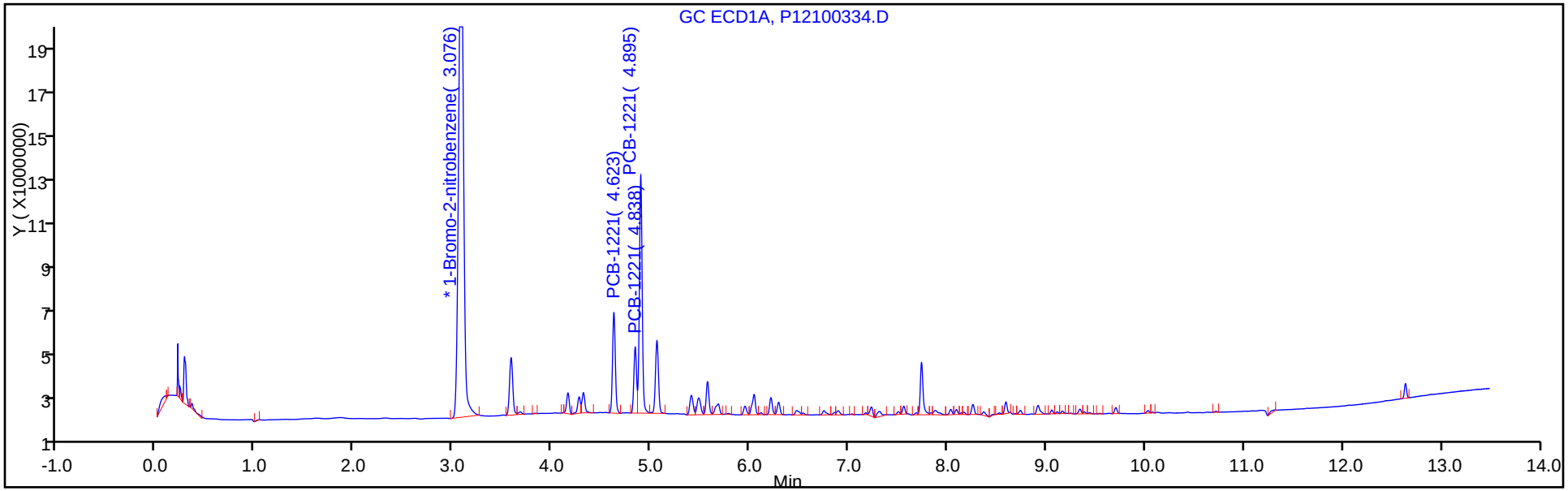
Report Date: 04-Oct-2017 08:19:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

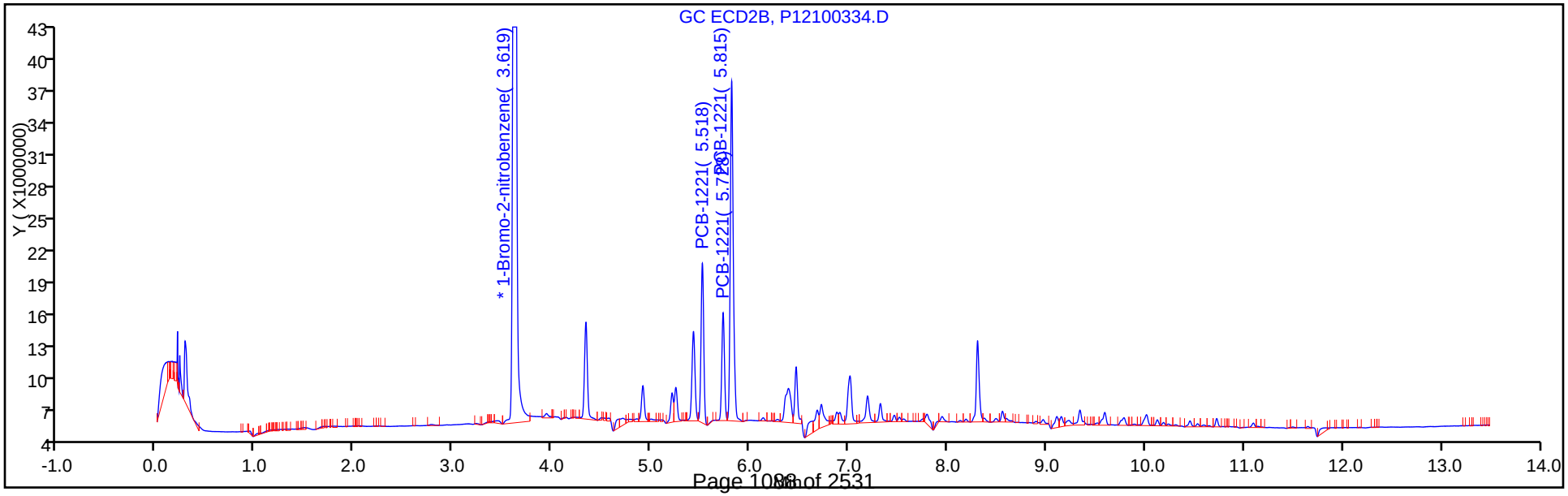
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100334.D

Injection Date:	03-Oct-2017 23:22:21	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1221			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/35 Calibration Date: 10/03/2017 23:39

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 14:33

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 16:01

Lab File ID: P12100335.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	0.0204	0.0169		0.415	0.500	-17.0	20.0
PCB-1232 Peak 2	Ave	0.0154	0.0136		0.441	0.500	-11.8	20.0
PCB-1232 Peak 3	Ave	0.0342	0.0247		0.360	0.500	-27.9*	20.0
PCB-1232 Peak 4	Ave	0.0145	0.0131		0.451	0.500	-9.8	20.0
PCB-1232 Peak 5	Ave	0.0141	0.0129		0.455	0.500	-9.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/35 Calibration Date: 10/03/2017 23:39

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 14:33

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 16:01

Lab File ID: P12100335.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	4.89	4.88	4.92
PCB-1232 Peak 2	5.41	5.39	5.42
PCB-1232 Peak 3	6.04	6.02	6.06
PCB-1232 Peak 4	6.21	6.19	6.23
PCB-1232 Peak 5	6.75	6.73	6.77

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100335.D
Lims ID: icv 1232
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 23:39:57 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-035
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:25:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.076	-0.005	83427304	0.0500	0.0500	
2	3.618	3.619	-0.001	260594323	0.0500	0.0500	
4 PCB-1232							
1	4.894	4.896	-0.002	14103569	0.5000	0.4149	
1	5.405	5.405	0.000	11365581	0.5000	0.4410	
1	6.040	6.036	0.004	20584602	0.5000	0.3605	
1	6.212	6.211	0.001	10935478	0.5000	0.4512	
1	6.748	6.748	0.000	10733414	0.5000	0.4551	
		Average of Peak Amounts =				0.4245	
2	5.814	5.815	-0.001	45984768	0.5000	0.4414	
2	6.397	6.397	0.000	38085845	0.5000	0.4310	
2	7.011	7.011	0.000	79487870	0.5000	0.4605	
2	7.189	7.188	0.001	33104099	0.5000	0.4540	
2	7.556	7.557	-0.001	12397976	0.5000	0.4623	
		Average of Peak Amounts =				0.4498	
						RPD = 5.79	

Reagents:

SG1232ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

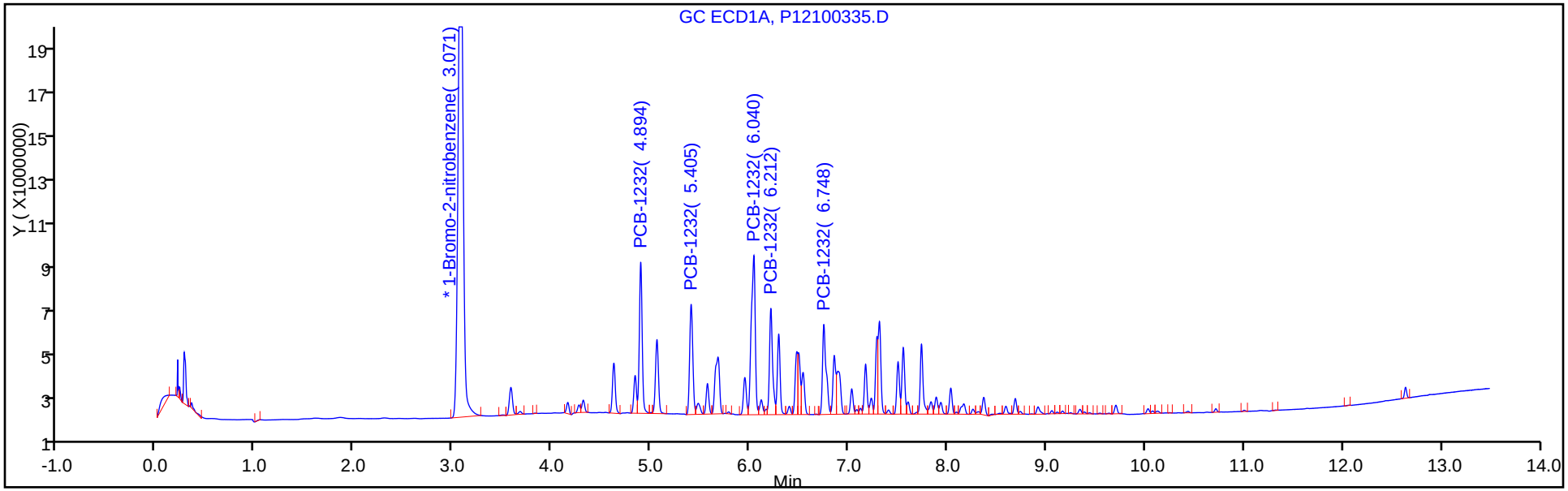
Report Date: 04-Oct-2017 08:19:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

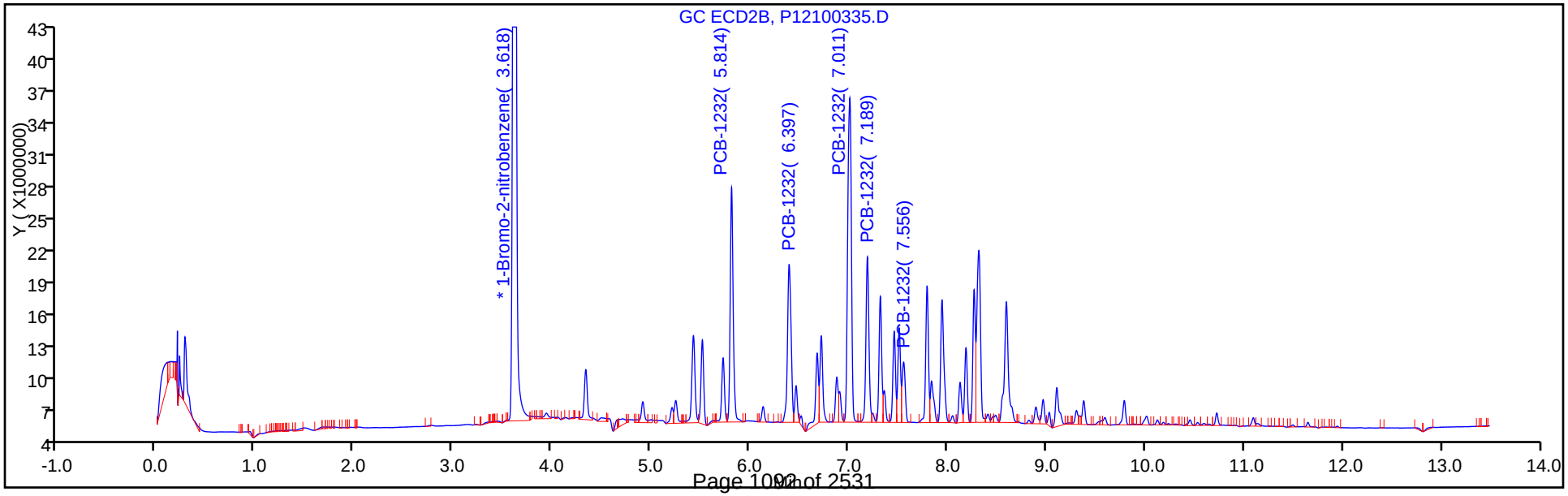
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100335.D

Injection Date:	03-Oct-2017 23:39:57	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1232			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/35 Calibration Date: 10/03/2017 23:39

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 14:33

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 16:01

Lab File ID: P12100335.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	0.0200	0.0177		0.441	0.500	-11.7	20.0
PCB-1232 Peak 2	Ave	0.0170	0.0146		0.431	0.500	-13.8	20.0
PCB-1232 Peak 3	Ave	0.0331	0.0305		0.461	0.500	-7.9	20.0
PCB-1232 Peak 4	Ave	0.0140	0.0127		0.454	0.500	-9.2	20.0
PCB-1232 Peak 5	Ave	0.0051	0.0048		0.462	0.500	-7.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/35 Calibration Date: 10/03/2017 23:39

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 14:33

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 16:01

Lab File ID: P12100335.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	5.81	5.80	5.83
PCB-1232 Peak 2	6.40	6.38	6.42
PCB-1232 Peak 3	7.01	6.99	7.03
PCB-1232 Peak 4	7.19	7.17	7.21
PCB-1232 Peak 5	7.56	7.54	7.58

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100335.D
Lims ID: icv 1232
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 23:39:57 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-035
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:25:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.076	-0.005	83427304	0.0500	0.0500	
2	3.618	3.619	-0.001	260594323	0.0500	0.0500	
4 PCB-1232							
1	4.894	4.896	-0.002	14103569	0.5000	0.4149	
1	5.405	5.405	0.000	11365581	0.5000	0.4410	
1	6.040	6.036	0.004	20584602	0.5000	0.3605	
1	6.212	6.211	0.001	10935478	0.5000	0.4512	
1	6.748	6.748	0.000	10733414	0.5000	0.4551	
		Average of Peak Amounts =				0.4245	
2	5.814	5.815	-0.001	45984768	0.5000	0.4414	
2	6.397	6.397	0.000	38085845	0.5000	0.4310	
2	7.011	7.011	0.000	79487870	0.5000	0.4605	
2	7.189	7.188	0.001	33104099	0.5000	0.4540	
2	7.556	7.557	-0.001	12397976	0.5000	0.4623	
		Average of Peak Amounts =				0.4498	
						RPD = 5.79	

Reagents:

SG1232ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

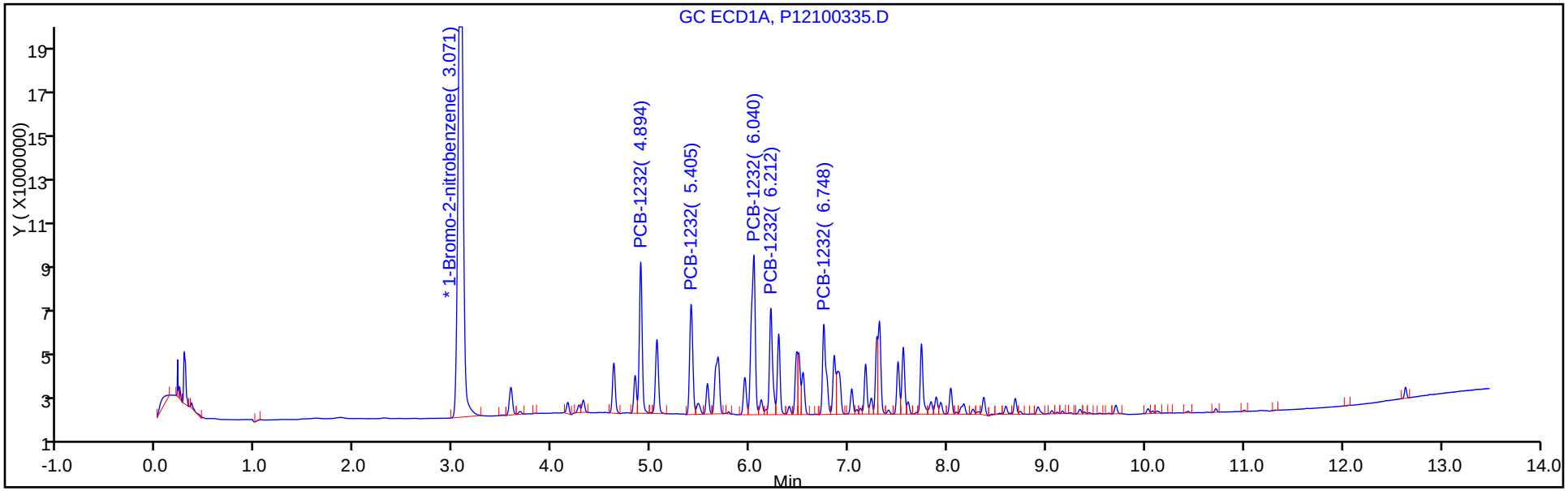
Report Date: 04-Oct-2017 08:19:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

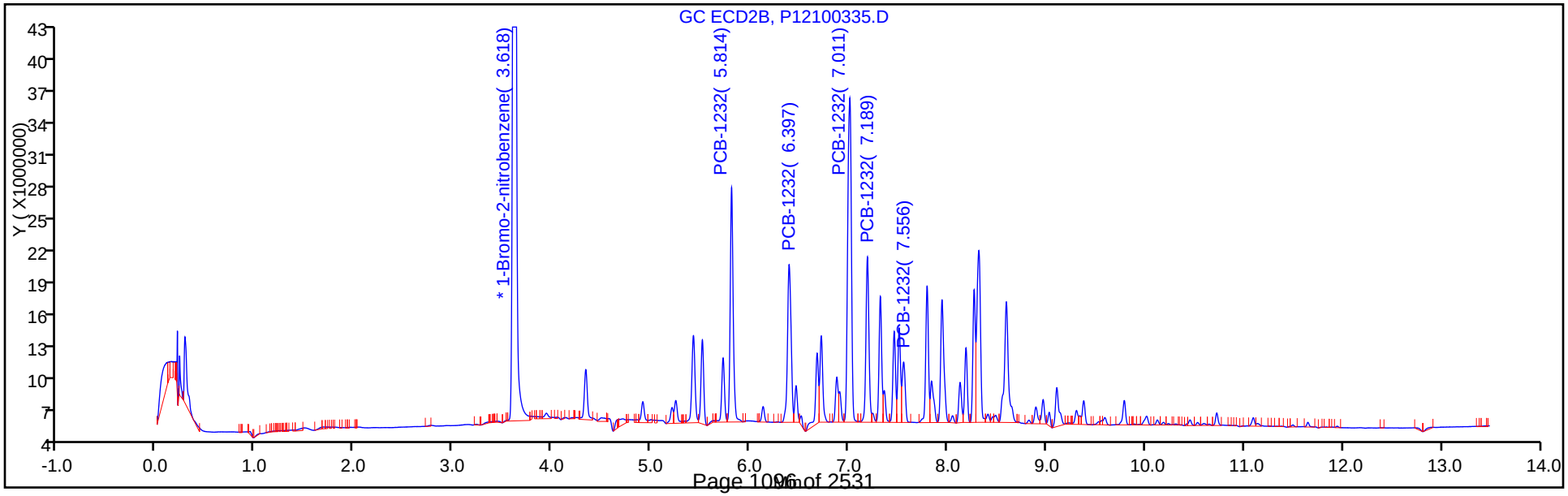
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100335.D

Injection Date:	03-Oct-2017 23:39:57	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1232			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/36 Calibration Date: 10/03/2017 23:57

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 16:19

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 17:47

Lab File ID: P12100336.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	0.0149	0.0154		0.516	0.500	3.1	20.0
PCB-1242 Peak 2	Ave	0.0265	0.0290		0.546	0.500	9.2	20.0
PCB-1242 Peak 3	Ave	0.0603	0.0537		0.445	0.500	-11.0	20.0
PCB-1242 Peak 4	Ave	0.0256	0.0283		0.552	0.500	10.3	20.0
PCB-1242 Peak 5	Ave	0.0263	0.0297		0.563	0.500	12.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/36 Calibration Date: 10/03/2017 23:57

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 16:19

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 17:47

Lab File ID: P12100336.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	4.89	4.88	4.92
PCB-1242 Peak 2	5.41	5.39	5.43
PCB-1242 Peak 3	6.04	6.02	6.06
PCB-1242 Peak 4	6.21	6.19	6.23
PCB-1242 Peak 5	6.75	6.73	6.77

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100336.D
Lims ID: icv 1242
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 23:57:33 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-036
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:26:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.073	3.076	-0.002	80791677	0.0500	0.0500	
2	3.618	3.619	-0.001	259044692	0.0500	0.0500	
5 PCB-1242							
1	4.894	4.896	-0.002	12404877	0.5000	0.5157	
1	5.405	5.406	-0.001	23393304	0.5000	0.5462	
1	6.039	6.036	0.003	43391684	0.5000	0.4450	
1	6.212	6.213	-0.001	22843122	0.5000	0.5517	
1	6.748	6.750	-0.002	23951201	0.5000	0.5634	
		Average of Peak Amounts =				0.5244	
2	5.813	5.816	-0.003	40082154	0.5000	0.5528	
2	6.396	6.399	-0.003	74259719	0.5000	0.5177	
2	7.009	7.011	-0.002	163504906	0.5000	0.5486	
2	7.188	7.189	-0.001	65902835	0.5000	0.5350	
2	7.555	7.557	-0.002	28062661	0.5000	0.5414	
		Average of Peak Amounts =				0.5391	
						RPD = 2.76	

Reagents:

SG1242ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

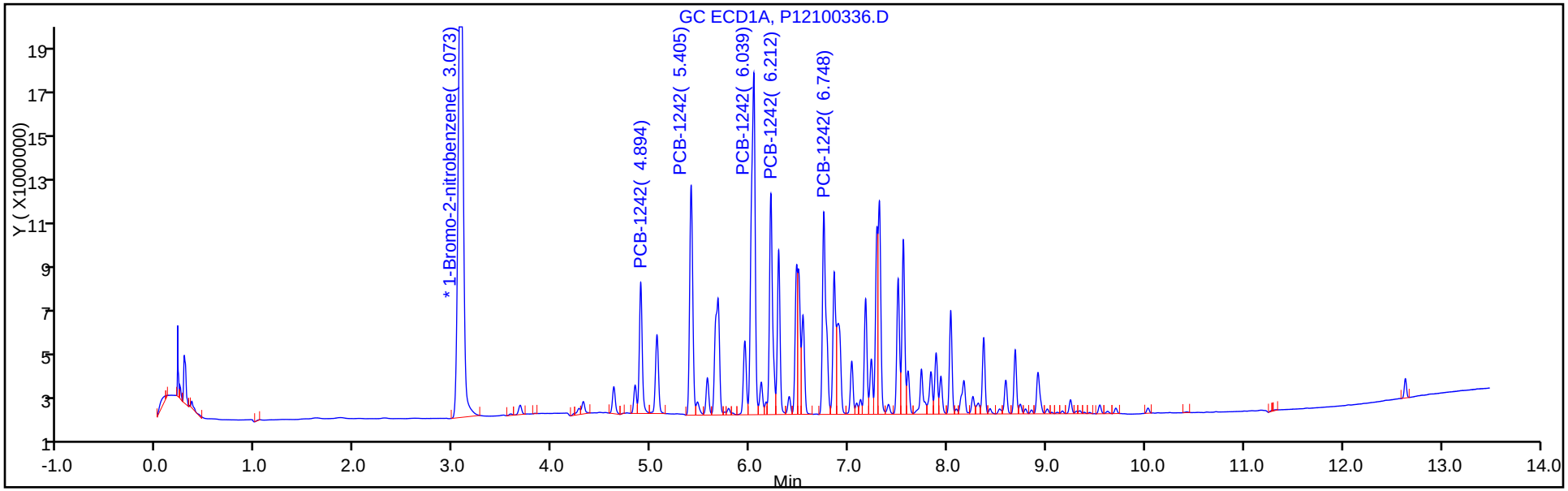
Report Date: 04-Oct-2017 08:19:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

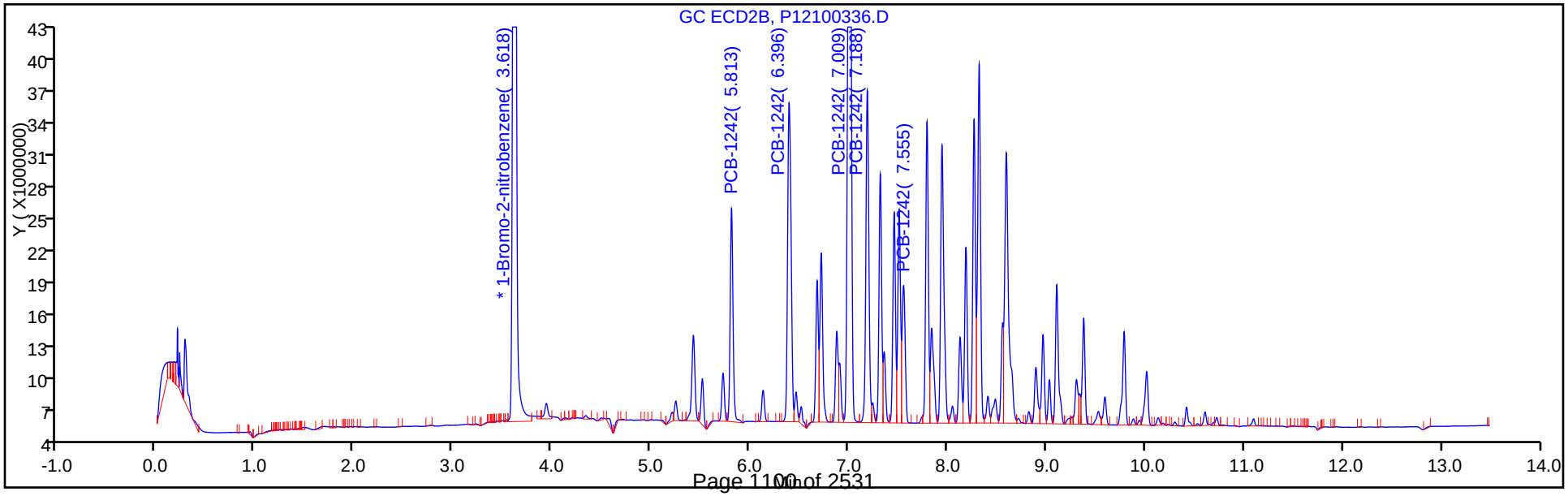
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100336.D

Injection Date:	03-Oct-2017 23:57:33	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1242			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/36 Calibration Date: 10/03/2017 23:57

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 16:19

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 17:47

Lab File ID: P12100336.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	0.0140	0.0155		0.553	0.500	10.6	20.0
PCB-1242 Peak 2	Ave	0.0277	0.0287		0.518	0.500	3.5	20.0
PCB-1242 Peak 3	Ave	0.0575	0.0631		0.549	0.500	9.7	20.0
PCB-1242 Peak 4	Ave	0.0238	0.0254		0.535	0.500	7.0	20.0
PCB-1242 Peak 5	Ave	0.0100	0.0108		0.541	0.500	8.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/36 Calibration Date: 10/03/2017 23:57

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 16:19

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 17:47

Lab File ID: P12100336.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	5.81	5.80	5.84
PCB-1242 Peak 2	6.40	6.38	6.42
PCB-1242 Peak 3	7.01	6.99	7.03
PCB-1242 Peak 4	7.19	7.17	7.21
PCB-1242 Peak 5	7.56	7.54	7.58

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100336.D
Lims ID: icv 1242
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 23:57:33 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-036
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:26:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.073	3.076	-0.002	80791677	0.0500	0.0500	
2	3.618	3.619	-0.001	259044692	0.0500	0.0500	
5 PCB-1242							
1	4.894	4.896	-0.002	12404877	0.5000	0.5157	
1	5.405	5.406	-0.001	23393304	0.5000	0.5462	
1	6.039	6.036	0.003	43391684	0.5000	0.4450	
1	6.212	6.213	-0.001	22843122	0.5000	0.5517	
1	6.748	6.750	-0.002	23951201	0.5000	0.5634	
		Average of Peak Amounts =				0.5244	
2	5.813	5.816	-0.003	40082154	0.5000	0.5528	
2	6.396	6.399	-0.003	74259719	0.5000	0.5177	
2	7.009	7.011	-0.002	163504906	0.5000	0.5486	
2	7.188	7.189	-0.001	65902835	0.5000	0.5350	
2	7.555	7.557	-0.002	28062661	0.5000	0.5414	
		Average of Peak Amounts =				0.5391	
						RPD = 2.76	

Reagents:

SG1242ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

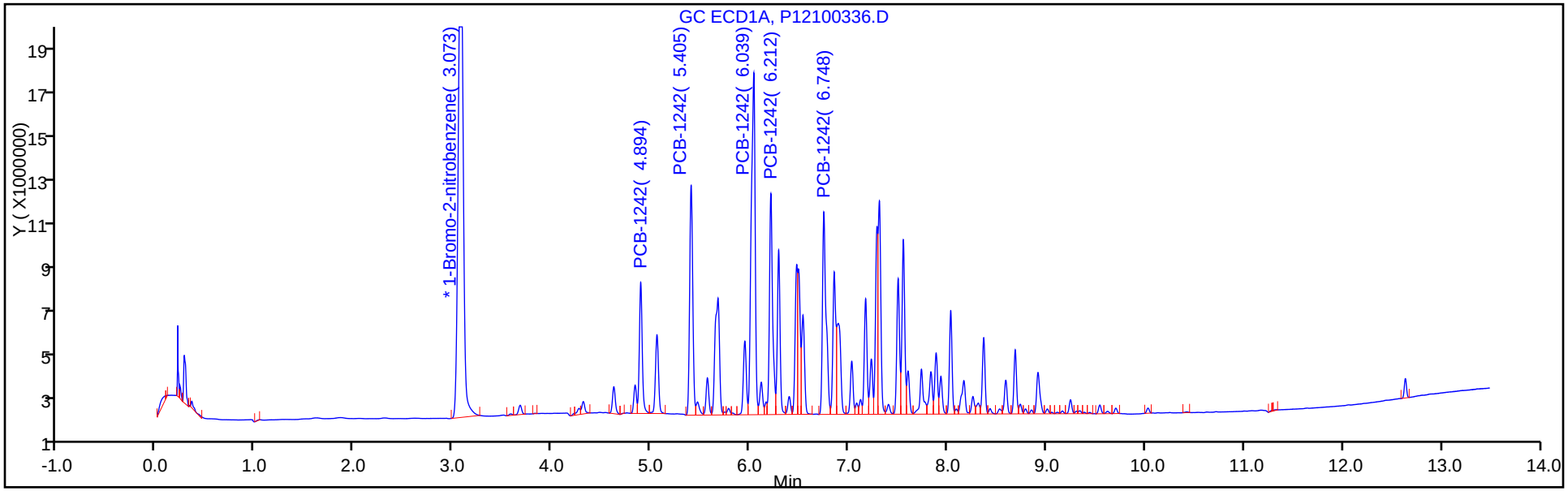
Report Date: 04-Oct-2017 08:19:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

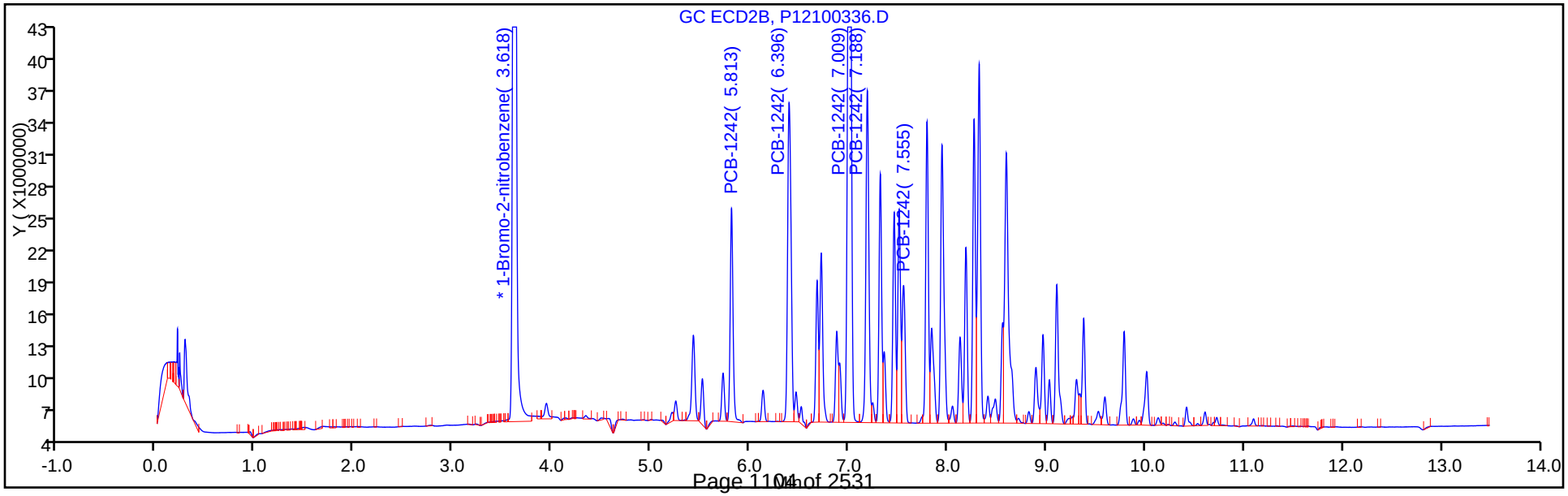
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100336.D

Injection Date:	03-Oct-2017 23:57:33	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1242			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/37 Calibration Date: 10/04/2017 00:15

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 18:04

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 19:33

Lab File ID: P12100337.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0147	0.0148		0.501	0.500	0.3	20.0
PCB-1248 Peak 2	Ave	0.0418	0.0444		0.530	0.500	6.0	20.0
PCB-1248 Peak 3	Ave	0.0386	0.0312		0.404	0.500	-19.3	20.0
PCB-1248 Peak 4	Ave	0.0312	0.0341		0.546	0.500	9.1	20.0
PCB-1248 Peak 5	Ave	0.0206	0.0209		0.508	0.500	1.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/37 Calibration Date: 10/04/2017 00:15

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 18:04

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 19:33

Lab File ID: P12100337.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	5.41	5.39	5.43
PCB-1248 Peak 2	6.75	6.73	6.77
PCB-1248 Peak 3	7.29	7.27	7.30
PCB-1248 Peak 4	7.55	7.54	7.57
PCB-1248 Peak 5	8.03	8.02	8.05

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100337.D
Lims ID: icv 1248
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2017 00:15:16 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-037
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:27:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.079	3.076	0.003	79394599	0.0500	0.0500	
2	3.620	3.619	0.001	253426991	0.0500	0.0500	
7 PCB-1248							M
1	5.405	5.406	-0.001	11732597	0.5000	0.5014	
1	6.748	6.750	-0.002	35215755	0.5000	0.5300	
1	7.288	7.285	0.003	24739382	0.5000	0.4035	
1	7.554	7.555	-0.001	27047853	0.5000	0.5457	
1	8.034	8.034	0.000	16567238	0.5000	0.5077	
		Average of Peak Amounts =				0.4977	
2	6.397	6.399	-0.002	35695981	0.5000	0.5078	M
2	7.011	7.007	0.004	116515812	0.5000	0.5774	M
2	7.794	7.794	0.000	79539987	0.5000	0.5053	M
2	8.322	8.322	0.000	112093462	0.5000	0.6201	
2	9.106	9.107	-0.001	50550887	0.5000	0.4919	
		Average of Peak Amounts =				0.5405	
						RPD = 8.26	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

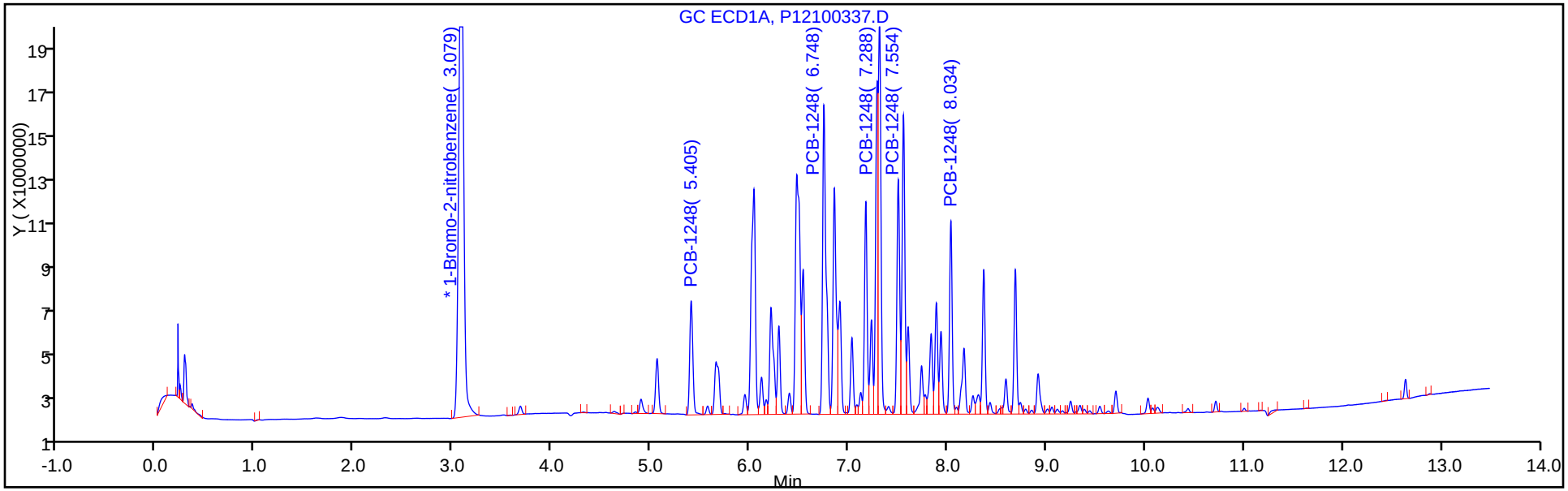
Report Date: 04-Oct-2017 08:19:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

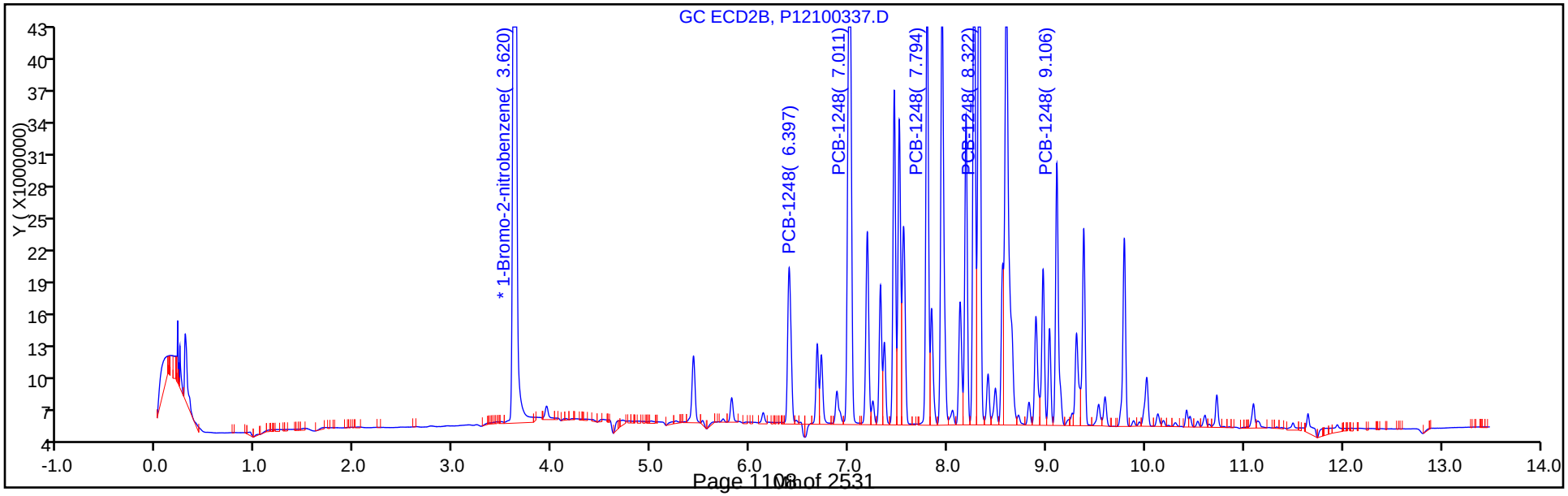
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100337.D

Injection Date:	04-Oct-2017 00:15:16	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1248			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/37 Calibration Date: 10/04/2017 00:15

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 18:04

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 19:33

Lab File ID: P12100337.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		0.0141		0.508	0.500	1.6	20.0
PCB-1248 Peak 2	Ave	0.0398	0.0460		0.577	0.500	15.5	20.0
PCB-1248 Peak 3	Ave	0.0311	0.0314		0.505	0.500	1.1	20.0
PCB-1248 Peak 4	Ave	0.0357	0.0442		0.620	0.500	24.0*	20.0
PCB-1248 Peak 5	Ave	0.0203	0.0200		0.492	0.500	-1.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/37 Calibration Date: 10/04/2017 00:15

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 18:04

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 19:33

Lab File ID: P12100337.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	6.40	6.38	6.42
PCB-1248 Peak 2	7.01	6.99	7.03
PCB-1248 Peak 3	7.79	7.78	7.81
PCB-1248 Peak 4	8.32	8.30	8.34
PCB-1248 Peak 5	9.11	9.09	9.13

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100337.D
Lims ID: icv 1248
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2017 00:15:16 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-037
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:27:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.079	3.076	0.003	79394599	0.0500	0.0500	
2	3.620	3.619	0.001	253426991	0.0500	0.0500	
7 PCB-1248							M
1	5.405	5.406	-0.001	11732597	0.5000	0.5014	
1	6.748	6.750	-0.002	35215755	0.5000	0.5300	
1	7.288	7.285	0.003	24739382	0.5000	0.4035	
1	7.554	7.555	-0.001	27047853	0.5000	0.5457	
1	8.034	8.034	0.000	16567238	0.5000	0.5077	
		Average of Peak Amounts =				0.4977	
2	6.397	6.399	-0.002	35695981	0.5000	0.5078	M
2	7.011	7.007	0.004	116515812	0.5000	0.5774	M
2	7.794	7.794	0.000	79539987	0.5000	0.5053	M
2	8.322	8.322	0.000	112093462	0.5000	0.6201	
2	9.106	9.107	-0.001	50550887	0.5000	0.4919	
		Average of Peak Amounts =				0.5405	
						RPD = 8.26	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

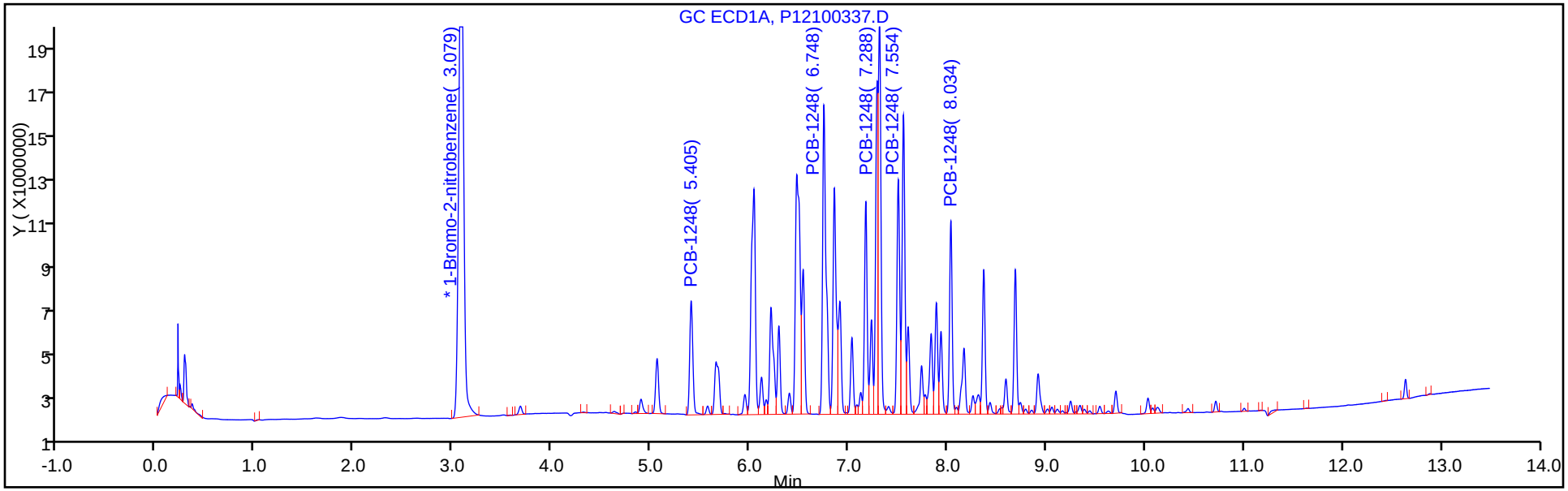
Report Date: 04-Oct-2017 08:19:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

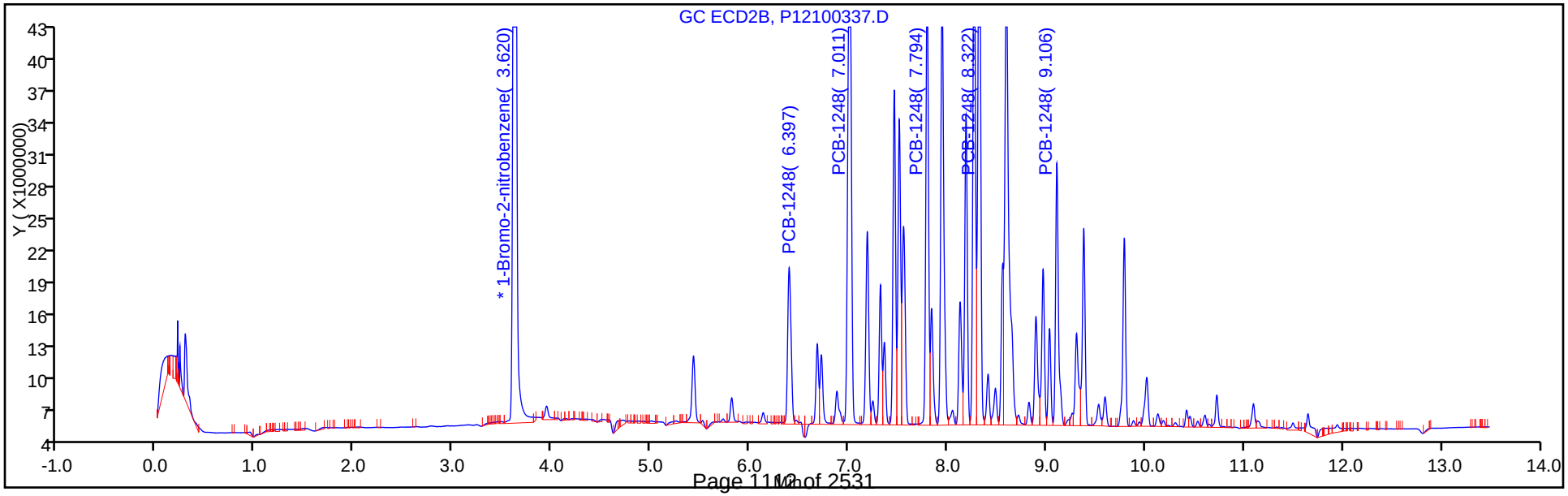
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100337.D

Injection Date:	04-Oct-2017 00:15:16	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1248			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:19:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100337.D

Injection Date: 04-Oct-2017 00:15:16 Instrument ID: A2HP12

Lims ID: icv 1248

Client ID:

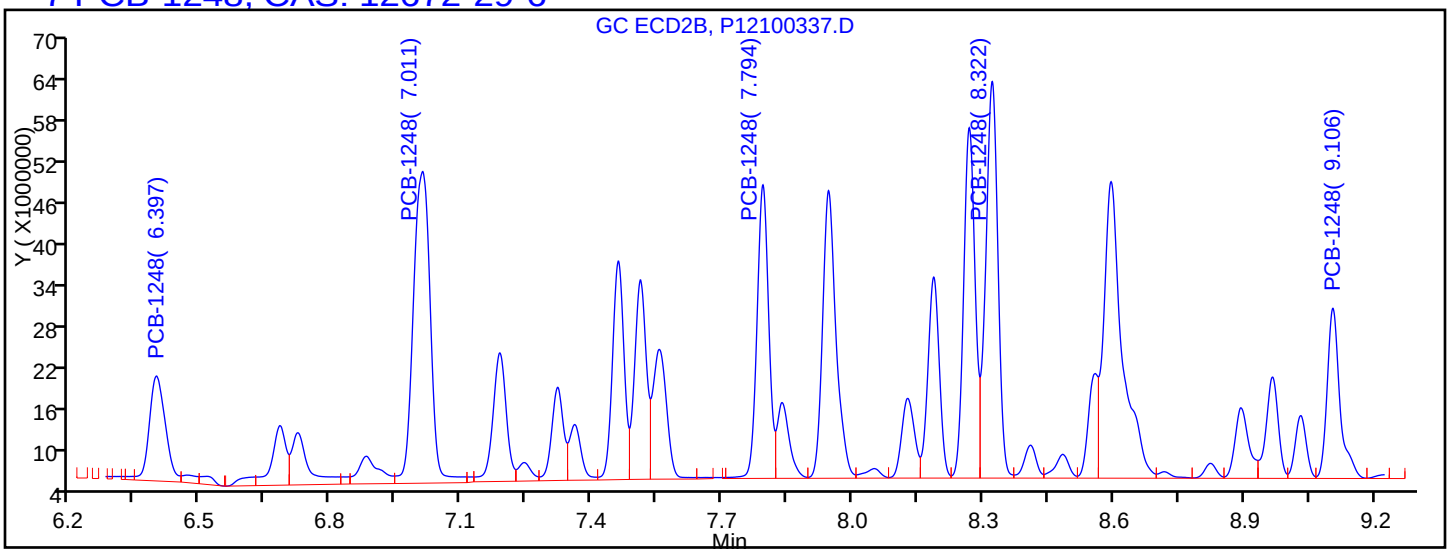
Operator ID: ALS Bottle#: 37 Worklist Smp#: 37

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

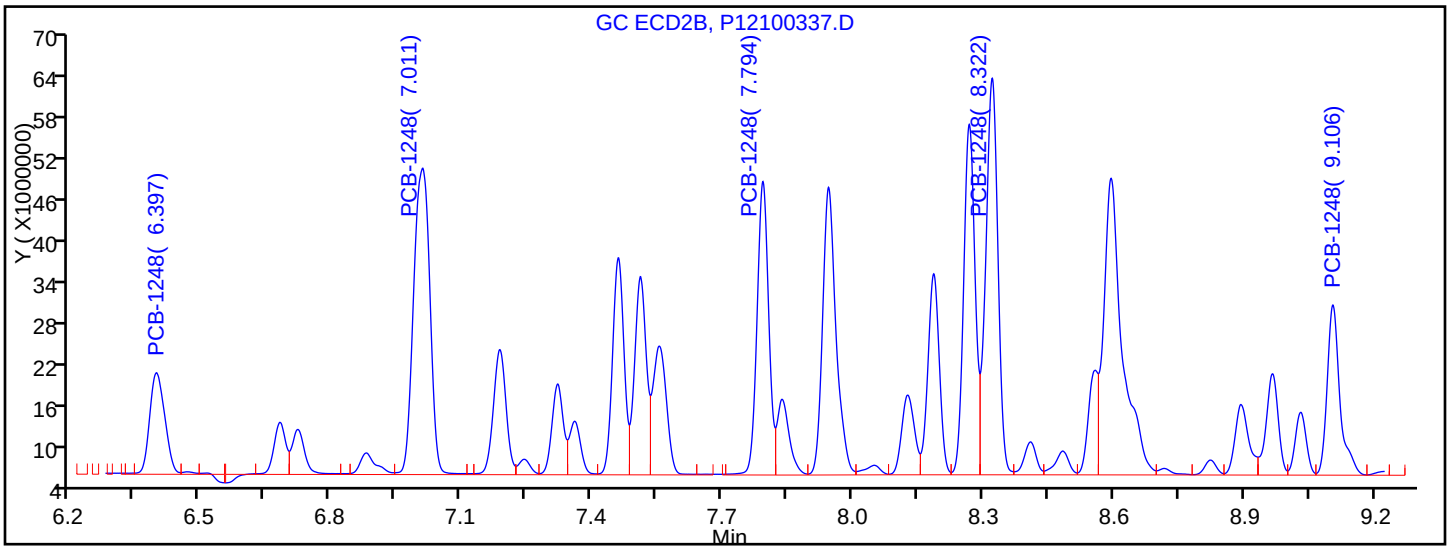
Column: Detector GC ecd2b

7 PCB-1248, CAS: 12672-29-6



Processing Integration Results

6.397	Response = 38912296
7.011	Response = 124020317
7.794	Response = 79696582
8.322	Response = 112093462
9.106	Response = 50550887



Manual Integration Results

6.397	Response = 35695981	M
7.011	Response = 116515812	M
7.794	Response = 79539987	M
8.322	Response = 112093462	
9.106	Response = 50550887	

Reviewer: hassl, 04-Oct-2017 06:27:15

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/38 Calibration Date: 10/04/2017 00:32

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100338.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1254 Peak 1	Ave	0.0460	0.0401		0.435	0.500	-12.9	20.0
PCB-1254 Peak 2	Ave	0.0651	0.0575		0.441	0.500	-11.7	20.0
PCB-1254 Peak 3	Ave	0.0498	0.0447		0.449	0.500	-10.1	20.0
PCB-1254 Peak 4	Ave	0.0448	0.0414		0.462	0.500	-7.6	20.0
PCB-1254 Peak 5	Ave	0.0662	0.0637		0.481	0.500	-3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/38 Calibration Date: 10/04/2017 00:32

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100338.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1254 Peak 1	7.56	7.54	7.58
PCB-1254 Peak 2	8.03	8.02	8.05
PCB-1254 Peak 3	8.37	8.35	8.39
PCB-1254 Peak 4	8.59	8.57	8.61
PCB-1254 Peak 5	8.91	8.90	8.94

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100338.D
Lims ID: icv 1254
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2017 00:32:51 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-038
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:29:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.073	3.076	-0.003	79182687	0.0500	0.0500	
2	3.617	3.619	-0.002	245245279	0.0500	0.0500	
8 PCB-1254							
1	7.556	7.559	-0.003	31739664	0.5000	0.4354	
1	8.032	8.034	-0.002	45522520	0.5000	0.4413	
1	8.365	8.367	-0.002	35409189	0.5000	0.4493	
1	8.589	8.592	-0.003	32755948	0.5000	0.4621	
1	8.914	8.917	-0.003	50445661	0.5000	0.4815	
		Average of Peak Amounts =				0.4539	
2	8.315	8.317	-0.002	80846230	0.5000	0.4910	
2	8.554	8.557	-0.003	83933639	0.5000	0.4341	
2	9.104	9.106	-0.002	110643065	0.5000	0.4099	
2	9.378	9.379	-0.001	81105975	0.5000	0.4110	
2	10.015	10.016	-0.001	111738706	0.5000	0.4241	
		Average of Peak Amounts =				0.4340	
						RPD = 4.48	

Reagents:

SG1254ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

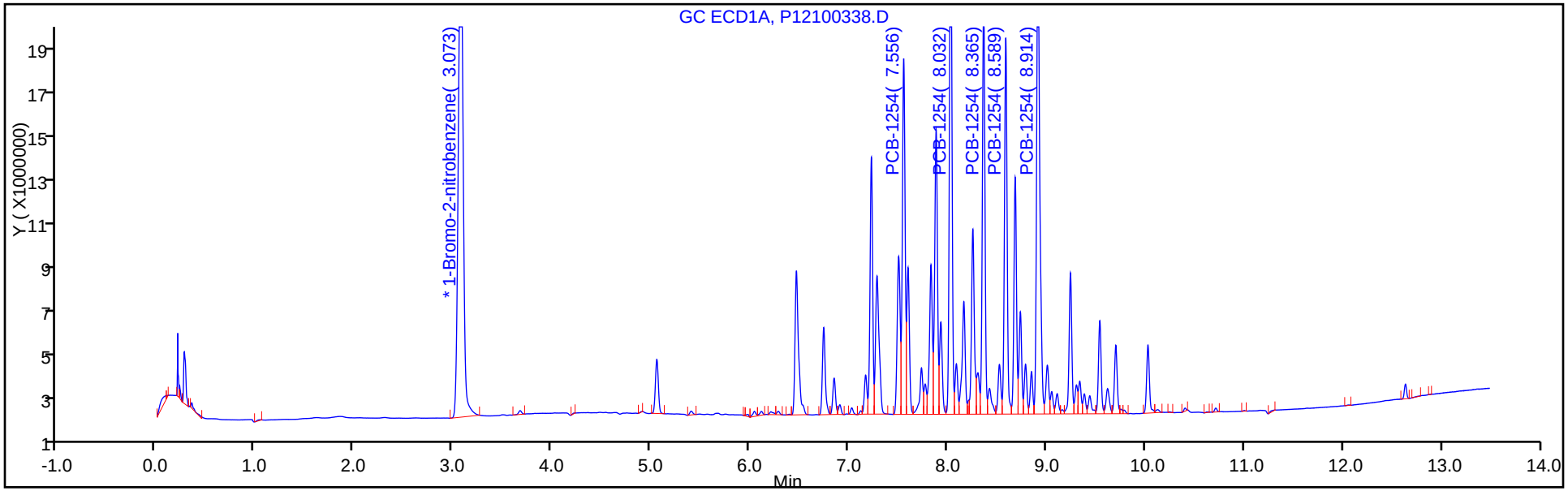
Report Date: 04-Oct-2017 08:19:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

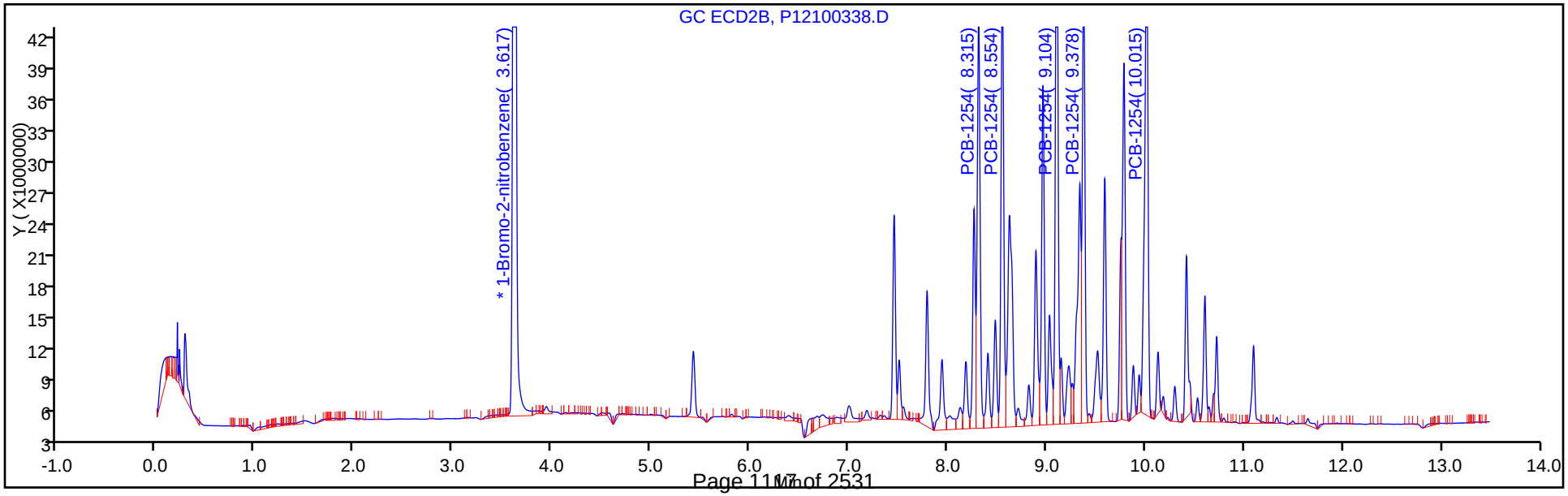
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100338.D

Injection Date:	04-Oct-2017 00:32:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1254			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/38 Calibration Date: 10/04/2017 00:32

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100338.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1254 Peak 1	Ave	0.0336	0.0330		0.491	0.500	-1.8	20.0
PCB-1254 Peak 2	Ave	0.0394	0.0342		0.434	0.500	-13.2	20.0
PCB-1254 Peak 3	Ave	0.0550	0.0451		0.410	0.500	-18.0	20.0
PCB-1254 Peak 4	Ave	0.0402	0.0331		0.411	0.500	-17.8	20.0
PCB-1254 Peak 5	Ave	0.0537	0.0456		0.424	0.500	-15.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/38 Calibration Date: 10/04/2017 00:32

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100338.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1254 Peak 1	8.32	8.30	8.34
PCB-1254 Peak 2	8.55	8.54	8.58
PCB-1254 Peak 3	9.10	9.09	9.13
PCB-1254 Peak 4	9.38	9.36	9.40
PCB-1254 Peak 5	10.02	10.00	10.04

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100338.D
Lims ID: icv 1254
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2017 00:32:51 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-038
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:29:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.073	3.076	-0.003	79182687	0.0500	0.0500	
2	3.617	3.619	-0.002	245245279	0.0500	0.0500	
8 PCB-1254							
1	7.556	7.559	-0.003	31739664	0.5000	0.4354	
1	8.032	8.034	-0.002	45522520	0.5000	0.4413	
1	8.365	8.367	-0.002	35409189	0.5000	0.4493	
1	8.589	8.592	-0.003	32755948	0.5000	0.4621	
1	8.914	8.917	-0.003	50445661	0.5000	0.4815	
		Average of Peak Amounts =				0.4539	
2	8.315	8.317	-0.002	80846230	0.5000	0.4910	
2	8.554	8.557	-0.003	83933639	0.5000	0.4341	
2	9.104	9.106	-0.002	110643065	0.5000	0.4099	
2	9.378	9.379	-0.001	81105975	0.5000	0.4110	
2	10.015	10.016	-0.001	111738706	0.5000	0.4241	
		Average of Peak Amounts =				0.4340	
						RPD = 4.48	

Reagents:

SG1254ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

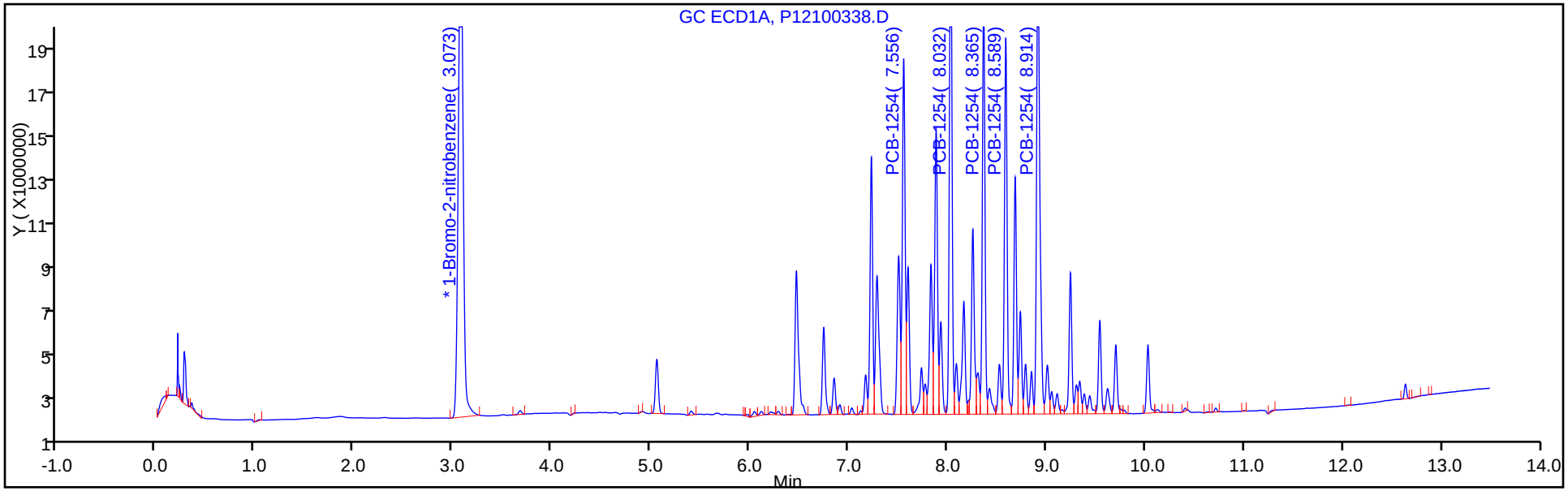
Report Date: 04-Oct-2017 08:19:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

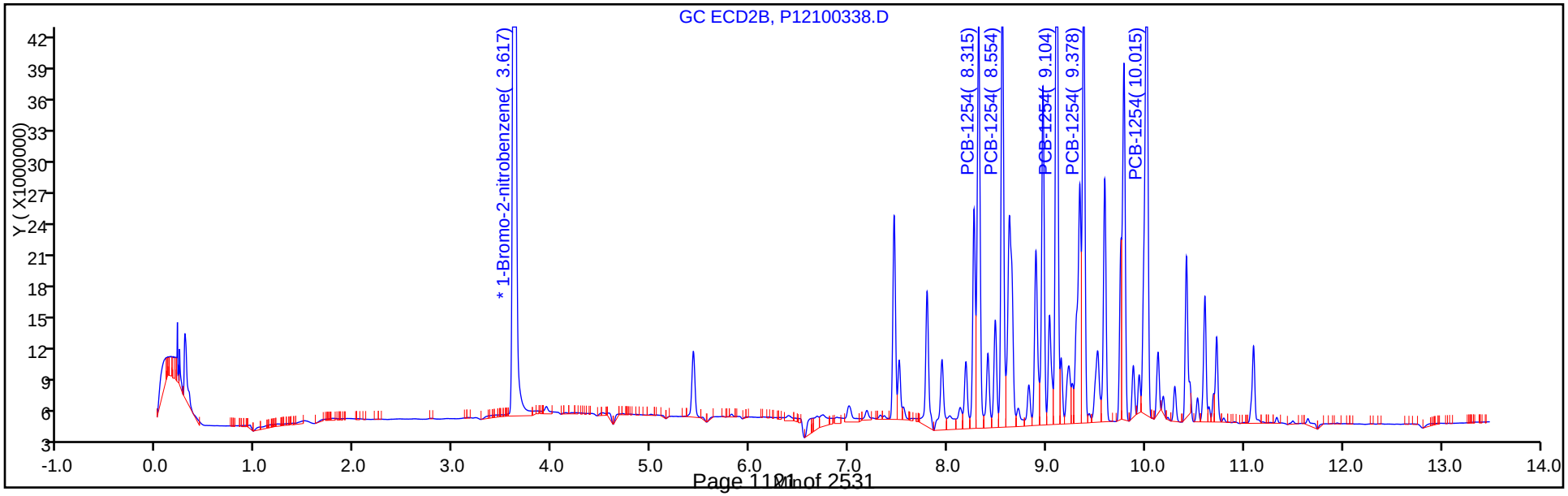
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100338.D

Injection Date:	04-Oct-2017 00:32:51	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1254			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/39 Calibration Date: 10/04/2017 00:50

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100339.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0216	0.0196		0.453	0.500	-9.3	20.0
PCB-1016 Peak 2	Ave	0.0390	0.0386		0.494	0.500	-1.1	20.0
PCB-1016 Peak 3	Ave	0.0900	0.0750		0.417	0.500	-16.6	20.0
PCB-1016 Peak 4	Ave	0.0380	0.0378		0.496	0.500	-0.7	20.0
PCB-1016 Peak 5	Ave	0.0386	0.0371		0.481	0.500	-3.9	20.0
PCB-1260 Peak 1	Ave	0.0570	0.0546		0.478	0.500	-4.3	20.0
PCB-1260 Peak 2	Ave	0.0922	0.0870		0.472	0.500	-5.6	20.0
PCB-1260 Peak 3	Ave	0.1023	0.0947		0.463	0.500	-7.5	20.0
PCB-1260 Peak 4	Ave	0.1321	0.1380		0.522	0.500	4.5	20.0
PCB-1260 Peak 5	Ave	0.0685	0.0697		0.509	0.500	1.8	20.0
Tetrachloro-m-xylene	Ave	0.9776	0.9566		0.0245	0.0250	-2.1	20.0
DCB Decachlorobiphenyl	Ave	1.051	1.007		0.0239	0.0250	-4.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/39 Calibration Date: 10/04/2017 00:50

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100339.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.90	4.88	4.91
PCB-1016 Peak 2	5.41	5.39	5.42
PCB-1016 Peak 3	6.04	6.02	6.06
PCB-1016 Peak 4	6.21	6.19	6.23
PCB-1016 Peak 5	6.75	6.73	6.77
PCB-1260 Peak 1	8.26	8.24	8.28
PCB-1260 Peak 2	8.59	8.57	8.61
PCB-1260 Peak 3	8.92	8.90	8.93
PCB-1260 Peak 4	9.70	9.68	9.72
PCB-1260 Peak 5	10.03	10.01	10.05
Tetrachloro-m-xylene	4.32	4.30	4.34
DCB Decachlorobiphenyl	11.19	11.17	11.21

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100339.D
Lims ID: icv 1660
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2017 00:50:26 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-039
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:30:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.070	3.076	-0.006	80135371	0.0500	0.0500	
2	3.617	3.619	-0.002	243434235	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.317	4.319	-0.002	38330090	0.0250	0.0245	
2	5.027	5.027	0.000	114205428	0.0250	0.0244	
						RPD = 0.38	
6 PCB-1016							
1	4.895	4.895	0.000	15721918	0.5000	0.4535	
1	5.406	5.405	0.001	30933307	0.5000	0.4945	
1	6.040	6.037	0.003	60121064	0.5000	0.4170	
1	6.212	6.212	0.000	30249181	0.5000	0.4964	
1	6.749	6.748	0.001	29727041	0.5000	0.4806	
		Average of Peak Amounts =				0.4684	
2	5.814	5.815	-0.001	48924654	0.5000	0.4935	
2	6.398	6.399	-0.001	94998021	0.5000	0.4900	
2	7.012	7.012	0.000	221507742	0.5000	0.5354	
2	7.189	7.190	-0.001	88246919	0.5000	0.5236	
2	7.557	7.557	0.000	37077337	0.5000	0.5236	
		Average of Peak Amounts =				0.5132	
						RPD = 9.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.257	8.257	0.000	43718116	0.5000	0.4783	M
1	8.591	8.591	0.000	69702627	0.5000	0.4719	M
1	8.915	8.915	0.000	75850289	0.5000	0.4627	M
1	9.702	9.703	-0.001	110580619	0.5000	0.5224	M
1	10.027	10.027	0.000	55845784	0.5000	0.5089	M
		Average of Peak Amounts =				0.4888	
2	9.341	9.341	0.000	119033504	0.5000	0.4637	
2	10.013	10.014	-0.001	187022852	0.5000	0.4550	
2	10.454	10.454	0.000	118772432	0.5000	0.4958	
2	10.724	10.725	-0.001	260163819	0.5000	0.5315	
2	11.094	11.095	-0.001	177937248	0.5000	0.5131	
		Average of Peak Amounts =				0.4918	
						RPD = 0.61	
$ 12 DCB Decachlorobiphenyl							
1	11.186	11.187	-0.001	40354705	0.0250	0.0239	
2	12.173	12.173	0.000	79914938	0.0250	0.0242	
						RPD = 1.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660ICV@1.0_00028	Amount Added: 0.50	Units: mL	
SGPCBISTD_00012	Amount Added: 5.00	Units: uL	Run Reagent

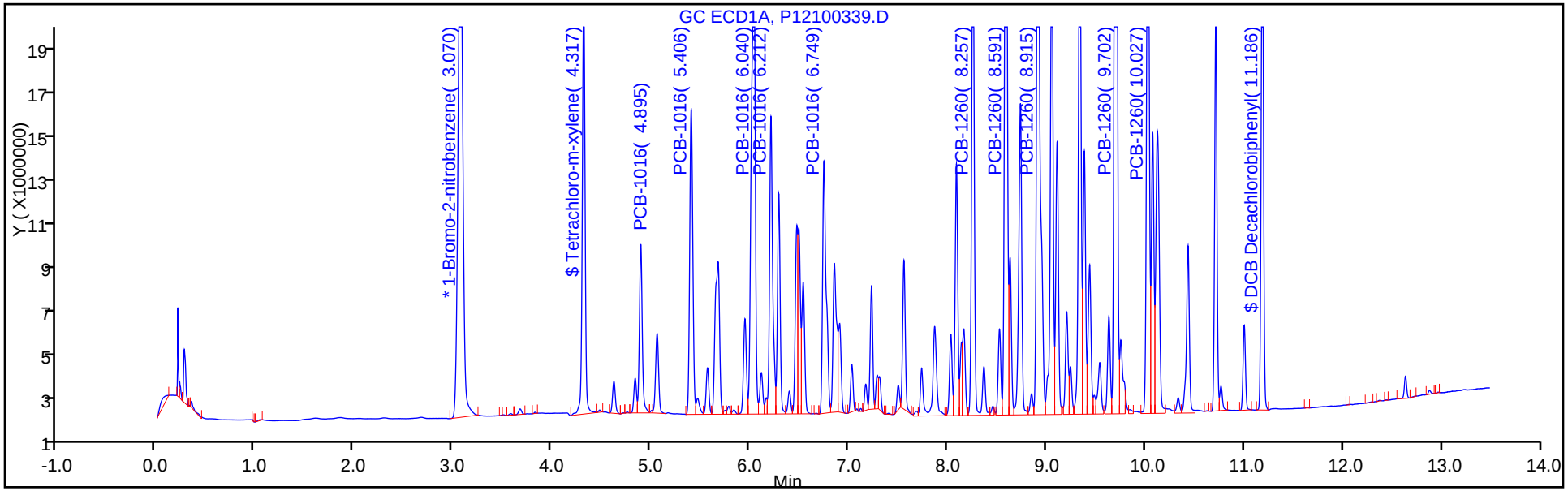
Report Date: 04-Oct-2017 08:19:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

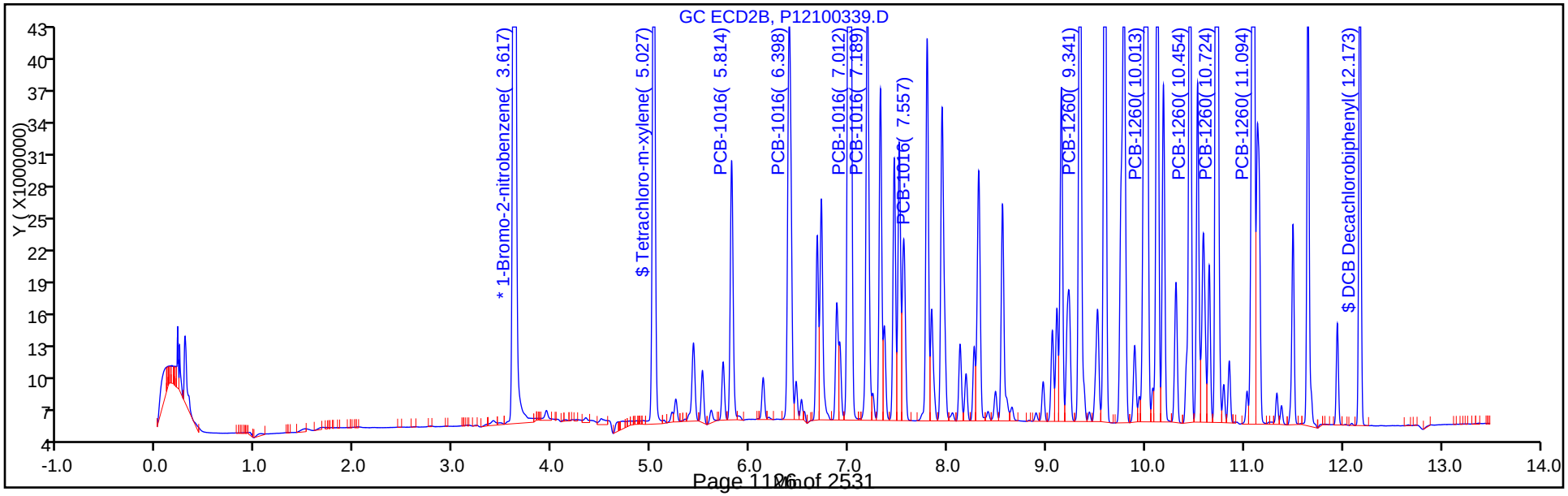
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100339.D

Injection Date:	04-Oct-2017 00:50:26	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1660			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 04-Oct-2017 08:19:56 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100339.D

Injection Date: 04-Oct-2017 00:50:26 Instrument ID: A2HP12

Lims ID: icv 1660

Client ID:

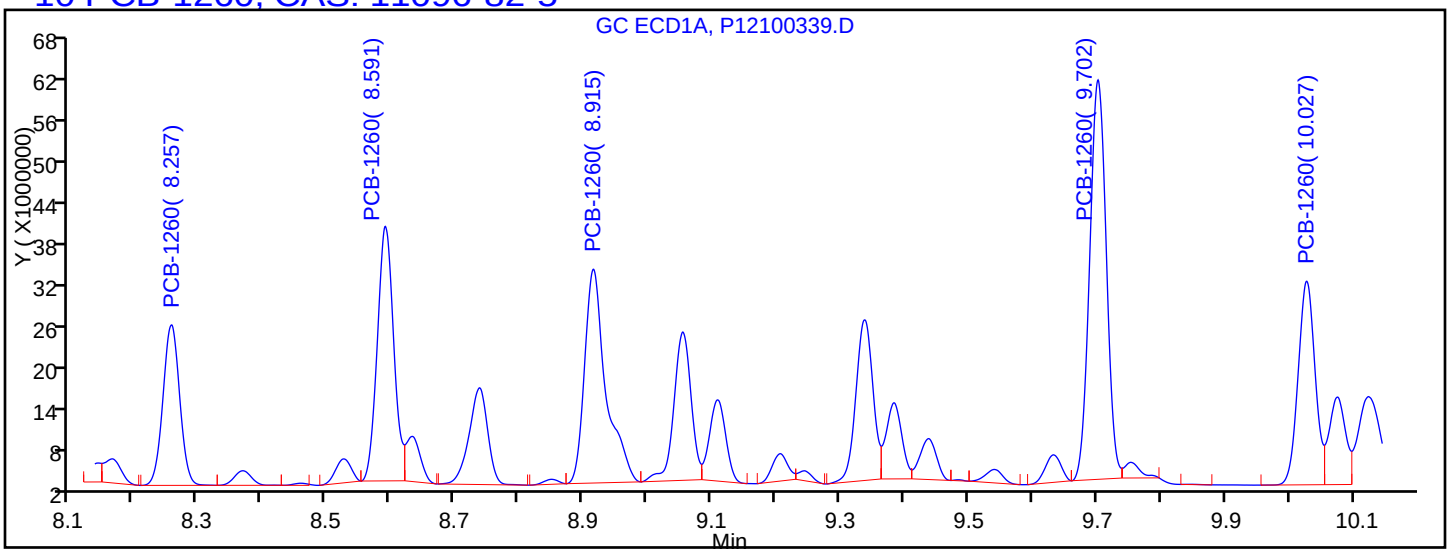
Operator ID: ALS Bottle#: 39 Worklist Smp#: 39

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

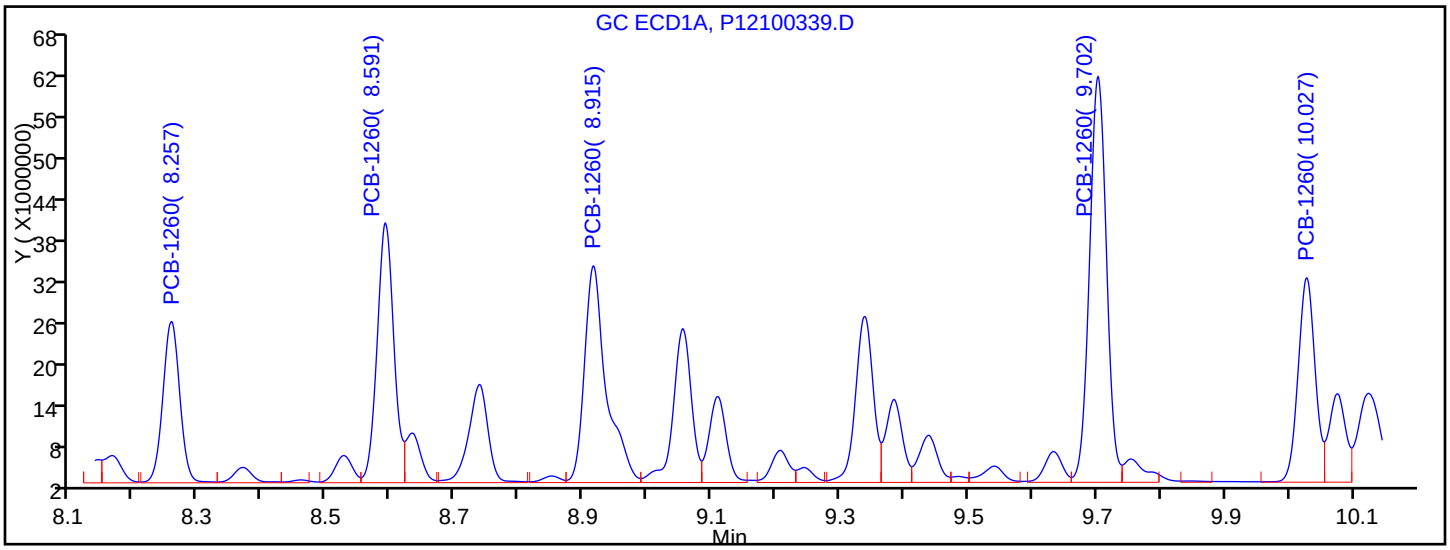
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

8.257	Response = 42920595
8.591	Response = 66620690
8.915	Response = 72640450
9.702	Response = 106230388
10.027	Response = 55297956



Manual Integration Results

8.257	Response = 43718116	M
8.591	Response = 69702627	M
8.915	Response = 75850289	M
9.702	Response = 110580619	M
10.027	Response = 55845784	M

Reviewer: hassl, 04-Oct-2017 06:40:21

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/39 Calibration Date: 10/04/2017 00:50

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100339.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0204	0.0201		0.494	0.500	-1.3	20.0
PCB-1016 Peak 2	Ave	0.0398	0.0390		0.490	0.500	-2.0	20.0
PCB-1016 Peak 3	Ave	0.0850	0.0910		0.535	0.500	7.1	20.0
PCB-1016 Peak 4	Ave	0.0346	0.0363		0.524	0.500	4.7	20.0
PCB-1016 Peak 5	Ave	0.0145	0.0152		0.524	0.500	4.7	20.0
PCB-1260 Peak 1	Ave	0.0527	0.0489		0.464	0.500	-7.3	20.0
PCB-1260 Peak 2	Ave	0.0844	0.0768		0.455	0.500	-9.0	20.0
PCB-1260 Peak 3	Ave	0.0492	0.0488		0.496	0.500	-0.8	20.0
PCB-1260 Peak 4	Ave	0.1005	0.1069		0.531	0.500	6.3	20.0
PCB-1260 Peak 5	Ave	0.0712	0.0731		0.513	0.500	2.6	20.0
Tetrachloro-m-xylene	Ave	0.9625	0.9383		0.0244	0.0250	-2.5	20.0
DCB Decachlorobiphenyl	Ave	0.6786	0.6566		0.0242	0.0250	-3.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297285/39 Calibration Date: 10/04/2017 00:50

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100339.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	5.81	5.80	5.83
PCB-1016 Peak 2	6.40	6.38	6.42
PCB-1016 Peak 3	7.01	6.99	7.03
PCB-1016 Peak 4	7.19	7.17	7.21
PCB-1016 Peak 5	7.56	7.54	7.58
PCB-1260 Peak 1	9.34	9.32	9.36
PCB-1260 Peak 2	10.01	10.00	10.03
PCB-1260 Peak 3	10.45	10.44	10.47
PCB-1260 Peak 4	10.72	10.71	10.74
PCB-1260 Peak 5	11.09	11.08	11.11
Tetrachloro-m-xylene	5.03	5.01	5.05
DCB Decachlorobiphenyl	12.17	12.15	12.19

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100339.D
Lims ID: icv 1660
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2017 00:50:26 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069267-039
Operator ID: Instrument ID: A2HP12
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 04-Oct-2017 08:19:19 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK031

First Level Reviewer: hassl Date: 04-Oct-2017 06:30:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.070	3.076	-0.006	80135371	0.0500	0.0500	
2	3.617	3.619	-0.002	243434235	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.317	4.319	-0.002	38330090	0.0250	0.0245	
2	5.027	5.027	0.000	114205428	0.0250	0.0244	
						RPD = 0.38	
6 PCB-1016							
1	4.895	4.895	0.000	15721918	0.5000	0.4535	
1	5.406	5.405	0.001	30933307	0.5000	0.4945	
1	6.040	6.037	0.003	60121064	0.5000	0.4170	
1	6.212	6.212	0.000	30249181	0.5000	0.4964	
1	6.749	6.748	0.001	29727041	0.5000	0.4806	
		Average of Peak Amounts =				0.4684	
2	5.814	5.815	-0.001	48924654	0.5000	0.4935	
2	6.398	6.399	-0.001	94998021	0.5000	0.4900	
2	7.012	7.012	0.000	221507742	0.5000	0.5354	
2	7.189	7.190	-0.001	88246919	0.5000	0.5236	
2	7.557	7.557	0.000	37077337	0.5000	0.5236	
		Average of Peak Amounts =				0.5132	
						RPD = 9.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.257	8.257	0.000	43718116	0.5000	0.4783	M
1	8.591	8.591	0.000	69702627	0.5000	0.4719	M
1	8.915	8.915	0.000	75850289	0.5000	0.4627	M
1	9.702	9.703	-0.001	110580619	0.5000	0.5224	M
1	10.027	10.027	0.000	55845784	0.5000	0.5089	M
		Average of Peak Amounts =				0.4888	
2	9.341	9.341	0.000	119033504	0.5000	0.4637	
2	10.013	10.014	-0.001	187022852	0.5000	0.4550	
2	10.454	10.454	0.000	118772432	0.5000	0.4958	
2	10.724	10.725	-0.001	260163819	0.5000	0.5315	
2	11.094	11.095	-0.001	177937248	0.5000	0.5131	
		Average of Peak Amounts =				0.4918	
						RPD = 0.61	
$ 12 DCB Decachlorobiphenyl							
1	11.186	11.187	-0.001	40354705	0.0250	0.0239	
2	12.173	12.173	0.000	79914938	0.0250	0.0242	
						RPD = 1.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660ICV@1.0_00028	Amount Added:	0.50	Units: mL	
SGPCBISTD_00012	Amount Added:	5.00	Units: uL	Run Reagent

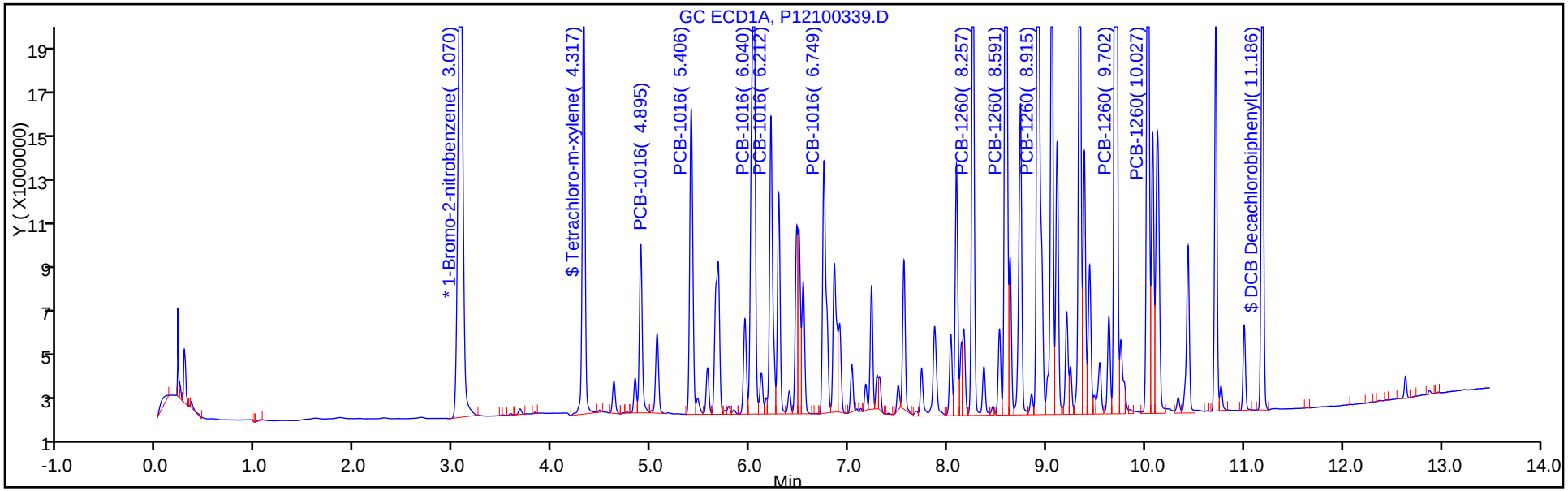
Report Date: 04-Oct-2017 08:19:56 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

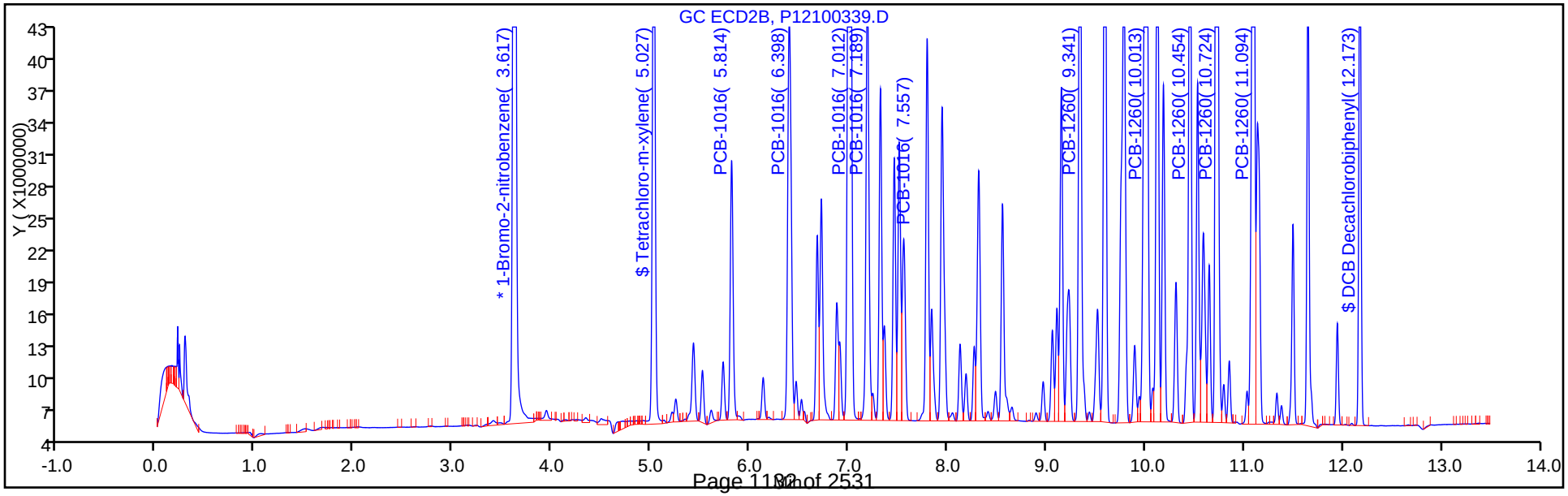
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100339.D

Injection Date:	04-Oct-2017 00:50:26	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	icv 1660			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/3 Calibration Date: 10/07/2017 11:40

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100703.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0216	0.0195		0.452	0.500	-9.7	20.0
PCB-1016 Peak 2	Ave	0.0390	0.0371		0.475	0.500	-4.9	20.0
PCB-1016 Peak 3	Ave	0.0900	0.0892		0.496	0.500	-0.8	20.0
PCB-1016 Peak 4	Ave	0.0380	0.0367		0.482	0.500	-3.6	20.0
PCB-1016 Peak 5	Ave	0.0386	0.0348		0.451	0.500	-9.9	20.0
PCB-1260 Peak 1	Ave	0.0570	0.0561		0.492	0.500	-1.6	20.0
PCB-1260 Peak 2	Ave	0.0922	0.0927		0.503	0.500	0.6	20.0
PCB-1260 Peak 3	Ave	0.1023	0.1038		0.508	0.500	1.5	20.0
PCB-1260 Peak 4	Ave	0.1321	0.1364		0.517	0.500	3.3	20.0
PCB-1260 Peak 5	Ave	0.0685	0.0701		0.512	0.500	2.3	20.0
Tetrachloro-m-xylene	Ave	0.9776	0.9462		0.0242	0.0250	-3.2	20.0
DCB Decachlorobiphenyl	Ave	1.051	1.002		0.0238	0.0250	-4.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/3 Calibration Date: 10/07/2017 11:40

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.89	4.87	4.91
PCB-1016 Peak 2	5.40	5.38	5.42
PCB-1016 Peak 3	6.03	6.02	6.05
PCB-1016 Peak 4	6.21	6.19	6.23
PCB-1016 Peak 5	6.75	6.73	6.76
PCB-1260 Peak 1	8.25	8.23	8.27
PCB-1260 Peak 2	8.59	8.57	8.61
PCB-1260 Peak 3	8.91	8.89	8.93
PCB-1260 Peak 4	9.70	9.68	9.72
PCB-1260 Peak 5	10.02	10.00	10.04
Tetrachloro-m-xylene	4.32	4.30	4.34
DCB Decachlorobiphenyl	11.18	11.16	11.20

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100703.D
Lims ID: CCV AR1660
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Oct-2017 11:40:39 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-003
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:27 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: coastc Date: 07-Oct-2017 12:46:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.071	3.071	0.000	98223979	0.0500	0.0500	
2	3.615	3.615	0.000	251969139	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.316	4.316	0.000	46468211	0.0250	0.0242	
2	5.024	5.024	0.000	118283413	0.0250	0.0244	
						RPD = 0.78	
6 PCB-1016							
1	4.892	4.892	0.000	19193374	0.5000	0.4517	
1	5.402	5.402	0.000	36451789	0.5000	0.4754	
1	6.034	6.034	0.000	87609420	0.5000	0.4958	
1	6.208	6.208	0.000	36010685	0.5000	0.4821	
1	6.745	6.745	0.000	34165651	0.5000	0.4507	
		Average of Peak Amounts =				0.4711	
2	5.812	5.812	0.000	47555320	0.5000	0.4635	
2	6.395	6.395	0.000	93520459	0.5000	0.4660	
2	7.008	7.008	0.000	220739815	0.5000	0.5155	
2	7.186	7.186	0.000	87141814	0.5000	0.4995	
2	7.552	7.552	0.000	36292937	0.5000	0.4952	
		Average of Peak Amounts =				0.4879	
						RPD = 3.51	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.252	8.252	0.000	55120116	0.5000	0.4920	
1	8.586	8.586	0.000	91054342	0.5000	0.5029	
1	8.911	8.911	0.000	101985378	0.5000	0.5076	
1	9.698	9.698	0.000	134012776	0.5000	0.5165	
1	10.022	10.022	0.000	68832068	0.5000	0.5117	
		Average of Peak Amounts =				0.5061	
2	9.336	9.336	0.000	129790180	0.5000	0.4885	
2	10.010	10.010	0.000	210902092	0.5000	0.4958	
2	10.450	10.450	0.000	120026557	0.5000	0.4840	
2	10.721	10.721	0.000	258188830	0.5000	0.5096	
2	11.091	11.091	0.000	186222029	0.5000	0.5188	
		Average of Peak Amounts =				0.4993	
						RPD = 1.36	
$ 12 DCB Decachlorobiphenyl							
1	11.181	11.181	0.000	49226656	0.0250	0.0238	
2	12.169	12.169	0.000	86756318	0.0250	0.0254	
						RPD = 6.25	
16 1260 Res 1							
1	10.022	10.022	0.000	68832068	NR	NR	
2	10.898	10.898	0.000	250911	NR	NR	
13 1260 Res 2							
1	10.071	10.071	0.000	29307673	NR	NR	
2	11.028	11.028	0.000	4989505	NR	NR	
15 1260 Res 3							
1	10.119	10.119	0.000	38086571	NR	NR	
2	0.115	0.115	0.000	11877087	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SG 1260 res_00002	Amount Added:	1.00	Units: mL
SG1660@0.5PPM_00074	Amount Added:	1.00	Units: mL

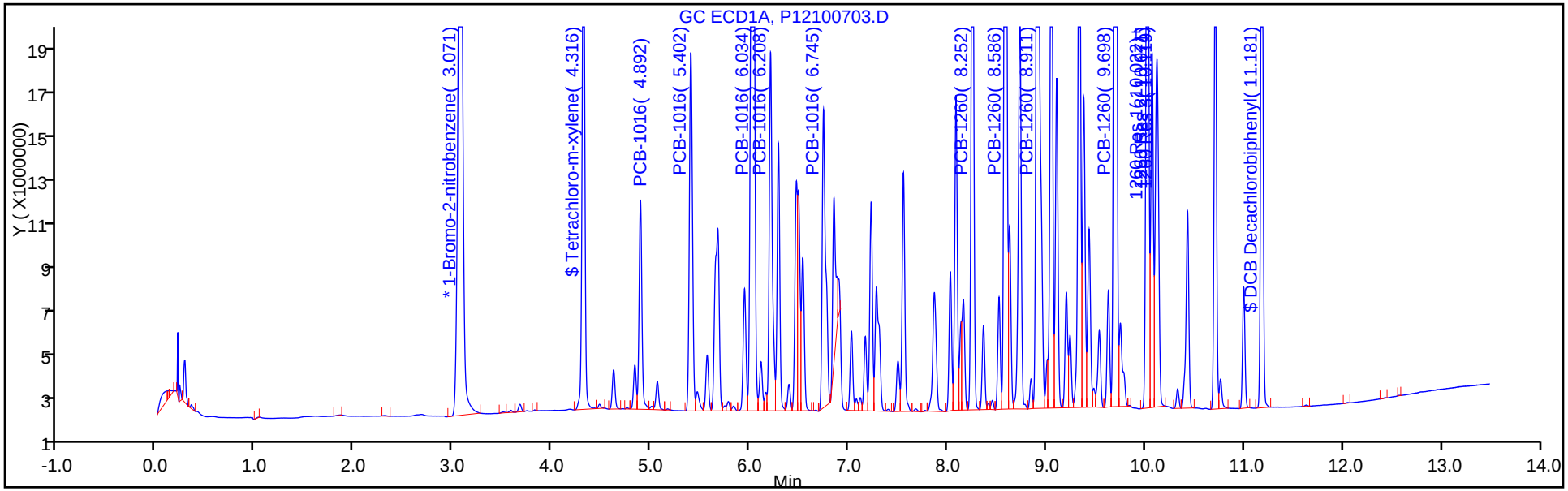
Report Date: 09-Oct-2017 11:20:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

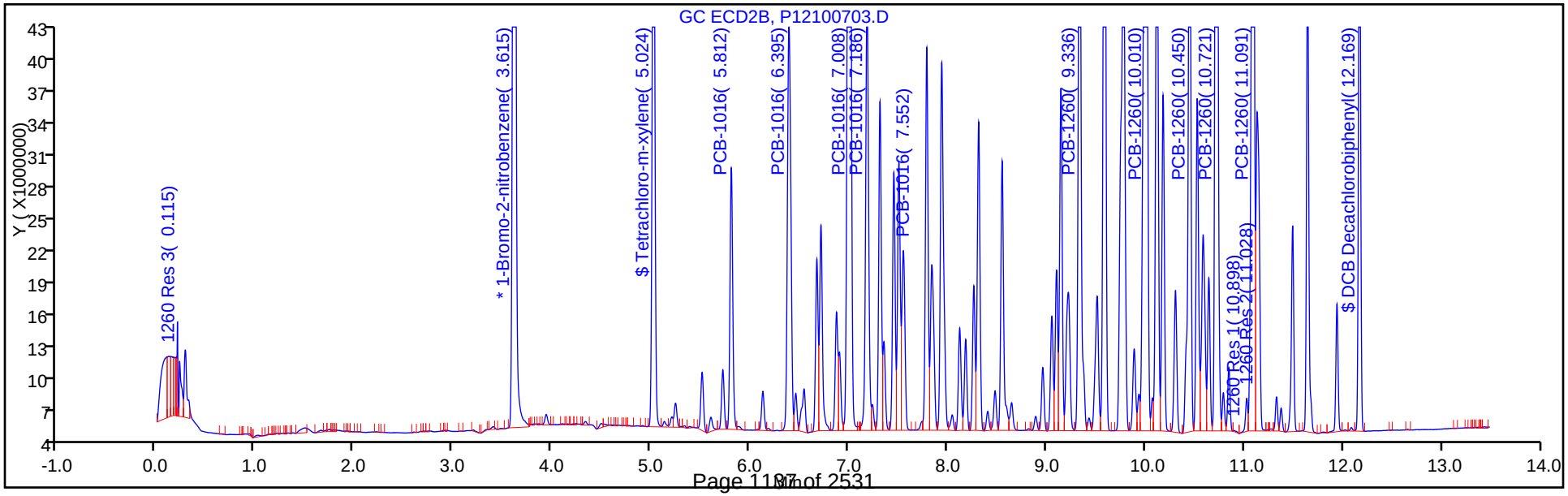
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100703.D

Injection Date:	07-Oct-2017 11:40:39	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	CCV AR1660			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/4 Calibration Date: 10/07/2017 11:58

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 14:33

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 16:01

Lab File ID: P12100704.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	0.0204	0.0187		0.459	0.500	-8.3	20.0
PCB-1232 Peak 2	Ave	0.0154	0.0144		0.466	0.500	-6.9	20.0
PCB-1232 Peak 3	Ave	0.0342	0.0324		0.474	0.500	-5.2	20.0
PCB-1232 Peak 4	Ave	0.0145	0.0138		0.476	0.500	-4.7	20.0
PCB-1232 Peak 5	Ave	0.0141	0.0131		0.462	0.500	-7.6	20.0
PCB-1262 Peak 1	Ave	0.0522	0.0501		0.480	0.500	-3.9	20.0
PCB-1262 Peak 2	Ave	0.0665	0.0654		0.491	0.500	-1.7	20.0
PCB-1262 Peak 3	Ave	0.0600	0.0592		0.493	0.500	-1.3	20.0
PCB-1262 Peak 4	Ave	0.1294	0.1305		0.504	0.500	0.8	20.0
PCB-1262 Peak 5	Ave	0.0535	0.0517		0.484	0.500	-3.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/4 Calibration Date: 10/07/2017 11:58

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 14:33

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 16:01

Lab File ID: P12100704.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	4.89	4.87	4.91
PCB-1232 Peak 2	5.40	5.38	5.42
PCB-1232 Peak 3	6.03	6.02	6.05
PCB-1232 Peak 4	6.21	6.19	6.23
PCB-1232 Peak 5	6.75	6.73	6.77
PCB-1262 Peak 1	8.59	8.57	8.61
PCB-1262 Peak 2	9.05	9.03	9.07
PCB-1262 Peak 3	9.33	9.31	9.35
PCB-1262 Peak 4	9.70	9.68	9.72
PCB-1262 Peak 5	10.07	10.05	10.09

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100704.D
Lims ID: CCV AR1232/1262
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2017 11:58:19 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-004
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:35 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: coastc Date: 07-Oct-2017 12:46:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.072	3.072	0.000	94265623	0.0500	0.0500	
2	3.616	3.616	0.000	248473912	0.0500	0.0500	
4 PCB-1232							
1	4.892	4.892	0.000	17619331	0.5000	0.4587	
1	5.403	5.403	0.000	13556433	0.5000	0.4655	
1	6.034	6.034	0.000	30584457	0.5000	0.4740	
1	6.210	6.210	0.000	13047479	0.5000	0.4765	
1	6.746	6.746	0.000	12313951	0.5000	0.4621	
		Average of Peak Amounts =				0.4674	
2	5.811	5.811	0.000	47049968	0.5000	0.4736	
2	6.396	6.396	0.000	39149133	0.5000	0.4646	
2	7.008	7.008	0.000	75314763	0.5000	0.4576	
2	7.186	7.186	0.000	30277061	0.5000	0.4355	
2	7.555	7.555	0.000	11521867	0.5000	0.4506	
		Average of Peak Amounts =				0.4564	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	8.586	8.586	0.000	47266665	0.5000	0.4804	
1	9.051	9.051	0.000	61615035	0.5000	0.4914	
1	9.332	9.332	0.000	55775795	0.5000	0.4935	
1	9.697	9.697	0.000	122975470	0.5000	0.5040	
1	10.070	10.070	0.000	48754241	0.5000	0.4838	
		Average of Peak Amounts =				0.4906	
2	9.589	9.589	0.000	86079662	0.5000	0.4769	
2	10.120	10.120	0.000	116257510	0.5000	0.4591	
2	10.451	10.451	0.000	108918975	0.5000	0.4694	
2	10.721	10.721	0.000	216261217	0.5000	0.4742	
2	11.088	11.088	0.000	151866495	0.5000	0.4629	
		Average of Peak Amounts =				0.4685	
						RPD = 4.62	

Reagents:

SG3262@0.5PPM_00021 Amount Added: 1.00 Units: mL

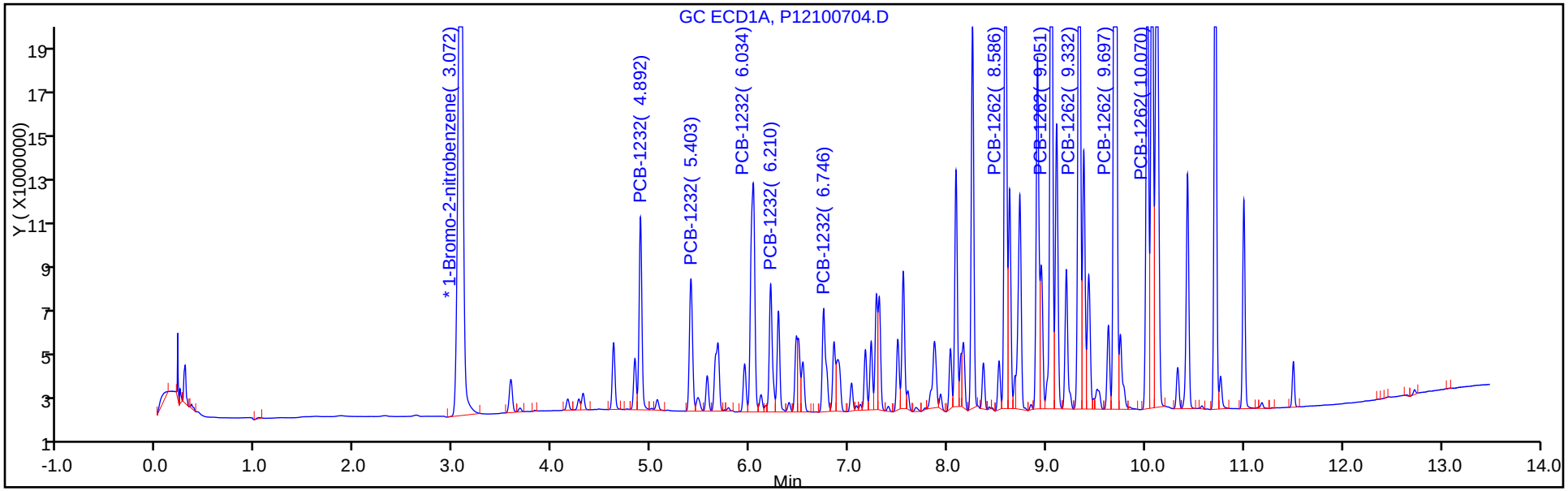
Report Date: 09-Oct-2017 11:20:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

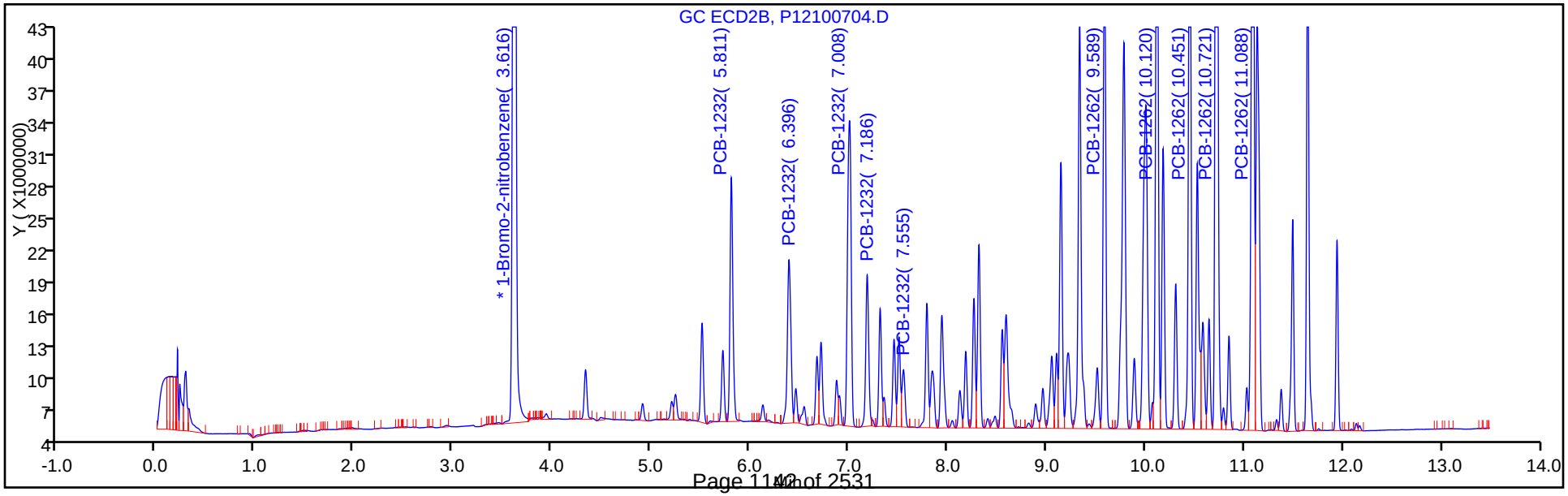
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100704.D

Injection Date:	07-Oct-2017 11:58:19	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	CCV AR1232/1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/5 Calibration Date: 10/07/2017 12:16

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 16:19

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 17:47

Lab File ID: P12100705.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	0.0149	0.0134		0.449	0.500	-10.2	20.0
PCB-1242 Peak 2	Ave	0.0265	0.0260		0.490	0.500	-2.0	20.0
PCB-1242 Peak 3	Ave	0.0603	0.0596		0.494	0.500	-1.3	20.0
PCB-1242 Peak 4	Ave	0.0256	0.0250		0.487	0.500	-2.5	20.0
PCB-1242 Peak 5	Ave	0.0263	0.0260		0.495	0.500	-1.1	20.0
PCB-1268 Peak 1	Ave	0.1529	0.1638		0.536	0.500	7.1	20.0
PCB-1268 Peak 2	Ave	0.1475	0.1585		0.537	0.500	7.5	20.0
PCB-1268 Peak 3	Ave	0.1273	0.1361		0.535	0.500	6.9	20.0
PCB-1268 Peak 4	Ave	0.0548	0.0587		0.535	0.500	7.1	20.0
PCB-1268 Peak 5	Ave	0.4193	0.4521		0.539	0.500	7.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/5 Calibration Date: 10/07/2017 12:16

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 16:19

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 17:47

Lab File ID: P12100705.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	4.89	4.87	4.91
PCB-1242 Peak 2	5.40	5.38	5.42
PCB-1242 Peak 3	6.03	6.01	6.05
PCB-1242 Peak 4	6.21	6.19	6.23
PCB-1242 Peak 5	6.75	6.73	6.76
PCB-1268 Peak 1	10.07	10.05	10.09
PCB-1268 Peak 2	10.11	10.09	10.13
PCB-1268 Peak 3	10.33	10.31	10.35
PCB-1268 Peak 4	10.71	10.69	10.73
PCB-1268 Peak 5	11.00	10.98	11.02

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100705.D
Lims ID: CCV AR1242/1268
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2017 12:16:09 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-005
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:42 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: coastc Date: 07-Oct-2017 12:47:28

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.064	3.064	0.000	82367034	0.0500	0.0500	
2	3.611	3.611	0.000	228154318	0.0500	0.0500	
5 PCB-1242							M
1	4.892	4.892	0.000	11008038	0.5000	0.4489	
1	5.402	5.402	0.000	21384543	0.5000	0.4898	M
1	6.033	6.033	0.000	49082686	0.5000	0.4937	
1	6.209	6.209	0.000	20572087	0.5000	0.4874	
1	6.745	6.745	0.000	21434949	0.5000	0.4946	
		Average of Peak Amounts =				0.4829	
2	5.810	5.810	0.000	31729895	0.5000	0.4968	
2	6.393	6.393	0.000	56975424	0.5000	0.4509	
2	7.008	7.008	0.000	116702751	0.5000	0.4446	
2	7.185	7.185	0.000	49535450	0.5000	0.4566	
2	7.552	7.552	0.000	19649924	0.5000	0.4304	
		Average of Peak Amounts =				0.4559	
						RPD = 5.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	10.069	10.069	0.000	134900881	0.5000	0.5357	
1	10.113	10.113	0.000	130565444	0.5000	0.5373	
1	10.328	10.328	0.000	112124408	0.5000	0.5346	
1	10.710	10.710	0.000	48362094	0.5000	0.5354	
1	10.998	10.998	0.000	372380739	0.5000	0.5391	
		Average of Peak Amounts =				0.5364	
2	11.085	11.085	0.000	239493154	0.5000	0.4933	
2	11.130	11.130	0.000	224909129	0.5000	0.4930	
2	11.375	11.375	0.000	196929721	0.5000	0.5080	
2	11.644	11.644	0.000	87111737	0.5000	0.5109	
2	11.940	11.940	0.000	597051823	0.5000	0.5085	
		Average of Peak Amounts =				0.5027	
						RPD = 6.48	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG4268@0.5PPM_00025 Amount Added: 1.00 Units: mL

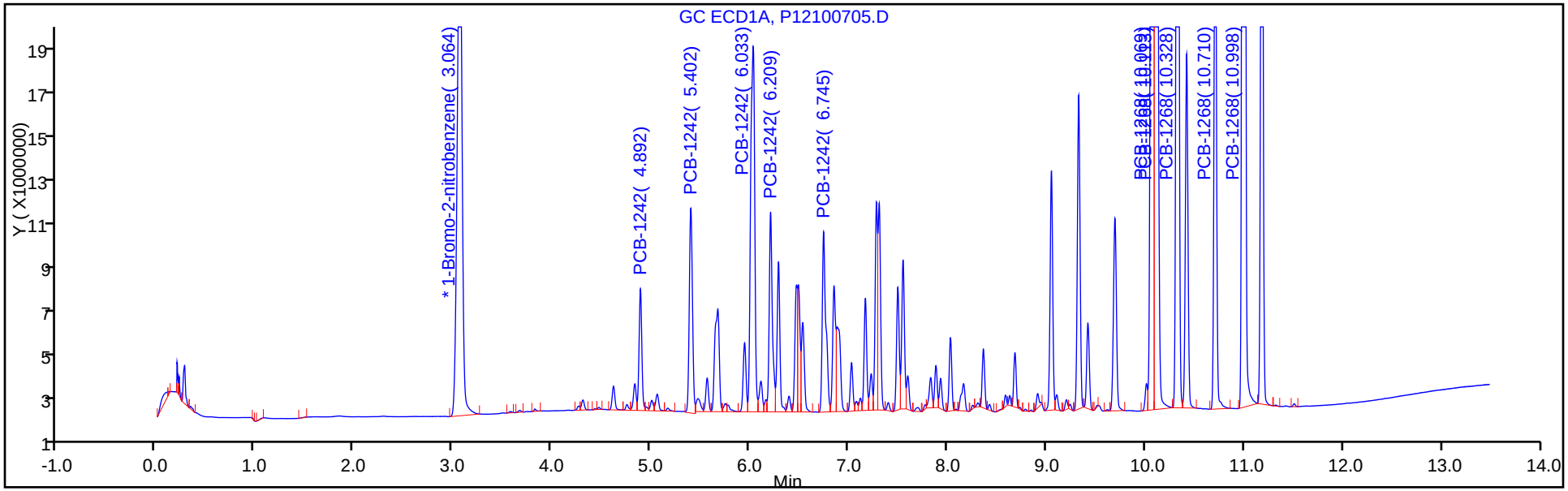
Report Date: 09-Oct-2017 11:20:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

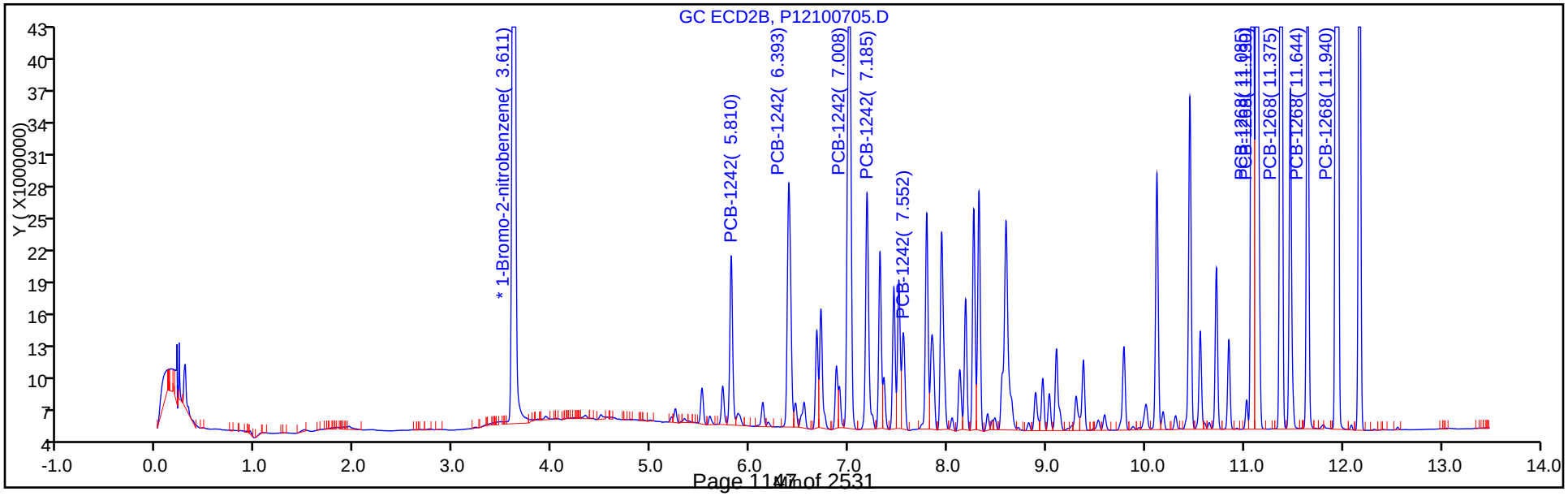
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100705.D

Injection Date:	07-Oct-2017 12:16:09	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	CCV AR1242/1268			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 09-Oct-2017 11:20:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100705.D

Injection Date: 07-Oct-2017 12:16:09 Instrument ID: A2HP12

Lims ID: CCV AR1242/1268

Client ID:

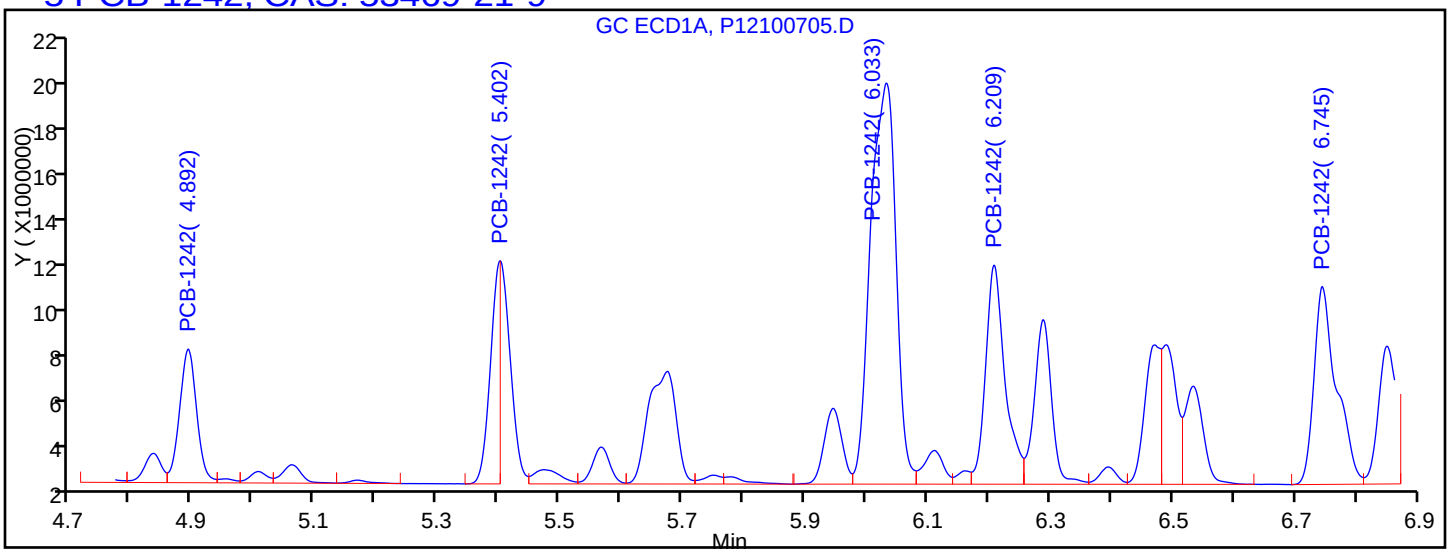
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

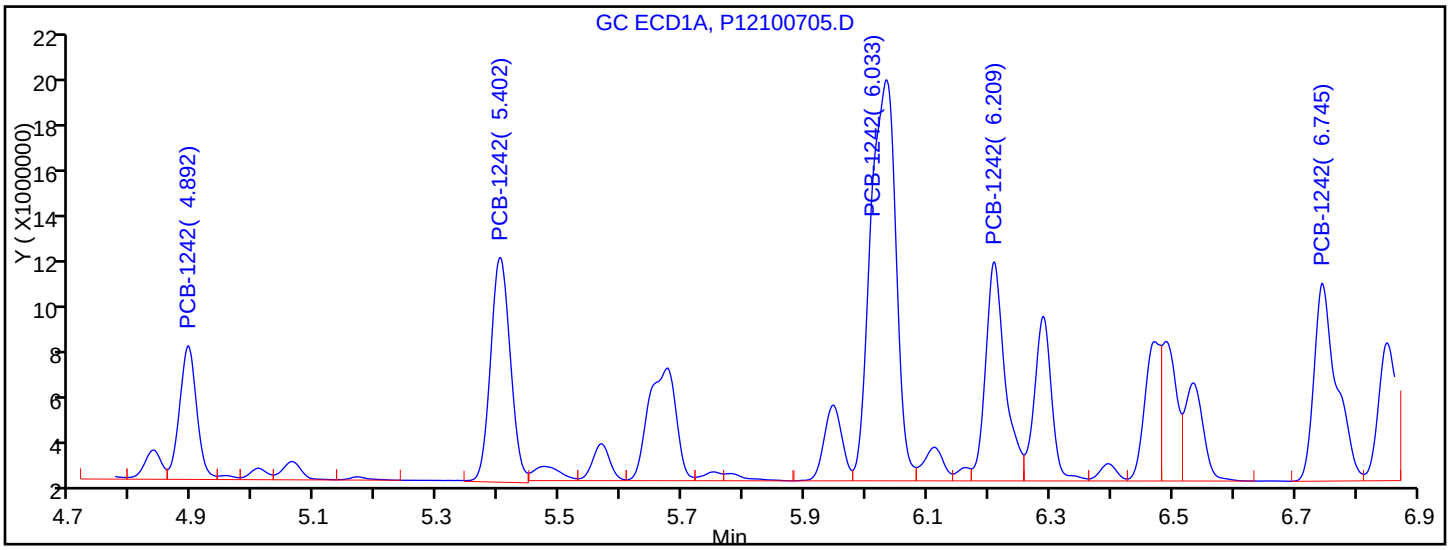
Column: Detector GC ECD1A

5 PCB-1242, CAS: 53469-21-9



Processing Integration Results

4.892	Response = 11008038
5.402	Response = 10102187
6.033	Response = 49082686
6.209	Response = 20572087
6.745	Response = 21434949



Manual Integration Results

4.892	Response = 11008038	
5.402	Response = 21384543	M
6.033	Response = 49082686	
6.209	Response = 20572087	
6.745	Response = 21434949	

Reviewer: coastc, 07-Oct-2017 12:47:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/6 Calibration Date: 10/07/2017 12:33

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 18:04

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 19:33

Lab File ID: P12100706.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0147	0.0149		0.507	0.500	1.4	20.0
PCB-1248 Peak 2	Ave	0.0418	0.0428		0.511	0.500	2.2	20.0
PCB-1248 Peak 3	Ave	0.0386	0.0406		0.526	0.500	5.3	20.0
PCB-1248 Peak 4	Ave	0.0312	0.0329		0.527	0.500	5.3	20.0
PCB-1248 Peak 5	Ave	0.0206	0.0219		0.532	0.500	6.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/6 Calibration Date: 10/07/2017 12:33

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 18:04

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 19:33

Lab File ID: P12100706.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	5.40	5.38	5.42
PCB-1248 Peak 2	6.74	6.73	6.76
PCB-1248 Peak 3	7.28	7.26	7.30
PCB-1248 Peak 4	7.55	7.53	7.57
PCB-1248 Peak 5	8.03	8.01	8.05

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100706.D
Lims ID: CCV AR1248
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2017 12:33:52 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-006
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: coastc Date: 07-Oct-2017 13:11:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.067	3.067	0.000	90354733	0.0500	0.0500	
2	3.613	3.613	0.000	226918740	0.0500	0.0500	
7 PCB-1248							
1	5.401	5.401	0.000	13496581	0.5000	0.5068	
1	6.744	6.744	0.000	38654564	0.5000	0.5112	
1	7.280	7.280	0.000	36721433	0.5000	0.5263	
1	7.550	7.550	0.000	29702900	0.5000	0.5266	
1	8.029	8.029	0.000	19749604	0.5000	0.5318	
		Average of Peak Amounts =				0.5205	
2	6.394	6.394	0.000	40681514	0.5000	0.6468	
2	7.003	7.003	0.000	102253576	0.5000	0.5659	
2	7.790	7.790	0.000	80769519	0.5000	0.5731	
2	8.318	8.318	0.000	93489279	0.5000	0.5776	
2	9.103	9.103	0.000	52705032	0.5000	0.5728	
		Average of Peak Amounts =				0.5872	
						RPD = 12.04	

Reagents:

SG1248@0.5ppm_00030 Amount Added: 1.00 Units: mL

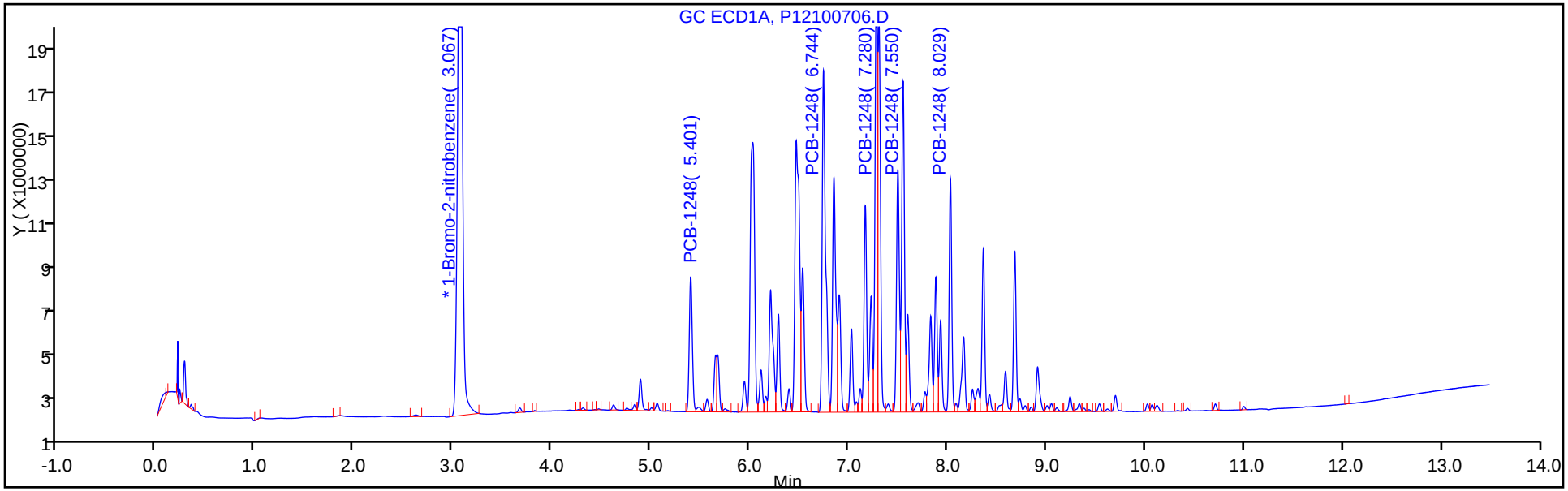
Report Date: 09-Oct-2017 11:20:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

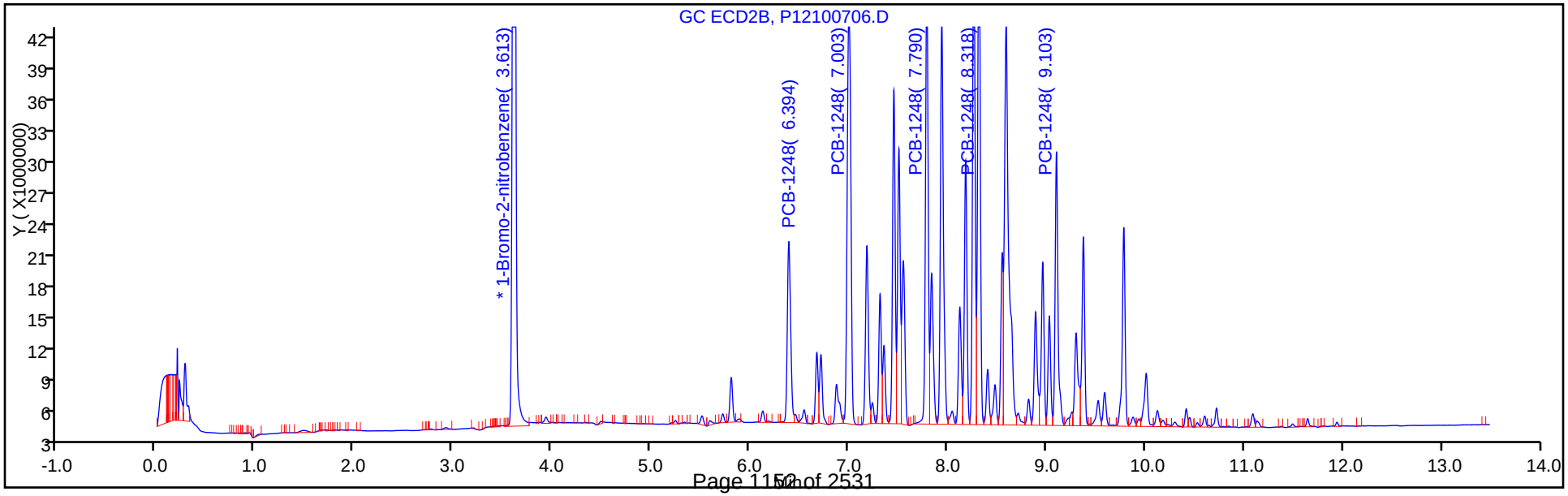
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100706.D

Injection Date:	07-Oct-2017 12:33:52	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	CCV AR1248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/7 Calibration Date: 10/07/2017 12:51

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100707.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0100	0.0092		0.460	0.500	-8.0	20.0
PCB-1221 Peak 2	Ave	0.0064	0.0060		0.462	0.500	-7.5	20.0
PCB-1221 Peak 3	Ave	0.0245	0.0219		0.447	0.500	-10.6	20.0
PCB-1254 Peak 1	Ave	0.0460	0.0431		0.468	0.500	-6.5	20.0
PCB-1254 Peak 2	Ave	0.0651	0.0629		0.482	0.500	-3.5	20.0
PCB-1254 Peak 3	Ave	0.0498	0.0479		0.481	0.500	-3.7	20.0
PCB-1254 Peak 4	Ave	0.0448	0.0425		0.475	0.500	-5.1	20.0
PCB-1254 Peak 5	Ave	0.0662	0.0645		0.487	0.500	-2.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-298032/7 Calibration Date: 10/07/2017 12:51

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 19:50

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 21:18

Lab File ID: P12100707.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	4.62	4.60	4.64
PCB-1221 Peak 2	4.84	4.82	4.86
PCB-1221 Peak 3	4.89	4.87	4.91
PCB-1254 Peak 1	7.55	7.53	7.57
PCB-1254 Peak 2	8.03	8.01	8.05
PCB-1254 Peak 3	8.36	8.34	8.38
PCB-1254 Peak 4	8.59	8.57	8.60
PCB-1254 Peak 5	8.91	8.89	8.93

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100707.D
Lims ID: CCV AR1221/1254
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2017 12:51:29 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-007
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:20:54 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.074	3.074	0.000	93644847	0.0500	0.0500	
2	3.617	3.617	0.000	254699110	0.0500	0.0500	
3 PCB-1221							
1	4.620	4.620	0.000	8651320	0.5000	0.4602	
1	4.836	4.836	0.000	5581779	0.5000	0.4625	
1	4.893	4.893	0.000	20499768	0.5000	0.4470	
		Average of Peak Amounts =				0.4565	
2	5.515	5.515	0.000	26349349	0.5000	0.5580	
2	5.725	5.725	0.000	16455946	0.5000	0.4654	
2	5.812	5.812	0.000	58447830	0.5000	0.4753	
		Average of Peak Amounts =				0.4996	
						RPD = 9.00	
8 PCB-1254							
1	7.553	7.553	0.000	40325982	0.5000	0.4677	
1	8.028	8.028	0.000	58853841	0.5000	0.4824	
1	8.362	8.362	0.000	44864249	0.5000	0.4814	
1	8.585	8.585	0.000	39797475	0.5000	0.4747	
1	8.910	8.910	0.000	60396413	0.5000	0.4874	
		Average of Peak Amounts =				0.4787	
2	8.313	8.313	0.000	82738887	0.5000	0.4838	
2	8.553	8.553	0.000	96911266	0.5000	0.4826	
2	9.102	9.102	0.000	134727366	0.5000	0.4806	
2	9.374	9.374	0.000	98377228	0.5000	0.4800	
2	10.011	10.011	0.000	131703314	0.5000	0.4814	
		Average of Peak Amounts =				0.4817	
						RPD = 0.62	

Reagents:

SG2154@0.5PPM_00033 Amount Added: 1.00 Units: mL

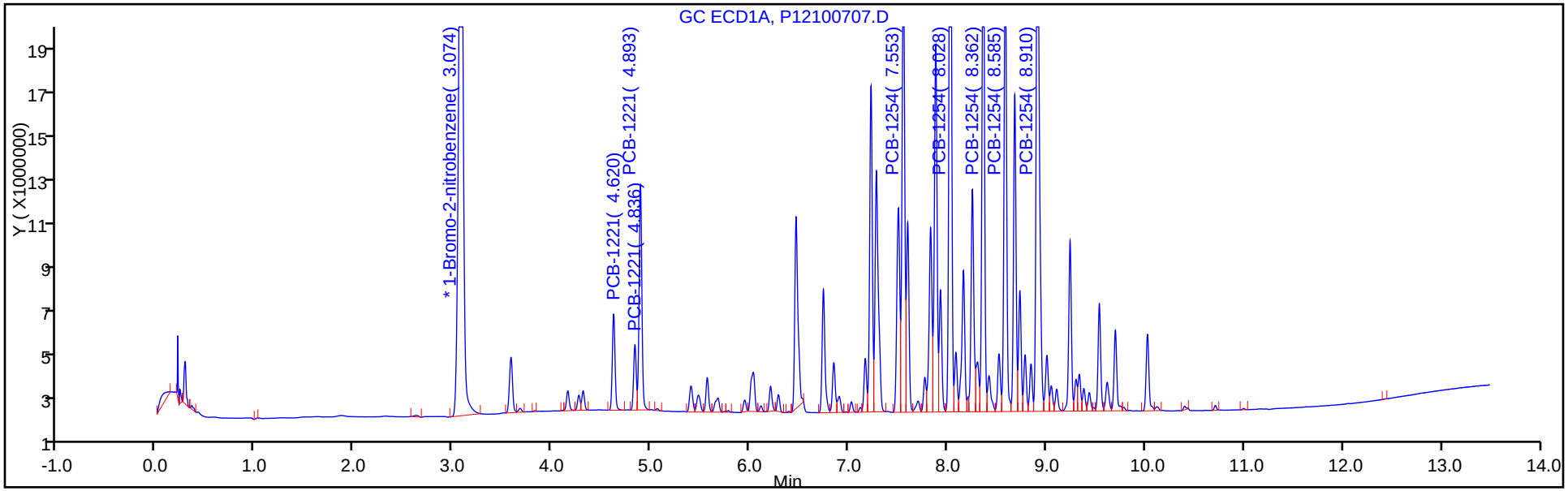
Report Date: 09-Oct-2017 11:20:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

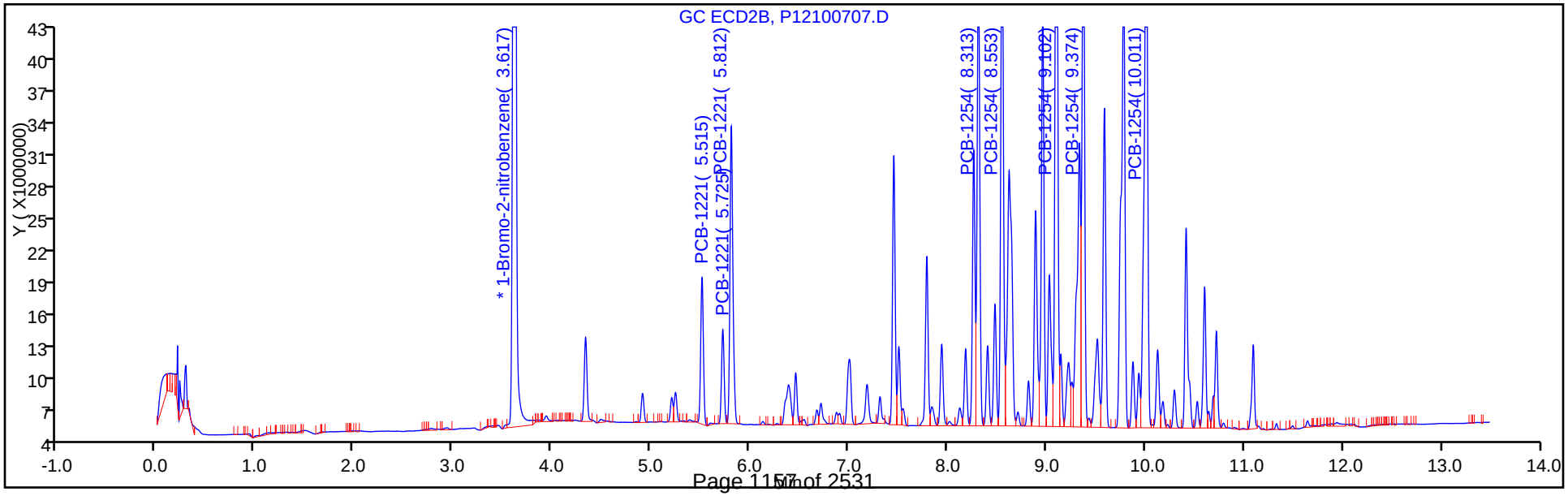
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100707.D

Injection Date:	07-Oct-2017 12:51:29	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	CCV AR1221/1254			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298032/29 Calibration Date: 10/07/2017 19:20

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100729.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0216	0.0195		0.450	0.500	-10.0	20.0
PCB-1016 Peak 2	Ave	0.0390	0.0365		0.468	0.500	-6.4	20.0
PCB-1016 Peak 3	Ave	0.0900	0.0884		0.492	0.500	-1.7	20.0
PCB-1016 Peak 4	Ave	0.0380	0.0361		0.474	0.500	-5.1	20.0
PCB-1016 Peak 5	Ave	0.0386	0.0361		0.468	0.500	-6.4	20.0
PCB-1260 Peak 1	Ave	0.0570	0.0551		0.483	0.500	-3.4	20.0
PCB-1260 Peak 2	Ave	0.0922	0.0915		0.496	0.500	-0.8	20.0
PCB-1260 Peak 3	Ave	0.1023	0.1027		0.502	0.500	0.4	20.0
PCB-1260 Peak 4	Ave	0.1321	0.1324		0.501	0.500	0.3	20.0
PCB-1260 Peak 5	Ave	0.0685	0.0688		0.502	0.500	0.4	20.0
Tetrachloro-m-xylene	Ave	0.9776	0.9358		0.0239	0.0250	-4.3	20.0
DCB Decachlorobiphenyl	Ave	1.051	0.9616		0.0229	0.0250	-8.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCVIS 240-298032/29 Calibration Date: 10/07/2017 19:20

Instrument ID: A2HP12 Calib Start Date: 10/03/2017 21:36

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/03/2017 23:04

Lab File ID: P12100729.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.90	4.88	4.91
PCB-1016 Peak 2	5.40	5.39	5.42
PCB-1016 Peak 3	6.04	6.02	6.05
PCB-1016 Peak 4	6.21	6.19	6.23
PCB-1016 Peak 5	6.75	6.73	6.77
PCB-1260 Peak 1	8.25	8.23	8.27
PCB-1260 Peak 2	8.59	8.57	8.61
PCB-1260 Peak 3	8.91	8.89	8.93
PCB-1260 Peak 4	9.70	9.68	9.72
PCB-1260 Peak 5	10.02	10.00	10.04
Tetrachloro-m-xylene	4.32	4.30	4.34
DCB Decachlorobiphenyl	11.18	11.16	11.20

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100729.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Oct-2017 19:20:47 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-029
Operator ID: Instrument ID: A2HP12
Sublist: chrom-PCB12IS*sub6

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:52:12 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:35:28

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.075	3.075	0.000	94909182	0.0500	0.0500	
2	3.617	3.617	0.000	320331818	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.317	4.317	0.000	44406779	0.0250	0.0239	
2	5.025	5.025	0.000	135673759	0.0250	0.0220	
						RPD = 8.40	
6 PCB-1016							M
1	4.895	4.895	0.000	18478925	0.5000	0.4500	
1	5.404	5.404	0.000	34657629	0.5000	0.4678	
1	6.035	6.035	0.000	83923237	0.5000	0.4915	M
1	6.211	6.211	0.000	34237334	0.5000	0.4744	M
1	6.746	6.746	0.000	34287403	0.5000	0.4681	M
		Average of Peak Amounts =				0.4704	
2	5.812	5.812	0.000	58652023	0.5000	0.4496	
2	6.396	6.396	0.000	117629313	0.5000	0.4611	
2	7.008	7.008	0.000	227507238	0.5000	0.4179	
2	7.186	7.186	0.000	89880741	0.5000	0.4053	
2	7.555	7.555	0.000	37305037	0.5000	0.4003	
		Average of Peak Amounts =				0.4268	
						RPD = 9.70	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							M
1	8.253	8.253	0.000	52296400	0.5000	0.4831	M
1	8.586	8.586	0.000	86813788	0.5000	0.4962	M
1	8.910	8.910	0.000	97475403	0.5000	0.5021	M
1	9.699	9.699	0.000	125700550	0.5000	0.5014	M
1	10.023	10.023	0.000	65266807	0.5000	0.5022	M
		Average of Peak Amounts =				0.4970	
2	9.336	9.336	0.000	135731863	0.5000	0.4018	
2	10.010	10.010	0.000	220645190	0.5000	0.4080	
2	10.451	10.451	0.000	122484918	0.5000	0.3885	
2	10.721	10.721	0.000	269834450	0.5000	0.4189	
2	11.092	11.092	0.000	187981198	0.5000	0.4119	
		Average of Peak Amounts =				0.4058	
						RPD = 20.20	
$ 12 DCB Decachlorobiphenyl							
1	11.181	11.181	0.000	45632963	0.0250	0.0229	
2	12.170	12.170	0.000	92493578	0.0250	0.0213	
						RPD = 7.20	
16 1260 Res 1							M
1	10.023	10.023	0.000	65266807	NR	NR	M
2	10.902	10.902	0.000	285302	NR	NR	
13 1260 Res 2							M
1	10.071	10.071	0.000	27692139	NR	NR	M
2	11.029	11.029	0.000	4177130	NR	NR	
15 1260 Res 3							M
1	10.117	10.117	0.000	36353694	NR	NR	M
2	0.108	0.108	0.000	41175491	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

SG1660@0.5PPM_00074 Amount Added: 1.00 Units: mL

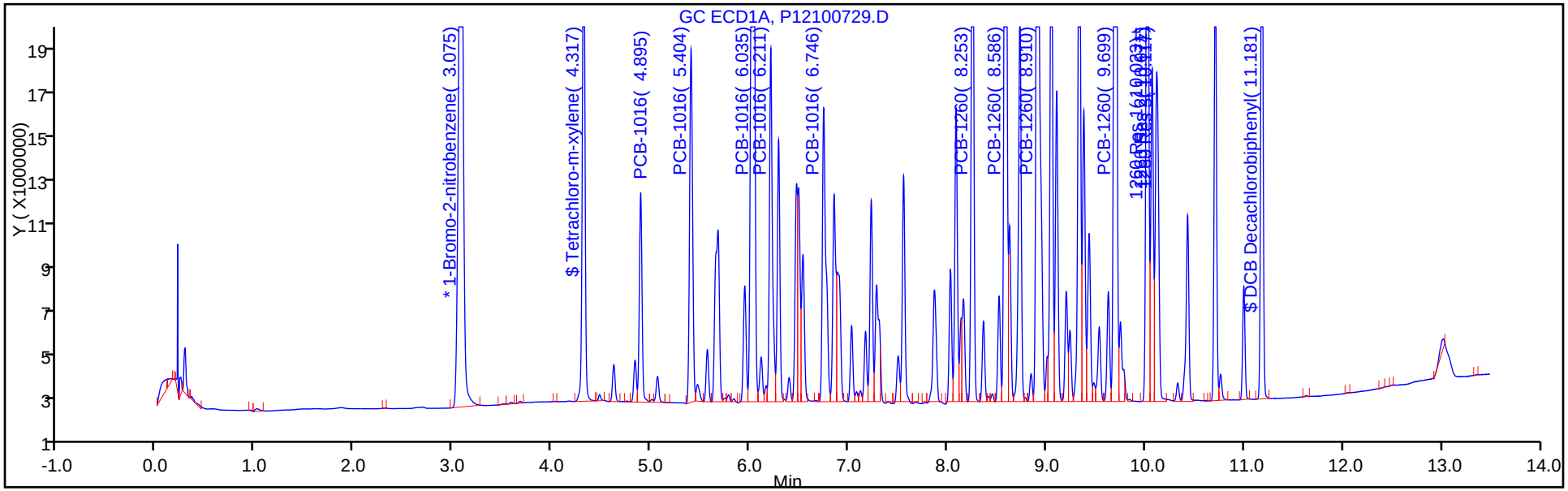
Report Date: 09-Oct-2017 11:52:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

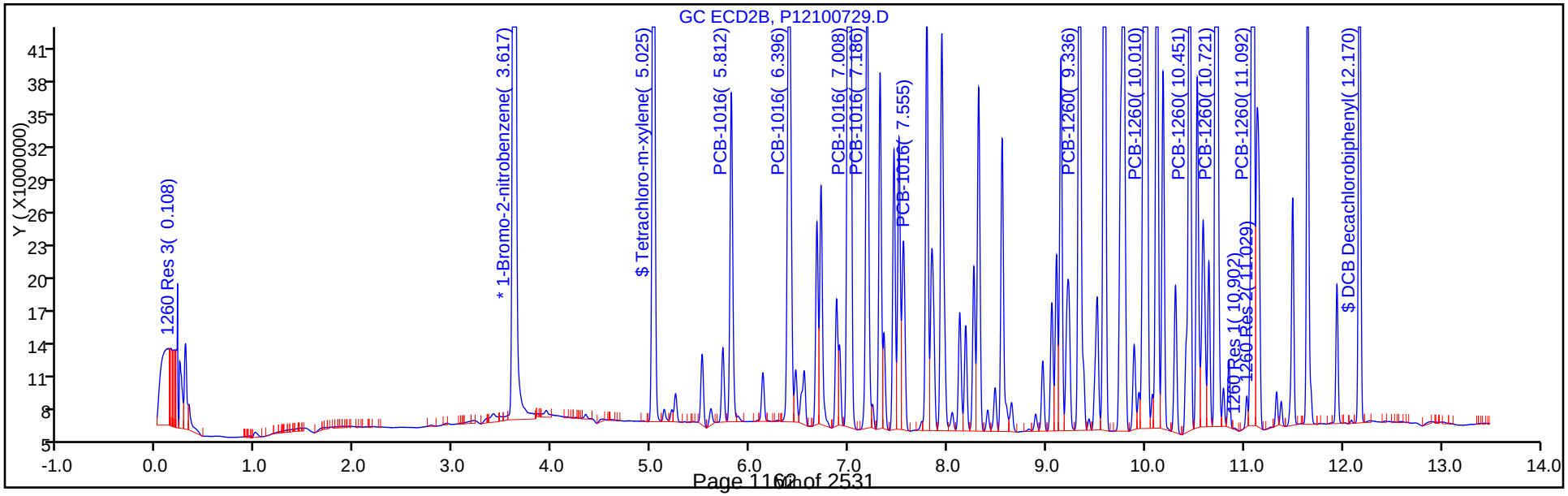
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100729.D

Injection Date:	07-Oct-2017 19:20:47	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 09-Oct-2017 11:52:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100729.D

Injection Date: 07-Oct-2017 19:20:47 Instrument ID: A2HP12

Lims ID: CCVIS

Client ID:

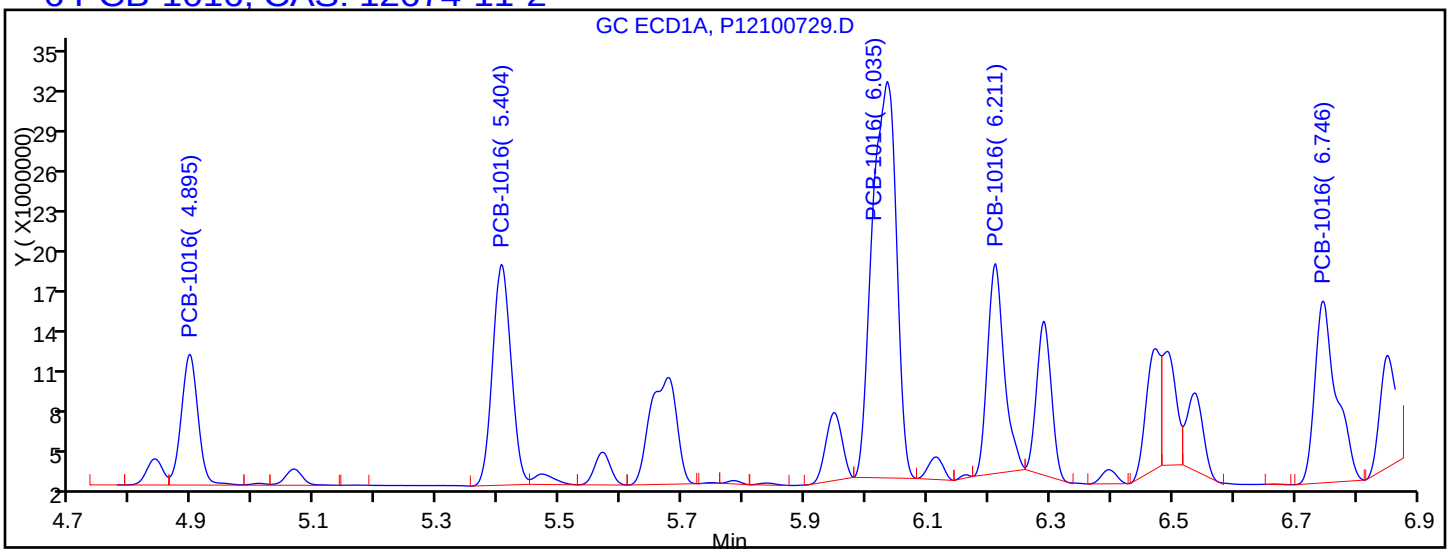
Operator ID: ALS Bottle#: 29 Worklist Smp#: 29

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

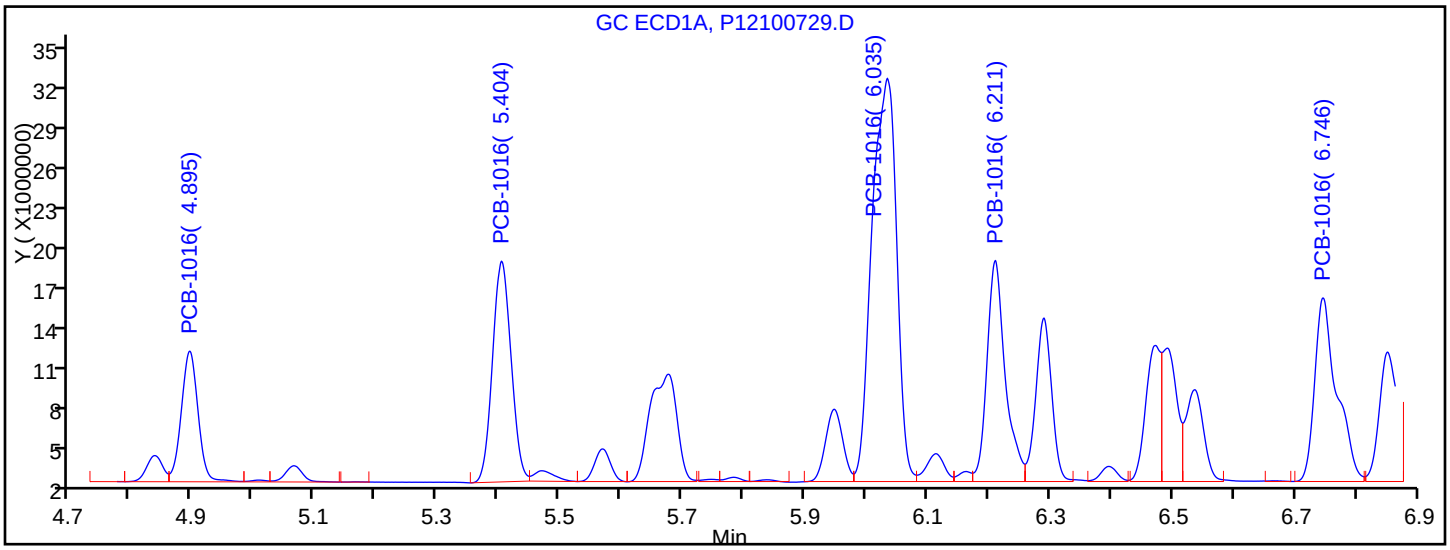
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

4.895	Response = 18478925	
5.404	Response = 34657629	
6.035	Response = 80763441	
6.211	Response = 29716461	
6.746	Response = 33087835	



Manual Integration Results

4.895	Response = 18478925	
5.404	Response = 34657629	
6.035	Response = 83923237	M
6.211	Response = 34237334	M
6.746	Response = 34287403	M

Reviewer: hassl, 09-Oct-2017 07:35:24

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Report Date: 09-Oct-2017 11:52:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100729.D

Injection Date: 07-Oct-2017 19:20:47 Instrument ID: A2HP12

Lims ID: CCVIS

Client ID:

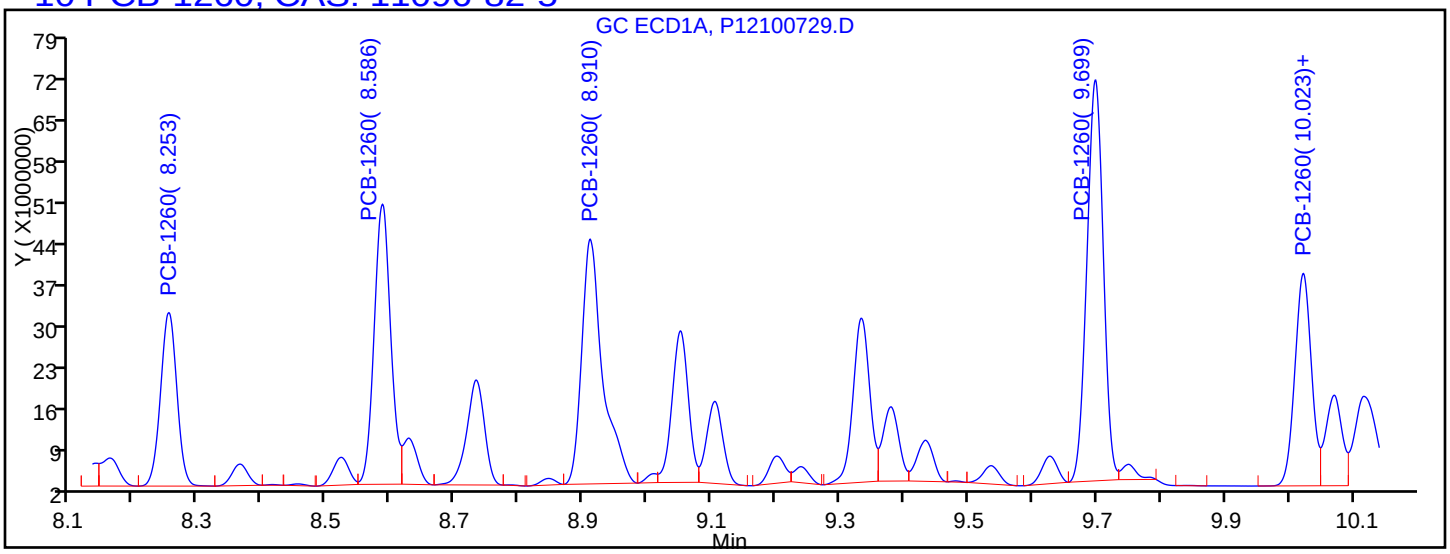
Operator ID: ALS Bottle#: 29 Worklist Smp#: 29

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

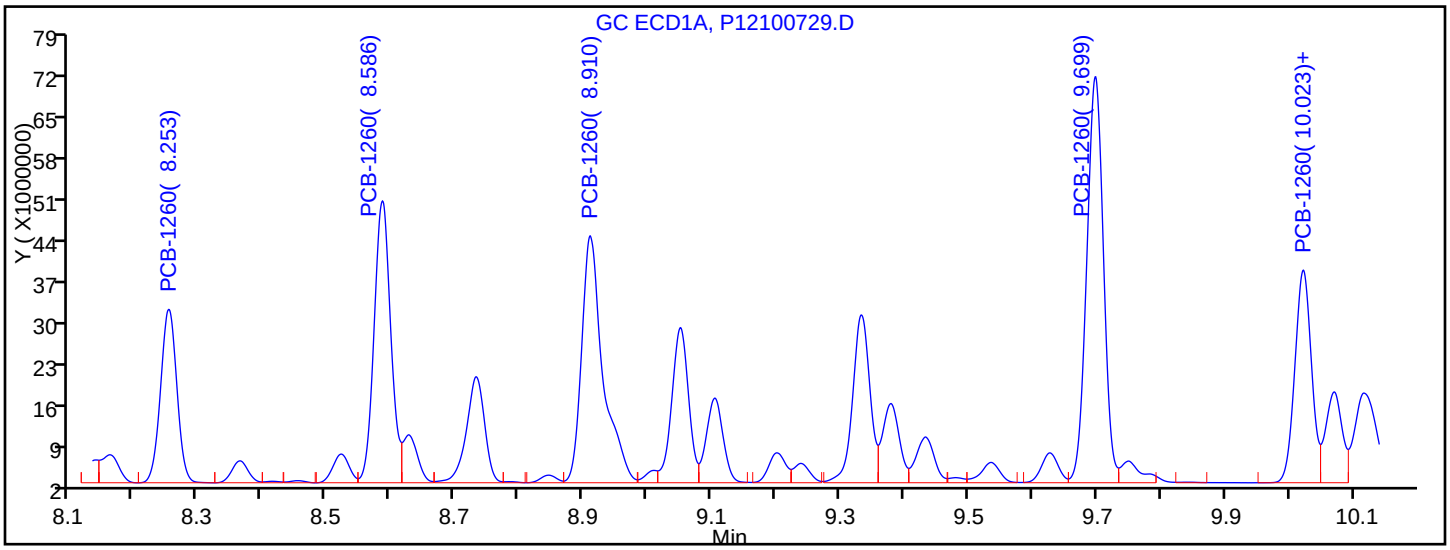
Column: Detector GC ECD1A

10 PCB-1260, CAS: 11096-82-5



Processing Integration Results

8.253	Response = 52400622
8.586	Response = 85611182
8.910	Response = 94828425
9.699	Response = 121675590
10.023	Response = 65176202



Manual Integration Results

8.253	Response = 52296400	M
8.586	Response = 86813788	M
8.910	Response = 97475403	M
9.699	Response = 125700550	M
10.023	Response = 65266807	M

Reviewer: hassl, 09-Oct-2017 07:35:24

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/34 Calibration Date: 10/02/2017 22:46

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100234.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0128	0.0137		0.537	0.500	7.4	20.0
PCB-1221 Peak 2	Ave	0.0083	0.0090		0.546	0.500	9.3	20.0
PCB-1221 Peak 3	Ave	0.0298	0.0312		0.523	0.500	4.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/34 Calibration Date: 10/02/2017 22:46

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100234.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	3.42	3.40	3.44
PCB-1221 Peak 2	3.68	3.66	3.70
PCB-1221 Peak 3	3.75	3.73	3.77

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100234.D
Lims ID: icv 1221
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 22:46:07 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-034
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:22:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	198385170	0.0500	0.0500	
2	2.390	2.391	-0.001	36757559	0.0500	0.0500	
3 PCB-1221							
1	3.419	3.421	-0.002	27263854	0.5000	0.5371	
1	3.677	3.680	-0.003	17884198	0.5000	0.5463	
1	3.745	3.746	-0.001	61985284	0.5000	0.5234	
		Average of Peak Amounts =				0.5356	
2	4.595	4.596	-0.001	5084526	0.5000	0.5301	
2	4.845	4.846	-0.001	3346657	0.5000	0.5636	
2	4.946	4.947	-0.001	11814656	0.5000	0.5377	
		Average of Peak Amounts =				0.5438	
						RPD = 1.52	

Reagents:

SG1221ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

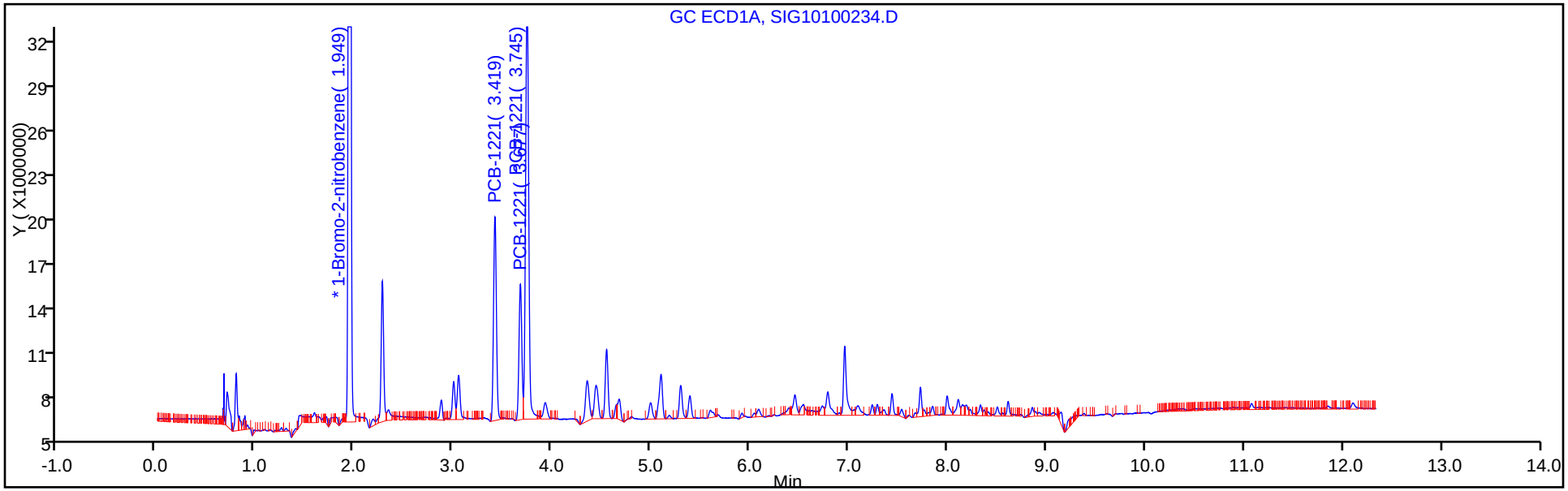
Report Date: 03-Oct-2017 08:44:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

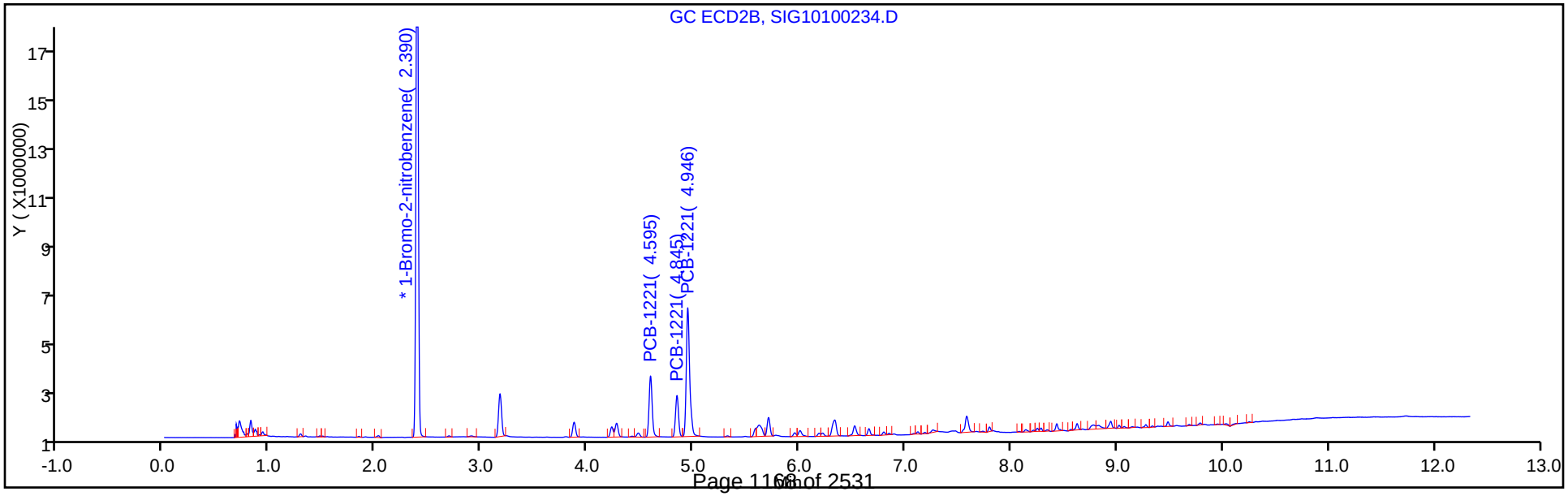
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100234.D

Injection Date:	02-Oct-2017 22:46:07	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1221			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/34 Calibration Date: 10/02/2017 22:46

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100234.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0130	0.0138		0.530	0.500	6.0	20.0
PCB-1221 Peak 2	Ave	0.0081	0.0091		0.564	0.500	12.7	20.0
PCB-1221 Peak 3	Ave	0.0299	0.0321		0.538	0.500	7.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/34 Calibration Date: 10/02/2017 22:46

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100234.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	4.60	4.58	4.62
PCB-1221 Peak 2	4.85	4.83	4.87
PCB-1221 Peak 3	4.95	4.93	4.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100234.D
Lims ID: icv 1221
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 22:46:07 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-034
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:22:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	198385170	0.0500	0.0500	
2	2.390	2.391	-0.001	36757559	0.0500	0.0500	
3 PCB-1221							
1	3.419	3.421	-0.002	27263854	0.5000	0.5371	
1	3.677	3.680	-0.003	17884198	0.5000	0.5463	
1	3.745	3.746	-0.001	61985284	0.5000	0.5234	
		Average of Peak Amounts =				0.5356	
2	4.595	4.596	-0.001	5084526	0.5000	0.5301	
2	4.845	4.846	-0.001	3346657	0.5000	0.5636	
2	4.946	4.947	-0.001	11814656	0.5000	0.5377	
		Average of Peak Amounts =				0.5438	
						RPD = 1.52	

Reagents:

SG1221ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

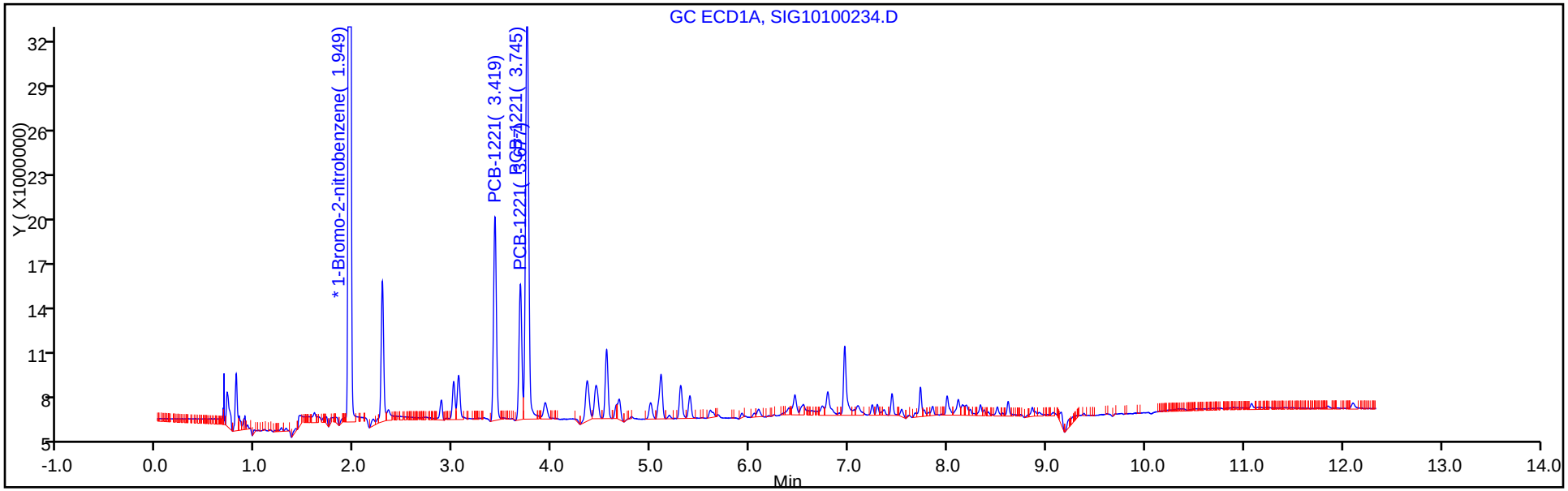
Report Date: 03-Oct-2017 08:44:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

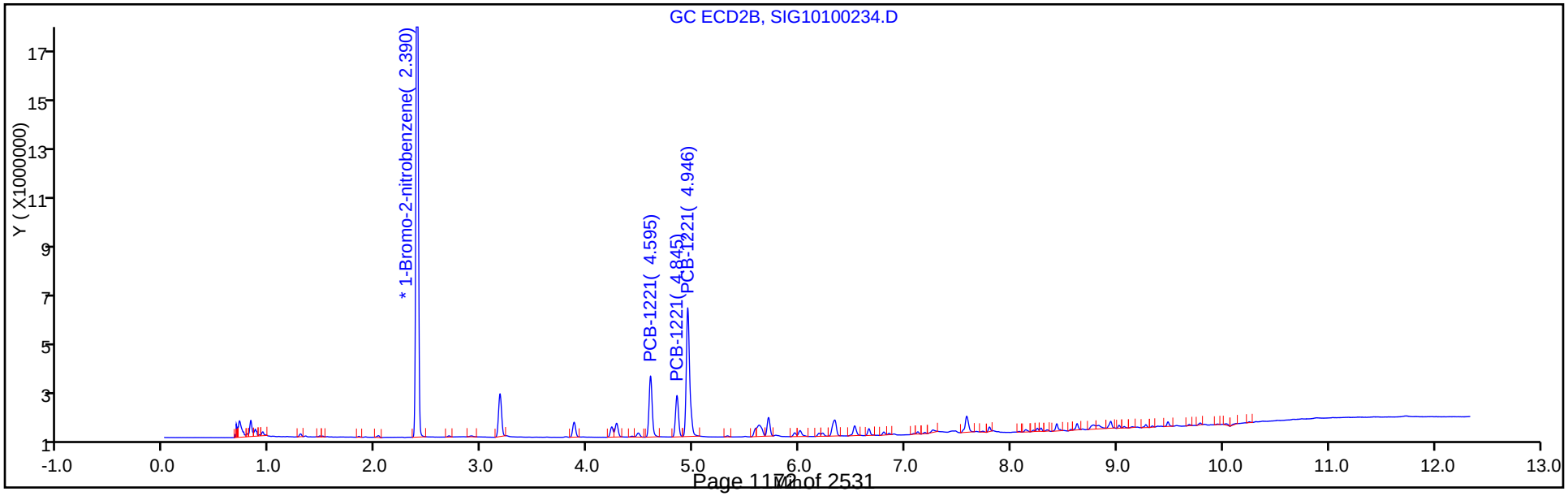
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100234.D

Injection Date:	02-Oct-2017 22:46:07	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1221			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/35 Calibration Date: 10/02/2017 23:04

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 13:35

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 15:07

Lab File ID: SIG10100235.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	0.0255	0.0205		0.400	0.500	-19.9	20.0
PCB-1232 Peak 2	Ave	0.0210	0.0180		0.428	0.500	-14.4	20.0
PCB-1232 Peak 3	Ave	0.0413	0.0317		0.383	0.500	-23.4*	20.0
PCB-1232 Peak 4	Ave	0.0181	0.0156		0.433	0.500	-13.4	20.0
PCB-1232 Peak 5	Ave	0.0070	0.0058		0.415	0.500	-17.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/35 Calibration Date: 10/02/2017 23:04

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 13:35

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 15:07

Lab File ID: SIG10100235.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.75	3.73	3.77
PCB-1232 Peak 2	4.35	4.34	4.37
PCB-1232 Peak 3	5.10	5.08	5.12
PCB-1232 Peak 4	5.30	5.28	5.32
PCB-1232 Peak 5	5.68	5.66	5.70

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100235.D
Lims ID: icv 1232
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:04:24 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-035
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:23:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	193587984	0.0500	0.0500	
2	2.390	2.391	0.000	35525050	0.0500	0.0500	
4 PCB-1232							
1	3.745	3.748	-0.003	39611712	0.5000	0.4005	
1	4.352	4.355	-0.003	34818395	0.5000	0.4282	
1	5.100	5.100	0.000	61284327	0.5000	0.3832	
1	5.300	5.303	-0.003	30267697	0.5000	0.4329	
1	5.676	5.680	-0.004	11223196	0.5000	0.4148	
		Average of Peak Amounts =				0.4119	
2	4.947	4.950	-0.003	7397722	0.5000	0.4207	
2	5.628	5.630	-0.002	6598196	0.5000	0.4384	
2	6.334	6.336	-0.002	12100682	0.5000	0.4416	
2	6.521	6.525	-0.004	4950226	0.5000	0.4328	
2	7.120	7.122	-0.002	3721868	0.5000	0.4692	
		Average of Peak Amounts =				0.4406	
						RPD = 6.72	

Reagents:

SG1232ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

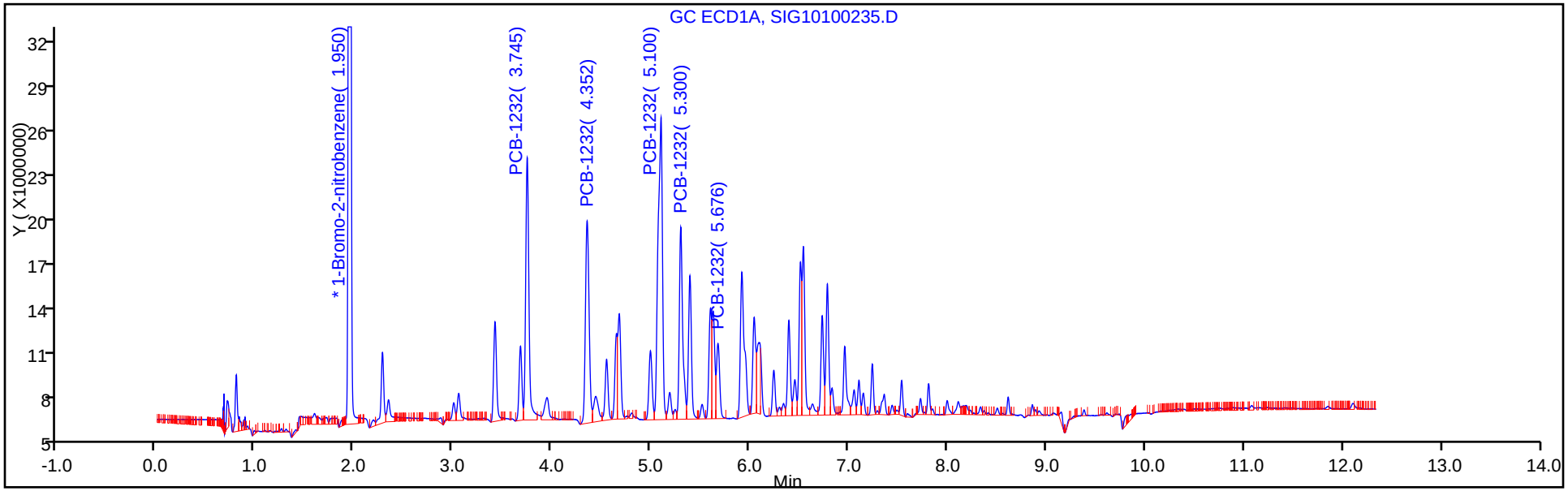
Report Date: 03-Oct-2017 08:44:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

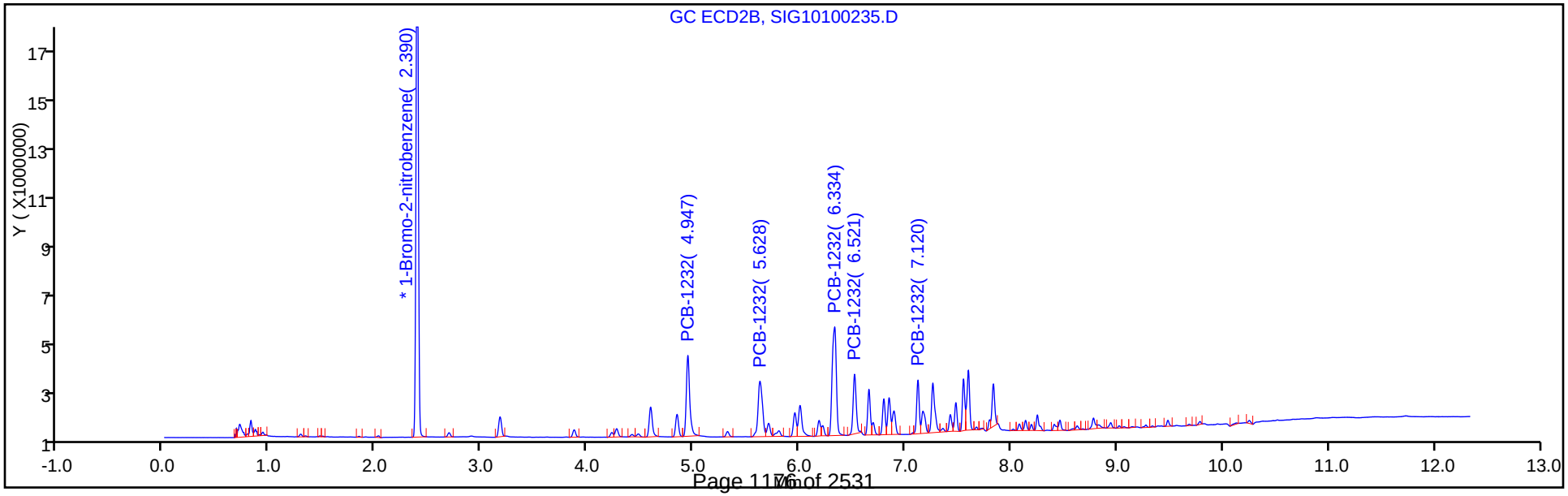
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100235.D

Injection Date:	02-Oct-2017 23:04:24	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1232			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/35 Calibration Date: 10/02/2017 23:04

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 13:35

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 15:07

Lab File ID: SIG10100235.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	0.0247	0.0208		0.421	0.500	-15.9	20.0
PCB-1232 Peak 2	Ave	0.0212	0.0186		0.438	0.500	-12.3	20.0
PCB-1232 Peak 3	Ave	0.0386	0.0341		0.442	0.500	-11.7	20.0
PCB-1232 Peak 4	Ave	0.0161	0.0139		0.433	0.500	-13.4	20.0
PCB-1232 Peak 5	Ave	0.0112	0.0105		0.469	0.500	-6.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/35 Calibration Date: 10/02/2017 23:04

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 13:35

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 15:07

Lab File ID: SIG10100235.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	4.95	4.93	4.97
PCB-1232 Peak 2	5.63	5.61	5.65
PCB-1232 Peak 3	6.33	6.32	6.36
PCB-1232 Peak 4	6.52	6.51	6.54
PCB-1232 Peak 5	7.12	7.10	7.14

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100235.D
Lims ID: icv 1232
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:04:24 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-035
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:23:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	193587984	0.0500	0.0500	
2	2.390	2.391	0.000	35525050	0.0500	0.0500	
4 PCB-1232							
1	3.745	3.748	-0.003	39611712	0.5000	0.4005	
1	4.352	4.355	-0.003	34818395	0.5000	0.4282	
1	5.100	5.100	0.000	61284327	0.5000	0.3832	
1	5.300	5.303	-0.003	30267697	0.5000	0.4329	
1	5.676	5.680	-0.004	11223196	0.5000	0.4148	
		Average of Peak Amounts =				0.4119	
2	4.947	4.950	-0.003	7397722	0.5000	0.4207	
2	5.628	5.630	-0.002	6598196	0.5000	0.4384	
2	6.334	6.336	-0.002	12100682	0.5000	0.4416	
2	6.521	6.525	-0.004	4950226	0.5000	0.4328	
2	7.120	7.122	-0.002	3721868	0.5000	0.4692	
		Average of Peak Amounts =				0.4406	
						RPD = 6.72	

Reagents:

SG1232ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

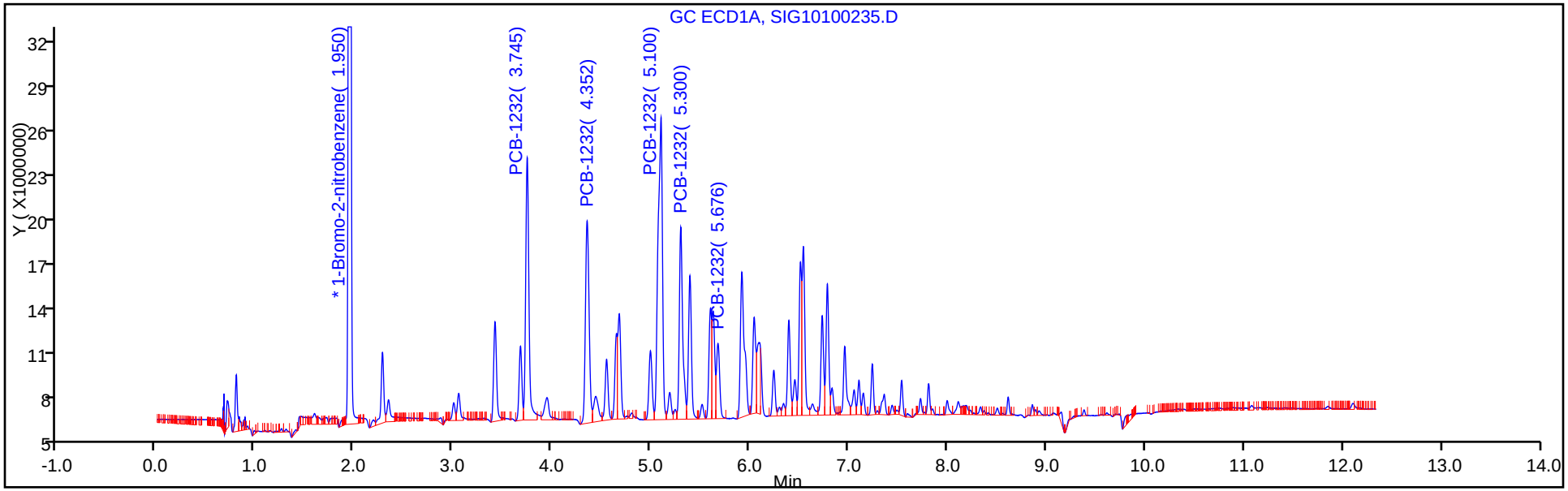
Report Date: 03-Oct-2017 08:44:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

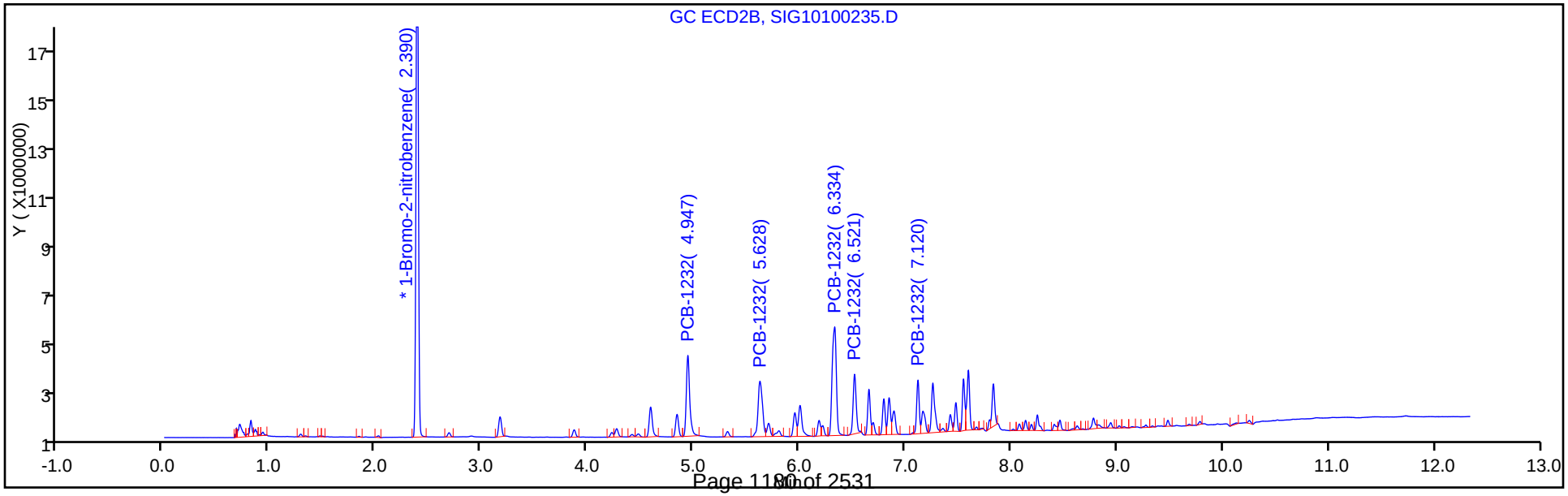
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100235.D

Injection Date:	02-Oct-2017 23:04:24	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1232			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/36 Calibration Date: 10/02/2017 23:22

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 15:25

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 16:57

Lab File ID: SIG10100236.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	0.0186	0.0198		0.533	0.500	6.6	20.0
PCB-1242 Peak 2	Ave	0.0340	0.0353		0.520	0.500	4.0	20.0
PCB-1242 Peak 3	Ave	0.0683	0.0622		0.455	0.500	-8.9	20.0
PCB-1242 Peak 4	Ave	0.0301	0.0320		0.533	0.500	6.6	20.0
PCB-1242 Peak 5	Ave	0.0127	0.0139		0.548	0.500	9.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/36 Calibration Date: 10/02/2017 23:22

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 15:25

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 16:57

Lab File ID: SIG10100236.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.75	3.73	3.77
PCB-1242 Peak 2	4.35	4.34	4.37
PCB-1242 Peak 3	5.10	5.08	5.12
PCB-1242 Peak 4	5.30	5.28	5.32
PCB-1242 Peak 5	5.68	5.66	5.70

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100236.D
Lims ID: icv 1242
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:22:46 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-036
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:23:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	196514658	0.0500	0.0500	
2	2.390	2.391	-0.001	36024053	0.0500	0.0500	
5 PCB-1242							
1	3.745	3.747	-0.002	38866659	0.5000	0.5328	
1	4.351	4.354	-0.003	69394461	0.5000	0.5200	
1	5.099	5.100	-0.001	122237381	0.5000	0.4554	
1	5.300	5.302	-0.002	62961662	0.5000	0.5330	
1	5.675	5.679	-0.004	27384478	0.5000	0.5476	
		Average of Peak Amounts =				0.5177	
2	4.946	4.949	-0.003	6844214	0.5000	0.5257	
2	5.628	5.629	-0.001	12982490	0.5000	0.5342	
2	6.334	6.336	-0.002	25895734	0.5000	0.5417	
2	6.521	6.523	-0.002	10952461	0.5000	0.5475	
2	7.120	7.122	-0.002	8202953	0.5000	0.5347	
		Average of Peak Amounts =				0.5368	
						RPD = 3.61	

Reagents:

SG1242ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

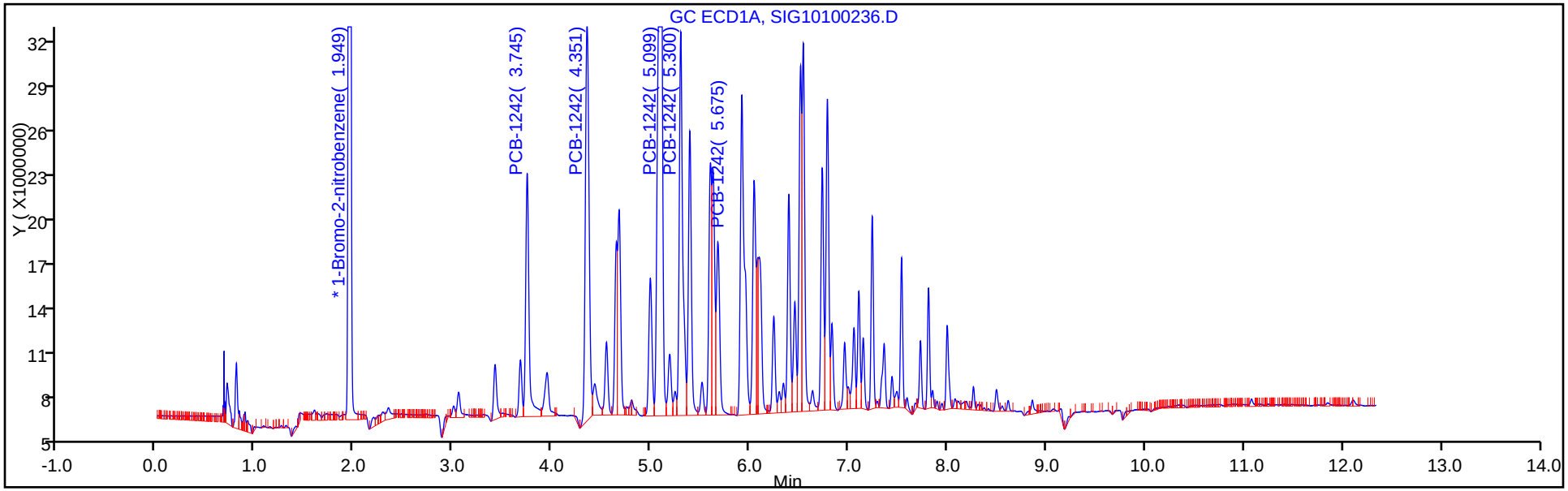
Report Date: 03-Oct-2017 08:44:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

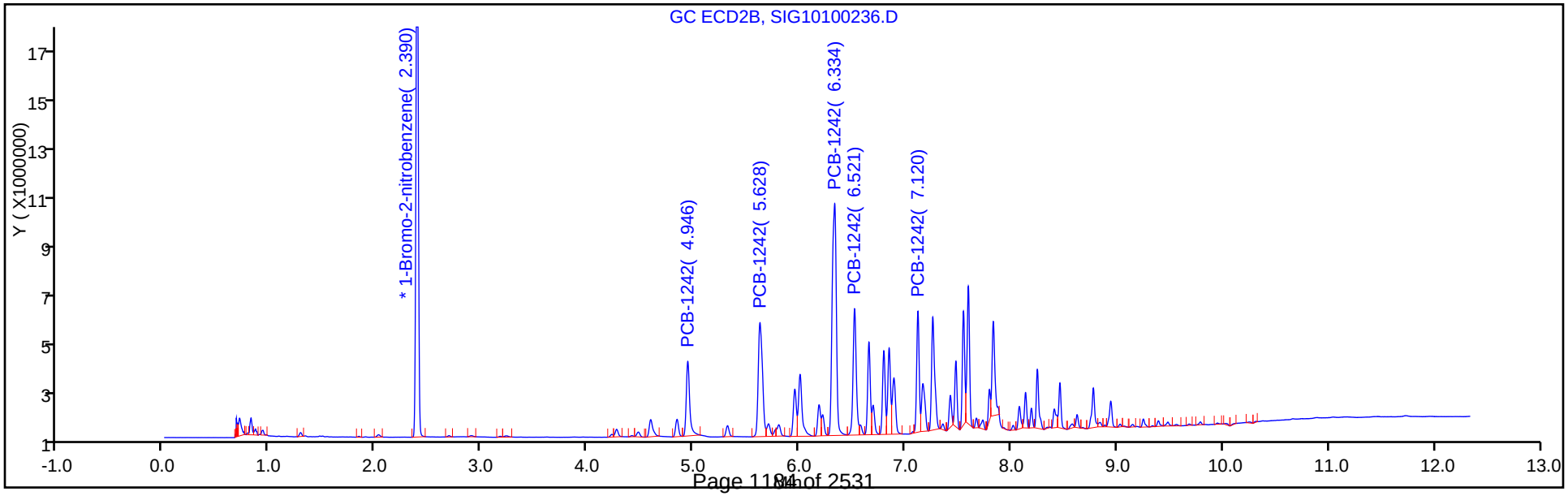
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100236.D

Injection Date:	02-Oct-2017 23:22:46	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1242			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/36 Calibration Date: 10/02/2017 23:22

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 15:25

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 16:57

Lab File ID: SIG10100236.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	0.0181	0.0190		0.526	0.500	5.1	20.0
PCB-1242 Peak 2	Ave	0.0337	0.0360		0.534	0.500	6.8	20.0
PCB-1242 Peak 3	Ave	0.0663	0.0719		0.542	0.500	8.3	20.0
PCB-1242 Peak 4	Ave	0.0278	0.0304		0.547	0.500	9.5	20.0
PCB-1242 Peak 5	Ave	0.0213	0.0228		0.535	0.500	6.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/36 Calibration Date: 10/02/2017 23:22

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 15:25

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 16:57

Lab File ID: SIG10100236.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	4.95	4.93	4.97
PCB-1242 Peak 2	5.63	5.61	5.65
PCB-1242 Peak 3	6.33	6.32	6.36
PCB-1242 Peak 4	6.52	6.50	6.54
PCB-1242 Peak 5	7.12	7.10	7.14

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100236.D
Lims ID: icv 1242
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:22:46 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-036
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:23:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	196514658	0.0500	0.0500	
2	2.390	2.391	-0.001	36024053	0.0500	0.0500	
5 PCB-1242							
1	3.745	3.747	-0.002	38866659	0.5000	0.5328	
1	4.351	4.354	-0.003	69394461	0.5000	0.5200	
1	5.099	5.100	-0.001	122237381	0.5000	0.4554	
1	5.300	5.302	-0.002	62961662	0.5000	0.5330	
1	5.675	5.679	-0.004	27384478	0.5000	0.5476	
		Average of Peak Amounts =				0.5177	
2	4.946	4.949	-0.003	6844214	0.5000	0.5257	
2	5.628	5.629	-0.001	12982490	0.5000	0.5342	
2	6.334	6.336	-0.002	25895734	0.5000	0.5417	
2	6.521	6.523	-0.002	10952461	0.5000	0.5475	
2	7.120	7.122	-0.002	8202953	0.5000	0.5347	
		Average of Peak Amounts =				0.5368	
						RPD = 3.61	

Reagents:

SG1242ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

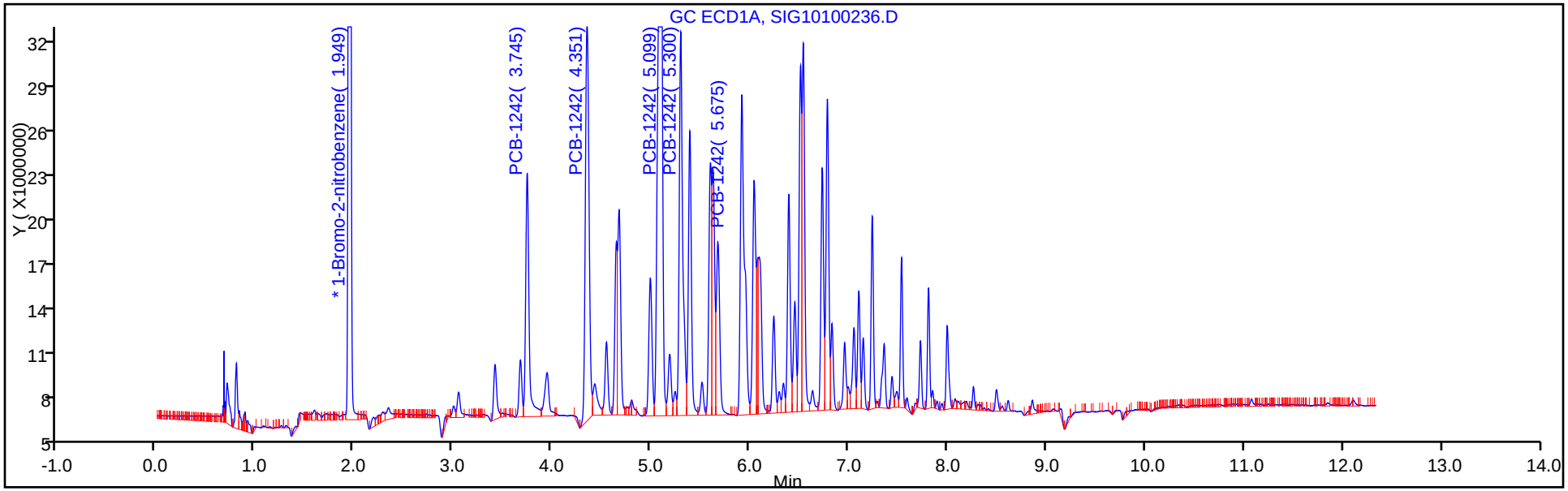
Report Date: 03-Oct-2017 08:44:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

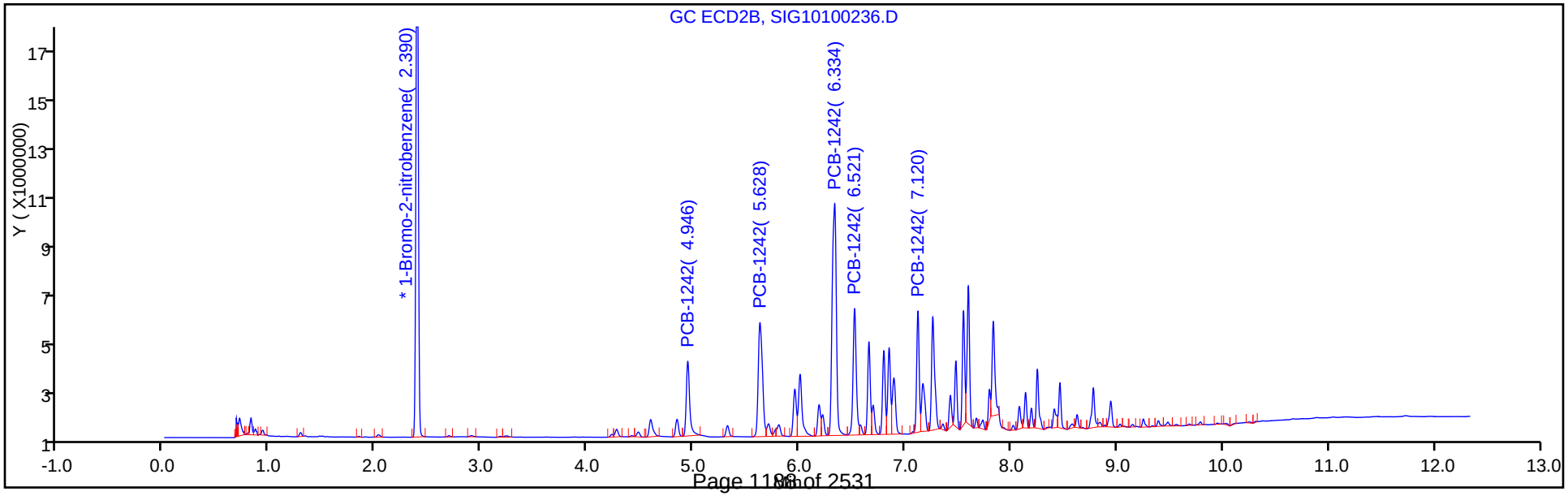
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100236.D

Injection Date:	02-Oct-2017 23:22:46	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1242			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/37 Calibration Date: 10/02/2017 23:41

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 17:15

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 18:47

Lab File ID: SIG10100237.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0199	0.0199		0.499	0.500	-0.1	20.0
PCB-1248 Peak 2	Ave	0.0452	0.0494		0.547	0.500	9.4	20.0
PCB-1248 Peak 3	Ave	0.0353	0.0424		0.601	0.500	20.2*	20.0
PCB-1248 Peak 4	Ave	0.0342	0.0361		0.527	0.500	5.3	20.0
PCB-1248 Peak 5	Ave	0.0213	0.0218		0.512	0.500	2.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/37 Calibration Date: 10/02/2017 23:41

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 17:15

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 18:47

Lab File ID: SIG10100237.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	4.35	4.33	4.37
PCB-1248 Peak 2	5.92	5.90	5.94
PCB-1248 Peak 3	6.54	6.52	6.56
PCB-1248 Peak 4	6.79	6.77	6.81
PCB-1248 Peak 5	7.24	7.22	7.26

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100237.D
Lims ID: icv 1248
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:41:11 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-037
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:24:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	189139688	0.0500	0.0500	
2	2.391	2.391	0.000	35134827	0.0500	0.0500	
7 PCB-1248							M
1	4.352	4.353	-0.001	37576068	0.5000	0.4995	
1	5.918	5.919	-0.001	93494591	0.5000	0.5468	
1	6.541	6.541	0.000	80231644	0.5000	0.6010	
1	6.785	6.787	-0.002	68182948	0.5000	0.5266	
1	7.237	7.239	-0.002	41304718	0.5000	0.5117	
		Average of Peak Amounts =				0.5371	
2	5.628	5.629	-0.001	7538783	0.5000	0.5576	
2	6.798	6.799	-0.001	9543895	0.5000	0.5046	
2	7.261	7.263	-0.002	15983000	0.5000	0.5638	M
2	7.597	7.598	-0.001	18071326	0.5000	0.6097	M
2	8.249	8.250	-0.001	8081133	0.5000	0.5112	M
		Average of Peak Amounts =				0.5494	
						RPD = 2.26	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

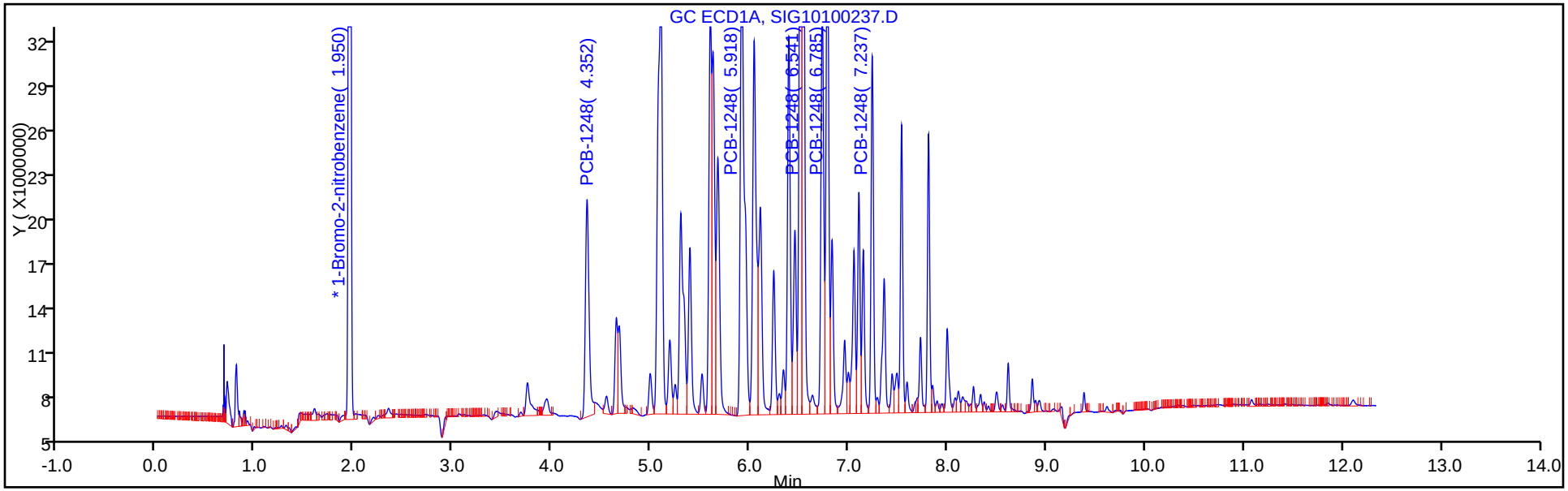
Report Date: 03-Oct-2017 08:44:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

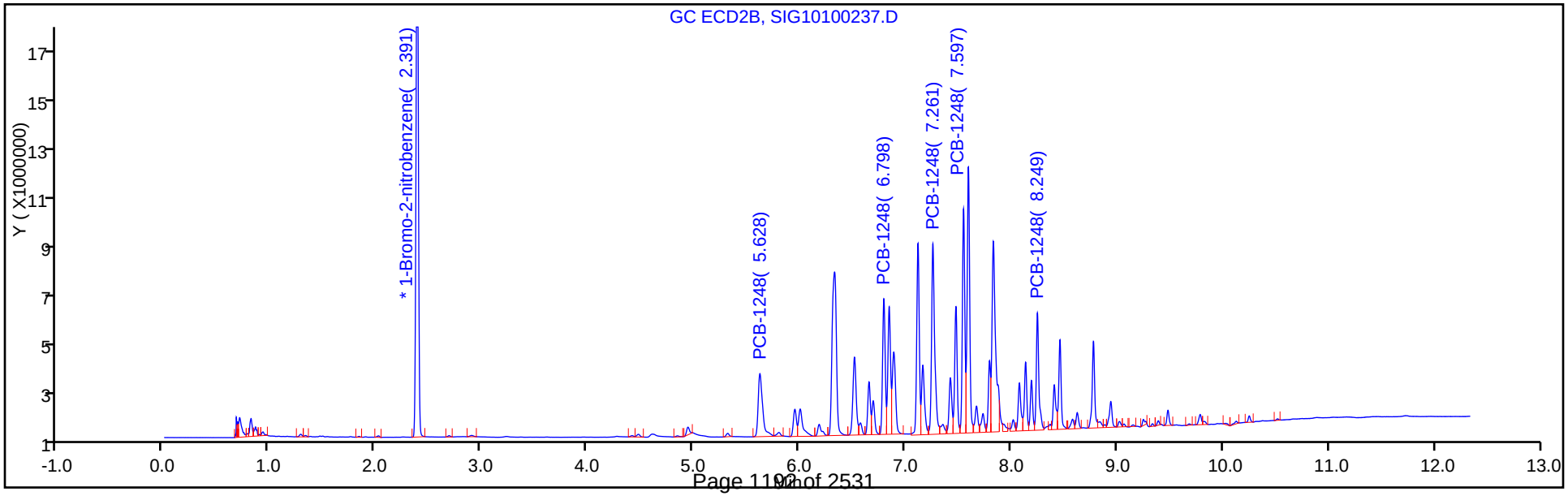
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100237.D

Injection Date:	02-Oct-2017 23:41:11	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1248			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/37 Calibration Date: 10/02/2017 23:41

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 17:15

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 18:47

Lab File ID: SIG10100237.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0192	0.0215		0.558	0.500	11.5	20.0
PCB-1248 Peak 2	Ave	0.0269	0.0272		0.505	0.500	0.9	20.0
PCB-1248 Peak 3	Ave	0.0403	0.0455		0.564	0.500	12.8	20.0
PCB-1248 Peak 4	Ave	0.0422	0.0514		0.610	0.500	21.9*	20.0
PCB-1248 Peak 5	Ave	0.0225	0.0230		0.511	0.500	2.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/37 Calibration Date: 10/02/2017 23:41

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 17:15

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 18:47

Lab File ID: SIG10100237.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	5.63	5.61	5.65
PCB-1248 Peak 2	6.80	6.78	6.82
PCB-1248 Peak 3	7.26	7.24	7.28
PCB-1248 Peak 4	7.60	7.58	7.62
PCB-1248 Peak 5	8.25	8.23	8.27

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100237.D
Lims ID: icv 1248
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:41:11 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-037
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:24:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	189139688	0.0500	0.0500	
2	2.391	2.391	0.000	35134827	0.0500	0.0500	
7 PCB-1248							M
1	4.352	4.353	-0.001	37576068	0.5000	0.4995	
1	5.918	5.919	-0.001	93494591	0.5000	0.5468	
1	6.541	6.541	0.000	80231644	0.5000	0.6010	
1	6.785	6.787	-0.002	68182948	0.5000	0.5266	
1	7.237	7.239	-0.002	41304718	0.5000	0.5117	
		Average of Peak Amounts =				0.5371	
2	5.628	5.629	-0.001	7538783	0.5000	0.5576	
2	6.798	6.799	-0.001	9543895	0.5000	0.5046	
2	7.261	7.263	-0.002	15983000	0.5000	0.5638	M
2	7.597	7.598	-0.001	18071326	0.5000	0.6097	M
2	8.249	8.250	-0.001	8081133	0.5000	0.5112	M
		Average of Peak Amounts =				0.5494	
						RPD = 2.26	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SG1248ICV@1.0_00021 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

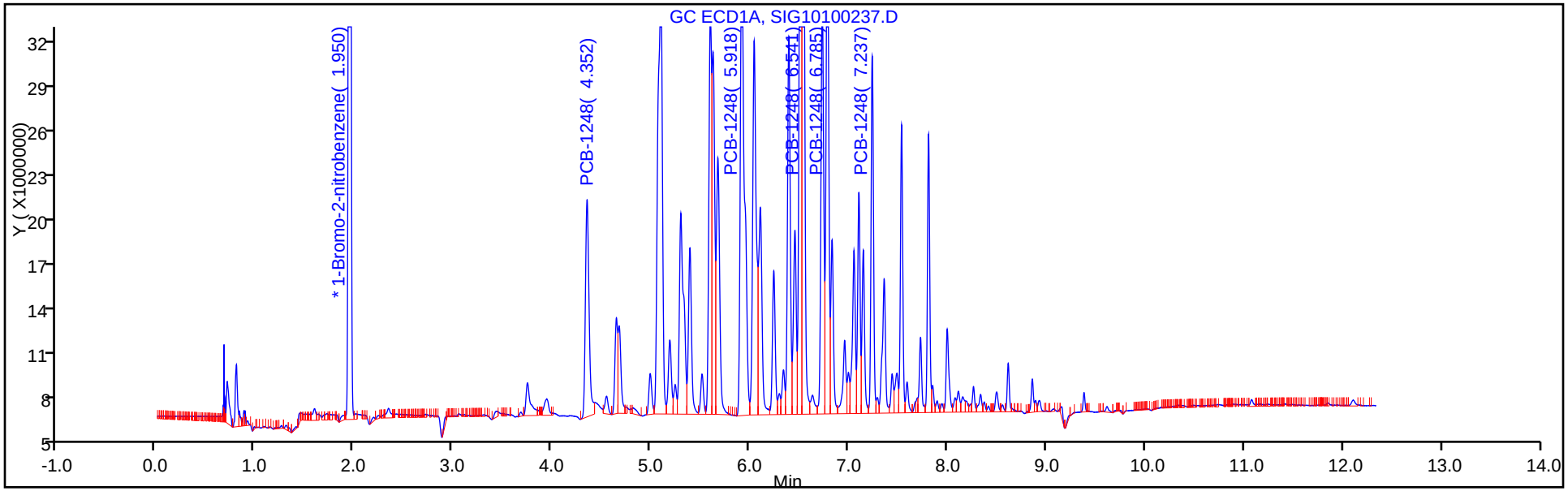
Report Date: 03-Oct-2017 08:44:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

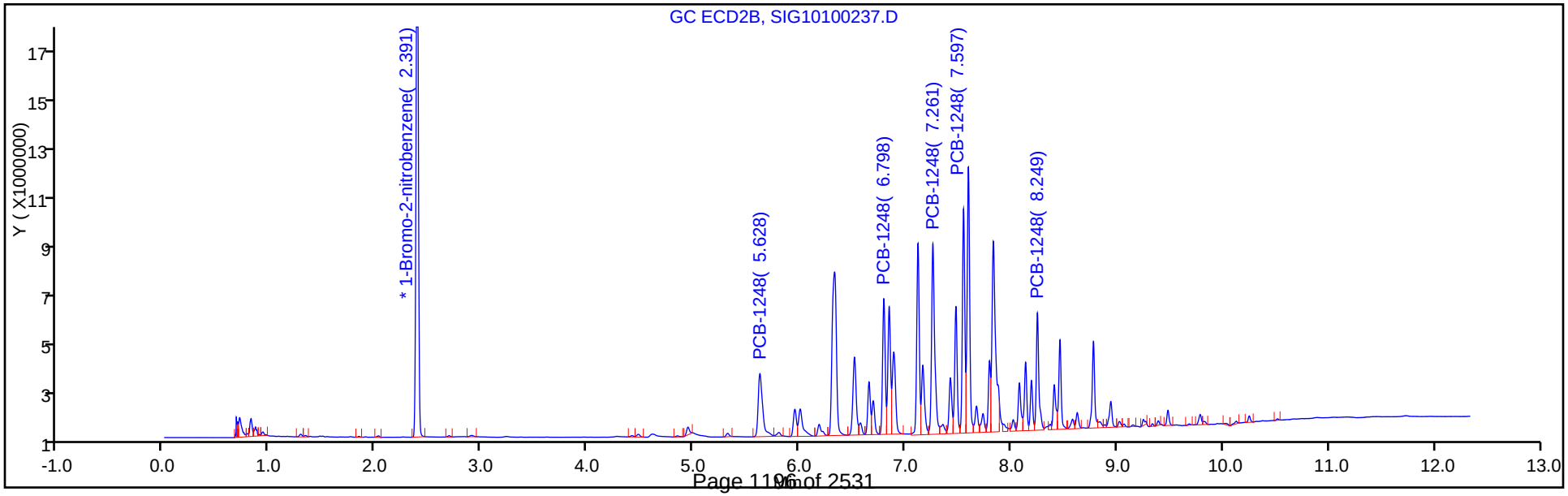
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100237.D

Injection Date:	02-Oct-2017 23:41:11	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1248			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 03-Oct-2017 08:44:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100237.D

Injection Date: 02-Oct-2017 23:41:11 Instrument ID: A2HP13

Lims ID: icv 1248

Client ID:

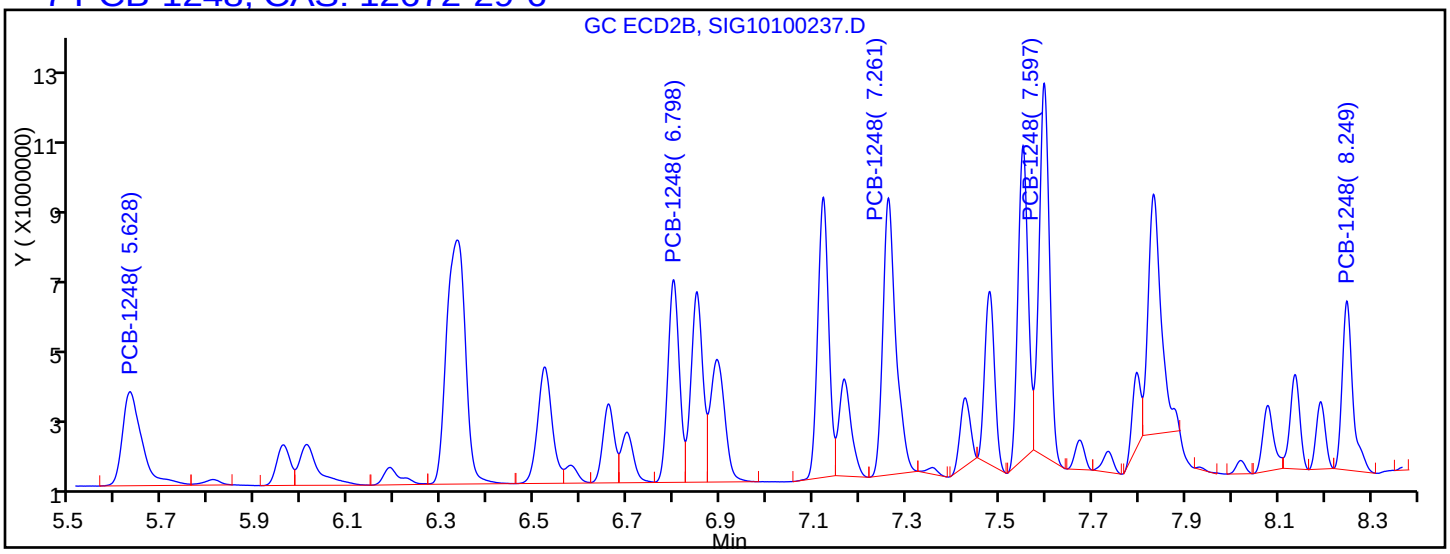
Operator ID: ALS Bottle#: 37 Worklist Smp#: 37

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

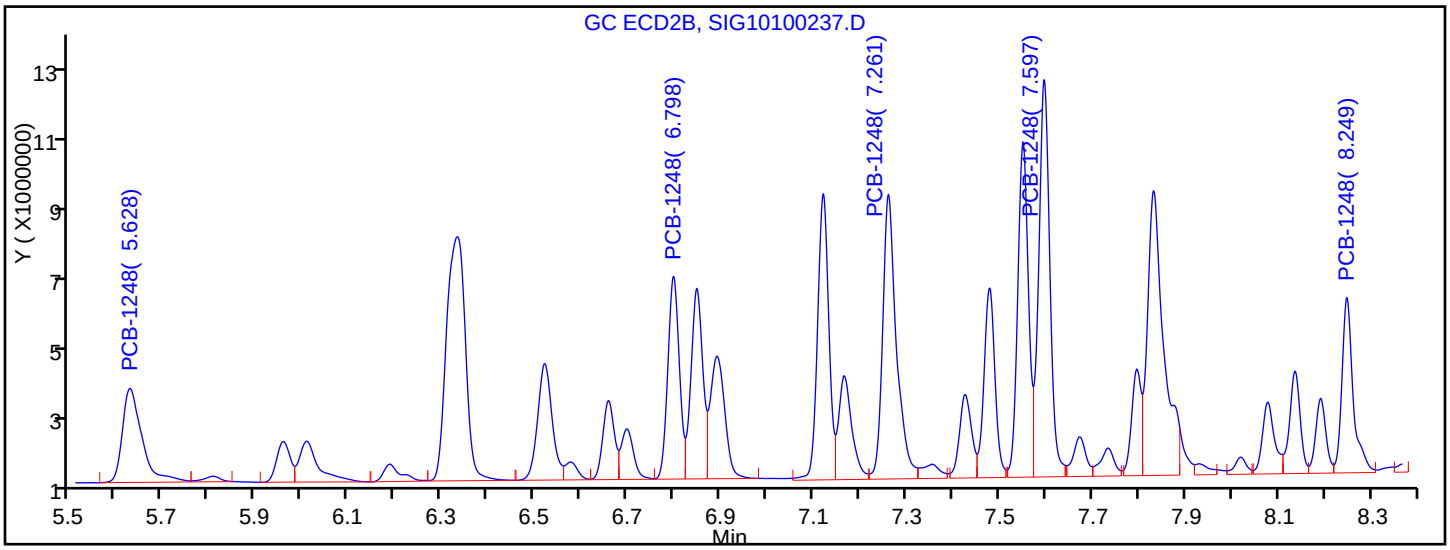
Column: Detector GC ecd2b

7 PCB-1248, CAS: 12672-29-6



Processing Integration Results

5.628	Response = 7538783
6.798	Response = 9543895
7.261	Response = 14624710
7.597	Response = 15756464
8.249	Response = 7328951



Manual Integration Results

5.628	Response = 7538783	
6.798	Response = 9543895	
7.261	Response = 15983000	M
7.597	Response = 18071326	M
8.249	Response = 8081133	M

Reviewer: hassl, 03-Oct-2017 06:24:35

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/38 Calibration Date: 10/02/2017 23:59

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100238.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1254 Peak 1	Ave	0.0493	0.0411		0.417	0.500	-16.6	20.0
PCB-1254 Peak 2	Ave	0.0636	0.0528		0.415	0.500	-17.0	20.0
PCB-1254 Peak 3	Ave	0.0483	0.0405		0.419	0.500	-16.1	20.0
PCB-1254 Peak 4	Ave	0.0445	0.0382		0.429	0.500	-14.2	20.0
PCB-1254 Peak 5	Ave	0.0641	0.0560		0.436	0.500	-12.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/38 Calibration Date: 10/02/2017 23:59

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100238.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1254 Peak 1	6.79	6.77	6.81
PCB-1254 Peak 2	7.24	7.22	7.26
PCB-1254 Peak 3	7.54	7.52	7.56
PCB-1254 Peak 4	7.73	7.71	7.75
PCB-1254 Peak 5	8.00	7.98	8.02

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100238.D
Lims ID: icv 1254
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:59:30 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-038
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 08:04:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	191929965	0.0500	0.0500	
2	2.390	2.391	0.000	35289265	0.0500	0.0500	
8 PCB-1254							
1	6.790	6.788	0.002	78864805	0.5000	0.4172	
1	7.239	7.239	0.000	101238640	0.5000	0.4149	
1	7.535	7.536	-0.001	77781233	0.5000	0.4194	
1	7.726	7.726	0.000	73249479	0.5000	0.4290	
1	7.997	7.997	0.000	107389840	0.5000	0.4364	
		Average of Peak Amounts =				0.4234	
2	7.593	7.593	0.000	12752672	0.5000	0.4605	
2	7.796	7.796	0.000	13080349	0.5000	0.4205	
2	8.249	8.249	0.000	18458103	0.5000	0.3973	
2	8.462	8.462	0.000	14463221	0.5000	0.4302	
2	8.943	8.943	0.000	20184459	0.5000	0.4471	
		Average of Peak Amounts =				0.4311	
						RPD = 1.81	

Reagents:

SG1254ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

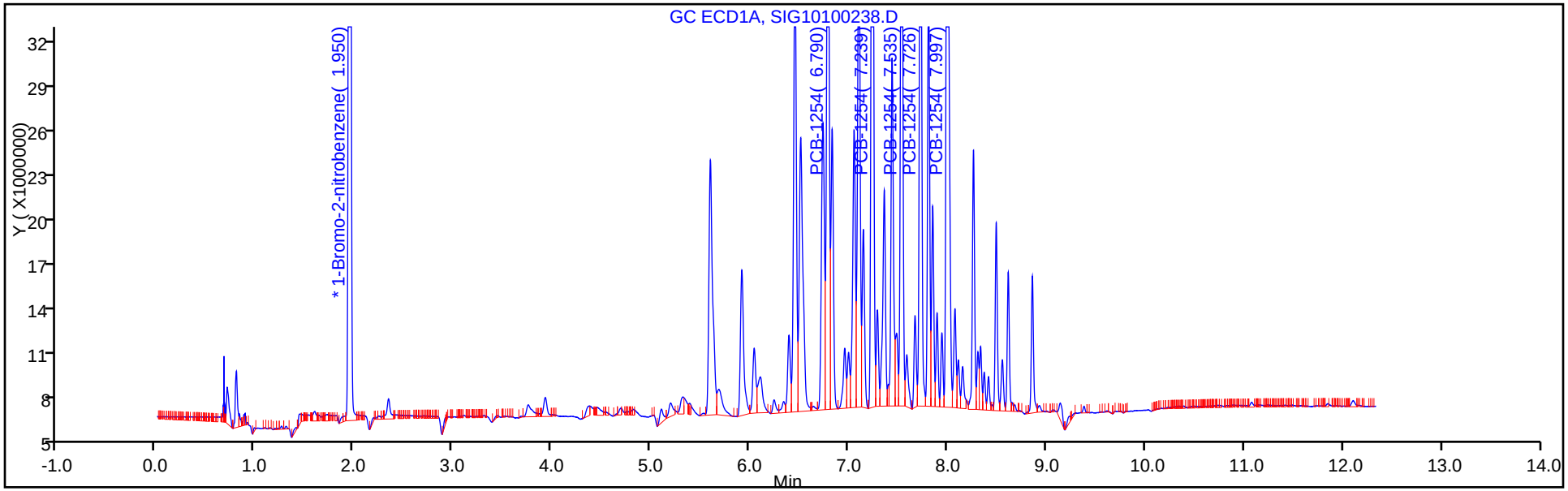
Report Date: 03-Oct-2017 08:44:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

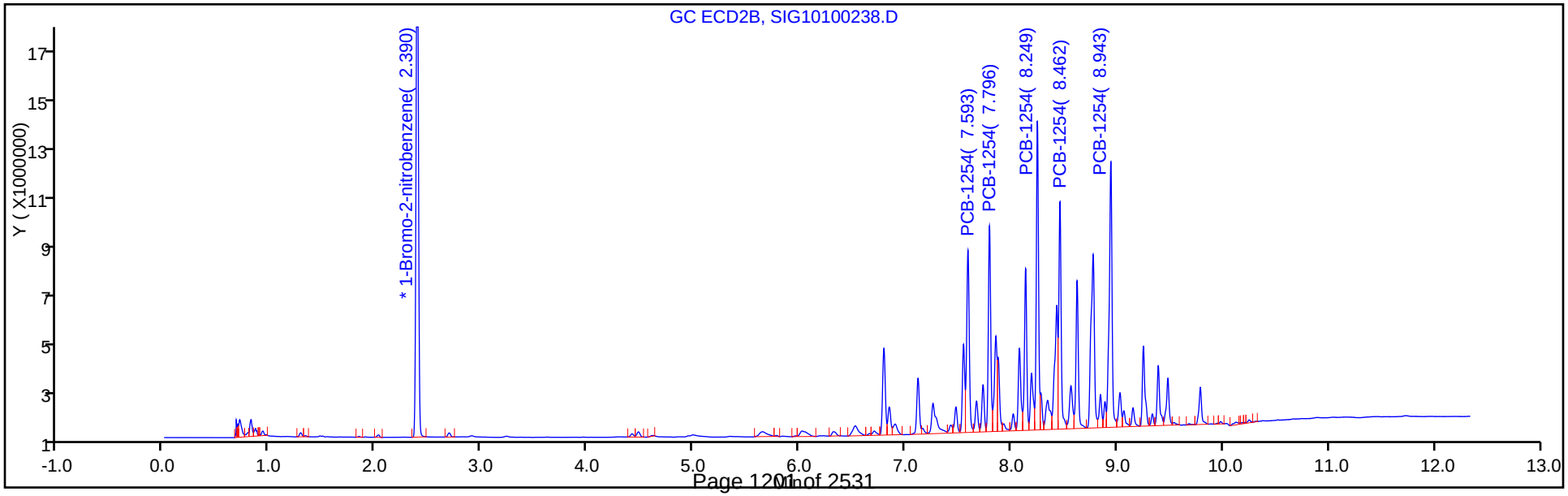
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100238.D

Injection Date:	02-Oct-2017 23:59:30	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1254			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/38 Calibration Date: 10/02/2017 23:59

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100238.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1254 Peak 1	Ave	0.0392	0.0361		0.460	0.500	-7.9	20.0
PCB-1254 Peak 2	Ave	0.0441	0.0371		0.421	0.500	-15.9	20.0
PCB-1254 Peak 3	Ave	0.0658	0.0523		0.397	0.500	-20.5*	20.0
PCB-1254 Peak 4	Ave	0.0476	0.0410		0.430	0.500	-14.0	20.0
PCB-1254 Peak 5	Ave	0.0640	0.0572		0.447	0.500	-10.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/38 Calibration Date: 10/02/2017 23:59

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG10100238.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1254 Peak 1	7.59	7.57	7.61
PCB-1254 Peak 2	7.80	7.78	7.82
PCB-1254 Peak 3	8.25	8.23	8.27
PCB-1254 Peak 4	8.46	8.44	8.48
PCB-1254 Peak 5	8.94	8.92	8.96

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100238.D
Lims ID: icv 1254
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2017 23:59:30 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-038
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: grantk Date: 03-Oct-2017 08:04:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.949	0.001	191929965	0.0500	0.0500	
2	2.390	2.391	0.000	35289265	0.0500	0.0500	
8 PCB-1254							
1	6.790	6.788	0.002	78864805	0.5000	0.4172	
1	7.239	7.239	0.000	101238640	0.5000	0.4149	
1	7.535	7.536	-0.001	77781233	0.5000	0.4194	
1	7.726	7.726	0.000	73249479	0.5000	0.4290	
1	7.997	7.997	0.000	107389840	0.5000	0.4364	
		Average of Peak Amounts =				0.4234	
2	7.593	7.593	0.000	12752672	0.5000	0.4605	
2	7.796	7.796	0.000	13080349	0.5000	0.4205	
2	8.249	8.249	0.000	18458103	0.5000	0.3973	
2	8.462	8.462	0.000	14463221	0.5000	0.4302	
2	8.943	8.943	0.000	20184459	0.5000	0.4471	
		Average of Peak Amounts =				0.4311	
						RPD = 1.81	

Reagents:

SG1254ICV@1.0_00020 Amount Added: 0.50 Units: mL
SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

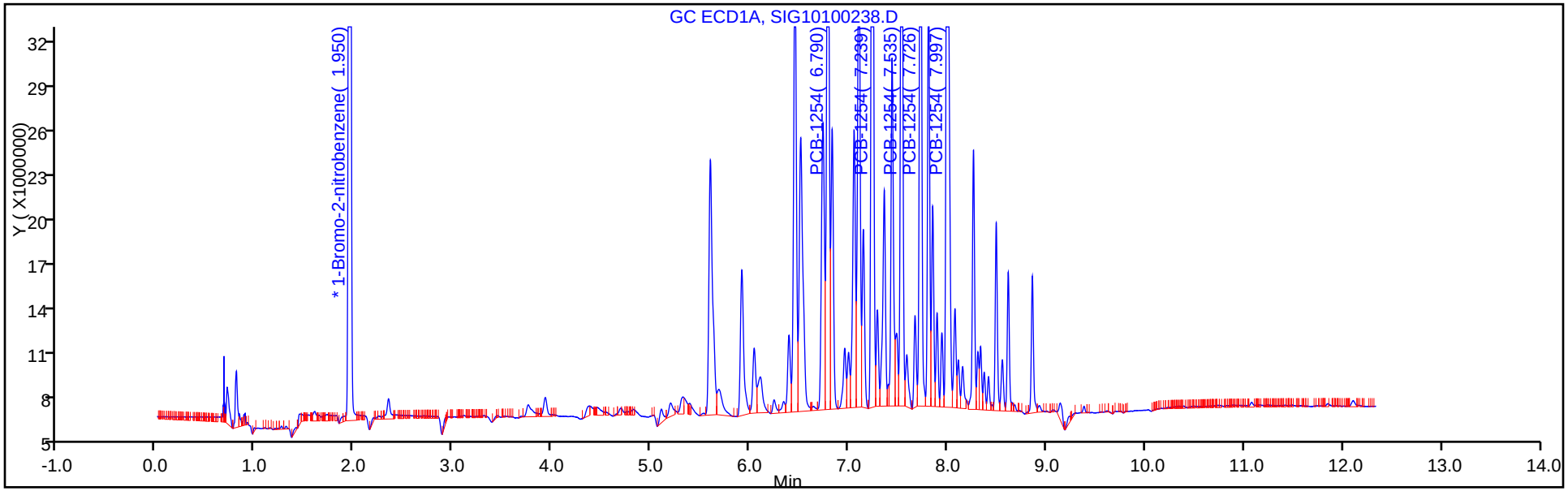
Report Date: 03-Oct-2017 08:44:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

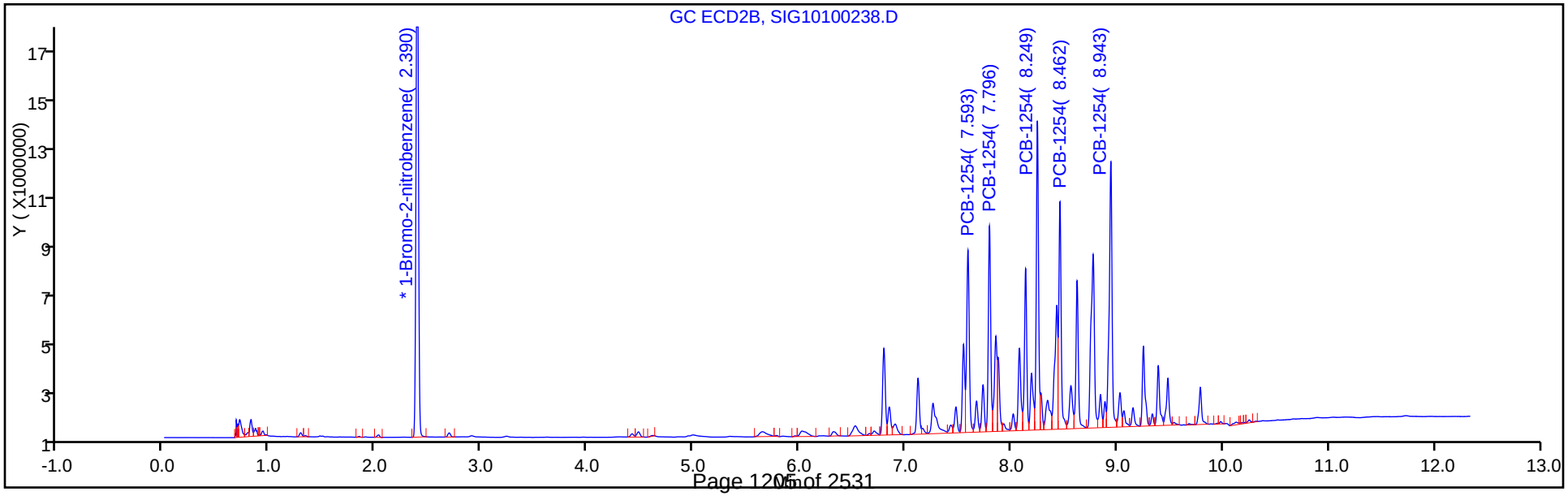
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100238.D

Injection Date:	02-Oct-2017 23:59:30	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1254			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/39 Calibration Date: 10/03/2017 00:17

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 20:56

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 22:27

Lab File ID: SIG10100239.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0279	0.0268		0.481	0.500	-3.8	20.0
PCB-1016 Peak 2	Ave	0.0486	0.0477		0.490	0.500	-1.9	20.0
PCB-1016 Peak 3	Ave	0.0987	0.0899		0.456	0.500	-8.9	20.0
PCB-1016 Peak 4	Ave	0.0439	0.0450		0.513	0.500	2.5	20.0
PCB-1016 Peak 5	Ave	0.0200	0.0219		0.548	0.500	9.5	20.0
PCB-1260 Peak 1	Ave	0.0575	0.0549		0.478	0.500	-4.5	20.0
PCB-1260 Peak 2	Ave	0.0872	0.0824		0.472	0.500	-5.5	20.0
PCB-1260 Peak 3	Ave	0.0964	0.0888		0.461	0.500	-7.9	20.0
PCB-1260 Peak 4	Ave	0.1167	0.1196		0.512	0.500	2.5	20.0
PCB-1260 Peak 5	Ave	0.0613	0.0604		0.493	0.500	-1.4	20.0
Tetrachloro-m-xylene	Ave	1.171	1.218		0.0260	0.0250	4.0	20.0
DCB Decachlorobiphenyl	Ave	0.8622	0.7164		0.0208	0.0250	-16.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/39 Calibration Date: 10/03/2017 00:17

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 20:56

GC Column: CLP-1 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 22:27

Lab File ID: SIG10100239.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.75	3.73	3.77
PCB-1016 Peak 2	4.35	4.33	4.37
PCB-1016 Peak 3	5.10	5.08	5.12
PCB-1016 Peak 4	5.30	5.28	5.32
PCB-1016 Peak 5	5.68	5.66	5.70
PCB-1260 Peak 1	7.44	7.42	7.46
PCB-1260 Peak 2	7.73	7.71	7.75
PCB-1260 Peak 3	8.00	7.98	8.02
PCB-1260 Peak 4	8.61	8.60	8.63
PCB-1260 Peak 5	8.86	8.84	8.88
Tetrachloro-m-xylene	3.07	3.05	3.09
DCB Decachlorobiphenyl	9.76	9.75	9.79

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100239.D
Lims ID: icv 1660
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 00:17:47 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-039
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:26:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	192332641	0.0500	0.0500	
2	2.390	2.391	-0.001	35517767	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	117155501	0.0250	0.0260	
2	4.015	4.016	-0.001	19318085	0.0250	0.0255	
						RPD = 1.81	
6 PCB-1016							
1	3.746	3.746	0.000	51583263	0.5000	0.4811	
1	4.352	4.352	0.000	91670997	0.5000	0.4903	
1	5.099	5.097	0.002	172941646	0.5000	0.4557	
1	5.300	5.300	0.000	86535213	0.5000	0.5125	
1	5.678	5.678	0.000	42172020	0.5000	0.5475	
		Average of Peak Amounts =				0.4974	
2	4.947	4.947	0.000	10163162	0.5000	0.5345	
2	5.628	5.629	-0.001	18088378	0.5000	0.5076	
2	6.335	6.335	0.000	36494999	0.5000	0.5254	
2	6.522	6.522	0.000	15408046	0.5000	0.5398	
2	6.895	6.895	0.000	7620345	0.5000	0.5355	
		Average of Peak Amounts =				0.5286	
						RPD = 6.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.438	7.438	0.000	105576982	0.5000	0.4776	
1	7.726	7.726	0.000	158455188	0.5000	0.4724	
1	7.996	7.996	0.000	170721436	0.5000	0.4606	
1	8.613	8.614	-0.001	230068650	0.5000	0.5123	
1	8.857	8.857	0.000	116201573	0.5000	0.4930	
		Average of Peak Amounts =				0.4832	
2	8.433	8.432	0.001	20695451	0.5000	0.4741	
2	8.624	8.623	0.001	24966359	0.5000	0.4902	
2	9.020	9.020	0.000	20286355	0.5000	0.5159	
2	9.481	9.481	0.000	48962166	0.5000	0.5297	
2	9.785	9.785	0.000	32235855	0.5000	0.5081	
		Average of Peak Amounts =				0.5036	
						RPD = 4.14	
$ 12 DCB Decachlorobiphenyl							
1	9.764	9.766	-0.002	68888464	0.0250	0.0208	
2	10.743	10.744	-0.001	16739888	0.0250	0.0242	
						RPD = 15.22	

Reagents:

SG1660ICV@1.0_00028	Amount Added: 0.50	Units: mL	
SGPCBISTD_00012	Amount Added: 5.00	Units: uL	Run Reagent

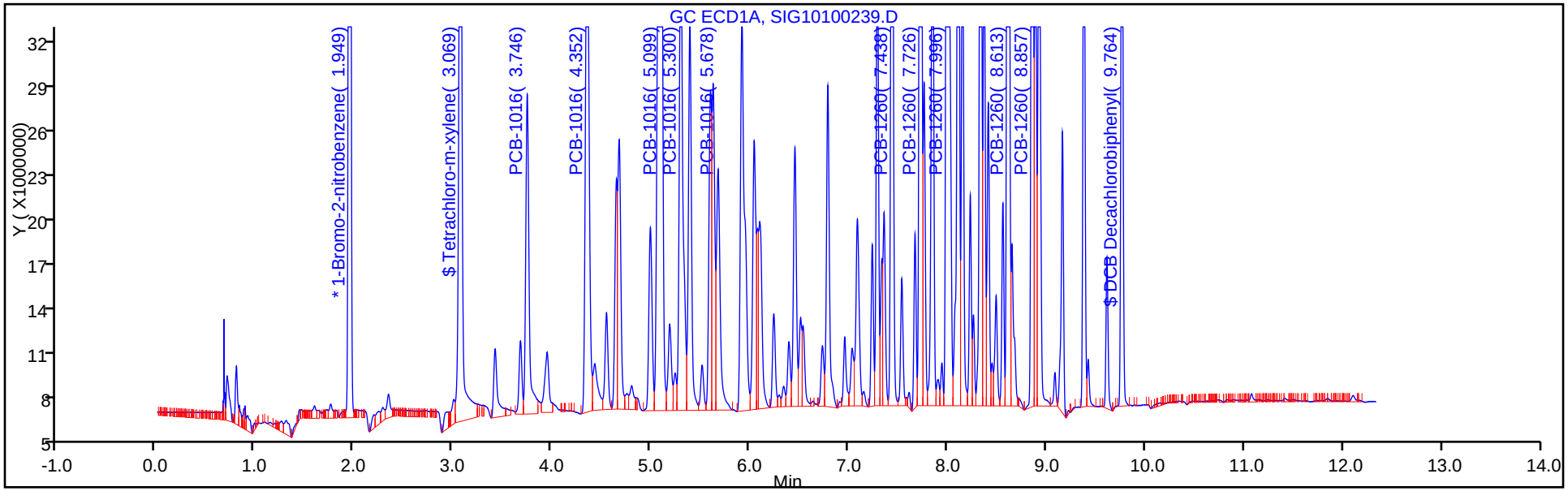
Report Date: 03-Oct-2017 08:44:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

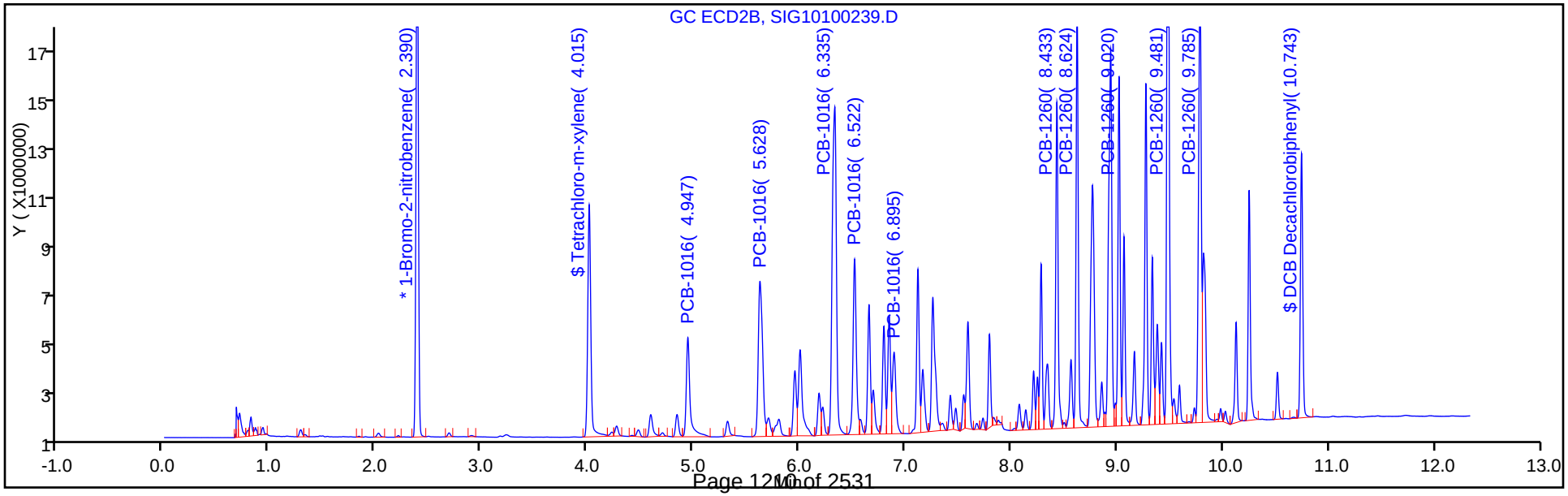
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100239.D

Injection Date:	03-Oct-2017 00:17:47	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1660			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/39 Calibration Date: 10/03/2017 00:17

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 20:56

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 22:27

Lab File ID: SIG10100239.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0268	0.0286		0.535	0.500	6.9	20.0
PCB-1016 Peak 2	Ave	0.0502	0.0509		0.508	0.500	1.5	20.0
PCB-1016 Peak 3	Ave	0.0978	0.1028		0.525	0.500	5.1	20.0
PCB-1016 Peak 4	Ave	0.0402	0.0434		0.540	0.500	8.0	20.0
PCB-1016 Peak 5	Ave	0.0200	0.0215		0.535	0.500	7.1	20.0
PCB-1260 Peak 1	Ave	0.0615	0.0583		0.474	0.500	-5.2	20.0
PCB-1260 Peak 2	Ave	0.0717	0.0703		0.490	0.500	-2.0	20.0
PCB-1260 Peak 3	Ave	0.0554	0.0571		0.516	0.500	3.2	20.0
PCB-1260 Peak 4	Ave	0.1301	0.1379		0.530	0.500	5.9	20.0
PCB-1260 Peak 5	Ave	0.0893	0.0908		0.508	0.500	1.6	20.0
Tetrachloro-m-xylene	Ave	1.065	1.088		0.0255	0.0250	2.2	20.0
DCB Decachlorobiphenyl	Ave	0.9741	0.9426		0.0242	0.0250	-3.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICV 240-297169/39 Calibration Date: 10/03/2017 00:17

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 20:56

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 22:27

Lab File ID: SIG10100239.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.95	4.93	4.97
PCB-1016 Peak 2	5.63	5.61	5.65
PCB-1016 Peak 3	6.34	6.32	6.35
PCB-1016 Peak 4	6.52	6.50	6.54
PCB-1016 Peak 5	6.90	6.88	6.91
PCB-1260 Peak 1	8.43	8.41	8.45
PCB-1260 Peak 2	8.62	8.60	8.64
PCB-1260 Peak 3	9.02	9.00	9.04
PCB-1260 Peak 4	9.48	9.46	9.50
PCB-1260 Peak 5	9.79	9.77	9.80
Tetrachloro-m-xylene	4.02	4.00	4.04
DCB Decachlorobiphenyl	10.74	10.73	10.76

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100239.D
Lims ID: icv 1660
Client ID:
Sample Type: ICV
Inject. Date: 03-Oct-2017 00:17:47 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069238-039
Operator ID: Instrument ID: A2HP13
Sublist:

Method: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 03-Oct-2017 08:44:06 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK019

First Level Reviewer: hassl Date: 03-Oct-2017 06:26:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	192332641	0.0500	0.0500	
2	2.390	2.391	-0.001	35517767	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	117155501	0.0250	0.0260	
2	4.015	4.016	-0.001	19318085	0.0250	0.0255	
						RPD = 1.81	
6 PCB-1016							
1	3.746	3.746	0.000	51583263	0.5000	0.4811	
1	4.352	4.352	0.000	91670997	0.5000	0.4903	
1	5.099	5.097	0.002	172941646	0.5000	0.4557	
1	5.300	5.300	0.000	86535213	0.5000	0.5125	
1	5.678	5.678	0.000	42172020	0.5000	0.5475	
		Average of Peak Amounts =				0.4974	
2	4.947	4.947	0.000	10163162	0.5000	0.5345	
2	5.628	5.629	-0.001	18088378	0.5000	0.5076	
2	6.335	6.335	0.000	36494999	0.5000	0.5254	
2	6.522	6.522	0.000	15408046	0.5000	0.5398	
2	6.895	6.895	0.000	7620345	0.5000	0.5355	
		Average of Peak Amounts =				0.5286	
						RPD = 6.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.438	7.438	0.000	105576982	0.5000	0.4776	
1	7.726	7.726	0.000	158455188	0.5000	0.4724	
1	7.996	7.996	0.000	170721436	0.5000	0.4606	
1	8.613	8.614	-0.001	230068650	0.5000	0.5123	
1	8.857	8.857	0.000	116201573	0.5000	0.4930	
		Average of Peak Amounts =				0.4832	
2	8.433	8.432	0.001	20695451	0.5000	0.4741	
2	8.624	8.623	0.001	24966359	0.5000	0.4902	
2	9.020	9.020	0.000	20286355	0.5000	0.5159	
2	9.481	9.481	0.000	48962166	0.5000	0.5297	
2	9.785	9.785	0.000	32235855	0.5000	0.5081	
		Average of Peak Amounts =				0.5036	
						RPD = 4.14	
$ 12 DCB Decachlorobiphenyl							
1	9.764	9.766	-0.002	68888464	0.0250	0.0208	
2	10.743	10.744	-0.001	16739888	0.0250	0.0242	
						RPD = 15.22	

Reagents:

SG1660ICV@1.0_00028	Amount Added: 0.50	Units: mL	
SGPCBISTD_00012	Amount Added: 5.00	Units: uL	Run Reagent

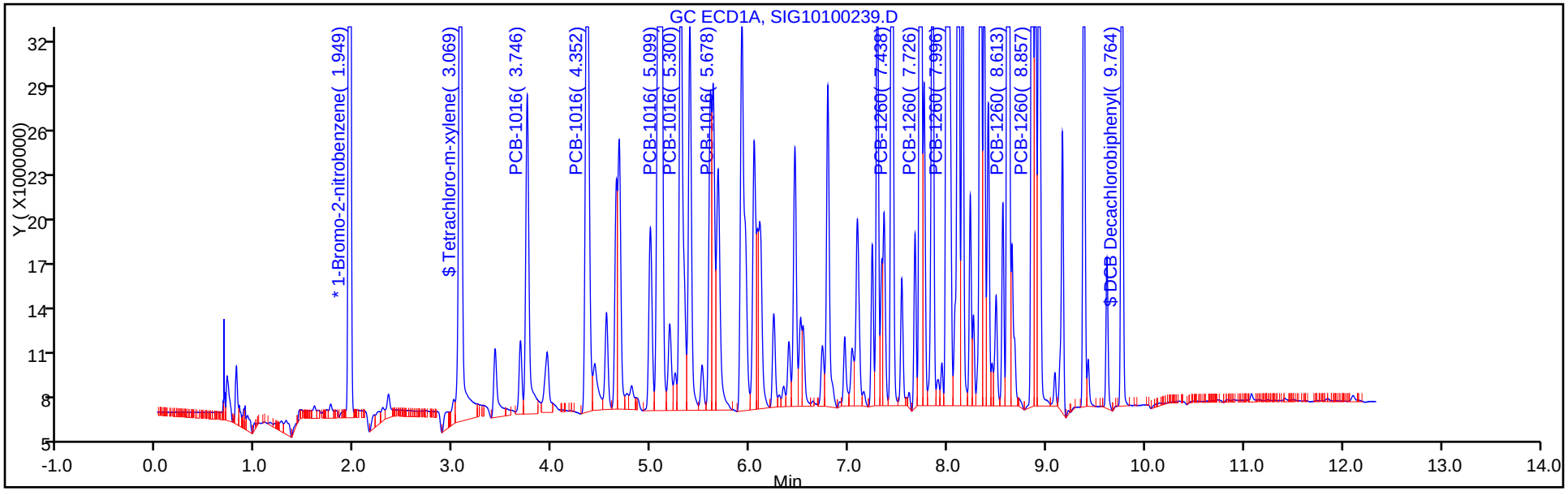
Report Date: 03-Oct-2017 08:44:43 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

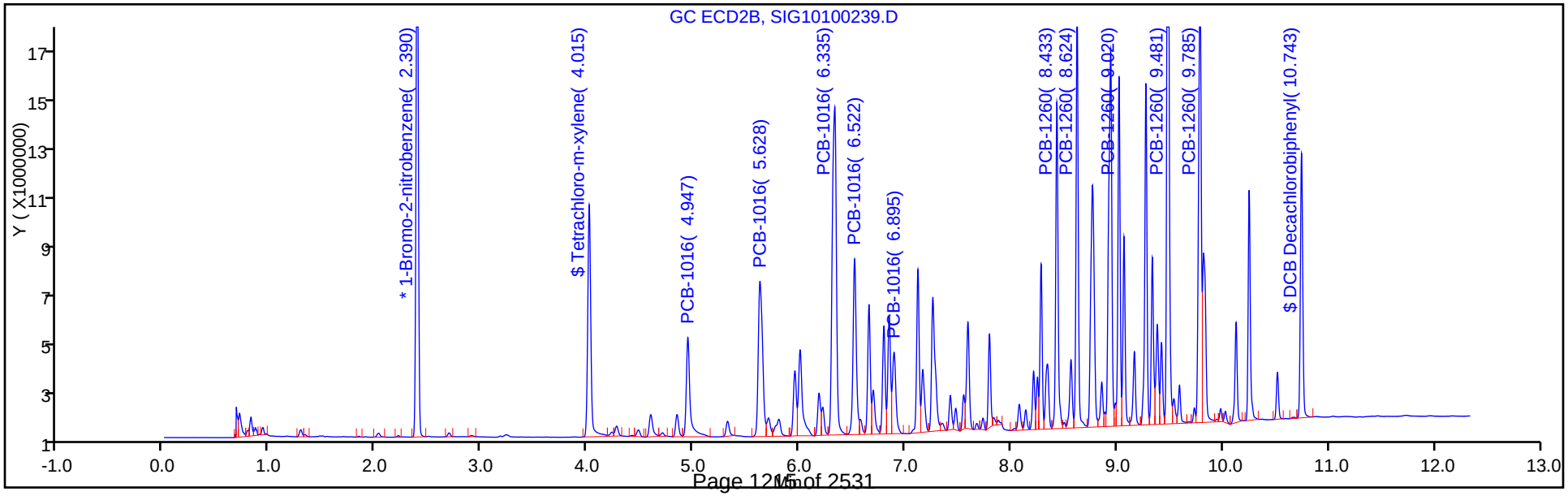
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100239.D

Injection Date:	03-Oct-2017 00:17:47	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	icv 1660			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/3 Calibration Date: 10/06/2017 14:45

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 20:56

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 22:27

Lab File ID: SIG1100603.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0268	0.0236		0.440	0.500	-11.9	20.0
PCB-1016 Peak 2	Ave	0.0502	0.0458		0.457	0.500	-8.6	20.0
PCB-1016 Peak 3	Ave	0.0978	0.1017		0.520	0.500	4.0	20.0
PCB-1016 Peak 4	Ave	0.0402	0.0424		0.527	0.500	5.4	20.0
PCB-1016 Peak 5	Ave	0.0200	0.0187		0.465	0.500	-6.9	20.0
PCB-1260 Peak 1	Ave	0.0615	0.0611		0.497	0.500	-0.5	20.0
PCB-1260 Peak 2	Ave	0.0717	0.0765		0.534	0.500	6.7	20.0
PCB-1260 Peak 3	Ave	0.0554	0.0600		0.542	0.500	8.4	20.0
PCB-1260 Peak 4	Ave	0.1301	0.1501		0.577	0.500	15.3	20.0
PCB-1260 Peak 5	Ave	0.0893	0.1022		0.572	0.500	14.4	20.0
Tetrachloro-m-xylene	Ave	1.065	1.062		0.0249	0.0250	-0.3	20.0
DCB Decachlorobiphenyl	Ave	0.9741	1.102		0.0283	0.0250	13.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/3 Calibration Date: 10/06/2017 14:45

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 20:56

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 22:27

Lab File ID: SIG1100603.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.95	4.93	4.97
PCB-1016 Peak 2	5.63	5.61	5.65
PCB-1016 Peak 3	6.33	6.32	6.35
PCB-1016 Peak 4	6.52	6.50	6.54
PCB-1016 Peak 5	6.89	6.87	6.91
PCB-1260 Peak 1	8.43	8.41	8.45
PCB-1260 Peak 2	8.62	8.61	8.64
PCB-1260 Peak 3	9.02	9.00	9.04
PCB-1260 Peak 4	9.48	9.46	9.50
PCB-1260 Peak 5	9.78	9.77	9.80
Tetrachloro-m-xylene	4.02	4.00	4.04
DCB Decachlorobiphenyl	10.74	10.72	10.76

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100603.D
Lims ID: CCV AR1660
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Oct-2017 14:45:02 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-003
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub5

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:32:04 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 07:46:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.950	1.950	0.000	231102964	0.0500	0.0500	
2	2.391	2.391	0.000	40139093	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.069	3.069	0.000	127035099	0.0250	0.0235	
2	4.016	4.016	0.000	21304454	0.0250	0.0249	
						RPD = 6.02	
6 PCB-1016							
1	3.746	3.746	0.000	50384714	0.5000	0.3911	
1	4.352	4.352	0.000	102582230	0.5000	0.4566	
1	5.097	5.097	0.000	230098382	0.5000	0.5046	
1	5.299	5.299	0.000	98100700	0.5000	0.4835	
1	5.676	5.676	0.000	50070999	0.5000	0.5410	
		Average of Peak Amounts =				0.4754	
2	4.947	4.947	0.000	9460402	0.5000	0.4403	
2	5.628	5.628	0.000	18393828	0.5000	0.4568	
2	6.334	6.334	0.000	40801918	0.5000	0.5198	
2	6.522	6.522	0.000	17007516	0.5000	0.5272	
2	6.893	6.893	0.000	7486033	0.5000	0.4655	
		Average of Peak Amounts =				0.4819	
						RPD = 1.37	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.437	7.437	0.000	139545757	0.5000	0.5254	
1	7.725	7.725	0.000	215311553	0.5000	0.5342	
1	7.994	7.994	0.000	242271009	0.5000	0.5439	
1	8.611	8.611	0.000	303298883	0.5000	0.5621	
1	8.856	8.856	0.000	159085516	0.5000	0.5617	
		Average of Peak Amounts =				0.5455	
2	8.432	8.432	0.000	24538151	0.5000	0.4974	
2	8.624	8.624	0.000	30711039	0.5000	0.5336	
2	9.020	9.020	0.000	24080907	0.5000	0.5419	
2	9.481	9.481	0.000	60243279	0.5000	0.5767	
2	9.784	9.784	0.000	41005886	0.5000	0.5720	
		Average of Peak Amounts =				0.5443	
						RPD = 0.21	
$ 12 DCB Decachlorobiphenyl							
1	9.763	9.763	0.000	117538974	0.0250	0.0295	
2	10.743	10.743	0.000	22122576	0.0250	0.0283	
						RPD = 4.16	
16 1260 Res 1							
1	8.856	8.856	0.000	159085516	NR	NR	
2	9.979	9.979	0.000	836771	NR	NR	
13 1260 Res 2							
1	8.887	8.887	0.000	71365134	NR	NR	
2	9.818	9.818	0.000	17820611	NR	NR	
15 1260 Res 3							
1	8.925	8.925	0.000	98015289	NR	NR	
2	0.793	0.793	0.000	430600	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SG 1260 res_00002	Amount Added:	1.00	Units: mL
SG1660@0.5PPM_00074	Amount Added:	1.00	Units: mL

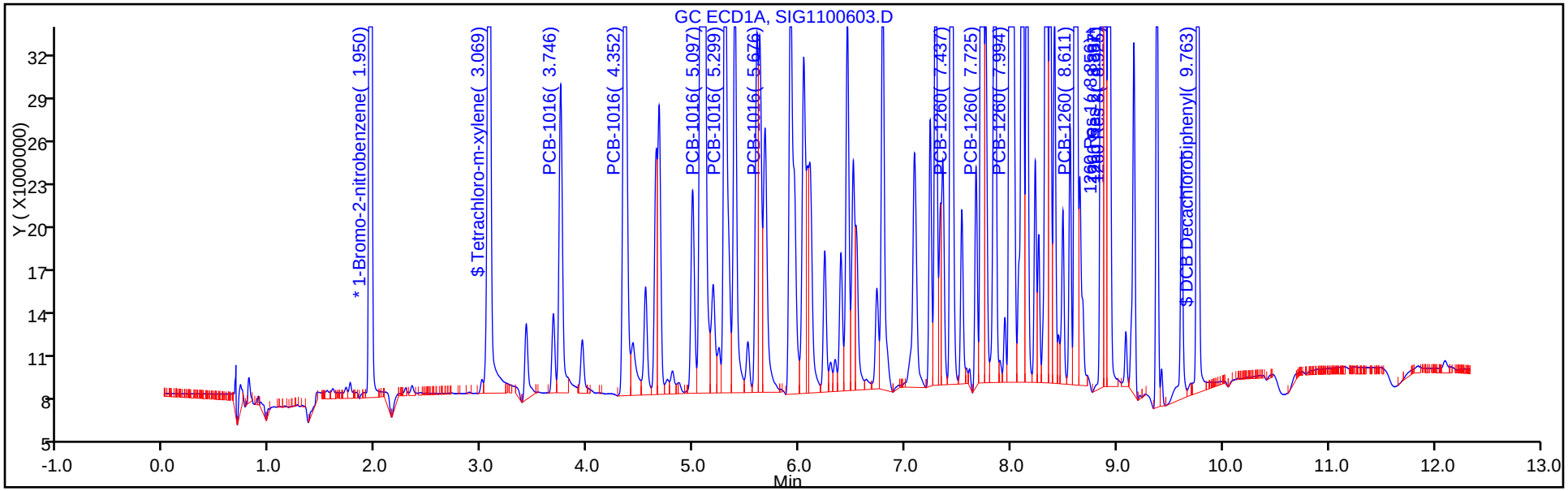
Report Date: 09-Oct-2017 08:32:06 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

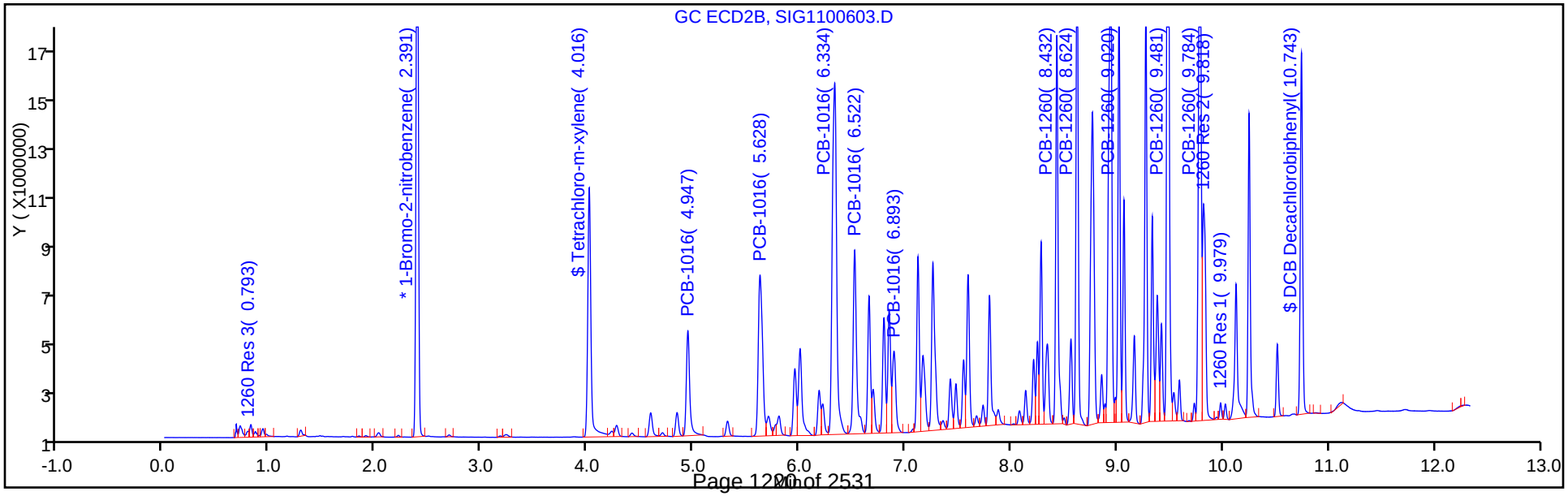
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100603.D

Injection Date:	06-Oct-2017 14:45:02	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	CCV AR1660			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/4 Calibration Date: 10/06/2017 15:03

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 13:35

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 15:07

Lab File ID: SIG1100604.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	0.0247	0.0231		0.466	0.500	-6.7	20.0
PCB-1232 Peak 2	Ave	0.0212	0.0192		0.453	0.500	-9.4	20.0
PCB-1232 Peak 3	Ave	0.0386	0.0381		0.494	0.500	-1.2	20.0
PCB-1232 Peak 4	Ave	0.0161	0.0166		0.516	0.500	3.1	20.0
PCB-1232 Peak 5	Ave	0.0112	0.0110		0.494	0.500	-1.2	20.0
PCB-1262 Peak 1	Ave	0.0488	0.0468		0.480	0.500	-4.0	20.0
PCB-1262 Peak 2	Ave	0.0718	0.0709		0.493	0.500	-1.3	20.0
PCB-1262 Peak 3	Ave	0.0622	0.0613		0.492	0.500	-1.6	20.0
PCB-1262 Peak 4	Ave	0.1371	0.1359		0.496	0.500	-0.8	20.0
PCB-1262 Peak 5	Ave	0.0970	0.0956		0.493	0.500	-1.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/4 Calibration Date: 10/06/2017 15:03

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 13:35

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 15:07

Lab File ID: SIG1100604.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	4.95	4.93	4.96
PCB-1232 Peak 2	5.63	5.61	5.65
PCB-1232 Peak 3	6.33	6.32	6.35
PCB-1232 Peak 4	6.52	6.50	6.54
PCB-1232 Peak 5	7.12	7.10	7.14
PCB-1262 Peak 1	8.62	8.60	8.64
PCB-1262 Peak 2	9.02	9.00	9.04
PCB-1262 Peak 3	9.27	9.25	9.29
PCB-1262 Peak 4	9.48	9.46	9.50
PCB-1262 Peak 5	9.78	9.76	9.80

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100604.D
Lims ID: CCV AR1232/1262
Client ID:
Sample Type: CCV
Inject. Date: 06-Oct-2017 15:03:22 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-004
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub1

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:32:08 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 07:48:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.948	1.948	0.000	235598084	0.0500	0.0500	
2	2.389	2.389	0.000	39377137	0.0500	0.0500	
4 PCB-1232							M
1	3.743	3.743	0.000	53581487	0.5000	0.4451	
1	4.349	4.349	0.000	40878566	0.5000	0.4130	
1	5.096	5.096	0.000	87923116	0.5000	0.4517	M
1	5.297	5.297	0.000	37950638	0.5000	0.4460	
1	5.674	5.674	0.000	17463455	0.5000	0.5304	
		Average of Peak Amounts =				0.4573	
2	4.945	4.945	0.000	9090331	0.5000	0.4664	
2	5.626	5.626	0.000	7560509	0.5000	0.4532	
2	6.334	6.334	0.000	14999524	0.5000	0.4939	
2	6.521	6.521	0.000	6536979	0.5000	0.5157	
2	7.119	7.119	0.000	4342350	0.5000	0.4939	
		Average of Peak Amounts =				0.4846	
						RPD = 5.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1	7.724	7.724	0.000	119557966	0.5000	0.4599	
1	8.106	8.106	0.000	156744906	0.5000	0.4490	
1	8.332	8.332	0.000	135422232	0.5000	0.4642	
1	8.611	8.611	0.000	278327584	0.5000	0.4607	
1	8.887	8.887	0.000	115635704	0.5000	0.4485	
		Average of Peak Amounts =				0.4564	
2	8.623	8.623	0.000	18425268	0.5000	0.4799	
2	9.019	9.019	0.000	27897756	0.5000	0.4933	
2	9.273	9.273	0.000	24121098	0.5000	0.4921	
2	9.480	9.480	0.000	53526989	0.5000	0.4959	
2	9.780	9.780	0.000	37636942	0.5000	0.4929	
		Average of Peak Amounts =				0.4908	
						RPD = 7.26	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG3262@0.5PPM_00021 Amount Added: 1.00 Units: mL

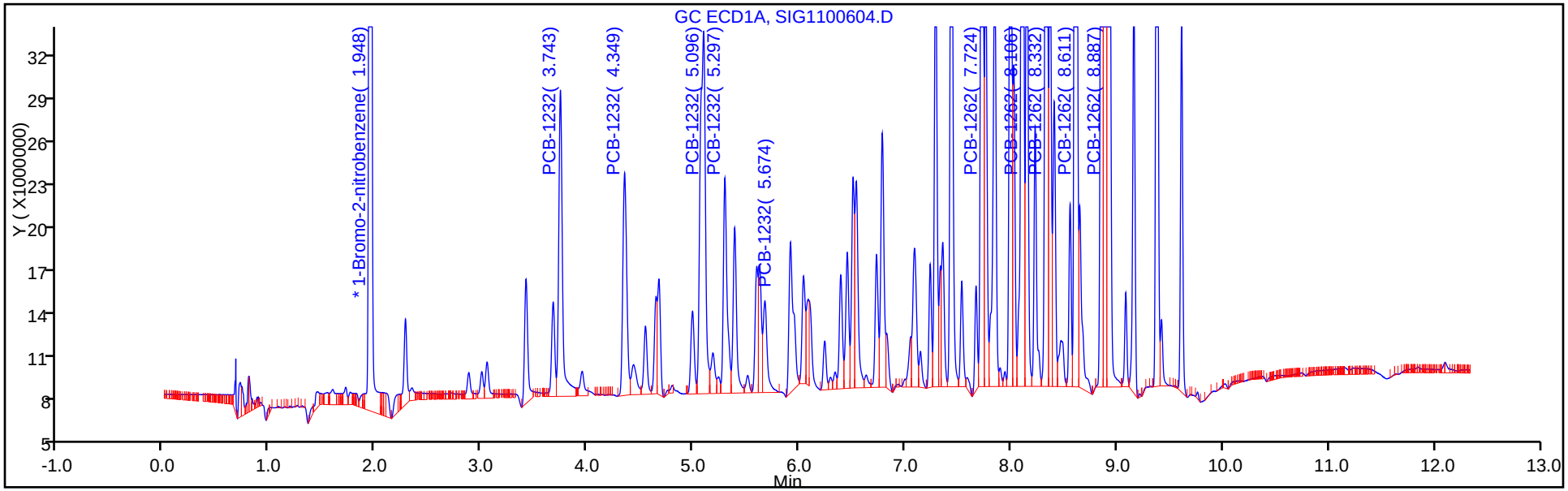
Report Date: 09-Oct-2017 08:32:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

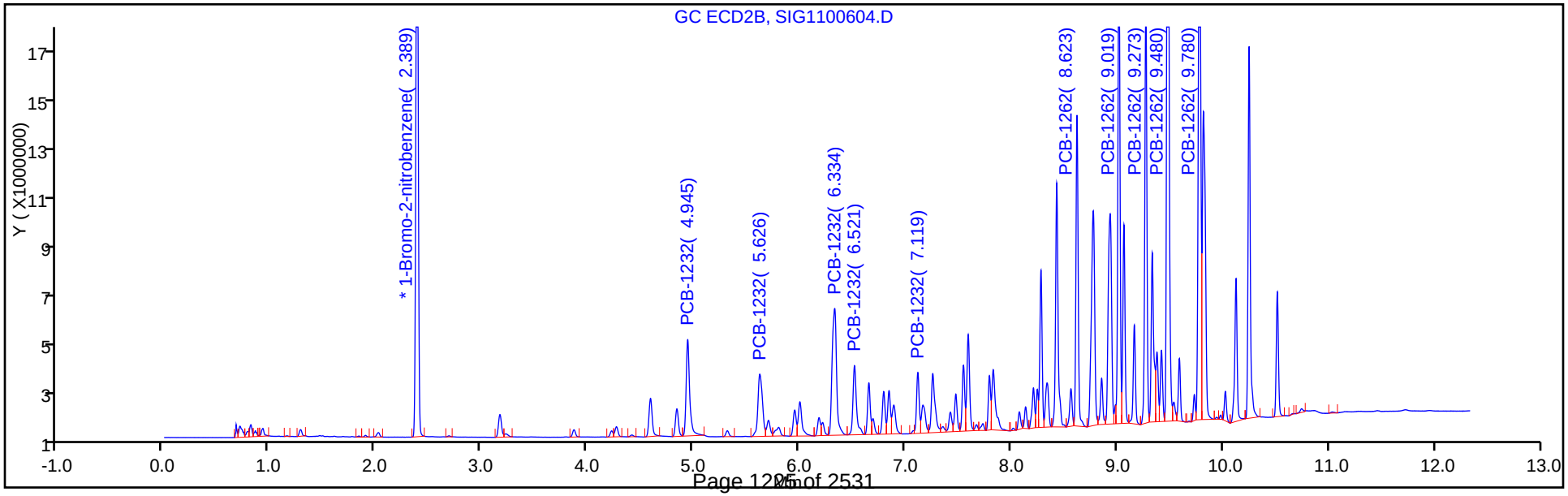
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100604.D

Injection Date:	06-Oct-2017 15:03:22	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	CCV AR1232/1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/5 Calibration Date: 10/06/2017 15:21

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 15:25

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 16:57

Lab File ID: SIG1100605.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	0.0181	0.0161		0.446	0.500	-10.9	20.0
PCB-1242 Peak 2	Ave	0.0337	0.0319		0.472	0.500	-5.6	20.0
PCB-1242 Peak 3	Ave	0.0663	0.0684		0.516	0.500	3.1	20.0
PCB-1242 Peak 4	Ave	0.0278	0.0294		0.529	0.500	5.7	20.0
PCB-1242 Peak 5	Ave	0.0213	0.0212		0.497	0.500	-0.6	20.0
PCB-1268 Peak 1	Ave	0.1616	0.1719		0.532	0.500	6.4	20.0
PCB-1268 Peak 2	Ave	0.1593	0.1671		0.524	0.500	4.9	20.0
PCB-1268 Peak 3	Ave	0.1348	0.1417		0.526	0.500	5.1	20.0
PCB-1268 Peak 4	Ave	0.0563	0.0596		0.529	0.500	5.9	20.0
PCB-1268 Peak 5	Ave	0.4147	0.4445		0.536	0.500	7.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/5 Calibration Date: 10/06/2017 15:21

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 15:25

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 16:57

Lab File ID: SIG1100605.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	4.95	4.93	4.97
PCB-1242 Peak 2	5.63	5.61	5.65
PCB-1242 Peak 3	6.34	6.32	6.35
PCB-1242 Peak 4	6.52	6.50	6.54
PCB-1242 Peak 5	7.12	7.10	7.14
PCB-1268 Peak 1	9.78	9.76	9.80
PCB-1268 Peak 2	9.82	9.80	9.84
PCB-1268 Peak 3	10.02	10.01	10.04
PCB-1268 Peak 4	10.25	10.23	10.27
PCB-1268 Peak 5	10.52	10.50	10.53

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100605.D
Lims ID: CCV AR1242/1268
Client ID:
Sample Type: CCV
Inject. Date: 06-Oct-2017 15:21:49 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-005
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub2

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:32:13 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 07:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	224954734	0.0500	0.0500	
2	2.390	2.390	0.000	39074067	0.0500	0.0500	
5 PCB-1242							
1	3.745	3.745	0.000	36472143	0.5000	0.4367	
1	4.350	4.350	0.000	68882881	0.5000	0.4509	
1	5.095	5.095	0.000	152994811	0.5000	0.4980	
1	5.298	5.298	0.000	65798956	0.5000	0.4866	
1	5.676	5.676	0.000	33030908	0.5000	0.5770	
		Average of Peak Amounts =				0.4898	
2	4.946	4.946	0.000	6291313	0.5000	0.4456	
2	5.628	5.628	0.000	12445096	0.5000	0.4721	
2	6.335	6.335	0.000	26741112	0.5000	0.5157	
2	6.522	6.522	0.000	11470836	0.5000	0.5286	
2	7.120	7.120	0.000	8270867	0.5000	0.4970	
		Average of Peak Amounts =				0.4918	
						RPD = 0.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
11 PCB-1268							
1	8.888	8.888	0.000	333290233	0.5000	0.5241	
1	8.921	8.921	0.000	330940951	0.5000	0.5161	
1	9.083	9.083	0.000	282473568	0.5000	0.5182	
1	9.378	9.378	0.000	118936906	0.5000	0.5137	
1	9.611	9.611	0.000	825810312	0.5000	0.5239	
		Average of Peak Amounts =				0.5192	
2	9.777	9.777	0.000	67157515	0.5000	0.5318	
2	9.816	9.816	0.000	65282366	0.5000	0.5244	
2	10.024	10.024	0.000	55363208	0.5000	0.5256	
2	10.248	10.248	0.000	23269217	0.5000	0.5293	
2	10.515	10.515	0.000	173683194	0.5000	0.5359	
		Average of Peak Amounts =				0.5294	
						RPD = 1.95	

Reagents:

SG4268@0.5PPM_00025 Amount Added: 1.00 Units: mL

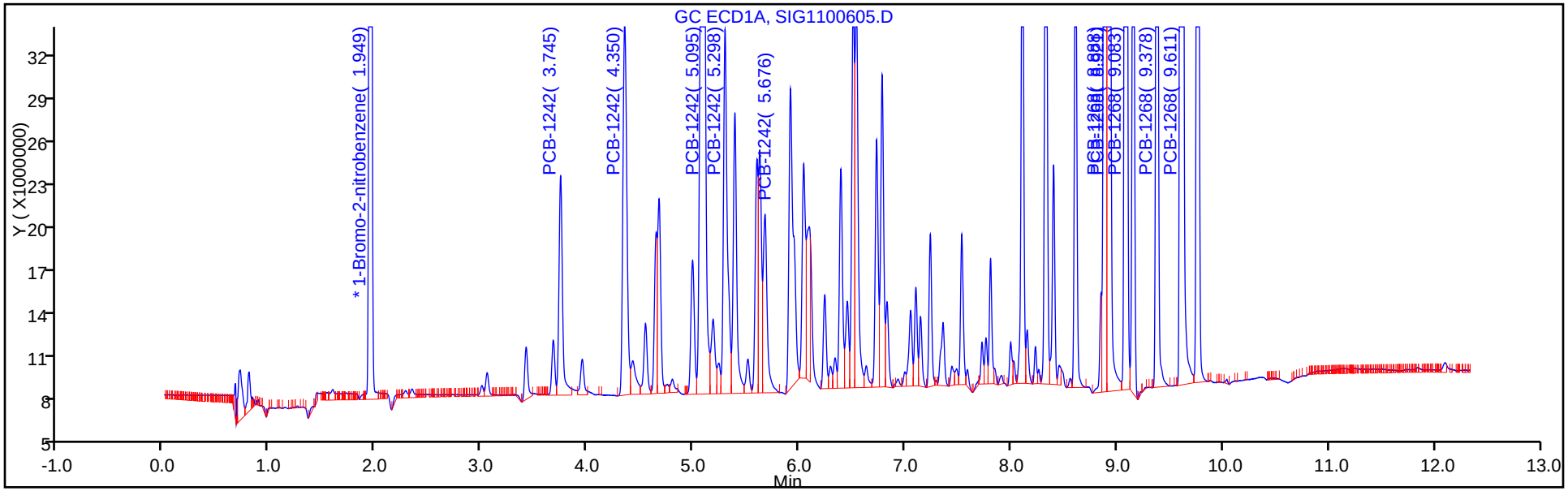
Report Date: 09-Oct-2017 08:32:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

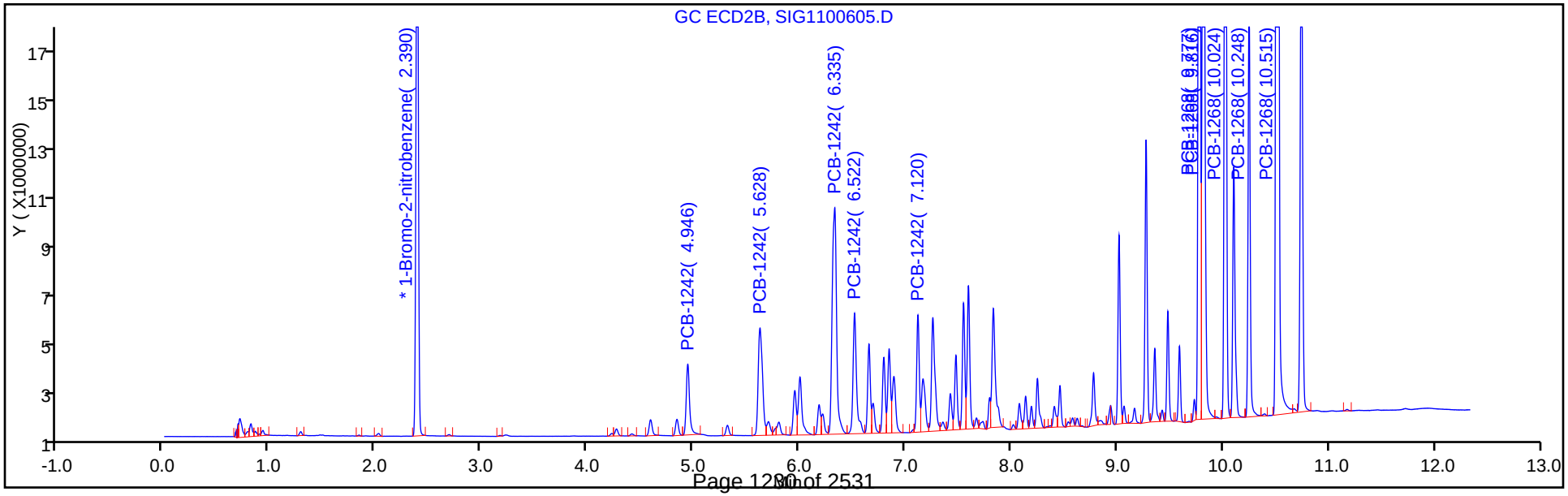
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100605.D

Injection Date:	06-Oct-2017 15:21:49	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	CCV AR1242/1268			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/6 Calibration Date: 10/06/2017 15:40

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 17:15

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 18:47

Lab File ID: SIG1100606.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0192	0.0175		0.454	0.500	-9.1	20.0
PCB-1248 Peak 2	Ave	0.0269	0.0271		0.504	0.500	0.8	20.0
PCB-1248 Peak 3	Ave	0.0403	0.0394		0.488	0.500	-2.4	20.0
PCB-1248 Peak 4	Ave	0.0422	0.0413		0.490	0.500	-2.1	20.0
PCB-1248 Peak 5	Ave	0.0225	0.0235		0.523	0.500	4.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/6 Calibration Date: 10/06/2017 15:40

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 17:15

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 18:47

Lab File ID: SIG1100606.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	5.63	5.61	5.65
PCB-1248 Peak 2	6.80	6.78	6.82
PCB-1248 Peak 3	7.26	7.24	7.28
PCB-1248 Peak 4	7.60	7.58	7.62
PCB-1248 Peak 5	8.25	8.23	8.27

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100606.D
Lims ID: CCV AR1248
Client ID:
Sample Type: CCV
Inject. Date: 06-Oct-2017 15:40:10 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-006
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub3

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:32:16 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 07:49:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	215830399	0.0500	0.0500	
2	2.390	2.390	0.000	37721215	0.0500	0.0500	
7 PCB-1248							
1	4.349	4.349	0.000	40723559	0.5000	0.4744	
1	5.916	5.916	0.000	104599967	0.5000	0.5361	
1	6.540	6.540	0.000	83385978	0.5000	0.5474	
1	6.783	6.783	0.000	76234284	0.5000	0.5160	
1	7.236	7.236	0.000	51936443	0.5000	0.5638	
		Average of Peak Amounts =				0.5275	
2	5.627	5.627	0.000	6596796	0.5000	0.4544	
2	6.798	6.798	0.000	10233925	0.5000	0.5040	
2	7.261	7.261	0.000	14846065	0.5000	0.4878	
2	7.596	7.596	0.000	15578821	0.5000	0.4896	
2	8.248	8.248	0.000	8875262	0.5000	0.5229	
		Average of Peak Amounts =				0.4917	
						RPD = 7.02	

Reagents:

SG1248@0.5ppm_00030 Amount Added: 1.00 Units: mL

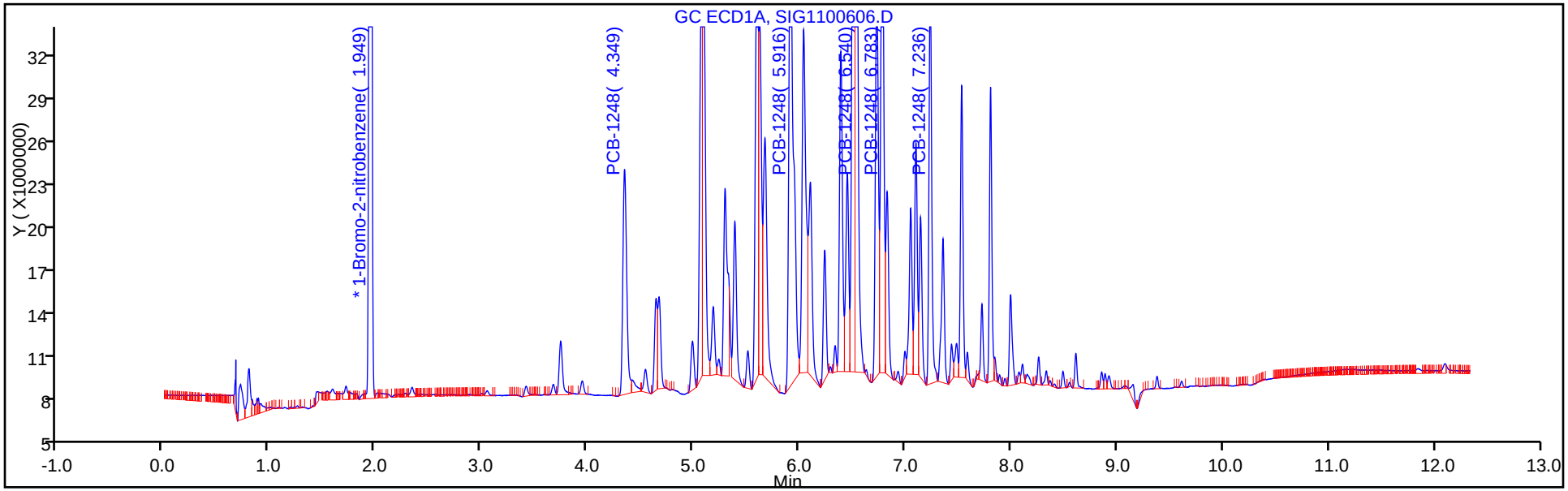
Report Date: 09-Oct-2017 08:32:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

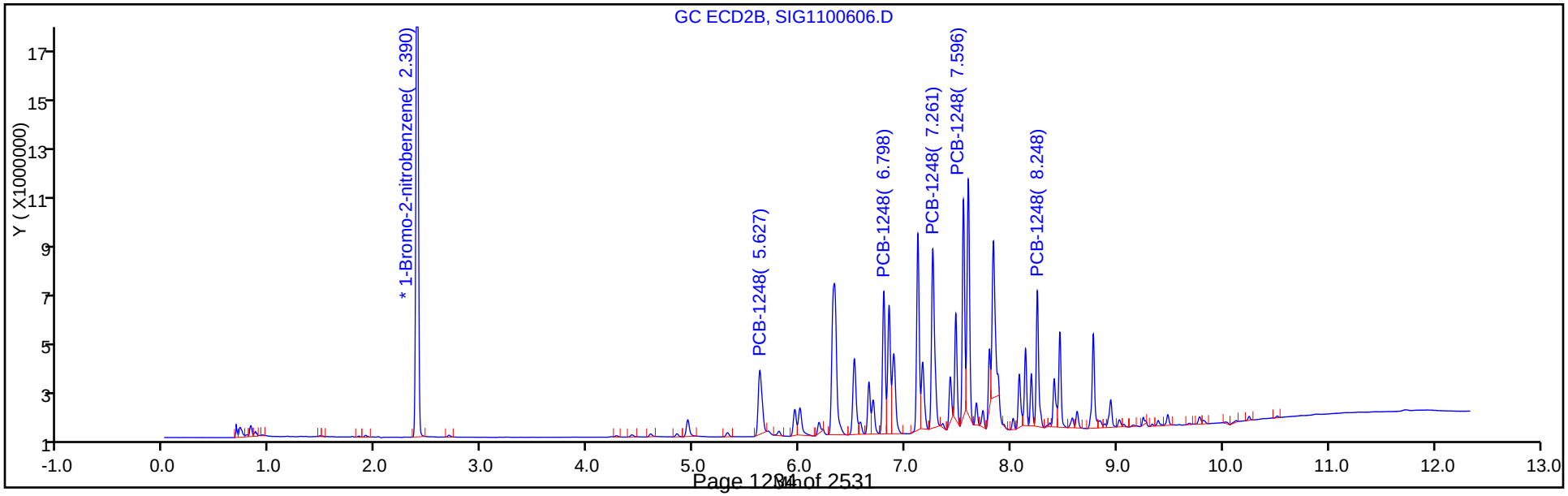
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100606.D

Injection Date:	06-Oct-2017 15:40:10	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	CCV AR1248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/7 Calibration Date: 10/06/2017 15:58

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG1100607.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0130	0.0116		0.445	0.500	-10.9	20.0
PCB-1221 Peak 2	Ave	0.0081	0.0074		0.455	0.500	-8.9	20.0
PCB-1221 Peak 3	Ave	0.0299	0.0271		0.452	0.500	-9.5	20.0
PCB-1254 Peak 1	Ave	0.0392	0.0384		0.489	0.500	-2.2	20.0
PCB-1254 Peak 2	Ave	0.0441	0.0412		0.467	0.500	-6.6	20.0
PCB-1254 Peak 3	Ave	0.0658	0.0576		0.437	0.500	-12.5	20.0
PCB-1254 Peak 4	Ave	0.0476	0.0474		0.498	0.500	-0.5	20.0
PCB-1254 Peak 5	Ave	0.0640	0.0656		0.512	0.500	2.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: CCV 240-297980/7 Calibration Date: 10/06/2017 15:58

Instrument ID: A2HP13 Calib Start Date: 10/02/2017 19:06

GC Column: CLP-2 (0.53mm) ID: 0.53(mm) Calib End Date: 10/02/2017 20:37

Lab File ID: SIG1100607.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	4.59	4.58	4.61
PCB-1221 Peak 2	4.84	4.83	4.86
PCB-1221 Peak 3	4.95	4.93	4.97
PCB-1254 Peak 1	7.59	7.57	7.61
PCB-1254 Peak 2	7.80	7.78	7.81
PCB-1254 Peak 3	8.25	8.23	8.27
PCB-1254 Peak 4	8.46	8.44	8.48
PCB-1254 Peak 5	8.94	8.92	8.96

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100607.D
Lims ID: CCV AR1221/1254
Client ID:
Sample Type: CCV
Inject. Date: 06-Oct-2017 15:58:31 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-007
Operator ID: Instrument ID: A2HP13
Sublist: chrom-PCB13 IS*sub4

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:32:19 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 07:51:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	225653421	0.0500	0.0500	
2	2.390	2.390	0.000	39166657	0.0500	0.0500	
3 PCB-1221							
1	3.418	3.418	0.000	26160548	0.5000	0.4531	
1	3.675	3.675	0.000	17019968	0.5000	0.4571	
1	3.744	3.744	0.000	57693072	0.5000	0.4283	
		Average of Peak Amounts =				0.4461	
2	4.594	4.594	0.000	4551287	0.5000	0.4453	
2	4.844	4.844	0.000	2881595	0.5000	0.4554	
2	4.946	4.946	0.000	10592974	0.5000	0.4525	
		Average of Peak Amounts =				0.4511	
						RPD = 1.10	
8 PCB-1254							
1	6.787	6.787	0.000	110094006	0.5000	0.4953	
1	7.236	7.236	0.000	149465161	0.5000	0.5210	
1	7.533	7.533	0.000	114320937	0.5000	0.5243	
1	7.724	7.724	0.000	104878055	0.5000	0.5224	
1	7.995	7.995	0.000	150971530	0.5000	0.5219	
		Average of Peak Amounts =				0.5170	
2	7.591	7.591	0.000	15032200	0.5000	0.4891	
2	7.795	7.795	0.000	16121342	0.5000	0.4670	
2	8.248	8.248	0.000	22547370	0.5000	0.4373	
2	8.461	8.461	0.000	18566874	0.5000	0.4976	
2	8.941	8.941	0.000	25675814	0.5000	0.5124	
		Average of Peak Amounts =				0.4807	
						RPD = 7.28	

Reagents:

SG2154@0.5PPM_00033 Amount Added: 1.00 Units: mL

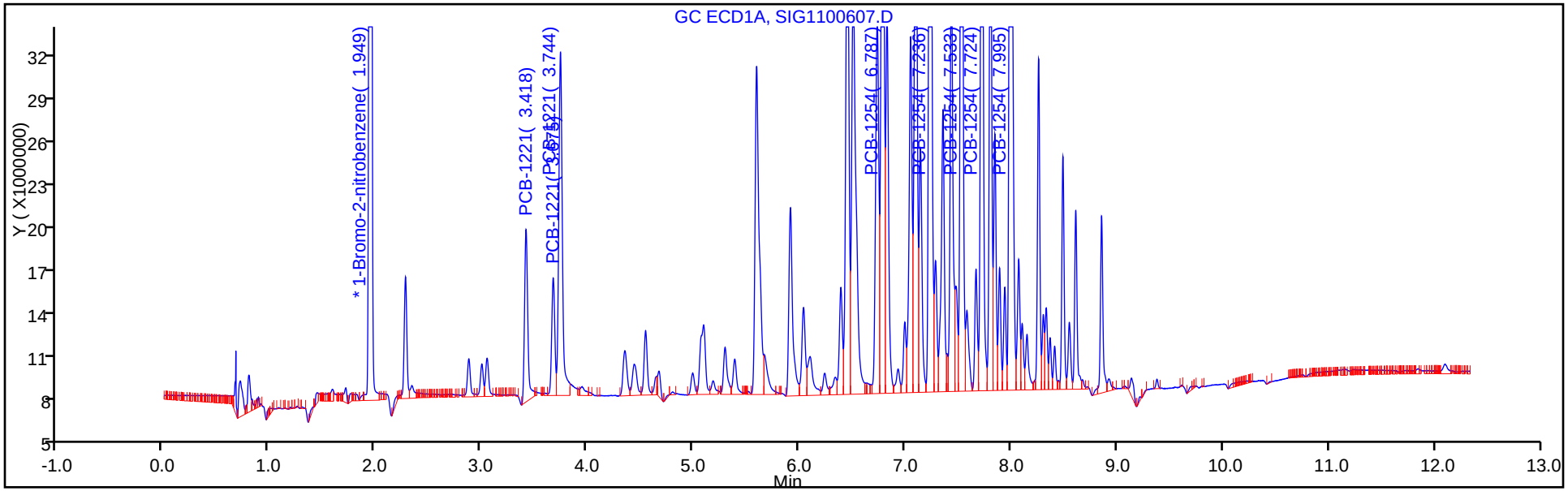
Report Date: 09-Oct-2017 08:32:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

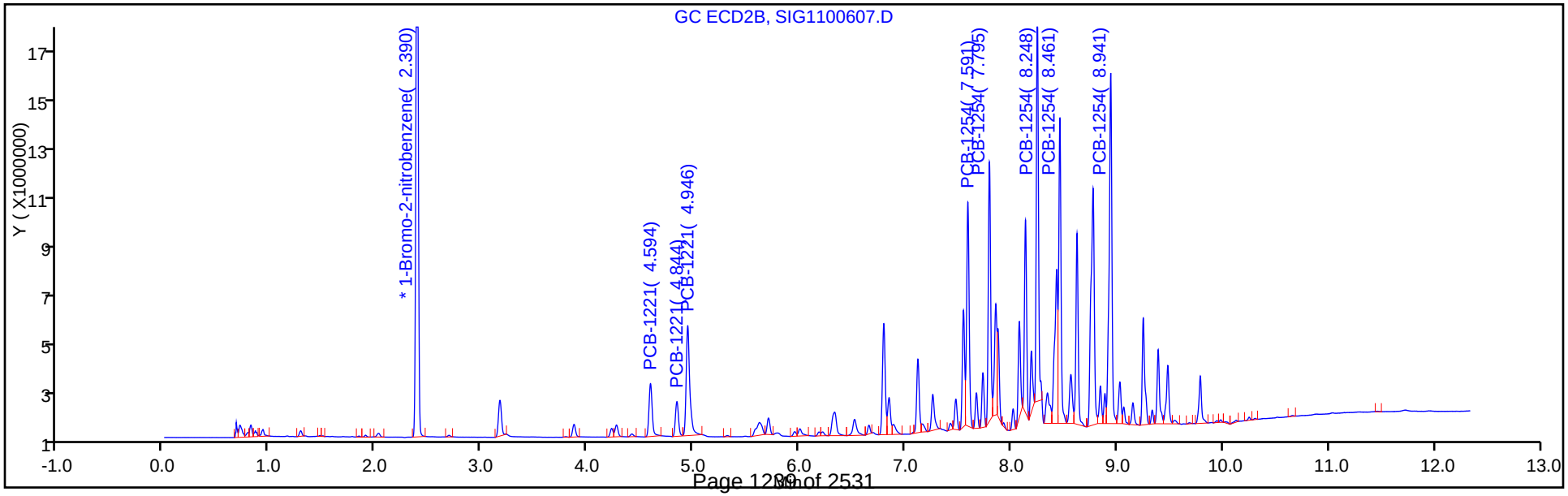
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100607.D

Injection Date:	06-Oct-2017 15:58:31	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	CCV AR1221/1254			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-297693/10-A

Matrix: Solid | Lab File ID: SIG1100614.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3540C | Date Extracted: 10/05/2017 08:47

Sample wt/vol: 10(g) | Date Analyzed: 10/06/2017 18:07

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 297980 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	24	U	50	24
11104-28-2	Aroclor-1221	23	U	50	23
11141-16-5	Aroclor-1232	16	U	50	16
53469-21-9	Aroclor-1242	20	U	50	20
12672-29-6	Aroclor-1248	17	U	50	17
11097-69-1	Aroclor-1254	14	U	50	14
11096-82-5	Aroclor-1260	18	U	50	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	78		14-128
2051-24-3	DCB Decachlorobiphenyl	102		10-132

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100614.D
Lims ID: MB 240-297693/10-A
Client ID:
Sample Type: MB
Inject. Date: 06-Oct-2017 18:07:04 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-014
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
* 14 1-Bromo-2-nitrobenzene							
1	1.948	1.949	-0.001	210801516	0.0500	0.0500	
2	2.388	2.390	-0.002	36598160	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.067	3.069	-0.002	78028179	0.0200	0.0158	
2	4.013	4.016	-0.003	12106085	0.0200	0.0155	
						RPD = 1.72	
3 PCB-1221							
1		3.418				ND	
1		3.675					
1		3.744					
2		4.594					
2		4.844					
2		4.946					
4 PCB-1232							
1		3.743				ND	
1		4.349					
1		5.096					
1		5.297					
1		5.674					
2		4.945					
2		5.626					
2		6.334					
2		6.521					
2		7.119					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		3.745				ND	
1		4.350					
1		5.095					
1		5.298					
1		5.676					
2		4.946					
2		5.628					
2		6.335					
2		6.522					
2		7.120					
6 PCB-1016							
1		3.746				ND	
1		4.352					
1		5.097					
1		5.299					
1		5.676					
2		4.947					
2		5.628					
2		6.334					
2		6.522					
2		6.893					
7 PCB-1248							
1		4.349				ND	
1		5.916					
1		6.540					
1		6.783					
1		7.236					
2		5.627					
2		6.798					
2		7.261					
2		7.596					
2		8.248					
8 PCB-1254							
1		6.787				ND	
1		7.236					
1		7.533					
1		7.724					
1		7.995					
2		7.591					
2		7.795					
2		8.248					
2		8.461					
2		8.941					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1		7.437				ND	
1		7.725					
1		7.994					
1		8.611					
1		8.856					
2		8.432					
2		8.624					
2		9.020					
2		9.481					
2		9.784					
9 PCB-1262							
1		7.724				ND	
1		8.106					
1		8.332					
1		8.611					
1		8.887					
2		8.623					
2		9.019					
2		9.273					
2		9.480					
2		9.780					
11 PCB-1268							
1		8.888				ND	
1		8.921					
1		9.083					
1		9.378					
1		9.611					
2		9.777					
2		9.816					
2		10.024					
2		10.248					
2		10.515					
$ 12 DCB Decachlorobiphenyl							
1	9.761	9.763	-0.002	74024708	0.0200	0.0204	
2	10.742	10.743	-0.001	14559385	0.0200	0.0204	
						RPD = 0.28	
16 1260 Res 1							
1		8.856				ND	
2		9.979					
13 1260 Res 2							
1		8.887				ND	
2		9.818					
15 1260 Res 3							
1	8.927	8.925	0.002	18845011		NR	
2	0.782	0.793	-0.011	556359		NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

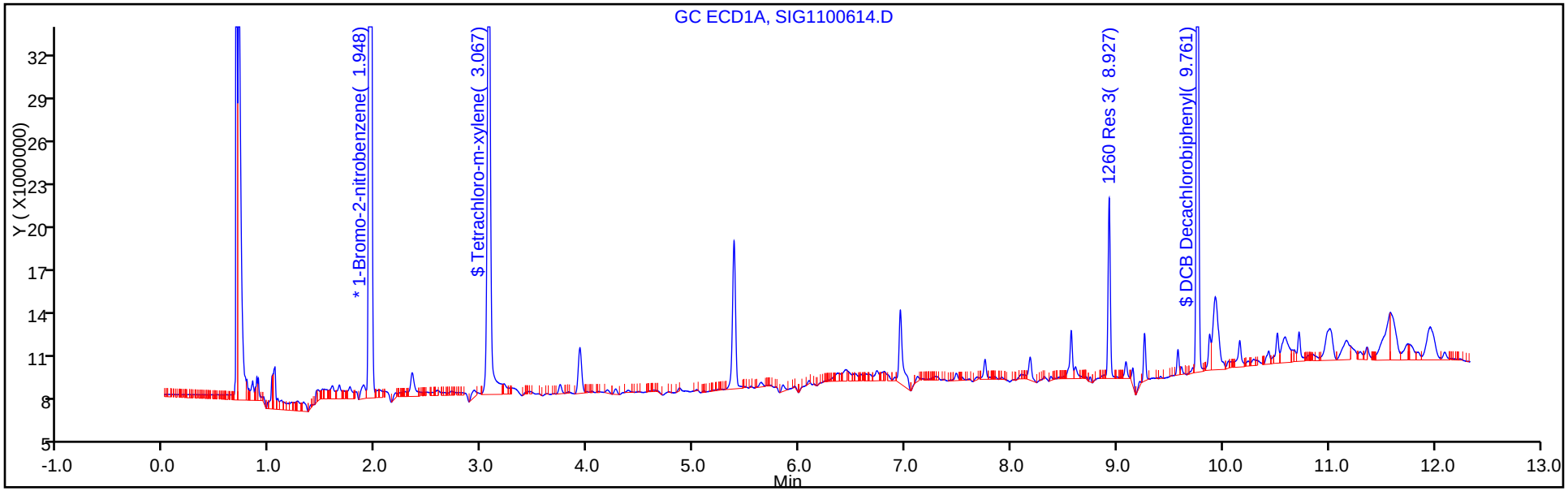
Report Date: 09-Oct-2017 08:31:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

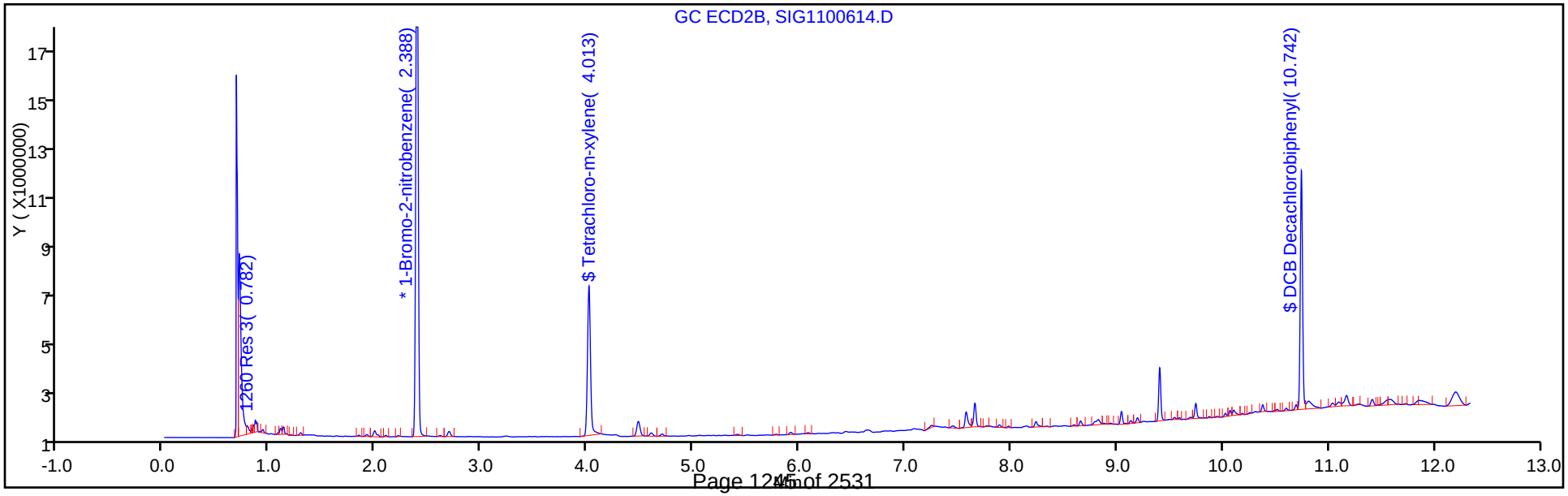
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100614.D

Injection Date:	06-Oct-2017 18:07:04	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	MB 240-297693/10-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100614.D
Lims ID: MB 240-297693/10-A
Client ID:
Sample Type: MB
Inject. Date: 06-Oct-2017 18:07:04 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-014
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0158	79.03
$ 12 DCB Decachlorobiphenyl	0.0200	0.0204	101.82

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0155	77.68
$ 12 DCB Decachlorobiphenyl	0.0200	0.0204	102.10

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-297775/21-A

Matrix: Water | Lab File ID: P12100727.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3520C | Date Extracted: 10/05/2017 12:53

Sample wt/vol: 1000(mL) | Date Analyzed: 10/07/2017 18:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	0.050	U	0.10	0.050
11104-28-2	Aroclor-1221	0.090	U	0.10	0.090
11141-16-5	Aroclor-1232	0.070	U	0.10	0.070
53469-21-9	Aroclor-1242	0.060	U	0.10	0.060
12672-29-6	Aroclor-1248	0.050	U	0.10	0.050
11097-69-1	Aroclor-1254	0.030	U	0.10	0.030
11096-82-5	Aroclor-1260	0.040	U	0.10	0.040

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	58		21-120
2051-24-3	DCB Decachlorobiphenyl	73		10-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100727.D
Lims ID: MB 240-297775/21-A
Client ID:
Sample Type: MB
Inject. Date: 07-Oct-2017 18:45:19 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-027
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
* 14 1-Bromo-2-nitrobenzene							
1	3.067	3.074	-0.007	97648418	0.0500	0.0500	
2	3.614	3.617	-0.003	245176061	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.315	4.316	-0.001	111119420	0.1000	0.0582	
2	5.024	5.024	0.000	250965078	0.1000	0.0532	
						RPD = 9.03	
3 PCB-1221							
1		4.620				ND	
1		4.836					
1		4.893					
2		5.515					
2		5.725					
2		5.812					
5 PCB-1242							
1		4.892				ND	
1		5.402					
1		6.033					
1		6.209					
1		6.745					
2		5.810					
2		6.393					
2		7.008					
2		7.185					
2		7.552					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1		4.892				ND	
1		5.403					
1		6.034					
1		6.210					
1		6.746					
2		5.811					
2		6.396					
2		7.008					
2		7.186					
2		7.555					
6 PCB-1016							
1		4.892				ND	
1		5.402					
1		6.034					
1		6.208					
1		6.745					
2		5.812					
2		6.395					
2		7.008					
2		7.186					
2		7.552					
7 PCB-1248							
1		5.401				ND	
1		6.744					
1		7.280					
1		7.550					
1		8.029					
2		6.394					
2		7.003					
2		7.790					
2		8.318					
2		9.103					
8 PCB-1254							
1		7.553				ND	
1		8.028					
1		8.362					
1		8.585					
1		8.910					
2		8.313					
2		8.553					
2		9.102					
2		9.374					
2		10.011					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1		8.252				ND	
1		8.586					
1		8.911					
1		9.698					
1		10.022					
2		9.336					
2		10.010					
2		10.450					
2		10.721					
2		11.091					
9 PCB-1262							
1		8.586				ND	
1		9.051					
1		9.332					
1		9.697					
1		10.070					
2		9.589					
2		10.120					
2		10.451					
2		10.721					
2		11.088					
11 PCB-1268							
1		10.069				ND	
1		10.113					
1		10.328					
1		10.710					
1		10.998					
2		11.085					
2		11.130					
2		11.375					
2		11.644					
2		11.940					
$ 12 DCB Decachlorobiphenyl							
1	11.181	11.181	0.000	149841529	0.1000	0.0730	
2	12.170	12.169	0.001	247945908	0.1000	0.0745	
						RPD = 2.09	
16 1260 Res 1							
1		10.022				ND	
2		10.898					
13 1260 Res 2							
1		10.071				ND	
2		11.028					
15 1260 Res 3							
1		10.119				ND	
2		0.115					

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

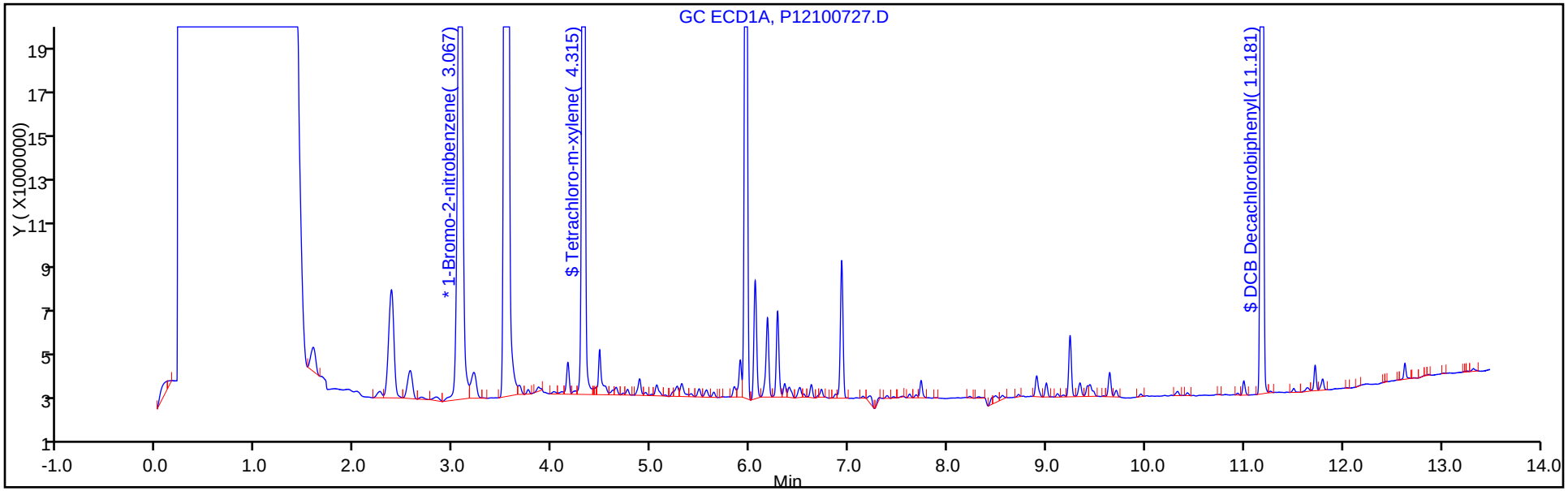
Report Date: 09-Oct-2017 11:20:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

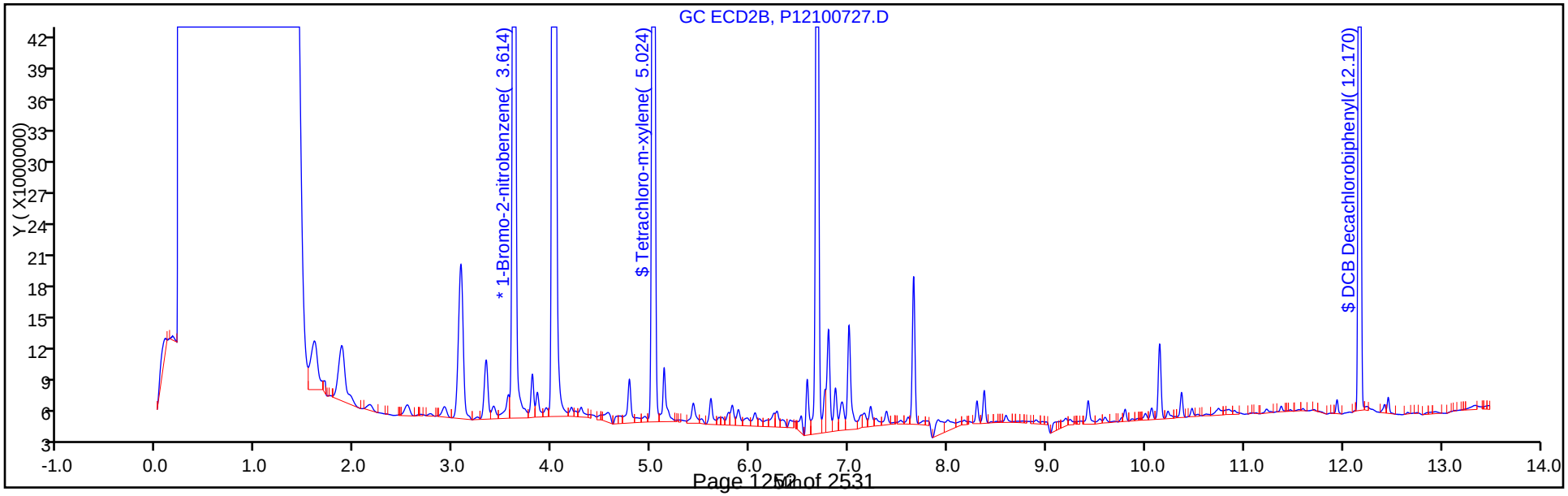
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100727.D

Injection Date:	07-Oct-2017 18:45:19	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	MB 240-297775/21-A			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100727.D
Lims ID: MB 240-297775/21-A
Client ID:
Sample Type: MB
Inject. Date: 07-Oct-2017 18:45:19 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-027
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0582	58.20
$ 12 DCB Decachlorobiphenyl	0.1000	0.0730	72.97

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0532	53.17
$ 12 DCB Decachlorobiphenyl	0.1000	0.0745	74.51

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-297693/11-A

Matrix: Solid | Lab File ID: SIG1100615.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3540C | Date Extracted: 10/05/2017 08:47

Sample wt/vol: 10(g) | Date Analyzed: 10/06/2017 18:25

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 297980 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	631		50	24
11096-82-5	Aroclor-1260	735		50	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	78		14-128
2051-24-3	DCB Decachlorobiphenyl	105		10-132

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100615.D
Lims ID: LCS 240-297693/11-A
Client ID:
Sample Type: LCS
Inject. Date: 06-Oct-2017 18:25:25 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-015
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:11:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	1.948	1.949	-0.001	210688961	0.0500	0.0500	
2	2.388	2.390	-0.001	36323539	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.067	3.069	-0.002	79650945	0.0200	0.0161	
2	4.013	4.016	-0.003	12017551	0.0200	0.0155	
						RPD = 3.82	
6 PCB-1016							
1	3.744	3.746	-0.002	62301679	1.00	0.5304	
1	4.349	4.352	-0.003	111141234	1.00	0.5426	
1	5.095	5.097	-0.002	227184282	1.00	0.5464	
1	5.297	5.299	-0.002	90402516	1.00	0.4888	
1	5.674	5.676	-0.002	35982337	1.00	0.4265	
		Average of Peak Amounts =				0.5069	
2	4.944	4.947	-0.003	10460519	1.00	0.5379	
2	5.626	5.628	-0.002	21648821	1.00	0.5940	
2	6.333	6.334	-0.001	50033418	1.00	0.7044	
2	6.520	6.522	-0.002	20368387	1.00	0.6977	
2	6.891	6.893	-0.002	9039527	1.00	0.6211	
		Average of Peak Amounts =				0.6310	
						RPD = 21.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	7.434	7.437	-0.003	167839337	1.00	0.6932	
1	7.723	7.725	-0.002	275455132	1.00	0.7496	
1	7.992	7.994	-0.002	309981275	1.00	0.7634	
1	8.609	8.611	-0.002	339362922	1.00	0.6899	
1	8.852	8.856	-0.004	186293819	1.00	0.7215	
		Average of Peak Amounts =				0.7235	
2	8.430	8.432	-0.002	33480757	1.00	0.7499	
2	8.622	8.624	-0.002	39836905	1.00	0.7648	
2	9.018	9.020	-0.002	26810758	1.00	0.6667	
2	9.479	9.481	-0.002	69730307	1.00	0.7376	
2	9.783	9.784	-0.001	49067768	1.00	0.7563	
		Average of Peak Amounts =				0.7351	
						RPD = 1.59	
$ 12 DCB Decachlorobiphenyl							
1	9.760	9.763	-0.003	76987874	0.0200	0.0212	
2	10.741	10.743	-0.002	14885487	0.0200	0.0210	
						RPD = 0.73	

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

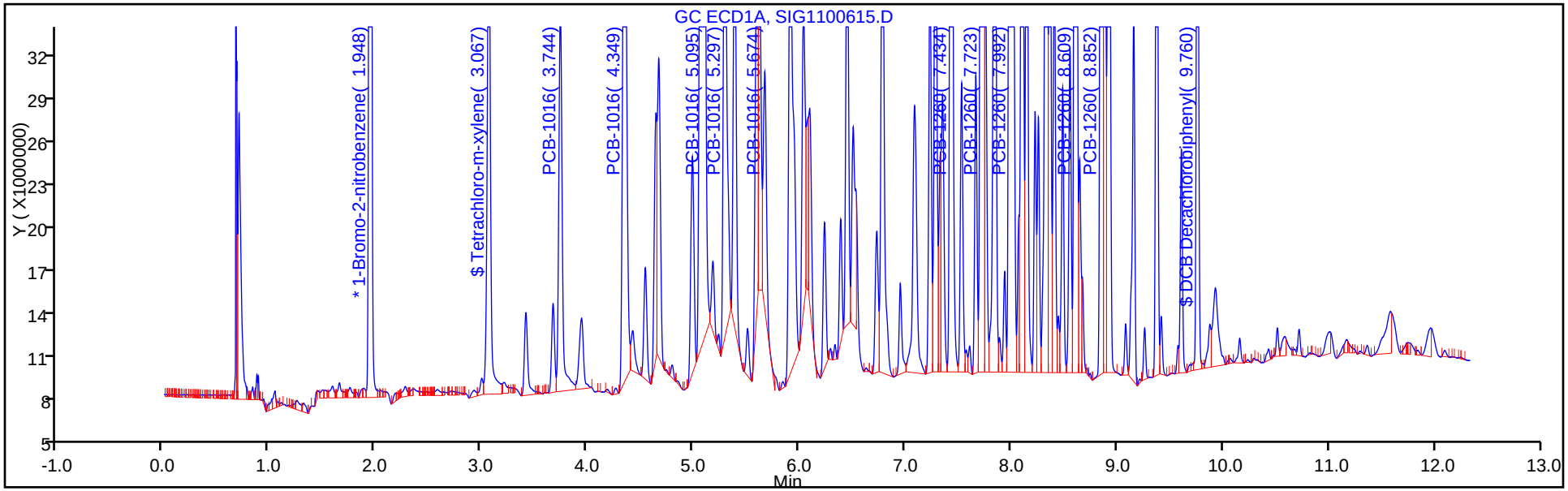
Report Date: 09-Oct-2017 08:31:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

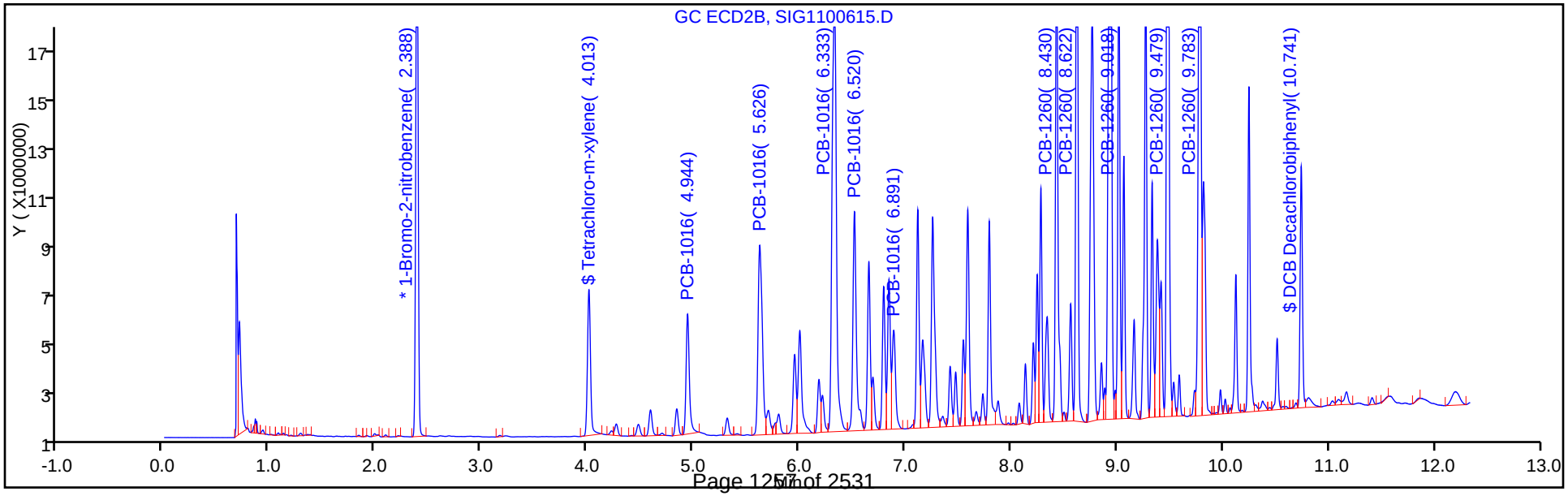
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100615.D

Injection Date:	06-Oct-2017 18:25:25	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	LCS 240-297693/11-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100615.D
Lims ID: LCS 240-297693/11-A
Client ID:
Sample Type: LCS
Inject. Date: 06-Oct-2017 18:25:25 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-015
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:11:09

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0161	80.72
$ 12 DCB Decachlorobiphenyl	0.0200	0.0212	105.95

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0155	77.70
$ 12 DCB Decachlorobiphenyl	0.0200	0.0210	105.18

Report Date: 09-Oct-2017 08:31:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100615.D

Injection Date: 06-Oct-2017 18:25:25 Instrument ID: A2HP13

Lims ID: LCS 240-297693/11-A

Client ID:

Operator ID: ALS Bottle#: 15 Worklist Smp#: 15

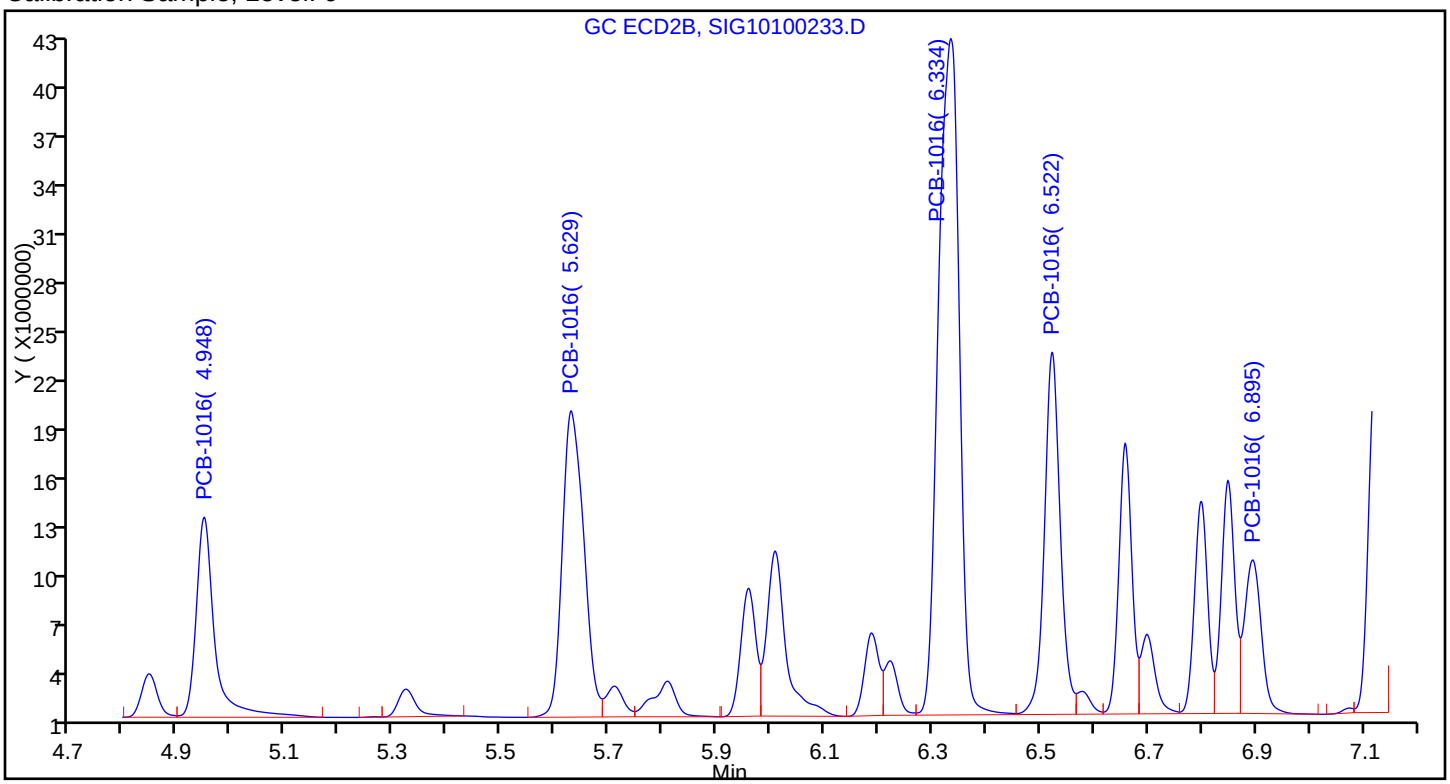
Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB13 IS Limit Group: GC 8082A IS

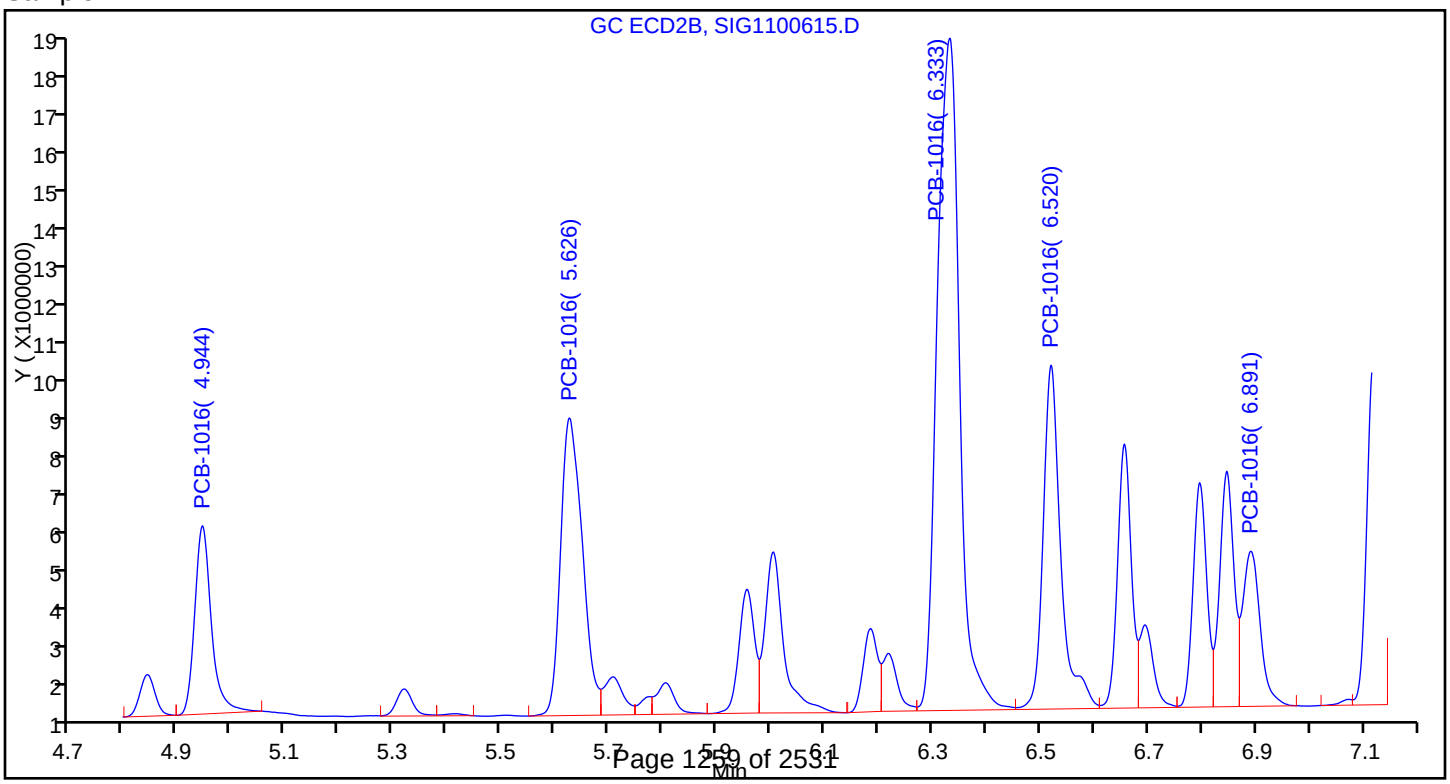
Column: Detector GC ecd2b

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 09-Oct-2017 08:31:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

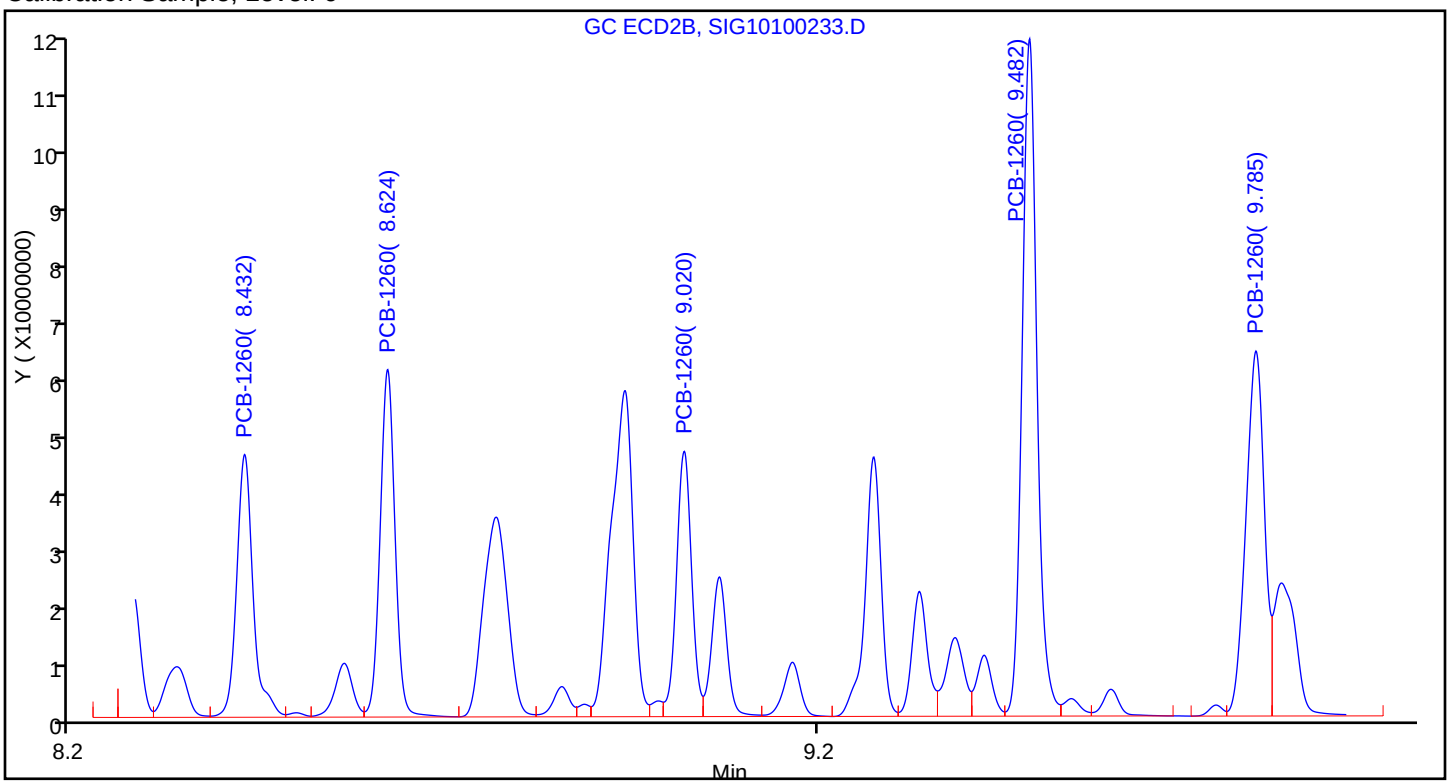
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100615.D

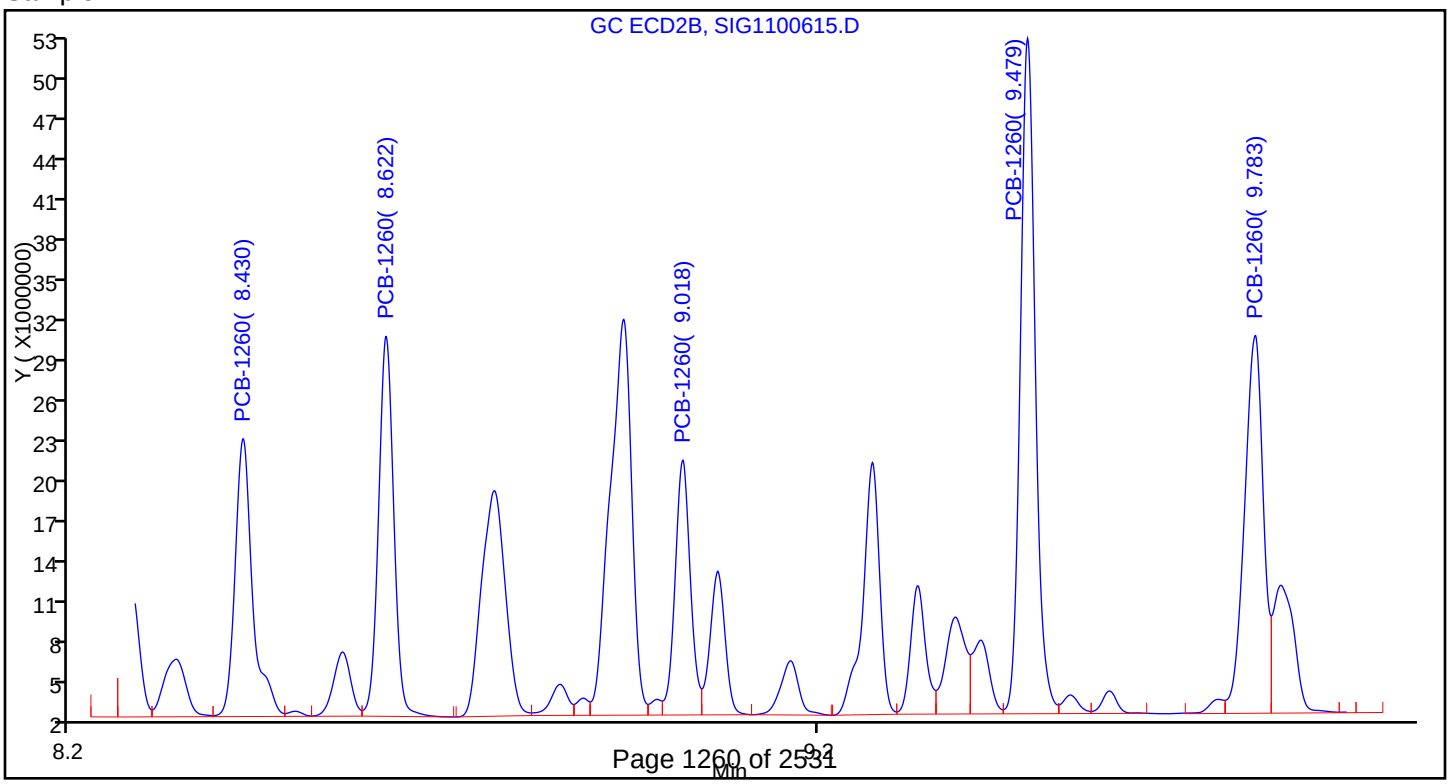
Injection Date:	06-Oct-2017 18:25:25	Instrument ID:	A2HP13		
Lims ID:	LCS 240-297693/11-A				
Client ID:					
Operator ID:		ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ecd2b		

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-297775/22-A

Matrix: Water | Lab File ID: P12100728.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3520C | Date Extracted: 10/05/2017 12:53

Sample wt/vol: 1000(mL) | Date Analyzed: 10/07/2017 19:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	1.26		0.10	0.050
11096-82-5	Aroclor-1260	1.55		0.10	0.040

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	60		21-120
2051-24-3	DCB Decachlorobiphenyl	69		10-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100728.D
Lims ID: LCS 240-297775/22-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2017 19:02:58 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-028
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 14 1-Bromo-2-nitrobenzene							
1	3.063	3.074	-0.011	91798150	0.0500	0.0500	
2	3.610	3.617	-0.006	262091110	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.313	4.316	-0.003	107872502	0.1000	0.0601	
2	5.022	5.024	-0.002	290838285	0.1000	0.0576	
						RPD = 4.17	
6 PCB-1016							
1	4.890	4.892	-0.002	23083428	1.25	0.5812	
1	5.400	5.402	-0.002	43370124	1.25	0.6052	
1	6.037	6.034	0.003	94191278	1.25	0.5703	
1	6.209	6.208	0.001	49842668	1.25	0.7140	
1	6.744	6.745	-0.001	48056185	1.25	0.6783	
		Average of Peak Amounts =				0.6298	
2	5.810	5.812	-0.002	66169355	1.25	0.6200	
2	6.397	6.395	0.002	108748213	1.25	0.5210	
2	7.008	7.008	0.000	317323946	1.25	0.7124	
2	7.186	7.186	0.000	135239282	1.25	0.7453	
2	7.554	7.552	0.002	56230072	1.25	0.7375	
		Average of Peak Amounts =				0.6672	
						RPD = 5.77	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	8.252	8.252	0.000	78705366	1.25	0.7517	
1	8.585	8.586	-0.001	135383419	1.25	0.8001	
1	8.909	8.911	-0.002	163289631	1.25	0.8696	
1	9.697	9.698	-0.001	165804577	1.25	0.6838	
1	10.022	10.022	0.000	96063796	1.25	0.7642	
		Average of Peak Amounts =				0.7739	
2	9.337	9.336	0.001	207660538	1.25	0.7514	
2	10.010	10.010	0.000	331561087	1.25	0.7493	
2	10.450	10.450	0.000	160725778	1.25	0.6231	
2	10.722	10.721	0.001	319745018	1.25	0.6067	
2	11.093	11.091	0.002	234393489	1.25	0.6277	
		Average of Peak Amounts =				0.6716	
						RPD = 14.14	
$ 12 DCB Decachlorobiphenyl							
1	11.180	11.181	-0.001	132343116	0.1000	0.0686	
2	12.170	12.169	0.001	222642945	0.1000	0.0626	
						RPD = 9.10	

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

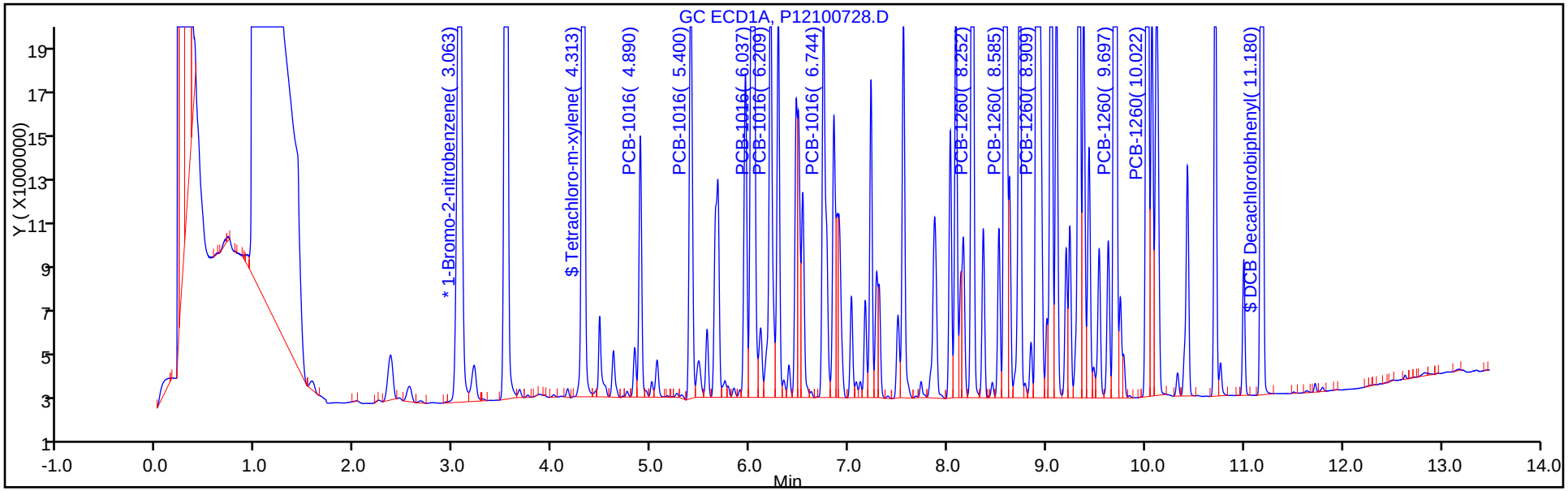
Report Date: 09-Oct-2017 11:20:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

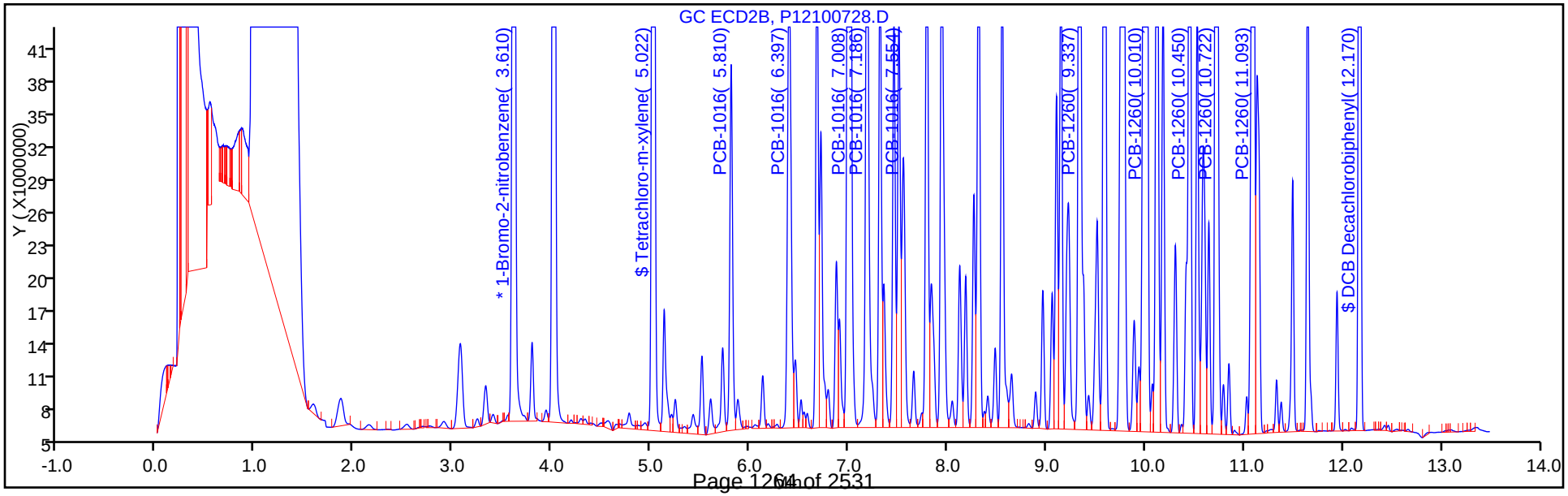
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100728.D

Injection Date:	07-Oct-2017 19:02:58	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	LCS 240-297775/22-A			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100728.D
Lims ID: LCS 240-297775/22-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2017 19:02:58 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-028
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0601	60.10
$ 12 DCB Decachlorobiphenyl	0.1000	0.0686	68.56

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0576	57.64
$ 12 DCB Decachlorobiphenyl	0.1000	0.0626	62.59

Report Date: 09-Oct-2017 11:20:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100728.D

Injection Date: 07-Oct-2017 19:02:58 Instrument ID: A2HP12

Lims ID: LCS 240-297775/22-A

Client ID:

Operator ID: ALS Bottle#: 28 Worklist Smp#: 28

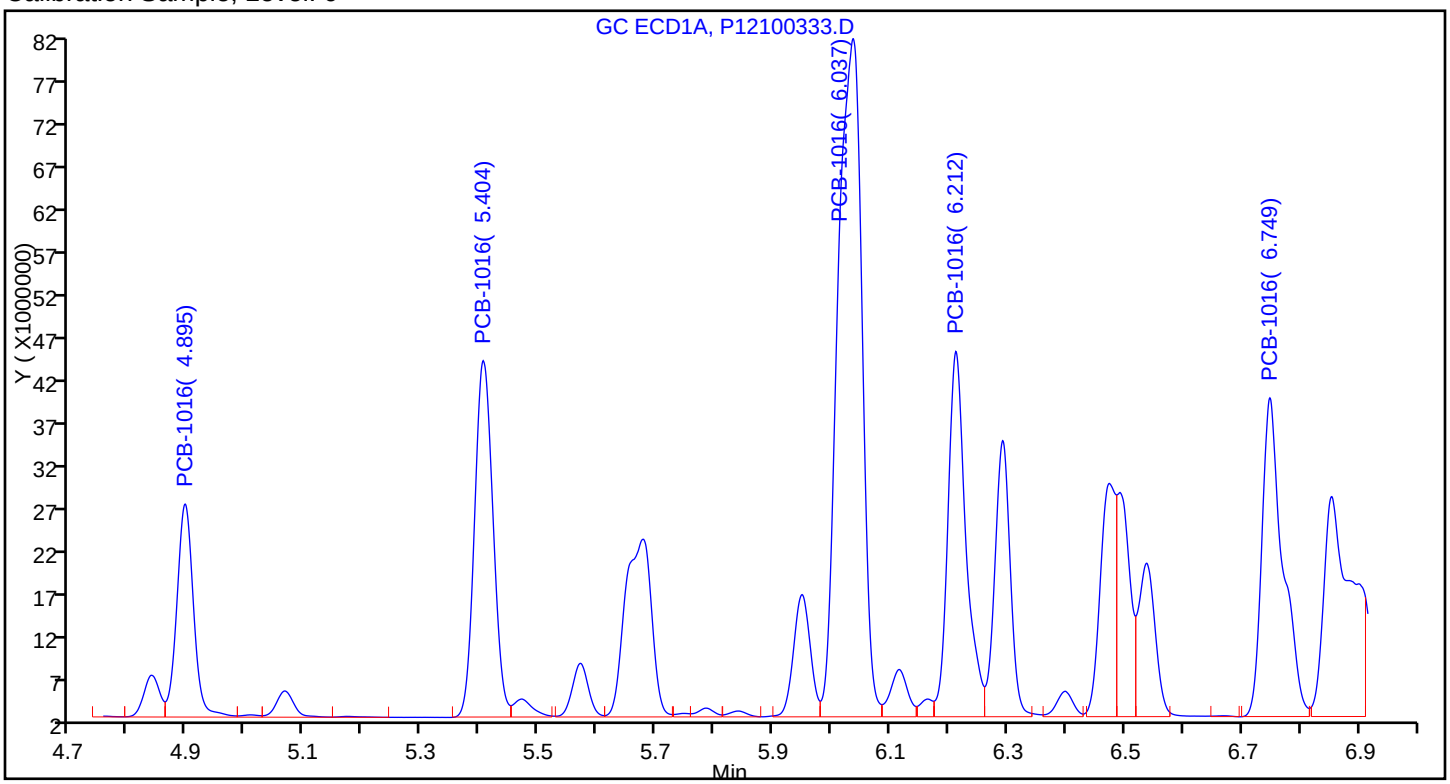
Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

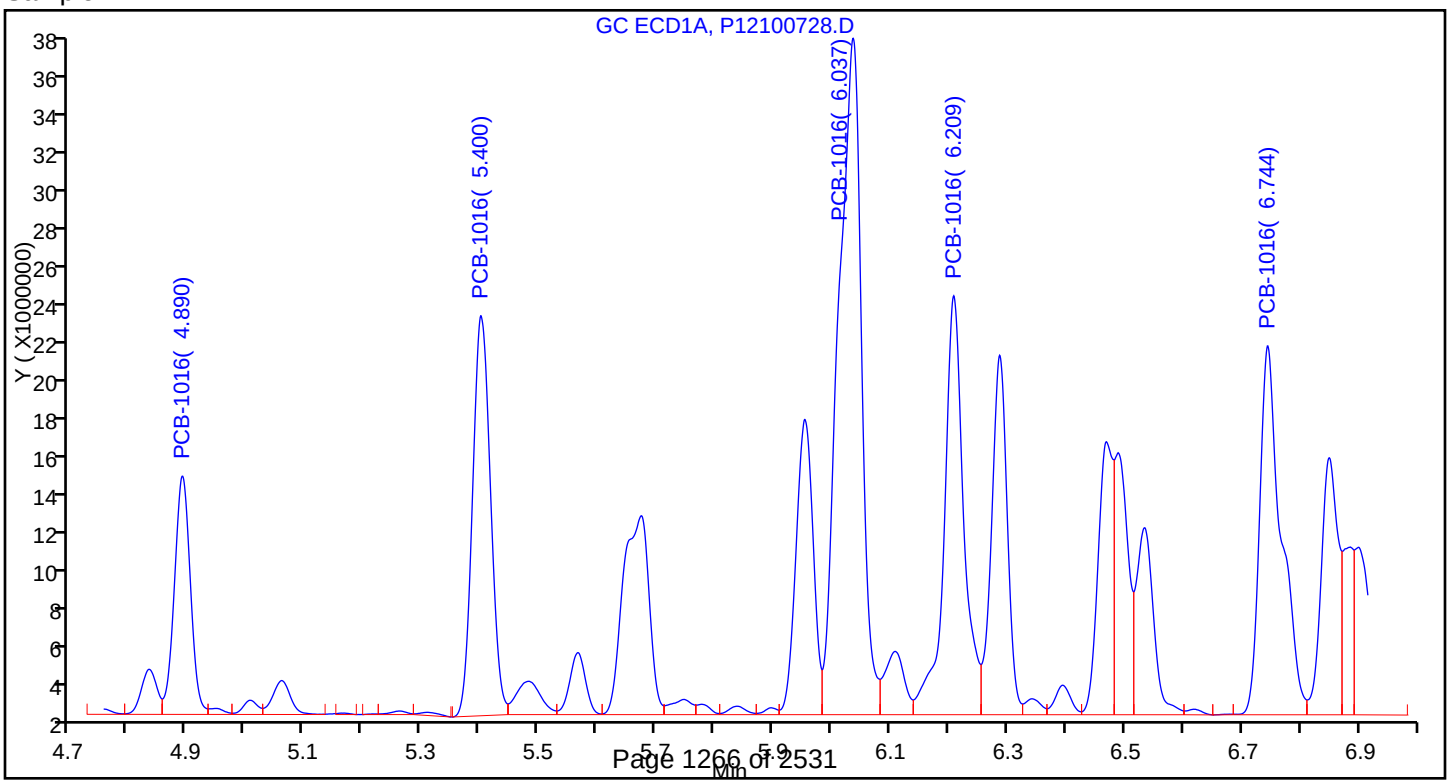
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 09-Oct-2017 11:20:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

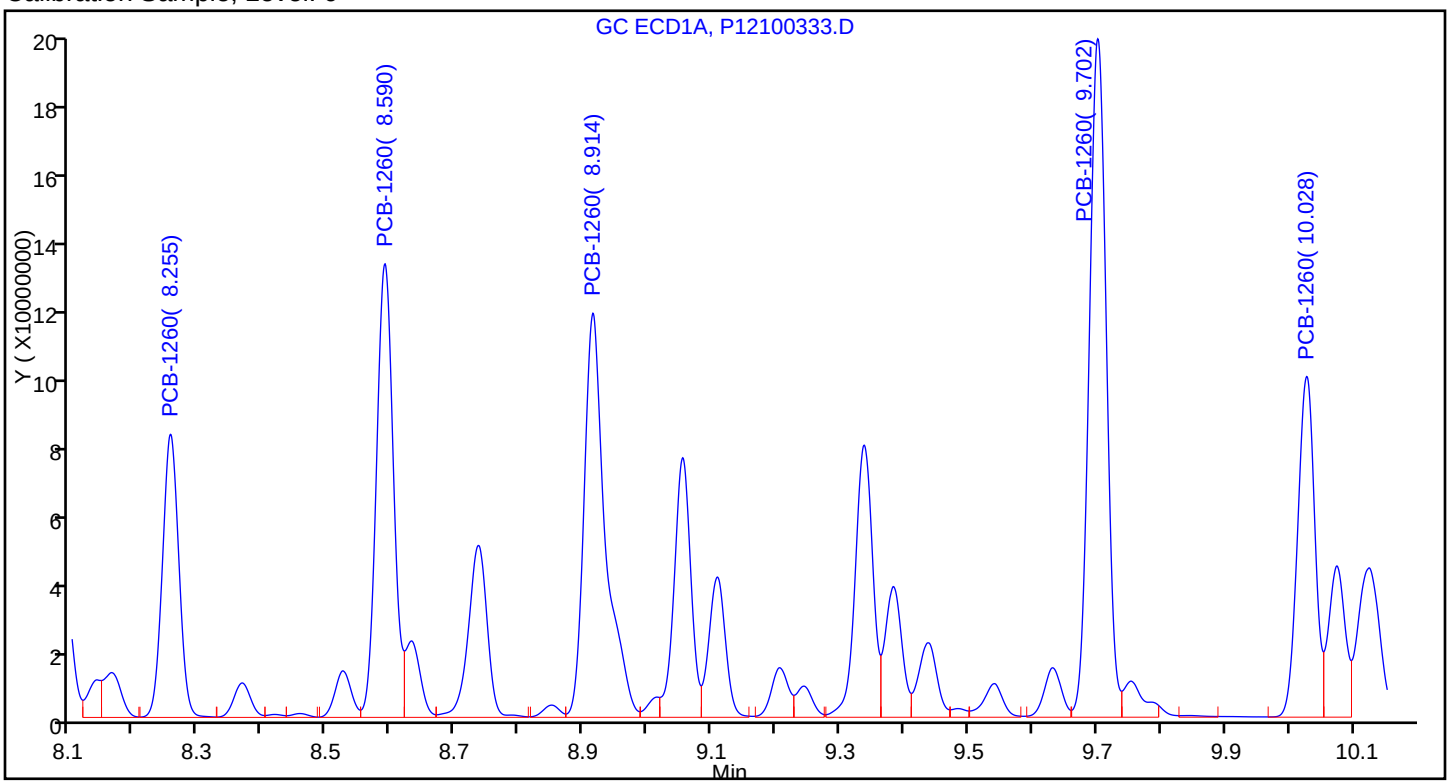
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100728.D

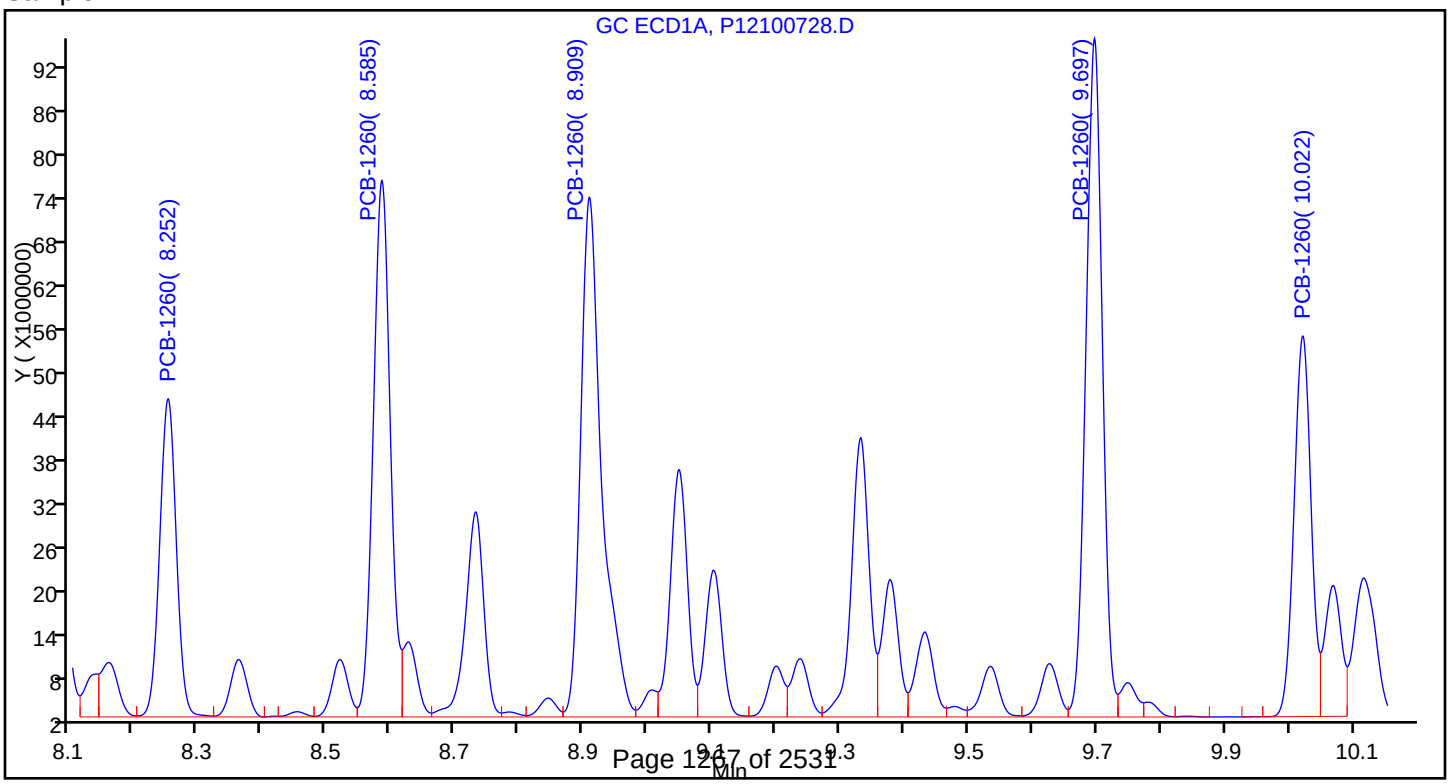
Injection Date:	07-Oct-2017 19:02:58	Instrument ID:	A2HP12		
Lims ID:	LCS 240-297775/22-A				
Client ID:					
Operator ID:		ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB12IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MS | Lab Sample ID: 240-85941-2 MS

Matrix: Solid | Lab File ID: SIG1100623.D

Analysis Method: 8082A | Date Collected: 10/03/2017 08:25

Extraction Method: 3540C | Date Extracted: 10/05/2017 08:47

Sample wt/vol: 10.16(g) | Date Analyzed: 10/06/2017 20:52

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

% Moisture: 22.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 297980 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	663		64	31
11104-28-2	Aroclor-1221	29	U	64	29
11141-16-5	Aroclor-1232	20	U	64	20
53469-21-9	Aroclor-1242	25	U	64	25
12672-29-6	Aroclor-1248	22	U	64	22
11097-69-1	Aroclor-1254	18	U	64	18
11096-82-5	Aroclor-1260	769		64	23

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	69		14-128
2051-24-3	DCB Decachlorobiphenyl	88		10-132

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100623.D
Lims ID: 240-85941-C-2-B MS
Client ID:
Sample Type: MS
Inject. Date: 06-Oct-2017 20:52:17 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-023
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:22:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
* 14 1-Bromo-2-nitrobenzene							
1	1.949	1.949	0.000	218838732	0.0500	0.0500	
2	2.390	2.390	0.000	40072259	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.068	3.069	-0.001	76485669	0.0200	0.0149	
2	4.013	4.016	-0.003	11786191	0.0200	0.0138	
						RPD = 7.73	
3 PCB-1221							
1		3.418				ND	
1		3.675					
1		3.744					
2		4.594					
2		4.844					
2		4.946					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1		3.743				ND	
1		4.349					
1		5.096					
1		5.297					
1		5.674					
2		4.945					
2		5.626					
2		6.334					
2		6.521					
2		7.119					
5 PCB-1242							
1		3.745				ND	
1		4.350					
1		5.095					
1		5.298					
1		5.676					
2		4.946					
2		5.628					
2		6.335					
2		6.522					
2		7.120					
6 PCB-1016							
1	3.744	3.746	-0.002	60131721	1.00	0.4929	
1	4.350	4.352	-0.002	110678367	1.00	0.5202	
1	5.098	5.097	0.001	144006266	1.00	0.3335	
1	5.296	5.299	-0.003	88636738	1.00	0.4614	
1	5.672	5.676	-0.004	34798221	1.00	0.3971	
		Average of Peak Amounts =				0.4410	
2	4.944	4.947	-0.003	10444516	1.00	0.4869	
2	5.626	5.628	-0.002	17985445	1.00	0.4474	
2	6.331	6.334	-0.003	47498380	1.00	0.6061	
2	6.520	6.522	-0.002	18054897	1.00	0.5606	
2	6.891	6.893	-0.002	8107031	1.00	0.5049	
		Average of Peak Amounts =				0.5212	
						RPD = 16.67	
7 PCB-1248							
1		4.349				ND	
1		5.916					
1		6.540					
1		6.783					
1		7.236					
2		5.627					
2		6.798					
2		7.261					
2		7.596					
2		8.248					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
8 PCB-1254							
1		6.787				ND	
1		7.236					
1		7.533					
1		7.724					
1		7.995					
2		7.591					
2		7.795					
2		8.248					
2		8.461					
2		8.941					
10 PCB-1260							
1	7.434	7.437	-0.003	150371965	1.00	0.5979	
1	7.722	7.725	-0.003	240308975	1.00	0.6296	
1	7.992	7.994	-0.002	264716138	1.00	0.6276	
1	8.609	8.611	-0.002	283144422	1.00	0.5541	
1	8.853	8.856	-0.003	156287051	1.00	0.5827	
		Average of Peak Amounts =				0.5984	
2	8.430	8.432	-0.002	29663270	1.00	0.6023	
2	8.621	8.624	-0.003	35983079	1.00	0.6262	
2	9.018	9.020	-0.002	23976380	1.00	0.5405	
2	9.479	9.481	-0.002	63709065	1.00	0.6109	
2	9.783	9.784	-0.001	46156810	1.00	0.6449	
		Average of Peak Amounts =				0.6049	
						RPD = 1.09	
9 PCB-1262							
1		7.724				ND	
1		8.106					
1		8.332					
1		8.611					
1		8.887					
2		8.623					
2		9.019					
2		9.273					
2		9.480					
2		9.780					
11 PCB-1268							
1		8.888				ND	
1		8.921					
1		9.083					
1		9.378					
1		9.611					
2		9.777					
2		9.816					
2		10.024					
2		10.248					
2		10.515					
$ 12 DCB Decachlorobiphenyl							
1	9.760	9.763	-0.003	57939748	0.0200	0.0154	
2	10.741	10.743	-0.002	13680175	0.0200	0.0175	
						RPD = 13.20	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
16 1260 Res 1							
1	8.853	8.856	-0.003	156287051		NR	
2	9.978	9.979	-0.001	992525		NR	
13 1260 Res 2							
1	8.885	8.887	-0.002	55374333		NR	
2	9.817	9.818	-0.001	15920823		NR	
15 1260 Res 3							
1	8.922	8.925	-0.003	98616515		NR	
2	0.791	0.793	-0.002	3271030		NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

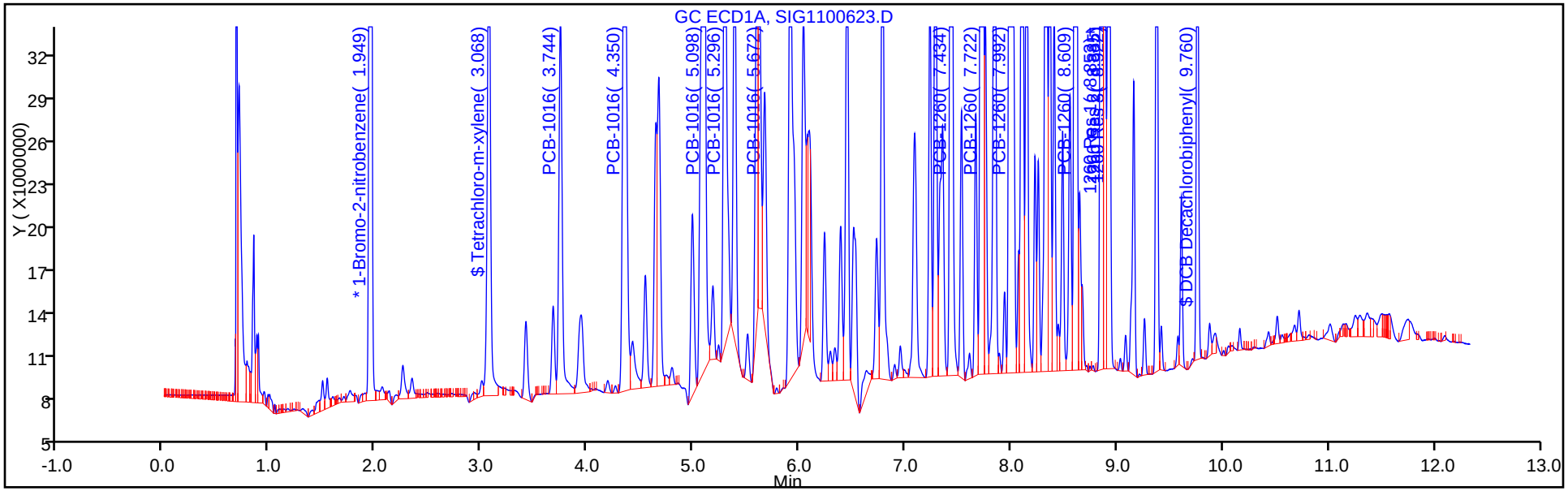
Report Date: 09-Oct-2017 08:31:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

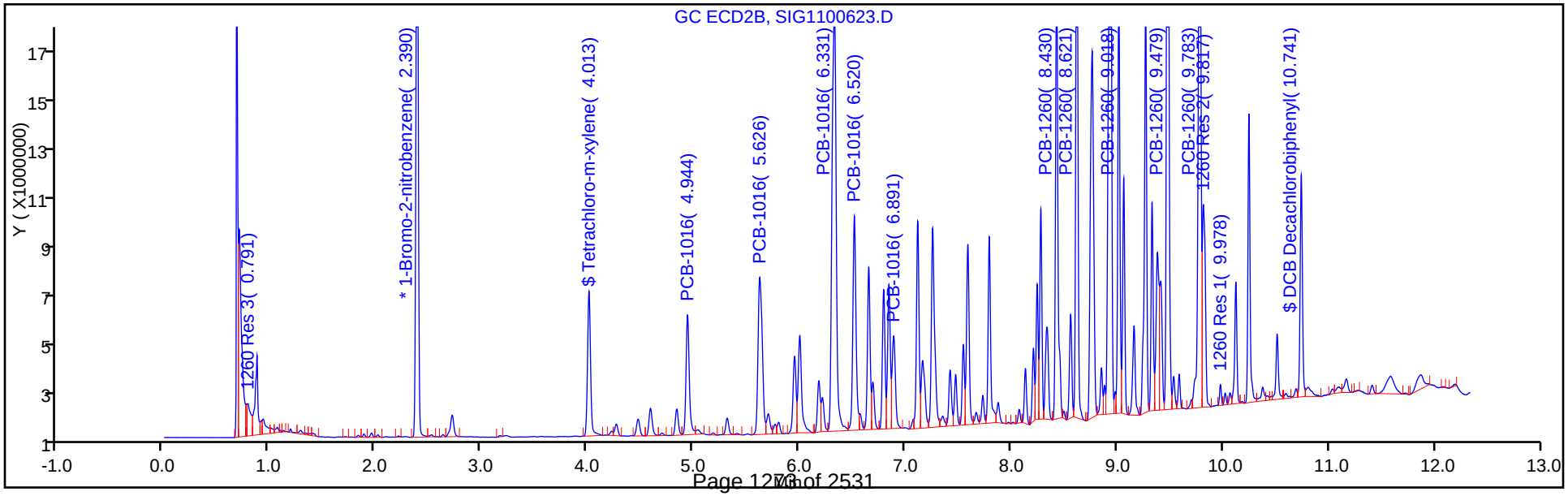
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100623.D

Injection Date:	06-Oct-2017 20:52:17	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	240-85941-C-2-B MS			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100623.D
Lims ID: 240-85941-C-2-B MS
Client ID:
Sample Type: MS
Inject. Date: 06-Oct-2017 20:52:17 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-023
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:22:44

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0149	74.62
$ 12 DCB Decachlorobiphenyl	0.0200	0.0154	76.77

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0138	69.07
$ 12 DCB Decachlorobiphenyl	0.0200	0.0175	87.62

Report Date: 09-Oct-2017 08:31:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

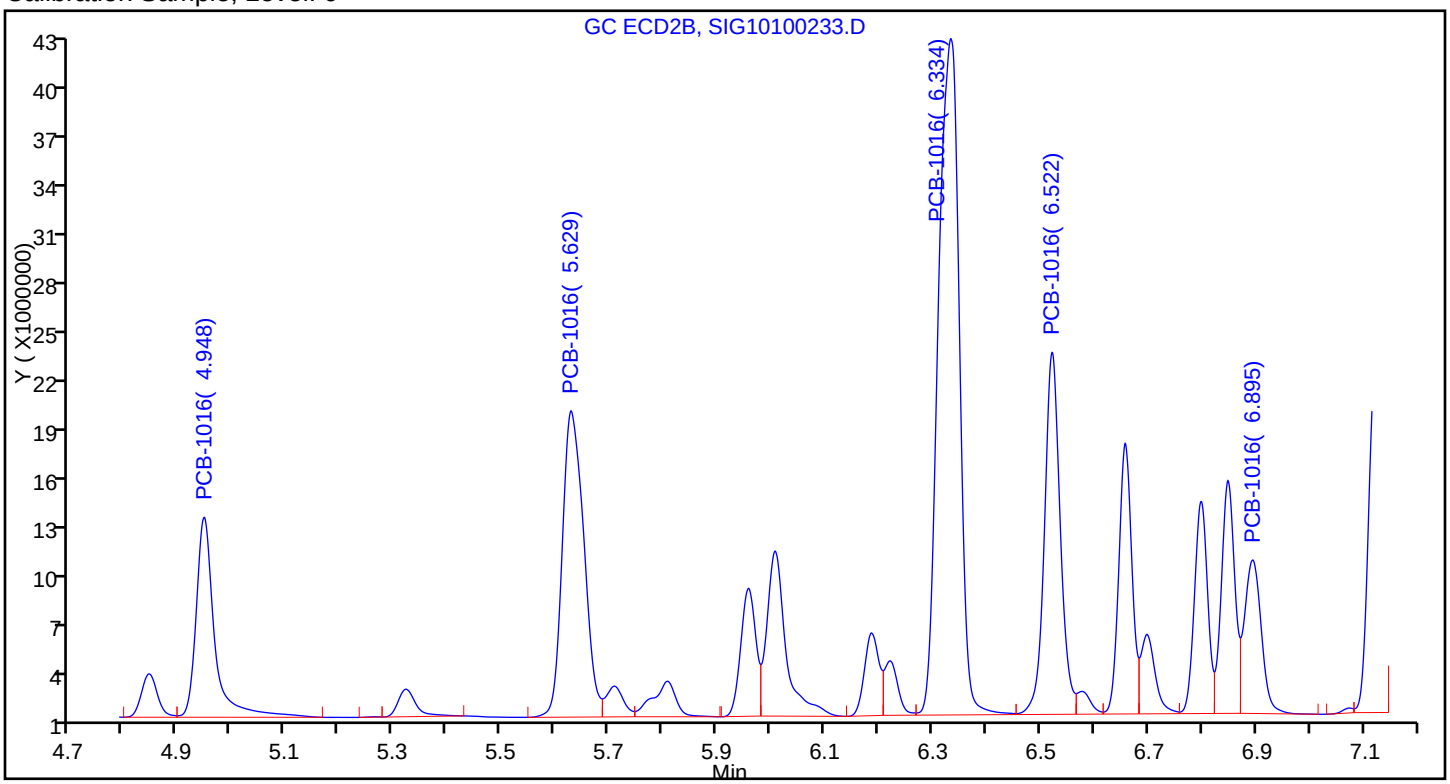
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100623.D

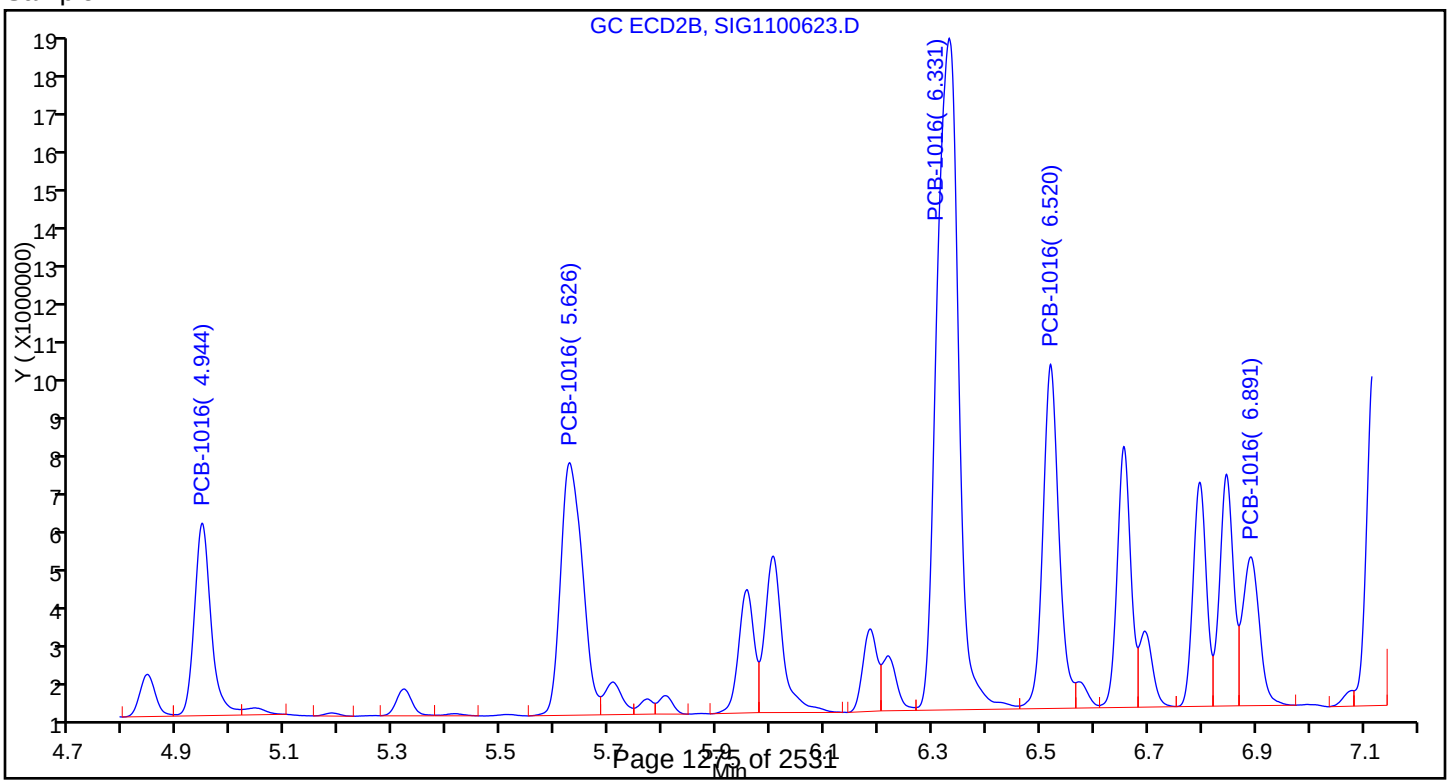
Injection Date:	06-Oct-2017 20:52:17	Instrument ID:	A2HP13		
Lims ID:	240-85941-C-2-B MS				
Client ID:					
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ecd2b		

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 09-Oct-2017 08:31:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

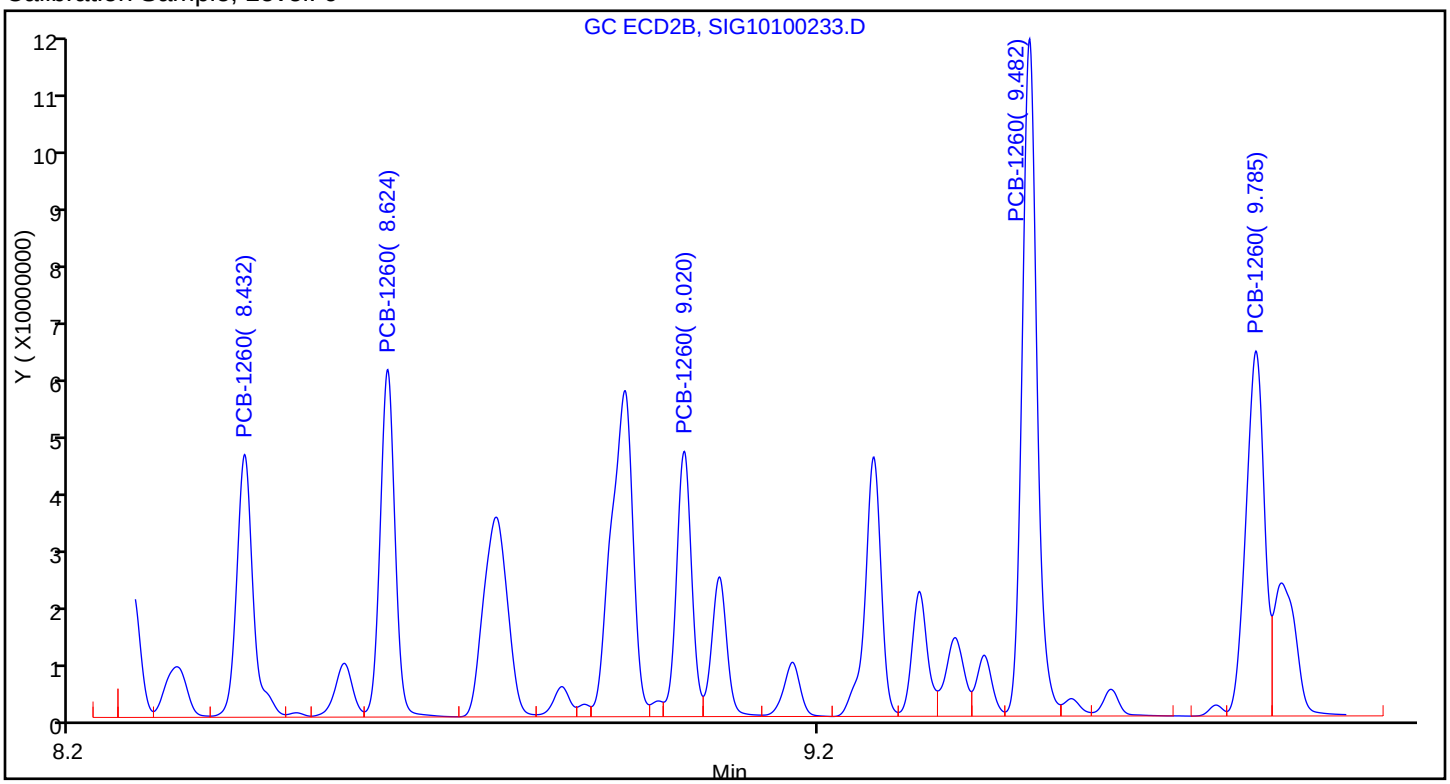
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100623.D

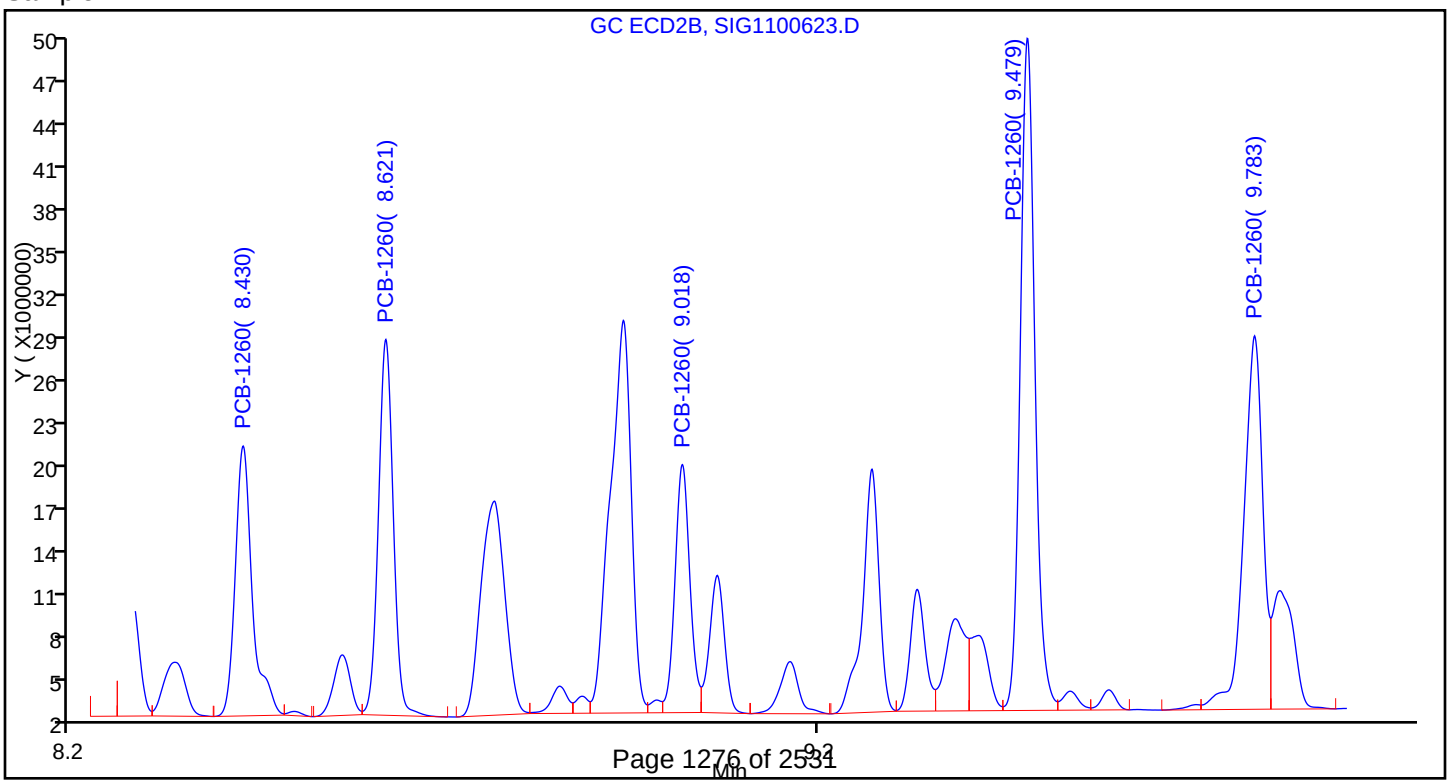
Injection Date:	06-Oct-2017 20:52:17	Instrument ID:	A2HP13		
Lims ID:	240-85941-C-2-B MS				
Client ID:					
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ecd2b		

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-85882-BB-1-A MS

Matrix: Water | Lab File ID: P12100710.D

Analysis Method: 8082A | Date Collected: 10/03/2017 13:10

Extraction Method: 3520C | Date Extracted: 10/05/2017 12:53

Sample wt/vol: 1050(mL) | Date Analyzed: 10/07/2017 13:44

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	1.08		0.095	0.048
11104-28-2	Aroclor-1221	0.086	U	0.095	0.086
11141-16-5	Aroclor-1232	0.067	U	0.095	0.067
53469-21-9	Aroclor-1242	0.057	U	0.095	0.057
12672-29-6	Aroclor-1248	0.048	U	0.095	0.048
11097-69-1	Aroclor-1254	0.029	U	0.095	0.029
11096-82-5	Aroclor-1260	1.15		0.095	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	60		21-120
2051-24-3	DCB Decachlorobiphenyl	34		10-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100710.D
Lims ID: 240-85882-BB-1-A MS
Client ID: GW-38443-100317-SCT-001
Sample Type: MS
Inject. Date: 07-Oct-2017 13:44:42 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-010
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:24:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
* 14 1-Bromo-2-nitrobenzene							
1	3.072	3.074	-0.002	98347375	0.0500	0.0500	
2	3.615	3.617	-0.002	241990081	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.315	4.316	-0.001	115255684	0.1000	0.0599	
2	5.023	5.024	-0.001	264880939	0.1000	0.0569	
						RPD = 5.27	
3 PCB-1221							
1		4.620				ND	
1		4.836					
1		4.893					
2		5.515					
2		5.725					
2		5.812					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							M
1		4.892				ND	
1		5.402					
1		6.033					
1		6.209					
1		6.745					
2		5.810					
2		6.393					
2		7.008					
2		7.185					
2		7.552					
4 PCB-1232							M
1		4.892				ND	
1		5.403					
1		6.034					
1		6.210					
1		6.746					
2		5.811					
2		6.396					
2		7.008					
2		7.186					
2		7.555					
6 PCB-1016							M
1	4.892	4.892	0.000	24367919	1.25	0.5727	
1	5.402	5.402	0.000	45294301	1.25	0.5900	M
1	6.037	6.034	0.003	87934087	1.25	0.4970	M
1	6.210	6.208	0.002	44598865	1.25	0.5964	M
1	6.745	6.745	0.000	44215727	1.25	0.5825	M
		Average of Peak Amounts =				0.5677	
2	5.810	5.812	-0.002	60647384	1.25	0.6154	
2	6.400	6.395	0.005	79958691	1.25	0.4149	
2	7.007	7.008	-0.001	269954370	1.25	0.6564	M
2	7.185	7.186	-0.001	108151179	1.25	0.6455	M
2	7.551	7.552	-0.001	44671031	1.25	0.6346	M
		Average of Peak Amounts =				0.5934	
						RPD = 4.42	
7 PCB-1248							M
1		5.401				ND	
1		6.744					
1		7.280					
1		7.550					
1		8.029					
2		6.394					
2		7.003					
2		7.790					
2		8.318					
2		9.103					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
8 PCB-1254							M
1		7.553				ND	
1		8.028					
1		8.362					
1		8.585					
1		8.910					
2		8.313					
2		8.553					
2		9.102					
2		9.374					
2		10.011					
10 PCB-1260							M
1	8.250	8.252	-0.002	67168372	1.25	0.5988	
1	8.585	8.586	-0.001	114323303	1.25	0.6306	
1	8.909	8.911	-0.002	135974582	1.25	0.6759	
1	9.696	9.698	-0.002	138009743	1.25	0.5312	
1	10.021	10.022	-0.001	78346389	1.25	0.5817	
		Average of Peak Amounts =				0.6037	
2	9.336	9.336	0.000	165080880	1.25	0.6469	M
2	10.009	10.010	-0.001	276008507	1.25	0.6756	M
2	10.449	10.450	-0.001	115575587	1.25	0.4853	M
2	10.721	10.721	0.000	259603267	1.25	0.5335	M
2	11.092	11.091	0.001	184040449	1.25	0.5338	M
		Average of Peak Amounts =				0.5750	
						RPD = 4.86	
9 PCB-1262							M
1		8.586				ND	
1		9.051					
1		9.332					
1		9.697					
1		10.070					
2		9.589					
2		10.120					
2		10.451					
2		10.721					
2		11.088					
11 PCB-1268							M
1		10.069				ND	
1		10.113					
1		10.328					
1		10.710					
1		10.998					
2		11.085					
2		11.130					
2		11.375					
2		11.644					
2		11.940					
$ 12 DCB Decachlorobiphenyl							
1	11.180	11.181	-0.001	70017515	0.1000	0.0339	
2	12.170	12.169	0.001	112500138	0.1000	0.0343	
						RPD = 1.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
16 1260 Res 1							M
1	10.021	10.022	-0.001	78346389		NR	
2	10.913	10.898	0.015	8353029		NR	M
13 1260 Res 2							M
1	10.069	10.071	-0.002	25278159		NR	
2	11.027	11.028	-0.001	3393148		NR	M
15 1260 Res 3							
1	10.119	10.119	0.001	34711926		NR	
2	0.120	0.115	0.006	2676116		NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

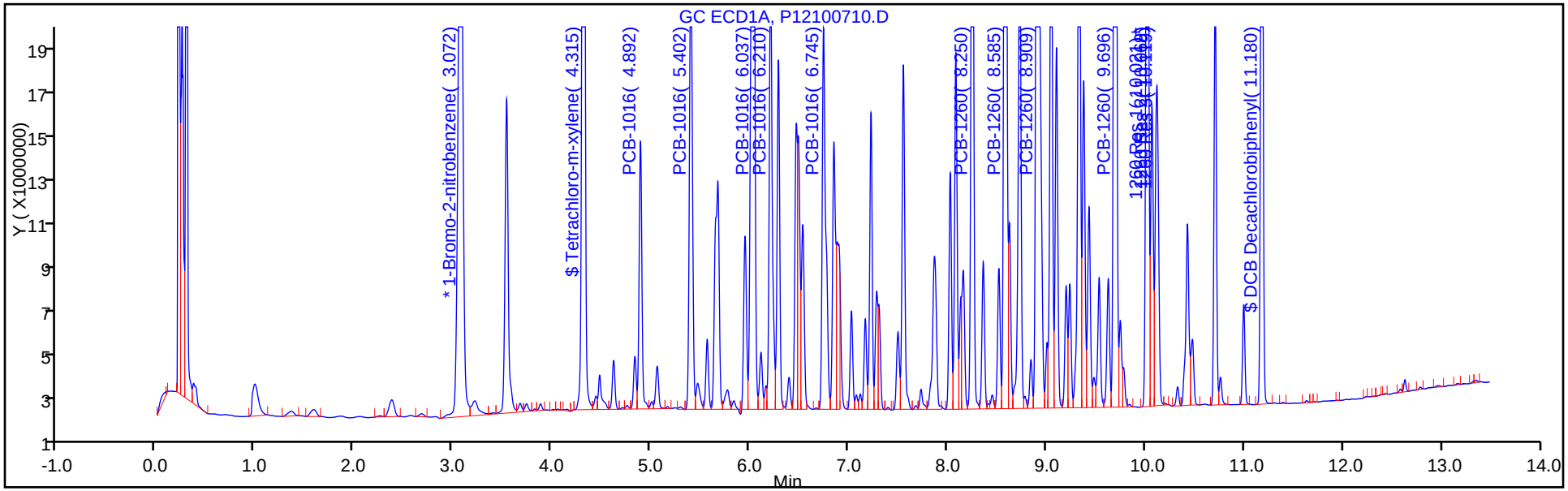
Report Date: 09-Oct-2017 11:18:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

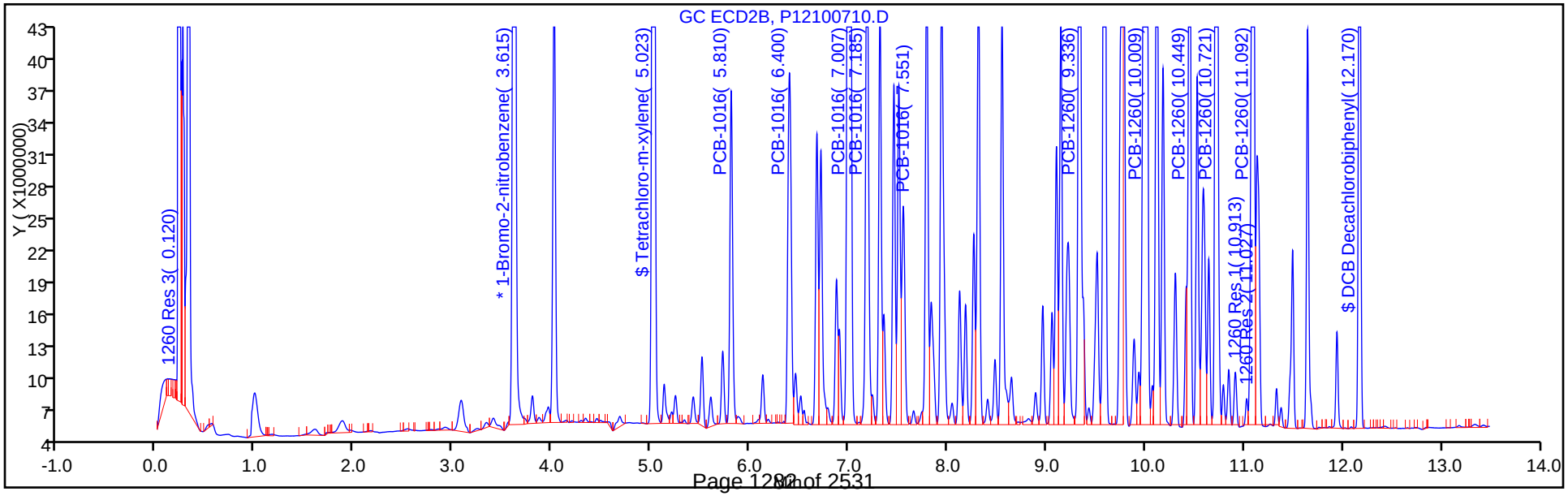
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100710.D

Injection Date:	07-Oct-2017 13:44:42	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	240-85882-BB-1-A MS			Worklist Smp#:	10
Client ID:	GW-38443-100317-SCT-001				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100710.D
Lims ID: 240-85882-BB-1-A MS
Client ID: GW-38443-100317-SCT-001
Sample Type: MS
Inject. Date: 07-Oct-2017 13:44:42 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-010
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:24:45

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0599	59.94
$ 12 DCB Decachlorobiphenyl	0.1000	0.0339	33.86

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0569	56.86
$ 12 DCB Decachlorobiphenyl	0.1000	0.0343	34.25

Report Date: 09-Oct-2017 11:18:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100710.D

Injection Date: 07-Oct-2017 13:44:42 Instrument ID: A2HP12

Lims ID: 240-85882-BB-1-A MS

Client ID: GW-38443-100317-SCT-001

Operator ID: ALS Bottle#: 10 Worklist Smp#: 10

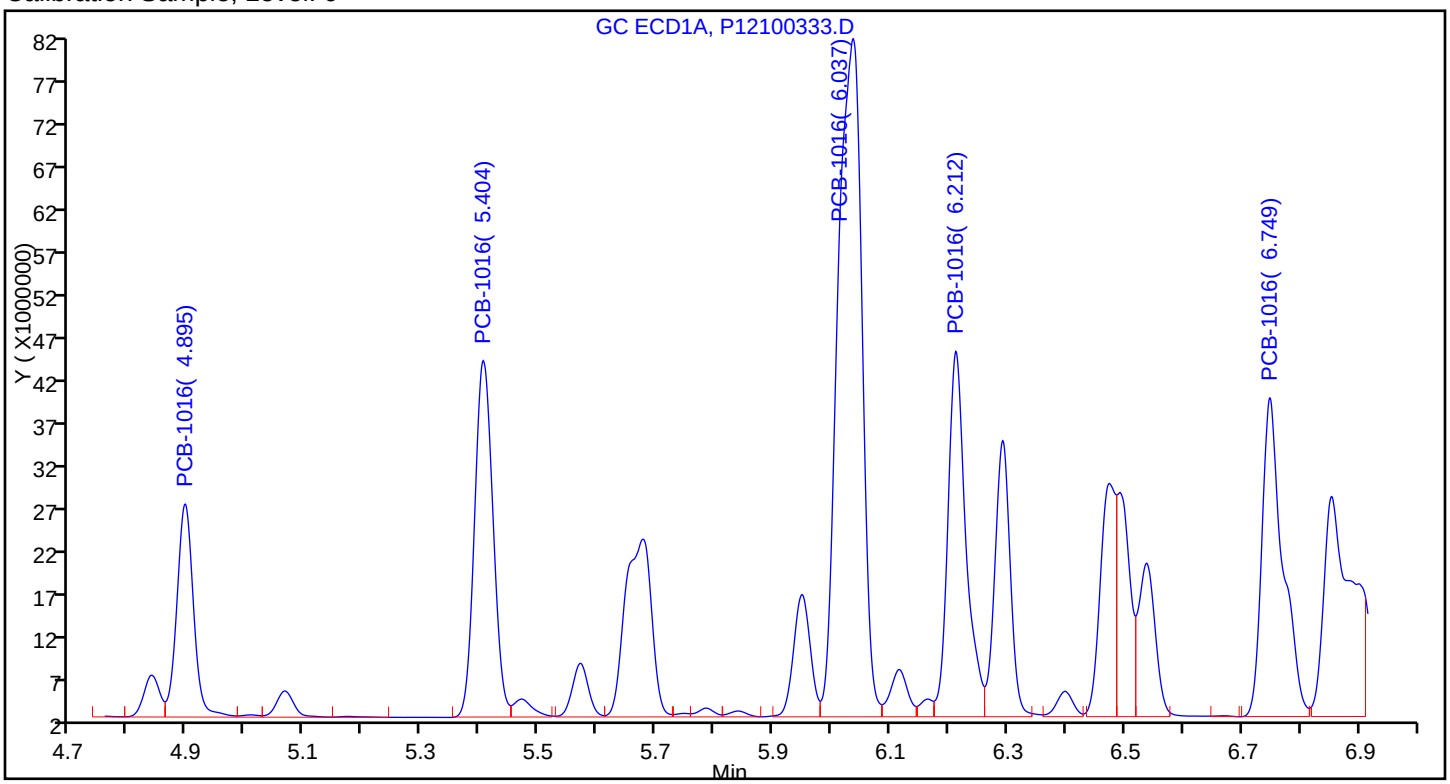
Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

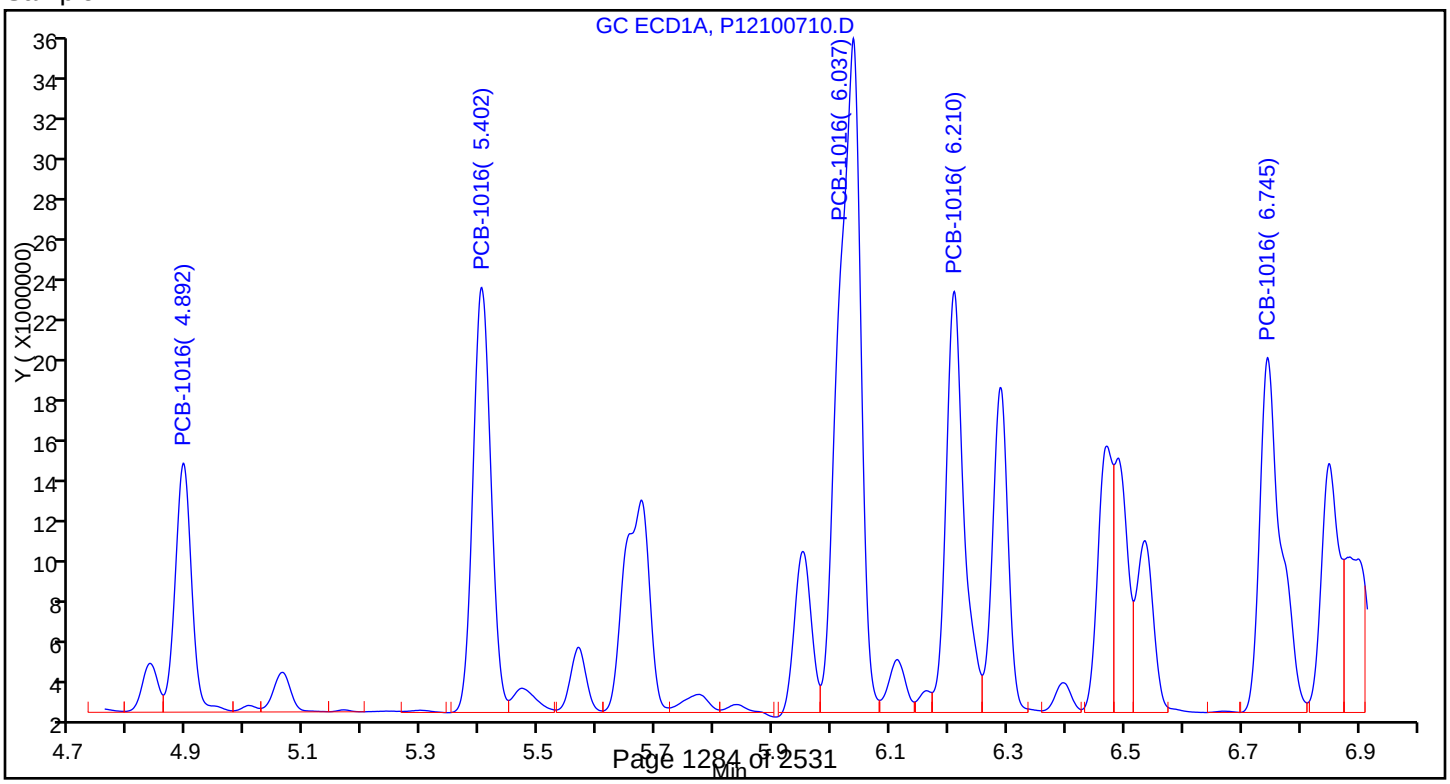
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 09-Oct-2017 11:18:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

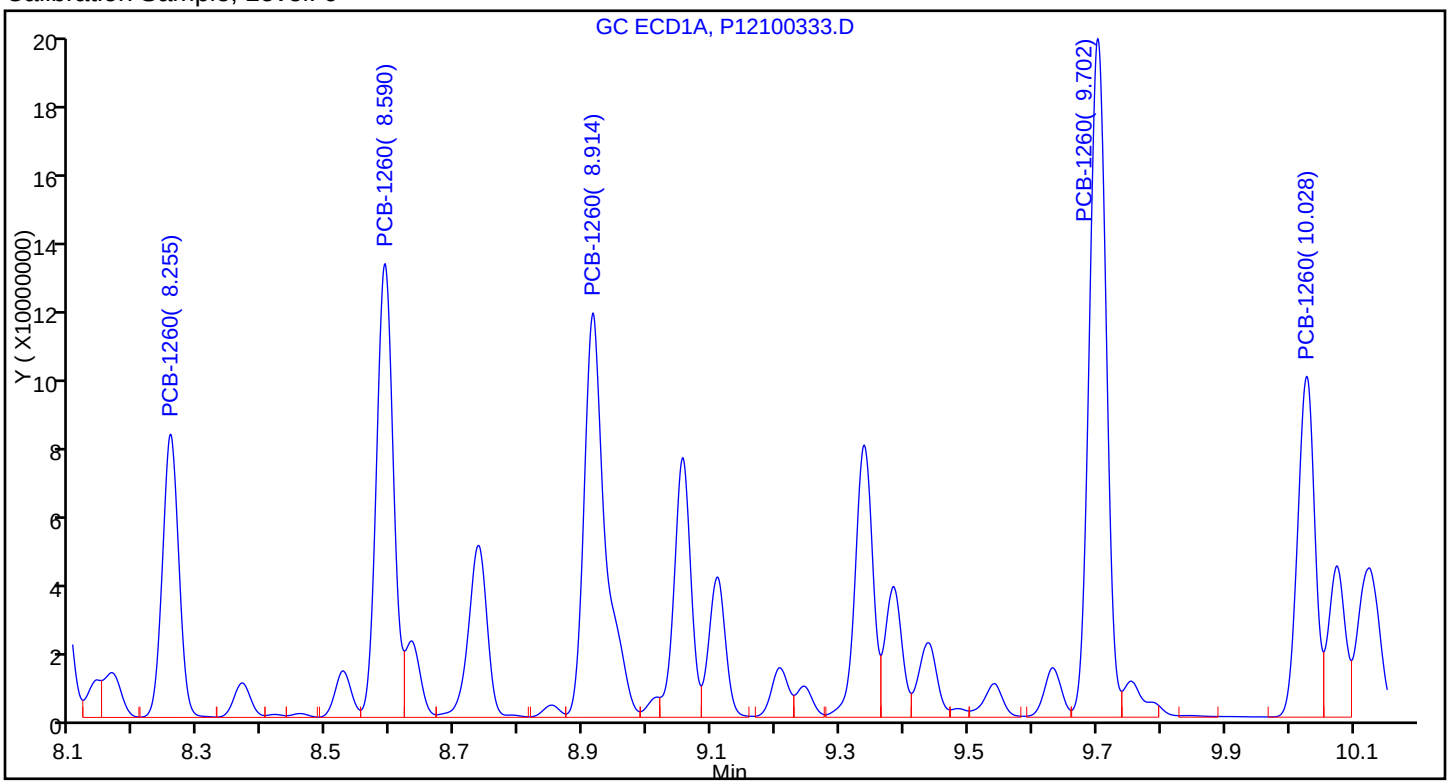
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100710.D

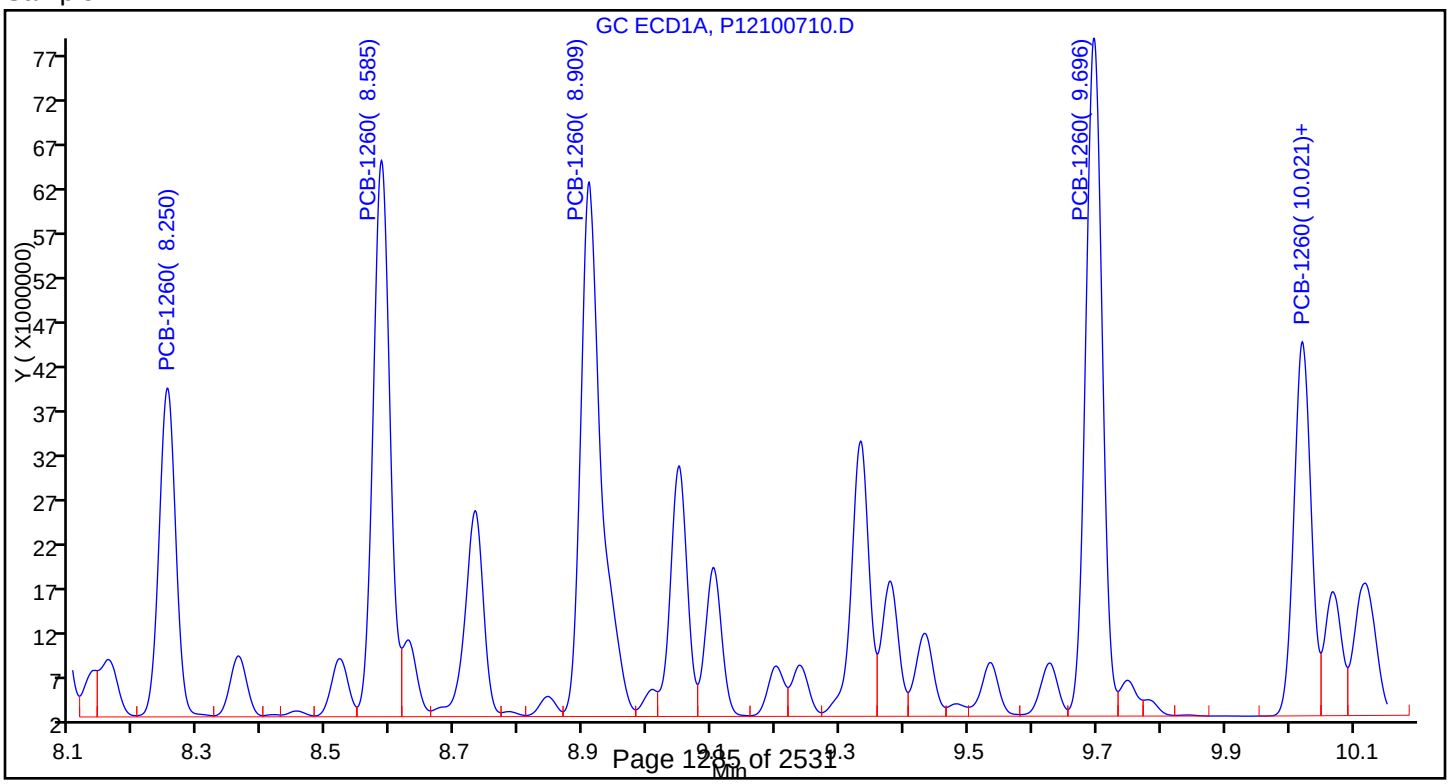
Injection Date:	07-Oct-2017 13:44:42	Instrument ID:	A2HP12		
Lims ID:	240-85882-BB-1-A MS				
Client ID:	GW-38443-100317-SCT-001				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB12IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



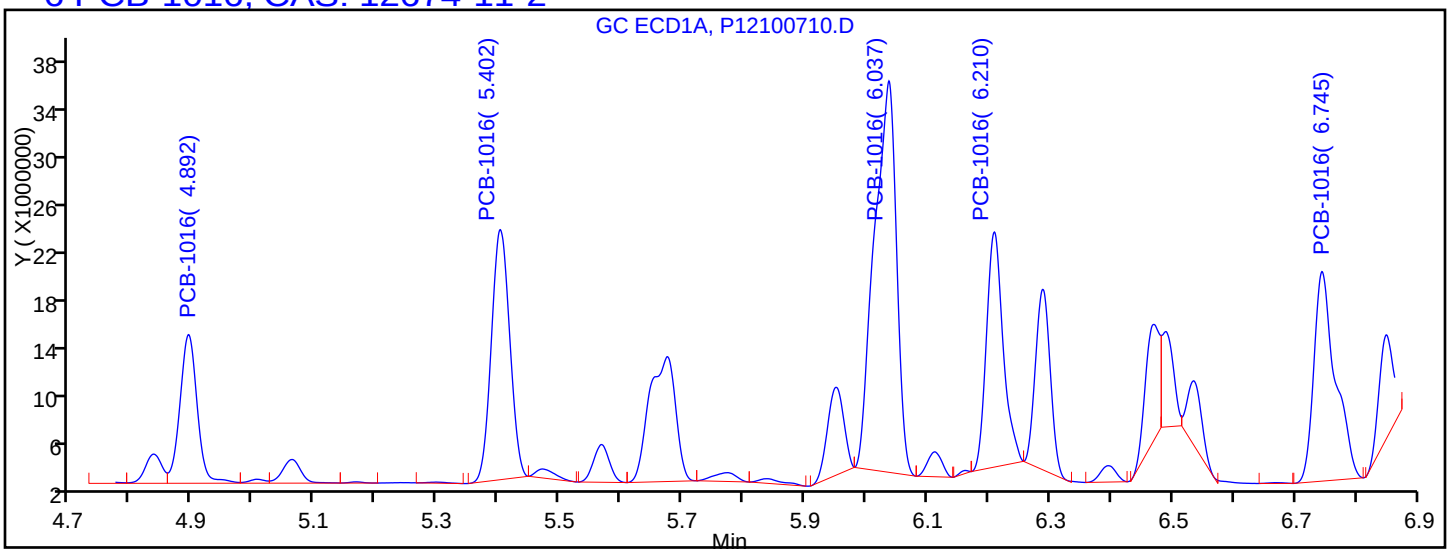
Report Date: 09-Oct-2017 11:18:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100710.D

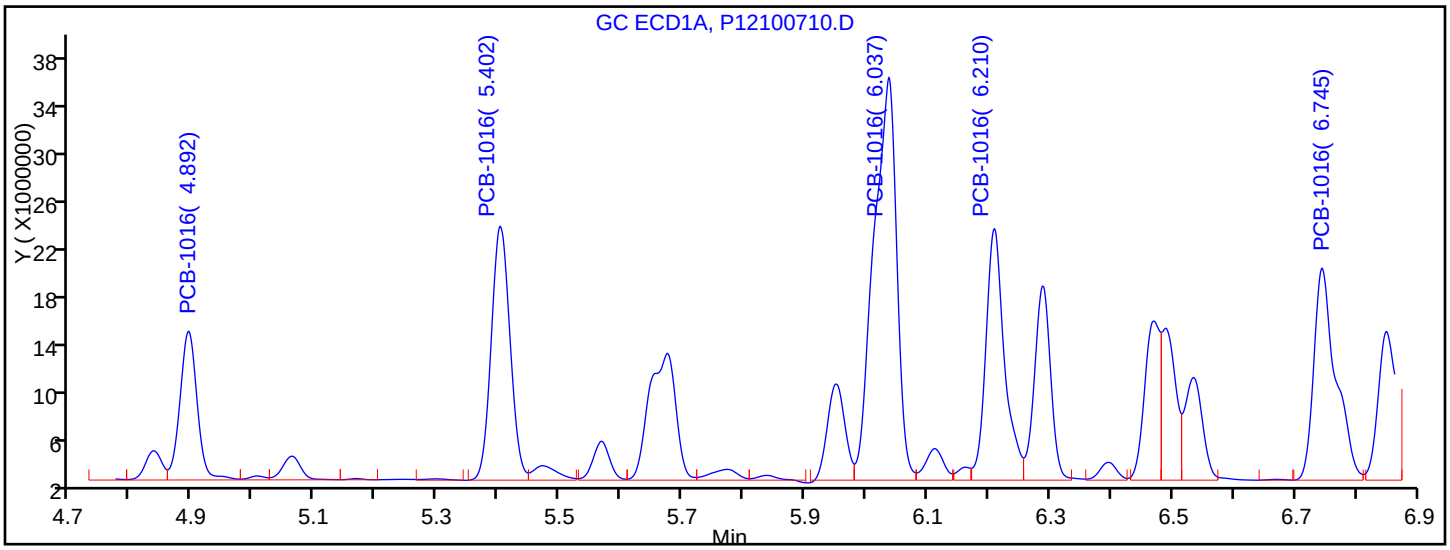
Injection Date:	07-Oct-2017 13:44:42	Instrument ID:	A2HP12		
Lims ID:	240-85882-BB-1-A MS				
Client ID:	GW-38443-100317-SCT-001				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB12IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

6 PCB-1016, CAS: 12674-11-2



Processing Integration Results

4.892	Response = 24367919
5.402	Response = 43563059
6.037	Response = 82056639
6.210	Response = 37377067
6.745	Response = 42610553



Manual Integration Results

4.892	Response = 24367919	
5.402	Response = 45294301	M
6.037	Response = 87934087	M
6.210	Response = 44598865	M
6.745	Response = 44215727	M

Reviewer: hassl, 09-Oct-2017 07:24:22

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: WC-IS-100317 MSD | Lab Sample ID: 240-85941-2 MSD

Matrix: Solid | Lab File ID: SIG1100624.D

Analysis Method: 8082A | Date Collected: 10/03/2017 08:25

Extraction Method: 3540C | Date Extracted: 10/05/2017 08:47

Sample wt/vol: 10.34(g) | Date Analyzed: 10/06/2017 21:10

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 (0.53mm) ID: 0.53(mm)

% Moisture: 22.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 297980 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	630		62	30
11104-28-2	Aroclor-1221	29	U	62	29
11141-16-5	Aroclor-1232	20	U	62	20
53469-21-9	Aroclor-1242	25	U	62	25
12672-29-6	Aroclor-1248	21	U	62	21
11097-69-1	Aroclor-1254	17	U	62	17
11096-82-5	Aroclor-1260	747		62	22

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	68		14-128
2051-24-3	DCB Decachlorobiphenyl	80		10-132

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100624.D
Lims ID: 240-85941-C-2-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 06-Oct-2017 21:10:35 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-024
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:23:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
* 14 1-Bromo-2-nitrobenzene							
1	1.948	1.949	-0.001	231248694	0.0500	0.0500	
2	2.389	2.390	-0.001	42186467	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	3.067	3.069	-0.002	80546490	0.0200	0.0149	
2	4.013	4.016	-0.003	12251876	0.0200	0.0136	
						RPD = 8.65	
3 PCB-1221							
1		3.418				ND	
1		3.675					
1		3.744					
2		4.594					
2		4.844					
2		4.946					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1		3.743				ND	
1		4.349					
1		5.096					
1		5.297					
1		5.674					
2		4.945					
2		5.626					
2		6.334					
2		6.521					
2		7.119					
5 PCB-1242							
1		3.745				ND	
1		4.350					
1		5.095					
1		5.298					
1		5.676					
2		4.946					
2		5.628					
2		6.335					
2		6.522					
2		7.120					
6 PCB-1016							
1	3.742	3.746	-0.004	60409026	1.00	0.4686	
1	4.348	4.352	-0.004	117997790	1.00	0.5249	
1	5.097	5.097	0.000	182914915	1.00	0.4008	
1	5.296	5.299	-0.003	121244977	1.00	0.5972	
1	5.672	5.676	-0.004	59010183	1.00	0.6372	
		Average of Peak Amounts =				0.5258	
2	4.944	4.947	-0.003	10946085	1.00	0.4847	
2	5.627	5.628	-0.001	17478226	1.00	0.4130	
2	6.332	6.334	-0.002	48710578	1.00	0.5905	
2	6.520	6.522	-0.002	18464669	1.00	0.5446	
2	6.891	6.893	-0.002	8254752	1.00	0.4883	
		Average of Peak Amounts =				0.5042	
						RPD = 4.18	
7 PCB-1248							
1		4.349				ND	
1		5.916					
1		6.540					
1		6.783					
1		7.236					
2		5.627					
2		6.798					
2		7.261					
2		7.596					
2		8.248					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
8 PCB-1254							
1		6.787				ND	
1		7.236					
1		7.533					
1		7.724					
1		7.995					
2		7.591					
2		7.795					
2		8.248					
2		8.461					
2		8.941					
10 PCB-1260							
1	7.434	7.437	-0.003	153750843	1.00	0.5785	
1	7.721	7.725	-0.004	250598231	1.00	0.6213	
1	7.991	7.994	-0.003	274613646	1.00	0.6162	
1	8.609	8.611	-0.002	295542501	1.00	0.5474	
1	8.852	8.856	-0.004	163007027	1.00	0.5752	
		Average of Peak Amounts =				0.5877	
2	8.430	8.432	-0.002	31060187	1.00	0.5990	
2	8.621	8.624	-0.003	37720893	1.00	0.6236	
2	9.018	9.020	-0.002	25088342	1.00	0.5372	
2	9.480	9.481	-0.001	65875897	1.00	0.6000	
2	9.783	9.784	-0.001	47507413	1.00	0.6305	
		Average of Peak Amounts =				0.5980	
						RPD = 1.74	
9 PCB-1262							
1		7.724				ND	
1		8.106					
1		8.332					
1		8.611					
1		8.887					
2		8.623					
2		9.019					
2		9.273					
2		9.480					
2		9.780					
11 PCB-1268							
1		8.888				ND	
1		8.921					
1		9.083					
1		9.378					
1		9.611					
2		9.777					
2		9.816					
2		10.024					
2		10.248					
2		10.515					
$ 12 DCB Decachlorobiphenyl							
1	9.761	9.763	-0.002	58826148	0.0200	0.0148	
2	10.741	10.743	-0.002	13109542	0.0200	0.0160	
						RPD = 7.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
16 1260 Res 1							
1	8.852	8.856	-0.004	163007027		NR	
2	9.978	9.979	-0.001	1017833		NR	
13 1260 Res 2							
1	8.886	8.887	-0.002	56218101		NR	
2	9.817	9.818	-0.001	16241577		NR	
15 1260 Res 3							
1	8.924	8.925	-0.001	100024384		NR	
2	0.791	0.793	-0.002	3660928		NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

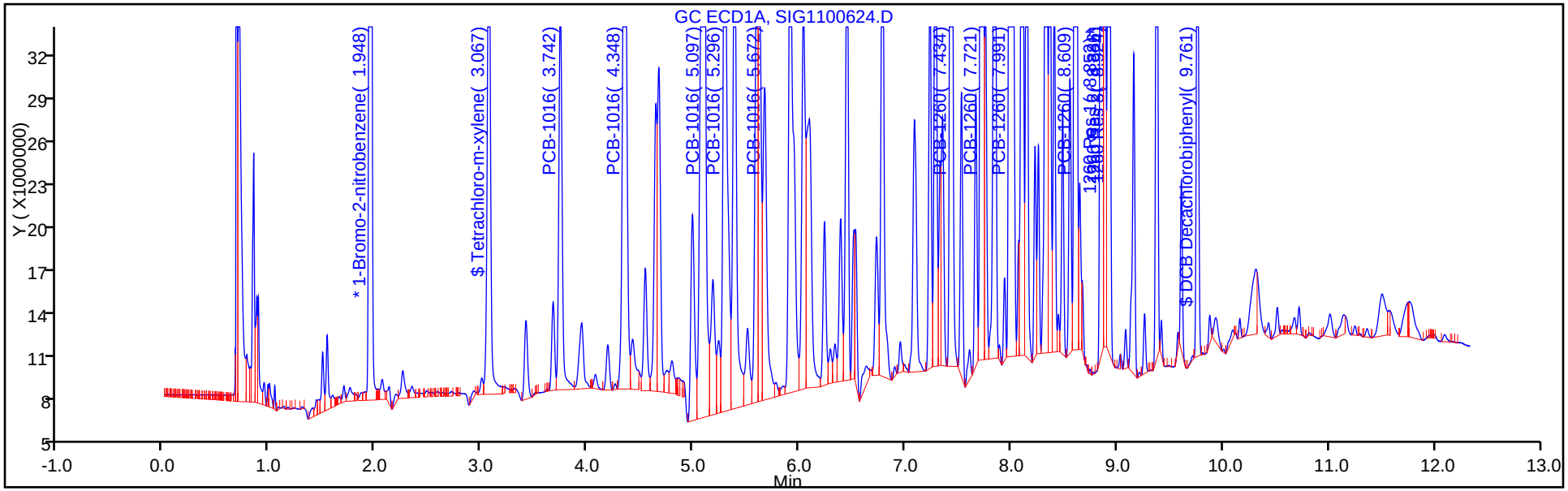
Report Date: 09-Oct-2017 08:31:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

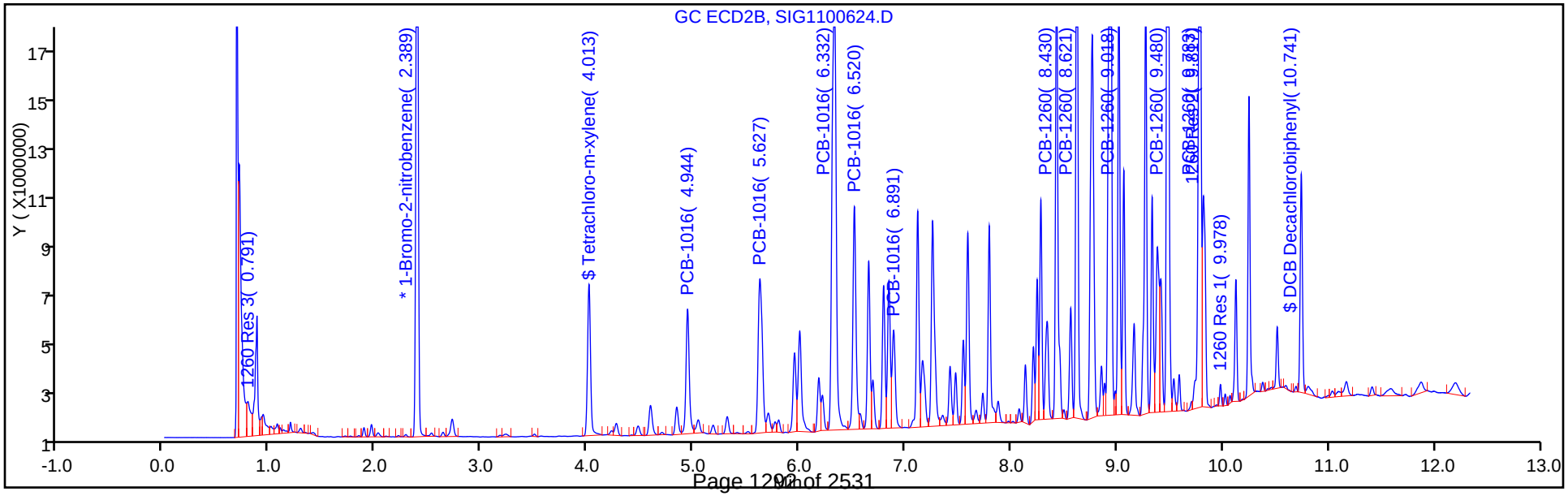
Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100624.D

Injection Date:	06-Oct-2017 21:10:35	Instrument ID:	A2HP13	Operator ID:	
Lims ID:	240-85941-C-2-C MSD			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB13 IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100624.D
Lims ID: 240-85941-C-2-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 06-Oct-2017 21:10:35 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069411-024
Operator ID: Instrument ID: A2HP13

Method: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\PCB13 IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 08:31:07 Calib Date: 02-Oct-2017 22:27:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP13\20171002-69238.b\SIG10100233.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK014

First Level Reviewer: grantk Date: 09-Oct-2017 08:23:43

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0149	74.37
$ 12 DCB Decachlorobiphenyl	0.0200	0.0148	73.76

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.0200	0.0136	68.20
$ 12 DCB Decachlorobiphenyl	0.0200	0.0160	79.76

Report Date: 09-Oct-2017 08:32:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

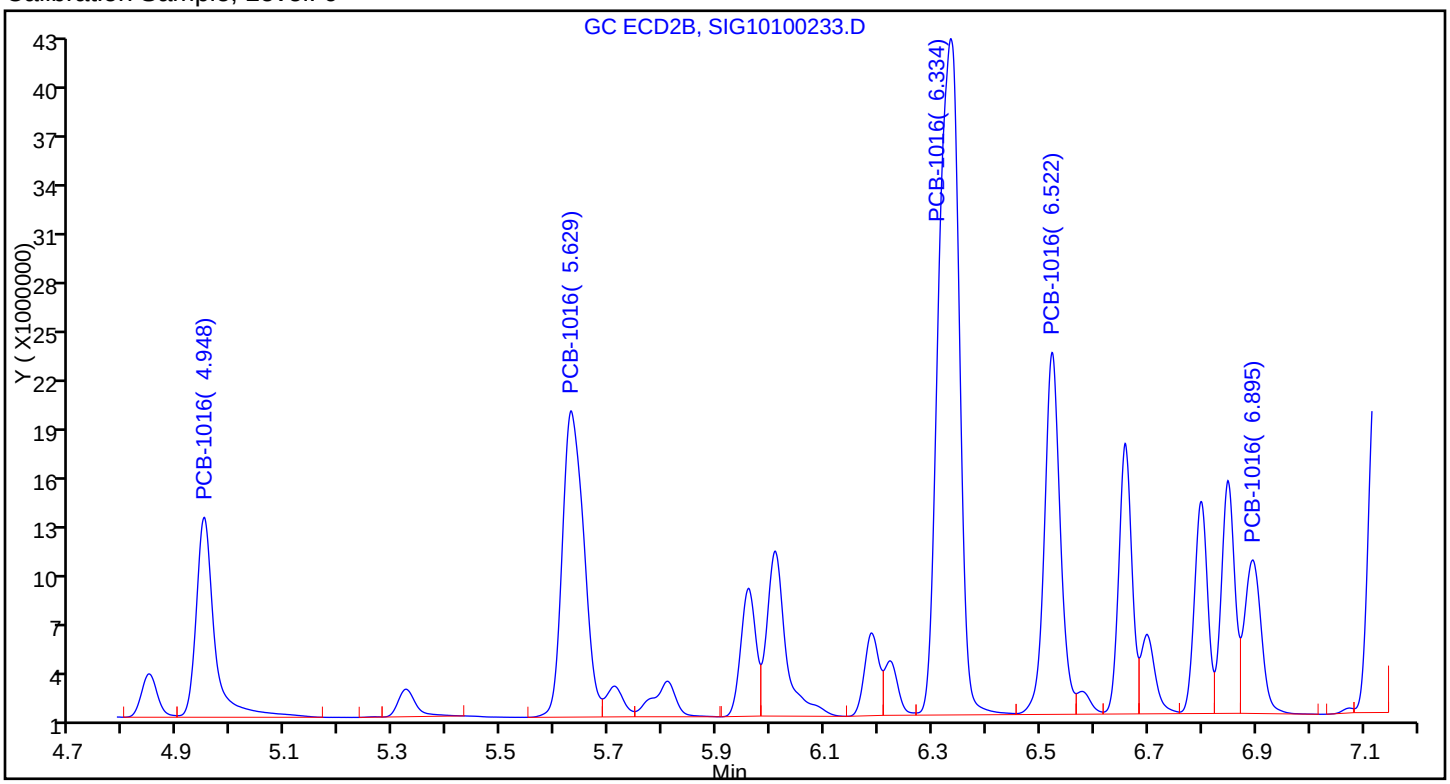
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100624.D

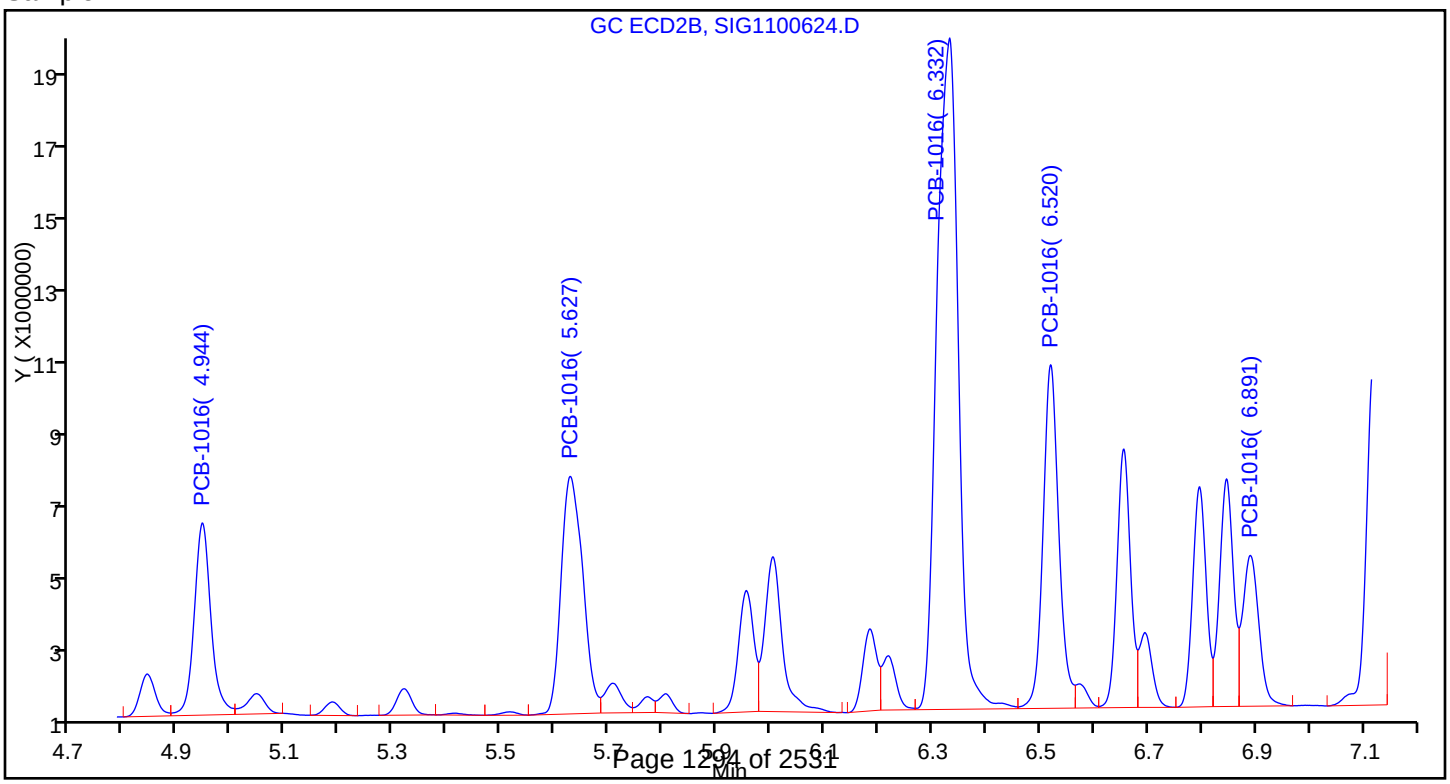
Injection Date:	06-Oct-2017 21:10:35	Instrument ID:	A2HP13		
Lims ID:	240-85941-C-2-C MSD				
Client ID:					
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ecd2b		

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 09-Oct-2017 08:32:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

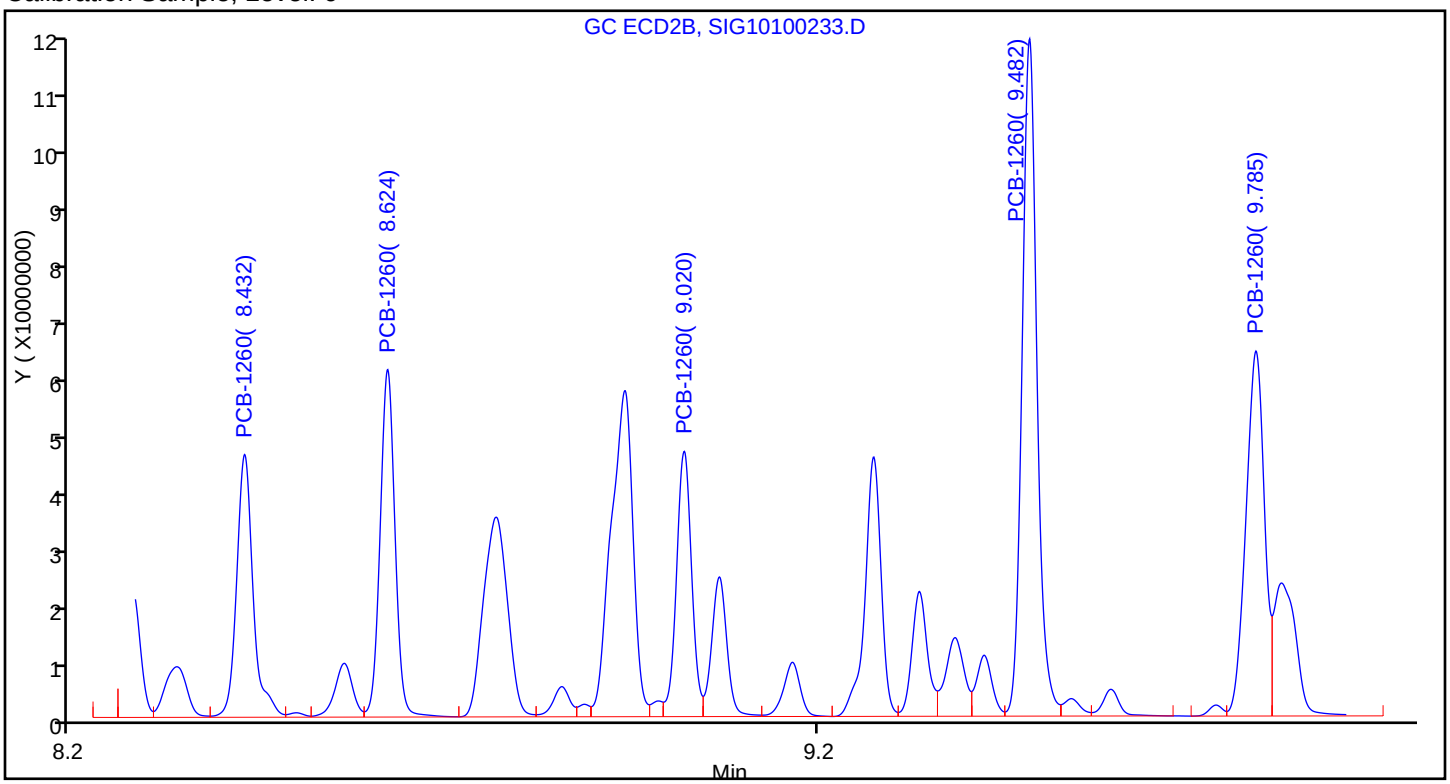
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP13\20171006-69411.b\SIG1100624.D

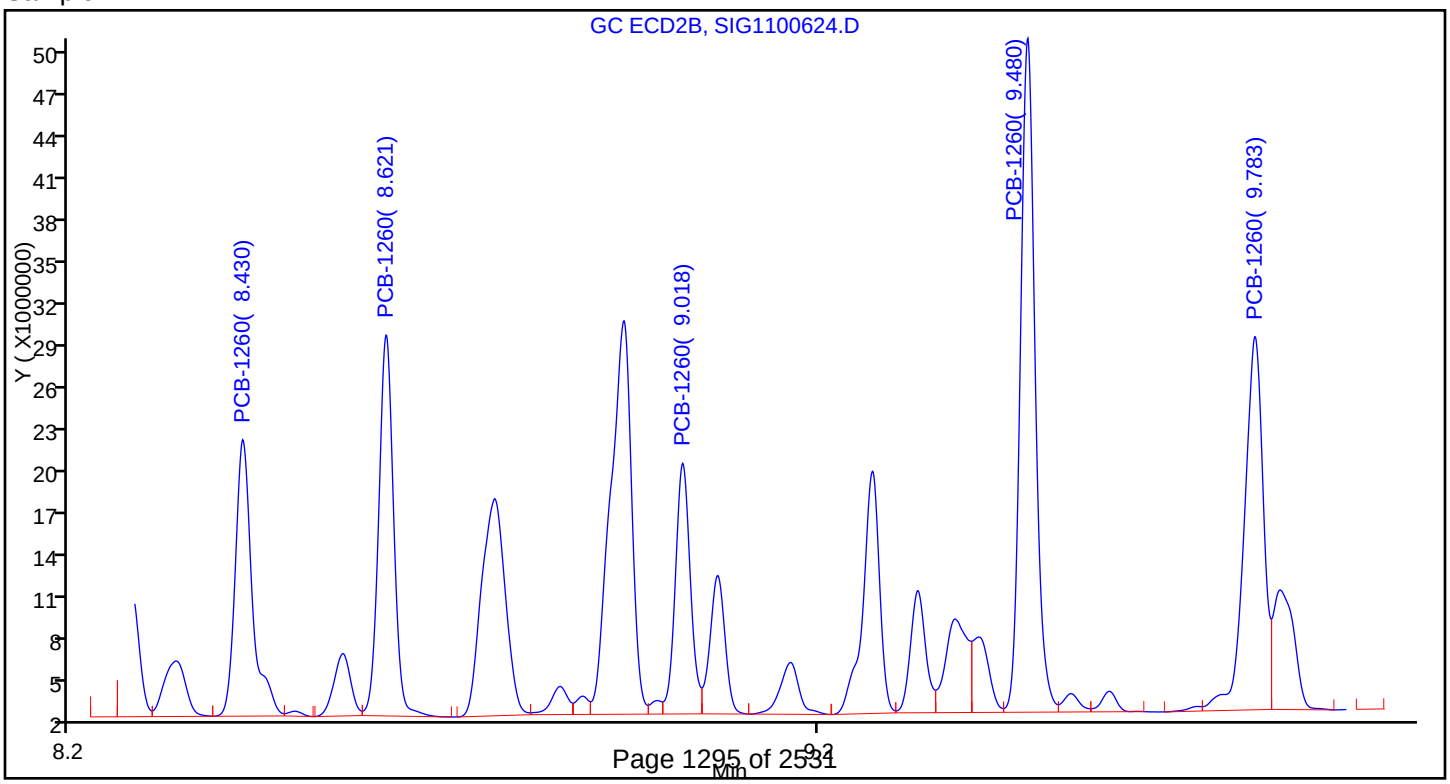
Injection Date:	06-Oct-2017 21:10:35	Instrument ID:	A2HP13		
Lims ID:	240-85941-C-2-C MSD				
Client ID:					
Operator ID:		ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB13 IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ecd2b		

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-85882-AU-1-A MSD

Matrix: Water | Lab File ID: P12100711.D

Analysis Method: 8082A | Date Collected: 10/03/2017 13:10

Extraction Method: 3520C | Date Extracted: 10/05/2017 12:53

Sample wt/vol: 1050(mL) | Date Analyzed: 10/07/2017 14:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 (0.53mm) ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	1.20		0.095	0.048
11104-28-2	Aroclor-1221	0.086	U	0.095	0.086
11141-16-5	Aroclor-1232	0.067	U	0.095	0.067
53469-21-9	Aroclor-1242	0.057	U	0.095	0.057
12672-29-6	Aroclor-1248	0.048	U	0.095	0.048
11097-69-1	Aroclor-1254	0.029	U	0.095	0.029
11096-82-5	Aroclor-1260	1.29		0.095	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	59		21-120
2051-24-3	DCB Decachlorobiphenyl	38		10-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100711.D
Lims ID: 240-85882-AU-1-A MSD
Client ID: GW-38443-100317-SCT-001
Sample Type: MSD
Inject. Date: 07-Oct-2017 14:02:22 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-011
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:24:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
* 14 1-Bromo-2-nitrobenzene							
1	3.068	3.074	-0.006	93879777	0.0500	0.0500	
2	3.613	3.617	-0.004	241341819	0.0500	0.0500	
$ 2 Tetrachloro-m-xylene							
1	4.315	4.316	-0.001	109122204	0.1000	0.0595	
2	5.023	5.024	-0.001	287256664	0.1000	0.0618	
						RPD = 3.92	
3 PCB-1221							
1		4.620				ND	
1		4.836					
1		4.893					
2		5.515					
2		5.725					
2		5.812					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		4.892				ND	
1		5.402					
1		6.033					
1		6.209					
1		6.745					
2		5.810					
2		6.393					
2		7.008					
2		7.185					
2		7.552					
4 PCB-1232							
1		4.892				ND	
1		5.403					
1		6.034					
1		6.210					
1		6.746					
2		5.811					
2		6.396					
2		7.008					
2		7.186					
2		7.555					
6 PCB-1016							
1	4.891	4.892	-0.001	26424689	1.25	0.6506	
1	5.401	5.402	-0.001	46638746	1.25	0.6364	
1	6.037	6.034	0.003	93863287	1.25	0.5557	
1	6.210	6.208	0.002	46045728	1.25	0.6450	
1	6.745	6.745	0.000	47445575	1.25	0.6548	
		Average of Peak Amounts =				0.6285	
2	5.811	5.812	-0.001	70134316	1.25	0.7136	
2	6.401	6.395	0.006	90590049	1.25	0.4713	
2	7.007	7.008	-0.001	319702769	1.25	0.7795	
2	7.186	7.186	0.000	129762696	1.25	0.7766	
2	7.553	7.552	0.001	53792445	1.25	0.7662	
		Average of Peak Amounts =				0.7014	
						RPD = 10.97	
7 PCB-1248							
1		5.401				ND	
1		6.744					
1		7.280					
1		7.550					
1		8.029					
2		6.394					
2		7.003					
2		7.790					
2		8.318					
2		9.103					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
8 PCB-1254							
1		7.553				ND	
1		8.028					
1		8.362					
1		8.585					
1		8.910					
2		8.313					
2		8.553					
2		9.102					
2		9.374					
2		10.011					
10 PCB-1260							
1	8.251	8.252	-0.001	72463433	1.25	0.6768	
1	8.584	8.586	-0.002	123295162	1.25	0.7125	
1	8.909	8.911	-0.002	146562235	1.25	0.7632	
1	9.696	9.698	-0.002	145981485	1.25	0.5887	
1	10.021	10.022	-0.001	83782147	1.25	0.6517	
		Average of Peak Amounts =				0.6786	
2	9.336	9.336	0.000	200547627	1.25	0.7880	
2	10.010	10.010	0.000	317337244	1.25	0.7788	
2	10.451	10.450	0.001	134249511	1.25	0.5652	
2	10.721	10.721	0.000	298079280	1.25	0.6142	
2	11.091	11.091	0.000	208916979	1.25	0.6076	
		Average of Peak Amounts =				0.6708	
						RPD = 1.15	
9 PCB-1262							
1		8.586				ND	
1		9.051					
1		9.332					
1		9.697					
1		10.070					
2		9.589					
2		10.120					
2		10.451					
2		10.721					
2		11.088					
11 PCB-1268							
1		10.069				ND	
1		10.113					
1		10.328					
1		10.710					
1		10.998					
2		11.085					
2		11.130					
2		11.375					
2		11.644					
2		11.940					
$ 12 DCB Decachlorobiphenyl							
1	11.181	11.181	0.000	74252734	0.1000	0.0376	
2	12.170	12.169	0.001	124816222	0.1000	0.0381	
						RPD = 1.30	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
16 1260 Res 1							
1	10.021	10.022	-0.001	83782147		NR	
2	10.908	10.898	0.010	1103098		NR	
13 1260 Res 2							
1	10.070	10.071	-0.001	26744237		NR	
2	11.028	11.028	0.000	4573253		NR	
15 1260 Res 3							
1	10.118	10.119	-0.001	36941589		NR	
2	0.113	0.115	-0.002	227022		NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

SGPCBISTD_00012 Amount Added: 5.00 Units: uL Run Reagent

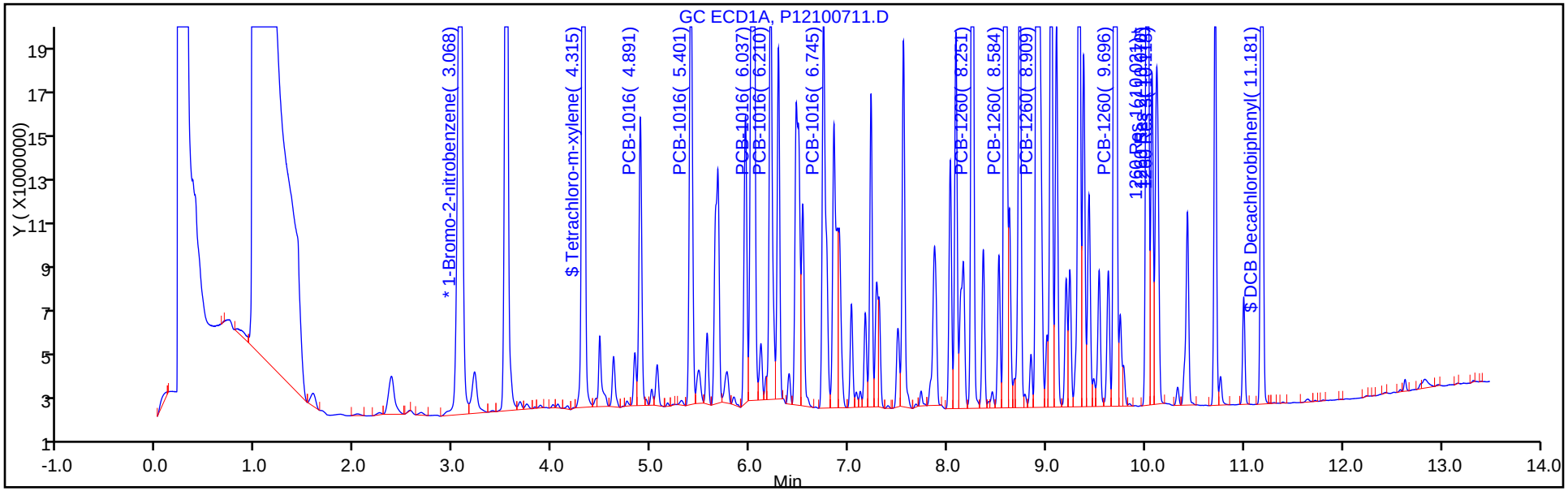
Report Date: 09-Oct-2017 11:19:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

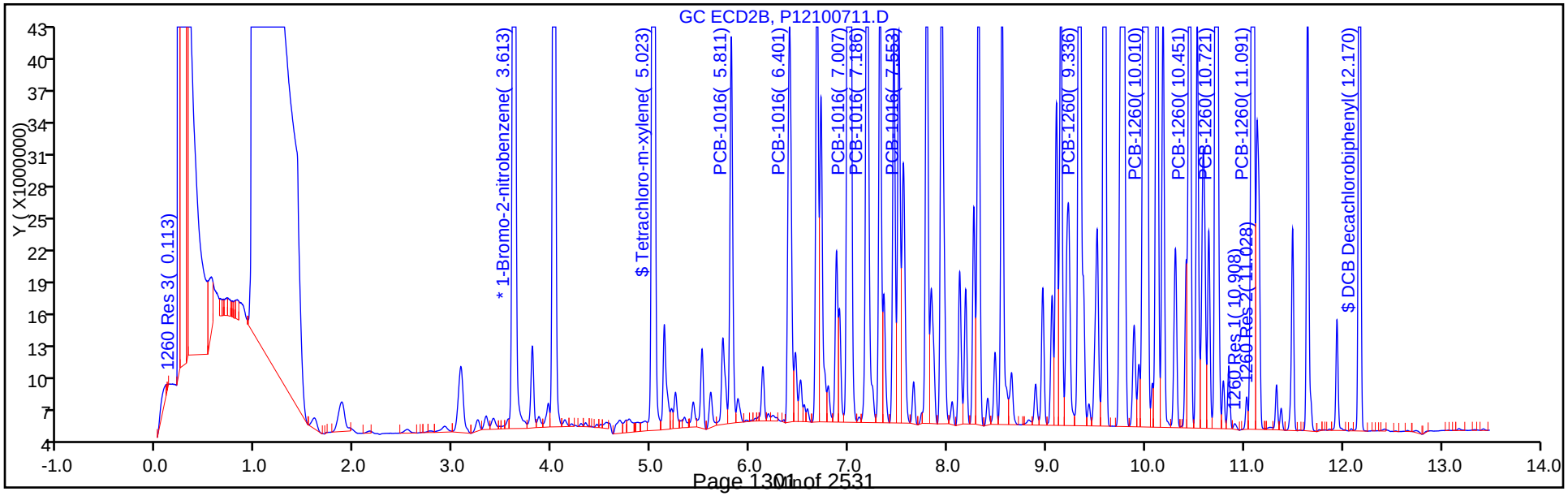
Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100711.D

Injection Date:	07-Oct-2017 14:02:22	Instrument ID:	A2HP12	Operator ID:	
Lims ID:	240-85882-AU-1-A MSD			Worklist Smp#:	11
Client ID:	GW-38443-100317-SCT-001				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB12IS	Limit Group:	GC 8082A IS		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100711.D
Lims ID: 240-85882-AU-1-A MSD
Client ID: GW-38443-100317-SCT-001
Sample Type: MSD
Inject. Date: 07-Oct-2017 14:02:22 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0069423-011
Operator ID: Instrument ID: A2HP12

Method: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\PCB12IS.m
Limit Group: GC 8082A IS
Last Update: 09-Oct-2017 11:17:48 Calib Date: 03-Oct-2017 23:04:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP12\20171003-69267.b\P12100333.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK009

First Level Reviewer: hassl Date: 09-Oct-2017 07:24:59

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0595	59.45
$ 12 DCB Decachlorobiphenyl	0.1000	0.0376	37.61

Surrogate Recovery, Detector: GC ecd2b

Compound	Amount Added	Amount Recovered	% Rec.
$ 2 Tetrachloro-m-xylene	0.1000	0.0618	61.83
$ 12 DCB Decachlorobiphenyl	0.1000	0.0381	38.11

Report Date: 09-Oct-2017 11:19:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100711.D

Injection Date: 07-Oct-2017 14:02:22 Instrument ID: A2HP12

Lims ID: 240-85882-AU-1-A MSD

Client ID: GW-38443-100317-SCT-001

Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

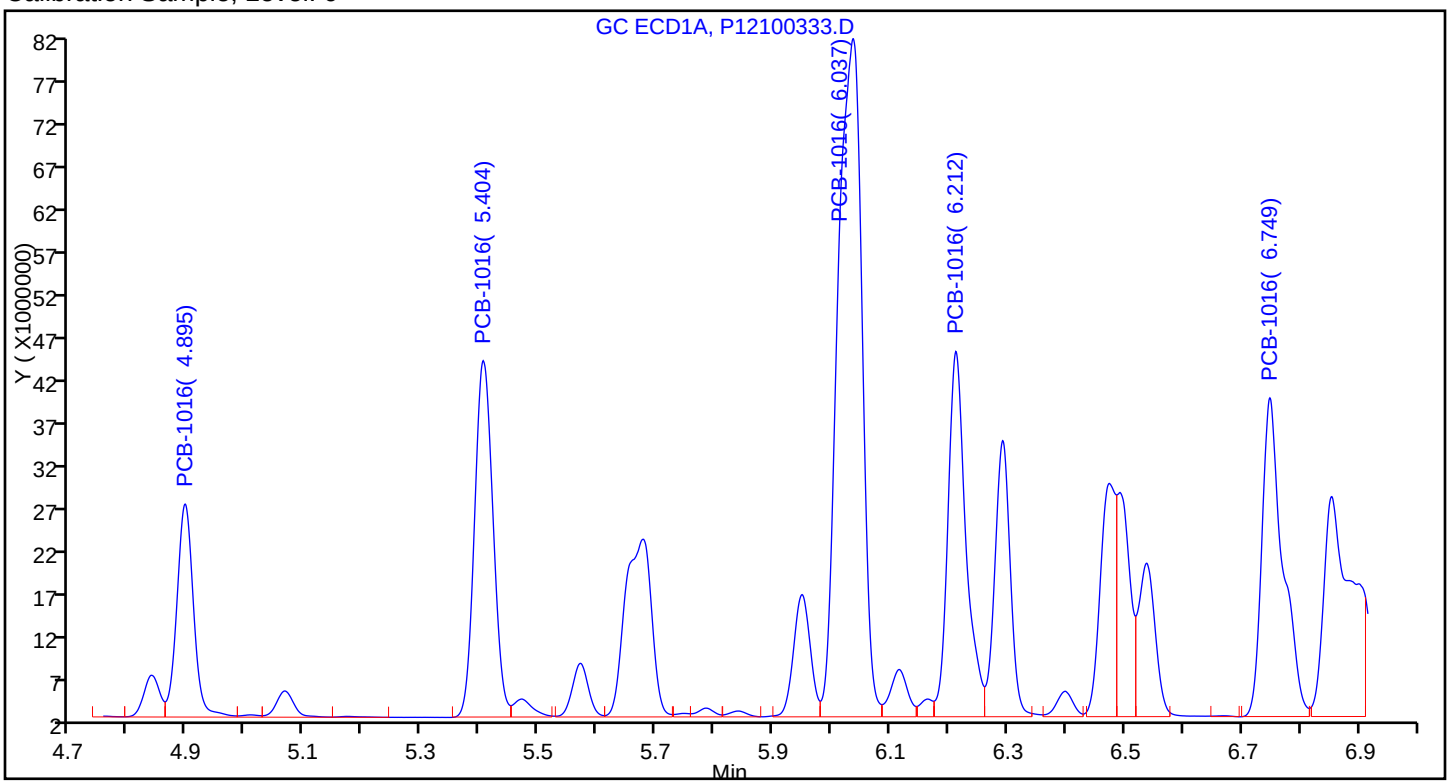
Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: PCB12IS Limit Group: GC 8082A IS

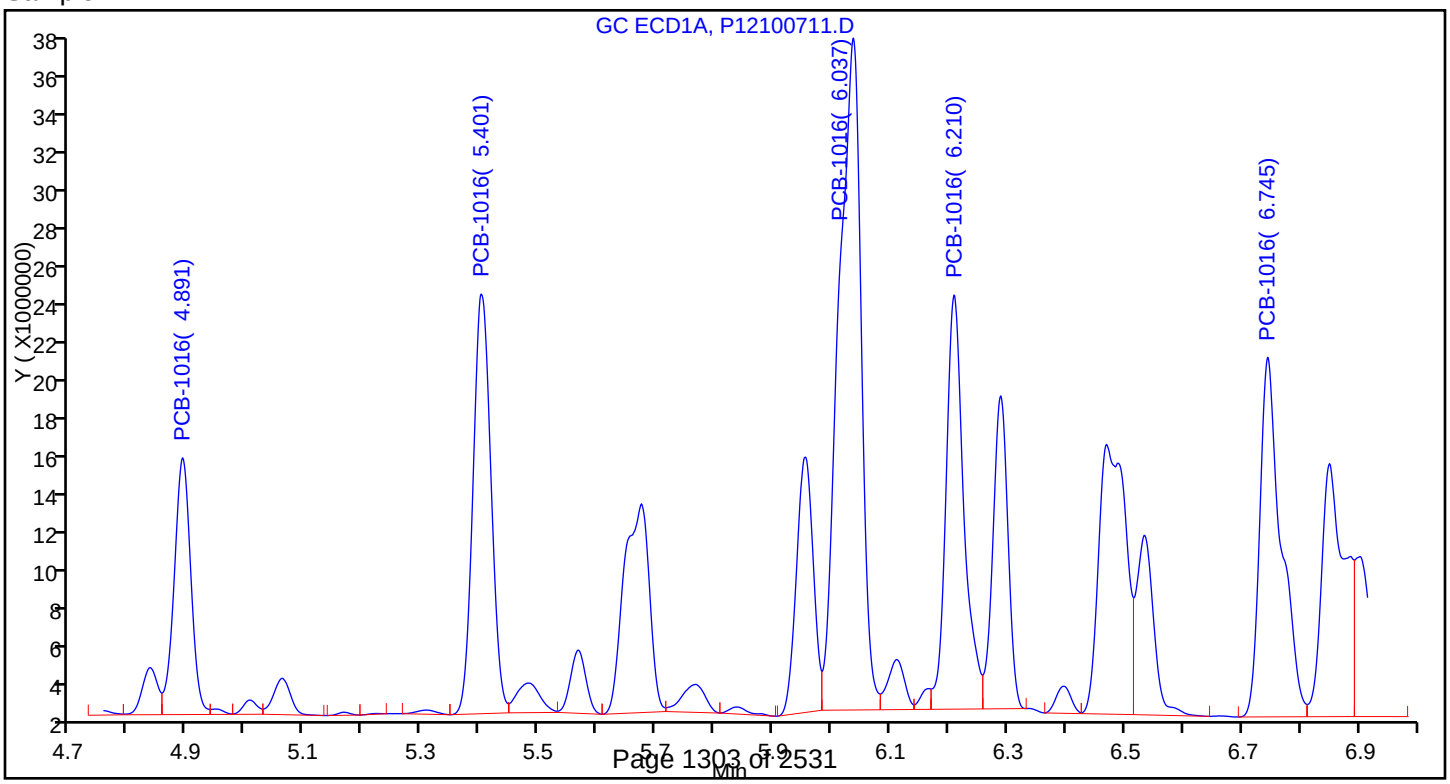
Column: Detector GC ECD1A

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 09-Oct-2017 11:19:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

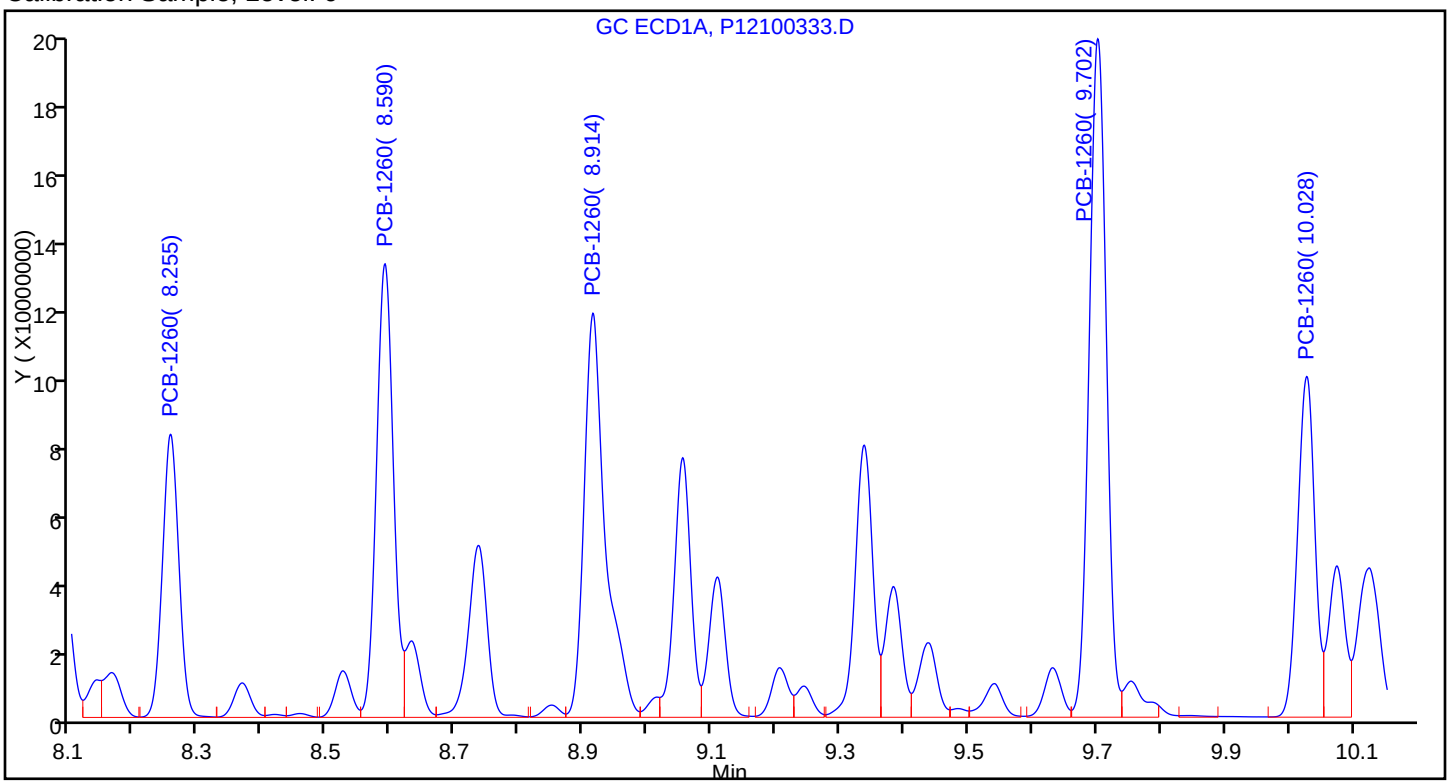
TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A2HP12\20171007-69423.b\P12100711.D

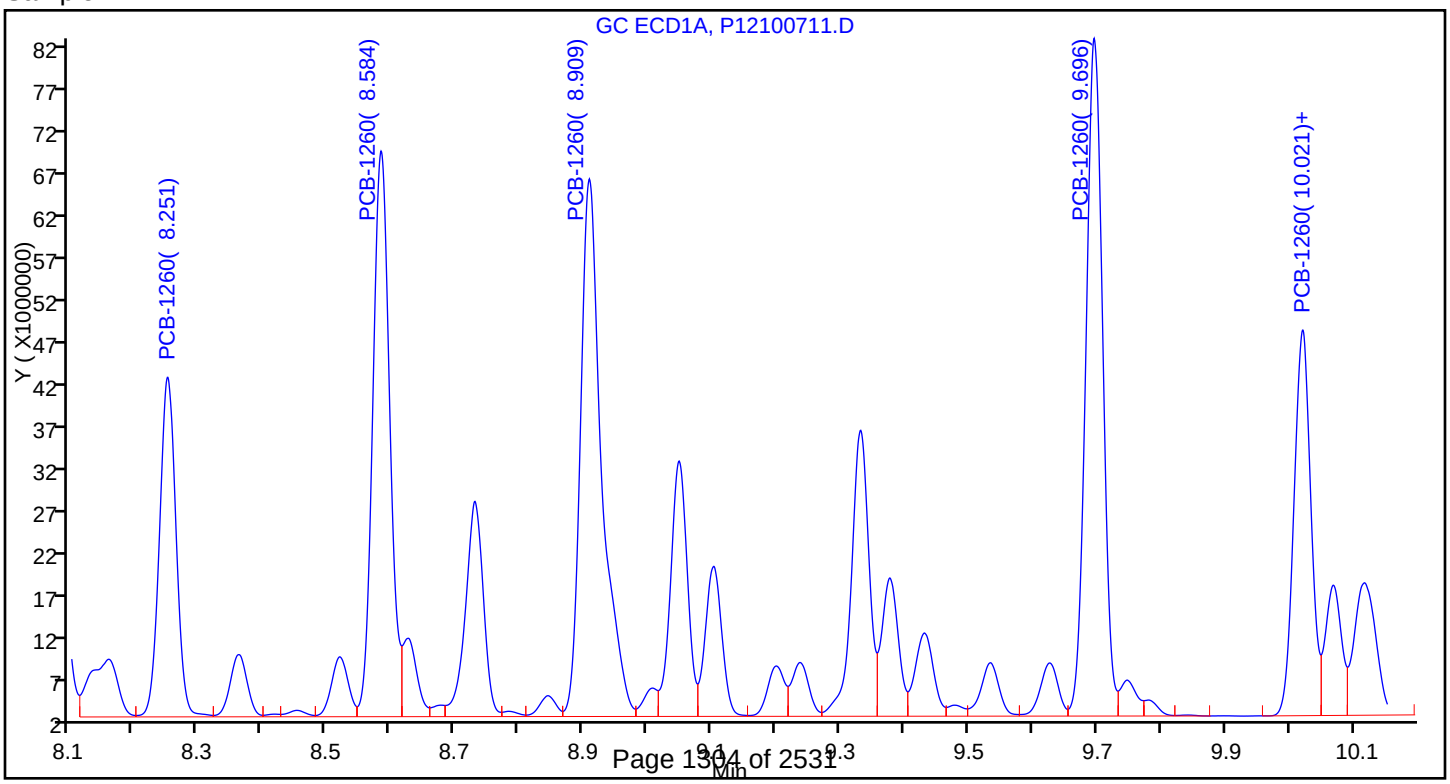
Injection Date:	07-Oct-2017 14:02:22	Instrument ID:	A2HP12		
Lims ID:	240-85882-AU-1-A MSD				
Client ID:	GW-38443-100317-SCT-001				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB12IS	Limit Group:	GC 8082A IS		
Column:		Detector	GC ECD1A		

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Start Date: 10/02/2017 13:35

Analysis Batch Number: 297169 End Date: 10/03/2017 00:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-297169/4 IC		10/02/2017 13:35	1	SIG10100204.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297169/4 IC		10/02/2017 13:35	1	SIG10100204.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297169/5 IC		10/02/2017 13:54	1	SIG10100205.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297169/5 IC		10/02/2017 13:54	1	SIG10100205.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297169/6 IC		10/02/2017 14:12	1	SIG10100206.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297169/6 IC		10/02/2017 14:12	1	SIG10100206.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297169/7 IC		10/02/2017 14:30	1	SIG10100207.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297169/7 IC		10/02/2017 14:30	1	SIG10100207.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297169/8 IC		10/02/2017 14:49	1	SIG10100208.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297169/8 IC		10/02/2017 14:49	1	SIG10100208.D	CLP-2 (0.53mm) 0.53(mm)
STD15 240-297169/9 IC		10/02/2017 15:07	1	SIG10100209.D	CLP-1 (0.53mm) 0.53(mm)
STD15 240-297169/9 IC		10/02/2017 15:07	1	SIG10100209.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297169/10 IC		10/02/2017 15:25	1	SIG10100210.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297169/10 IC		10/02/2017 15:25	1	SIG10100210.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297169/11 IC		10/02/2017 15:44	1	SIG10100211.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297169/11 IC		10/02/2017 15:44	1	SIG10100211.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297169/12 IC		10/02/2017 16:02	1	SIG10100212.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297169/12 IC		10/02/2017 16:02	1	SIG10100212.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297169/13 IC		10/02/2017 16:20	1	SIG10100213.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297169/13 IC		10/02/2017 16:20	1	SIG10100213.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297169/14 IC		10/02/2017 16:39	1	SIG10100214.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297169/14 IC		10/02/2017 16:39	1	SIG10100214.D	CLP-2 (0.53mm) 0.53(mm)
STD151242 240-297169/15 IC		10/02/2017 16:57	1	SIG10100215.D	CLP-1 (0.53mm) 0.53(mm)
STD151242 240-297169/15 IC		10/02/2017 16:57	1	SIG10100215.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297169/16 IC		10/02/2017 17:15	1	SIG10100216.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297169/16 IC		10/02/2017 17:15	1	SIG10100216.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297169/17 IC		10/02/2017 17:34	1	SIG10100217.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297169/17 IC		10/02/2017 17:34	1	SIG10100217.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297169/18 IC		10/02/2017 17:52	1	SIG10100218.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297169/18 IC		10/02/2017 17:52	1	SIG10100218.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297169/19 IC		10/02/2017 18:10	1	SIG10100219.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297169/19 IC		10/02/2017 18:10	1	SIG10100219.D	CLP-2 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Start Date: 10/02/2017 13:35

Analysis Batch Number: 297169 End Date: 10/03/2017 00:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-297169/20 IC		10/02/2017 18:29	1	SIG10100220.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297169/20 IC		10/02/2017 18:29	1	SIG10100220.D	CLP-2 (0.53mm) 0.53(mm)
STD15 240-297169/21 IC		10/02/2017 18:47	1	SIG10100221.D	CLP-1 (0.53mm) 0.53(mm)
STD15 240-297169/21 IC		10/02/2017 18:47	1	SIG10100221.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297169/22 IC		10/02/2017 19:06	1	SIG10100222.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297169/22 IC		10/02/2017 19:06	1	SIG10100222.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297169/23 IC		10/02/2017 19:24	1	SIG10100223.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297169/23 IC		10/02/2017 19:24	1	SIG10100223.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297169/24 IC		10/02/2017 19:42	1	SIG10100224.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297169/24 IC		10/02/2017 19:42	1	SIG10100224.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297169/25 IC		10/02/2017 20:01	1	SIG10100225.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297169/25 IC		10/02/2017 20:01	1	SIG10100225.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297169/26 IC		10/02/2017 20:19	1	SIG10100226.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297169/26 IC		10/02/2017 20:19	1	SIG10100226.D	CLP-2 (0.53mm) 0.53(mm)
STD15 240-297169/27 IC		10/02/2017 20:37	1	SIG10100227.D	CLP-1 (0.53mm) 0.53(mm)
STD15 240-297169/27 IC		10/02/2017 20:37	1	SIG10100227.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297169/28 IC		10/02/2017 20:56	1	SIG10100228.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297169/28 IC		10/02/2017 20:56	1	SIG10100228.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297169/29 IC		10/02/2017 21:14	1	SIG10100229.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297169/29 IC		10/02/2017 21:14	1	SIG10100229.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297169/30 IC		10/02/2017 21:32	1	SIG10100230.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297169/30 IC		10/02/2017 21:32	1	SIG10100230.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297169/31 ICIS		10/02/2017 21:51	1	SIG10100231.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297169/31 ICIS		10/02/2017 21:51	1	SIG10100231.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297169/32 IC		10/02/2017 22:09	1	SIG10100232.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297169/32 IC		10/02/2017 22:09	1	SIG10100232.D	CLP-2 (0.53mm) 0.53(mm)
STD151660 240-297169/33 IC		10/02/2017 22:27	1	SIG10100233.D	CLP-1 (0.53mm) 0.53(mm)
STD151660 240-297169/33 IC		10/02/2017 22:27	1	SIG10100233.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/34		10/02/2017 22:46	1	SIG10100234.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/34		10/02/2017 22:46	1	SIG10100234.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/35		10/02/2017 23:04	1	SIG10100235.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/35		10/02/2017 23:04	1	SIG10100235.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/36		10/02/2017 23:22	1	SIG10100236.D	CLP-1 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Start Date: 10/02/2017 13:35

Analysis Batch Number: 297169 End Date: 10/03/2017 00:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 240-297169/36		10/02/2017 23:22	1	SIG10100236.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/37		10/02/2017 23:41	1	SIG10100237.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/37		10/02/2017 23:41	1	SIG10100237.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/38		10/02/2017 23:59	1	SIG10100238.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/38		10/02/2017 23:59	1	SIG10100238.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/39		10/03/2017 00:17	1	SIG10100239.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/39		10/03/2017 00:17	1	SIG10100239.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/40		10/03/2017 00:36	1	SIG10100240.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/40		10/03/2017 00:36	1	SIG10100240.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297169/41		10/03/2017 00:54	1	SIG10100241.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297169/41		10/03/2017 00:54	1	SIG10100241.D	CLP-2 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Start Date: 10/03/2017 14:33

Analysis Batch Number: 297285 End Date: 10/04/2017 01:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-297285/4 IC		10/03/2017 14:33	1	P12100304.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297285/4 IC		10/03/2017 14:33	1	P12100304.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297285/5 IC		10/03/2017 14:50	1	P12100305.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297285/5 IC		10/03/2017 14:50	1	P12100305.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297285/6 IC		10/03/2017 15:08	1	P12100306.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297285/6 IC		10/03/2017 15:08	1	P12100306.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297285/7 IC		10/03/2017 15:26	1	P12100307.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297285/7 IC		10/03/2017 15:26	1	P12100307.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297285/8 IC		10/03/2017 15:43	1	P12100308.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297285/8 IC		10/03/2017 15:43	1	P12100308.D	CLP-2 (0.53mm) 0.53(mm)
STD15 240-297285/9 IC		10/03/2017 16:01	1	P12100309.D	CLP-1 (0.53mm) 0.53(mm)
STD15 240-297285/9 IC		10/03/2017 16:01	1	P12100309.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297285/10 IC		10/03/2017 16:19	1	P12100310.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297285/10 IC		10/03/2017 16:19	1	P12100310.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297285/11 IC		10/03/2017 16:36	1	P12100311.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297285/11 IC		10/03/2017 16:36	1	P12100311.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297285/12 IC		10/03/2017 16:54	1	P12100312.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297285/12 IC		10/03/2017 16:54	1	P12100312.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297285/13 IC		10/03/2017 17:12	1	P12100313.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297285/13 IC		10/03/2017 17:12	1	P12100313.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297285/14 IC		10/03/2017 17:29	1	P12100314.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297285/14 IC		10/03/2017 17:29	1	P12100314.D	CLP-2 (0.53mm) 0.53(mm)
STD151242 240-297285/15 IC		10/03/2017 17:47	1	P12100315.D	CLP-1 (0.53mm) 0.53(mm)
STD151242 240-297285/15 IC		10/03/2017 17:47	1	P12100315.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297285/16 IC		10/03/2017 18:04	1	P12100316.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297285/16 IC		10/03/2017 18:04	1	P12100316.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297285/17 IC		10/03/2017 18:22	1	P12100317.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297285/17 IC		10/03/2017 18:22	1	P12100317.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297285/18 IC		10/03/2017 18:40	1	P12100318.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297285/18 IC		10/03/2017 18:40	1	P12100318.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297285/19 IC		10/03/2017 18:57	1	P12100319.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297285/19 IC		10/03/2017 18:57	1	P12100319.D	CLP-2 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Start Date: 10/03/2017 14:33

Analysis Batch Number: 297285 End Date: 10/04/2017 01:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-297285/20 IC		10/03/2017 19:15	1	P12100320.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297285/20 IC		10/03/2017 19:15	1	P12100320.D	CLP-2 (0.53mm) 0.53(mm)
STD15 240-297285/21 IC		10/03/2017 19:33	1	P12100321.D	CLP-1 (0.53mm) 0.53(mm)
STD15 240-297285/21 IC		10/03/2017 19:33	1	P12100321.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297285/22 IC		10/03/2017 19:50	1	P12100322.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297285/22 IC		10/03/2017 19:50	1	P12100322.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297285/23 IC		10/03/2017 20:08	1	P12100323.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297285/23 IC		10/03/2017 20:08	1	P12100323.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297285/24 IC		10/03/2017 20:25	1	P12100324.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297285/24 IC		10/03/2017 20:25	1	P12100324.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297285/25 IC		10/03/2017 20:43	1	P12100325.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297285/25 IC		10/03/2017 20:43	1	P12100325.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297285/26 IC		10/03/2017 21:01	1	P12100326.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297285/26 IC		10/03/2017 21:01	1	P12100326.D	CLP-2 (0.53mm) 0.53(mm)
STD15 240-297285/27 IC		10/03/2017 21:18	1	P12100327.D	CLP-1 (0.53mm) 0.53(mm)
STD15 240-297285/27 IC		10/03/2017 21:18	1	P12100327.D	CLP-2 (0.53mm) 0.53(mm)
STD005 240-297285/28 IC		10/03/2017 21:36	1	P12100328.D	CLP-1 (0.53mm) 0.53(mm)
STD005 240-297285/28 IC		10/03/2017 21:36	1	P12100328.D	CLP-2 (0.53mm) 0.53(mm)
STD01 240-297285/29 IC		10/03/2017 21:54	1	P12100329.D	CLP-1 (0.53mm) 0.53(mm)
STD01 240-297285/29 IC		10/03/2017 21:54	1	P12100329.D	CLP-2 (0.53mm) 0.53(mm)
STD02 240-297285/30 IC		10/03/2017 22:11	1	P12100330.D	CLP-1 (0.53mm) 0.53(mm)
STD02 240-297285/30 IC		10/03/2017 22:11	1	P12100330.D	CLP-2 (0.53mm) 0.53(mm)
STD05 240-297285/31 ICIS		10/03/2017 22:29	1	P12100331.D	CLP-1 (0.53mm) 0.53(mm)
STD05 240-297285/31 ICIS		10/03/2017 22:29	1	P12100331.D	CLP-2 (0.53mm) 0.53(mm)
STD1 240-297285/32 IC		10/03/2017 22:47	1	P12100332.D	CLP-1 (0.53mm) 0.53(mm)
STD1 240-297285/32 IC		10/03/2017 22:47	1	P12100332.D	CLP-2 (0.53mm) 0.53(mm)
STD151660 240-297285/33 IC		10/03/2017 23:04	1	P12100333.D	CLP-1 (0.53mm) 0.53(mm)
STD151660 240-297285/33 IC		10/03/2017 23:04	1	P12100333.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/34		10/03/2017 23:22	1	P12100334.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/34		10/03/2017 23:22	1	P12100334.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/35		10/03/2017 23:39	1	P12100335.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/35		10/03/2017 23:39	1	P12100335.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/36		10/03/2017 23:57	1	P12100336.D	CLP-1 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Start Date: 10/03/2017 14:33

Analysis Batch Number: 297285 End Date: 10/04/2017 01:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 240-297285/36		10/03/2017 23:57	1	P12100336.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/37		10/04/2017 00:15	1	P12100337.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/37		10/04/2017 00:15	1	P12100337.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/38		10/04/2017 00:32	1	P12100338.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/38		10/04/2017 00:32	1	P12100338.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/39		10/04/2017 00:50	1	P12100339.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/39		10/04/2017 00:50	1	P12100339.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/40		10/04/2017 01:08	1	P12100340.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/40		10/04/2017 01:08	1	P12100340.D	CLP-2 (0.53mm) 0.53(mm)
ICV 240-297285/41		10/04/2017 01:25	1	P12100341.D	CLP-1 (0.53mm) 0.53(mm)
ICV 240-297285/41		10/04/2017 01:25	1	P12100341.D	CLP-2 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP13 Start Date: 10/06/2017 14:45

Analysis Batch Number: 297980 End Date: 10/06/2017 21:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-297980/3 CCVIS		10/06/2017 14:45	1		CLP-1 (0.53mm) 0.53(mm)
CCV 240-297980/3 CCVIS		10/06/2017 14:45	1	SIG1100603.D	CLP-2 (0.53mm) 0.53(mm)
CCV 240-297980/4		10/06/2017 15:03	1		CLP-1 (0.53mm) 0.53(mm)
CCV 240-297980/4		10/06/2017 15:03	1	SIG1100604.D	CLP-2 (0.53mm) 0.53(mm)
CCV 240-297980/5		10/06/2017 15:21	1		CLP-1 (0.53mm) 0.53(mm)
CCV 240-297980/5		10/06/2017 15:21	1	SIG1100605.D	CLP-2 (0.53mm) 0.53(mm)
CCV 240-297980/6		10/06/2017 15:40	1		CLP-1 (0.53mm) 0.53(mm)
CCV 240-297980/6		10/06/2017 15:40	1	SIG1100606.D	CLP-2 (0.53mm) 0.53(mm)
CCV 240-297980/7		10/06/2017 15:58	1		CLP-1 (0.53mm) 0.53(mm)
CCV 240-297980/7		10/06/2017 15:58	1	SIG1100607.D	CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 16:35	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 16:35	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 16:53	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 16:53	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 17:11	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 17:11	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 17:30	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 17:30	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 17:48	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 17:48	1		CLP-2 (0.53mm) 0.53(mm)
MB 240-297693/10-A		10/06/2017 18:07	1	SIG1100614.D	CLP-1 (0.53mm) 0.53(mm)
MB 240-297693/10-A		10/06/2017 18:07	1	SIG1100614.D	CLP-2 (0.53mm) 0.53(mm)
LCS 240-297693/11-A		10/06/2017 18:25	1	SIG1100615.D	CLP-1 (0.53mm) 0.53(mm)
LCS 240-297693/11-A		10/06/2017 18:25	1	SIG1100615.D	CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 18:43	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 18:43	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:02	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:02	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:20	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:20	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:38	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:38	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:57	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 19:57	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 20:15	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 20:15	1		CLP-2 (0.53mm) 0.53(mm)
240-85941-2		10/06/2017 20:33	1	SIG1100622.D	CLP-1 (0.53mm) 0.53(mm)
240-85941-2		10/06/2017 20:33	1	SIG1100622.D	CLP-2 (0.53mm) 0.53(mm)
240-85941-2 MS		10/06/2017 20:52	1	SIG1100623.D	CLP-1 (0.53mm) 0.53(mm)
240-85941-2 MS		10/06/2017 20:52	1	SIG1100623.D	CLP-2 (0.53mm) 0.53(mm)
240-85941-2 MSD		10/06/2017 21:10	1	SIG1100624.D	CLP-1 (0.53mm) 0.53(mm)
240-85941-2 MSD		10/06/2017 21:10	1	SIG1100624.D	CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 21:29	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/06/2017 21:29	1		CLP-2 (0.53mm) 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: A2HP12 Start Date: 10/07/2017 11:40

Analysis Batch Number: 298032 End Date: 10/07/2017 19:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-298032/3 CCVIS		10/07/2017 11:40	1	P12100703.D	CLP-1 (0.53mm) 0.53(mm)
CCV 240-298032/3 CCVIS		10/07/2017 11:40	1		CLP-2 (0.53mm) 0.53(mm)
CCV 240-298032/4		10/07/2017 11:58	1	P12100704.D	CLP-1 (0.53mm) 0.53(mm)
CCV 240-298032/4		10/07/2017 11:58	1		CLP-2 (0.53mm) 0.53(mm)
CCV 240-298032/5		10/07/2017 12:16	1	P12100705.D	CLP-1 (0.53mm) 0.53(mm)
CCV 240-298032/5		10/07/2017 12:16	1		CLP-2 (0.53mm) 0.53(mm)
CCV 240-298032/6		10/07/2017 12:33	1	P12100706.D	CLP-1 (0.53mm) 0.53(mm)
CCV 240-298032/6		10/07/2017 12:33	1		CLP-2 (0.53mm) 0.53(mm)
CCV 240-298032/7		10/07/2017 12:51	1	P12100707.D	CLP-1 (0.53mm) 0.53(mm)
CCV 240-298032/7		10/07/2017 12:51	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 13:27	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 13:27	1		CLP-2 (0.53mm) 0.53(mm)
240-85882-BB-1-A MS		10/07/2017 13:44	1	P12100710.D	CLP-1 (0.53mm) 0.53(mm)
240-85882-BB-1-A MS		10/07/2017 13:44	1	P12100710.D	CLP-2 (0.53mm) 0.53(mm)
240-85882-AU-1-A MSD		10/07/2017 14:02	1	P12100711.D	CLP-1 (0.53mm) 0.53(mm)
240-85882-AU-1-A MSD		10/07/2017 14:02	1	P12100711.D	CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 14:20	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 14:20	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 14:37	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 14:37	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 15:30	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 15:30	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 15:48	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 15:48	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 18:27	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 18:27	1		CLP-2 (0.53mm) 0.53(mm)
MB 240-297775/21-A		10/07/2017 18:45	1	P12100727.D	CLP-1 (0.53mm) 0.53(mm)
MB 240-297775/21-A		10/07/2017 18:45	1	P12100727.D	CLP-2 (0.53mm) 0.53(mm)
LCS 240-297775/22-A		10/07/2017 19:02	1	P12100728.D	CLP-1 (0.53mm) 0.53(mm)
LCS 240-297775/22-A		10/07/2017 19:02	1	P12100728.D	CLP-2 (0.53mm) 0.53(mm)
CCVIS 240-298032/29		10/07/2017 19:20	1	P12100729.D	CLP-1 (0.53mm) 0.53(mm)
CCVIS 240-298032/29		10/07/2017 19:20	1		CLP-2 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 19:38	1		CLP-1 (0.53mm) 0.53(mm)
ZZZZZ		10/07/2017 19:38	1		CLP-2 (0.53mm) 0.53(mm)
240-85941-3		10/07/2017 19:56	1	P12100731.D	CLP-1 (0.53mm) 0.53(mm)
240-85941-3		10/07/2017 19:56	1	P12100731.D	CLP-2 (0.53mm) 0.53(mm)

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297693 Batch Start Date: 10/05/17 12:50 Batch Analyst: Trushel, Jessica

Batch Method: 3540C Batch End Date: 10/06/17 04:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ex10PPMSPK 00028	ex2/.2SURRW 00092		
240-85941-C-2	WC-IS-100317	3540C, 8082A	T	10.35 g	10 mL		1 mL		
240-85941-C-2 MS	WC-IS-100317	3540C, 8082A	T	10.16 g	10 mL	1 mL	1 mL		
240-85941-C-2 MSD	WC-IS-100317	3540C, 8082A	T	10.34 g	10 mL	1 mL	1 mL		
MB 240-297693/10		3540C, 8082A		10 g	10 mL		1 mL		
LCS 240-297693/11		3540C, 8082A		10 g	10 mL	1 mL	1 mL		

Batch Notes	
Acid used for Clean Up ID	2902653
Balance ID	1339907
Analyst ID - Concentration	STEVEEARLE
Na2SO4 ID	2548159
Prep Solvent ID	3261884

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297775 Batch Start Date: 10/05/17 15:05 Batch Analyst: Scott, Caitlin

Batch Method: 3520C Batch End Date: 10/06/17 09:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	ex10PPMSPK 00028	ex2/.2SURRW 00092	
240-85882-BB-1 MS		3520C, 8082A	T	1050 mL	2 mL	7	0.25 mL	1 mL	
240-85882-AU-1 MSD		3520C, 8082A	T	1050 mL	2 mL	7	0.25 mL	1 mL	
240-85941-H-3	WC-IW-100317	3520C, 8082A	T	1040 mL	2 mL	7		1 mL	
MB 240-297775/21		3520C, 8082A		1000 mL	2 mL	7		1 mL	
LCS 240-297775/22		3520C, 8082A		1000 mL	2 mL	7	0.25 mL	1 mL	

Batch Notes	
Acid used for Clean Up ID	3187927
Analyst ID - Concentration	ELIZABETH BORDER
Exchange Solvent ID	3198105
pH Paper ID	2644945
Prep Solvent ID	3275483
Person's name who did the prep	CAITLIN SCOTT
TCLP Fluid 1 ID	2308568

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG No.:

Project: MRC Waste Characterization Block I

Client Sample ID	Lab Sample ID
WC-IS-100317	240-85941-2
WC-IW-100317	240-85941-3

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TCLP

Client Sample ID: WC-IS-100317 Lab Sample ID: 240-85941-2

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG ID.:

Matrix: Solid Date Sampled: 10/03/2017 08:25

Reporting Basis: WET Date Received: 10/04/2017 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.0049	0.050	0.0033	mg/L	J	B	1	6010B
7440-39-3	Barium	0.43	0.50	0.0024	mg/L	J		1	6010B
7440-43-9	Cadmium	0.00029	0.050	0.00029	mg/L	U		1	6010B
7440-47-3	Chromium	0.0054	0.050	0.00055	mg/L	J	B	1	6010B
7439-92-1	Lead	0.0019	0.050	0.0019	mg/L	U		1	6010B
7782-49-2	Selenium	0.0051	0.050	0.0051	mg/L	U		1	6010B
7440-22-4	Silver	0.00092	0.050	0.00092	mg/L	U		1	6010B
7439-97-6	Mercury	0.00013	0.0020	0.00013	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TCLP

Client Sample ID: WC-IW-100317 Lab Sample ID: 240-85941-3

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG ID.:

Matrix: Water Date Sampled: 10/03/2017 08:00

Reporting Basis: WET Date Received: 10/04/2017 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.0033	0.050	0.0033	mg/L	U		1	6010B
7440-39-3	Barium	0.021	0.50	0.0024	mg/L	J	B	1	6010B
7440-43-9	Cadmium	0.00029	0.050	0.00029	mg/L	U		1	6010B
7440-47-3	Chromium	0.0068	0.050	0.00055	mg/L	J	B	1	6010B
7439-92-1	Lead	0.0019	0.050	0.0019	mg/L	U		1	6010B
7782-49-2	Selenium	0.0051	0.050	0.0051	mg/L	U		1	6010B
7440-22-4	Silver	0.00092	0.050	0.00092	mg/L	U		1	6010B
7439-97-6	Mercury	0.00013	0.0020	0.00013	mg/L	U		1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MT6500ICV_00039 Concentration Units: ug/L

CCV Source: MTICPCCV_00110

Analyte	ICV 240-298256/4 10/09/2017 10:36				CCV 240-298256/46 10/09/2017 14:03				CCV 240-298256/58 10/09/2017 15:19			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	390		375	104	499		500	100	499		500	100
Barium	1500		1500	100	1930		2000	97	1930		2000	97
Cadmium	382		375	102	485		500	97	485		500	97
Chromium	1510		1500	101	1890		2000	95	1880		2000	94
Lead	376		375	100	480		500	96	479		500	96
Selenium	387		375	103	499		500	100	500		500	100
Silver	766		750	102	973		1000	97	974		1000	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MT6500ICV_00039 Concentration Units: ug/L

CCV Source: MTICPCCV_00110

Analyte	CCV 240-298256/142 10/09/2017 21:47				CCV 240-298256/154 10/09/2017 22:42							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	507		500	101	502		500	100				
Barium	1940		2000	97	1930		2000	97				
Cadmium	485		500	97	481		500	96				
Chromium	1860		2000	93	1840		2000	92				
Lead	489		500	98	489		500	98				
Selenium	505		500	101	504		500	101				
Silver	969		1000	97	976		1000	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTTRCRIC_00051 Concentration Units: ug/L

CCV Source: MTICPCCV_00110

Analyte	ICVL 240-298256/6 10/09/2017 10:45				CCV 240-298256/46 10/09/2017 14:03				CCV 240-298256/58 10/09/2017 15:19			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	13.7		15.0	91	499		500	100	499		500	100
Barium	193	J	200	96	1930		2000	97	1930		2000	97
Cadmium	4.96		5.00	99	485		500	97	485		500	97
Chromium	10.1		10.0	101	1890		2000	95	1880		2000	94
Lead	10.2		10.0	102	480		500	96	479		500	96
Selenium	19.5		20.0	98	499		500	100	500		500	100
Silver	9.80		10.0	98	973		1000	97	974		1000	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTTRCRIC_00051 Concentration Units: ug/L

CCV Source: MTICPCCV_00110

Analyte	CCV 240-298256/142 10/09/2017 21:47				CCV 240-298256/154 10/09/2017 22:42							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	507		500	101	502		500	100				
Barium	1940		2000	97	1930		2000	97				
Cadmium	485		500	97	481		500	96				
Chromium	1860		2000	93	1840		2000	92				
Lead	489		500	98	489		500	98				
Selenium	505		500	101	504		500	101				
Silver	969		1000	97	976		1000	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MT6500ICV_00039 Concentration Units: ug/L

CCV Source: MTICPCCV_00111

Analyte	ICV 240-299318/4 10/16/2017 09:01				CCV 240-299318/90 10/16/2017 15:10				CCV 240-299318/102 10/16/2017 17:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	398		375	106	527		500	105	534		500	107
Barium	1490		1500	100	2010		2000	100	2020		2000	101
Cadmium	388		375	104	520		500	104	522		500	104
Chromium	1490		1500	99	1980		2000	99	2030		2000	102
Lead	383		375	102	506		500	101	510		500	102
Selenium	391		375	104	531		500	106	540		500	108
Silver	750		750	100	1020		1000	102	1030		1000	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MT6500ICV_00039 Concentration Units: ug/L

CCV Source: MTICPCCV_00111

Analyte	CCV 240-299318/114 10/16/2017 18:12				CCV 240-299318/198 10/17/2017 00:13				CCV 240-299318/210 10/17/2017 01:04			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	544		500	109	535		500	107	539		500	108
Barium	2050		2000	103	2040		2000	102	2050		2000	103
Cadmium	527		500	105	524		500	105	524		500	105
Chromium	2030		2000	102	2040		2000	102	2060		2000	103
Lead	513		500	103	513		500	103	517		500	103
Selenium	547		500	109	539		500	108	541		500	108
Silver	1040		1000	104	1030		1000	103	1040		1000	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTTRCRIC_00051 Concentration Units: ug/L

CCV Source: MTICPCCV_00111

Analyte	ICVL 240-299318/6 10/16/2017 09:10				CCV 240-299318/90 10/16/2017 15:10				CCV 240-299318/102 10/16/2017 17:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	16.3		15.0	109	527		500	105	534		500	107
Barium	197	J	200	98	2010		2000	100	2020		2000	101
Cadmium	5.08		5.00	102	520		500	104	522		500	104
Chromium	9.69		10.0	97	1980		2000	99	2030		2000	102
Lead	10.2		10.0	102	506		500	101	510		500	102
Selenium	19.7		20.0	98	531		500	106	540		500	108
Silver	9.69		10.0	97	1020		1000	102	1030		1000	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTTRCRIC_00051 Concentration Units: ug/L

CCV Source: MTICPCCV_00111

Analyte	CCV 240-299318/114 10/16/2017 18:12				CCV 240-299318/198 10/17/2017 00:13				CCV 240-299318/210 10/17/2017 01:04			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	544		500	109	535		500	107	539		500	108
Barium	2050		2000	103	2040		2000	102	2050		2000	103
Cadmium	527		500	105	524		500	105	524		500	105
Chromium	2030		2000	102	2040		2000	102	2060		2000	103
Lead	513		500	103	513		500	103	517		500	103
Selenium	547		500	109	539		500	108	541		500	108
Silver	1040		1000	104	1030		1000	103	1040		1000	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTHgICV_00001_00237 Concentration Units: ug/L

CCV Source: MTHGCALW_01633

Analyte	ICV 240-297729/7-A 10/06/2017 09:29				CCV 240-297729/10-A 10/06/2017 18:41				CCV 240-297729/10-A 10/06/2017 18:58			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.08		5.00	102	4.84		5.00	97	5.00		5.00	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTHgICV_00001_00237 Concentration Units: ug/L

CCV Source: MTHGCALW_01633

Analyte	CCV 240-297729/10-A 10/06/2017 19:14				CCV 240-297729/10-A 10/06/2017 19:21							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.77		5.00	95	4.89		5.00	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTHgICV_00001_00241 Concentration Units: ug/L

CCV Source: MTHGCALW_01642

Analyte	ICV 240-299251/7-A 10/17/2017 09:21				CCV 240-299251/10-A 10/17/2017 10:06				CCV 240-299251/10-A 10/17/2017 10:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.73		5.00	95	4.78		5.00	96	4.90		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

ICV Source: MTHgICV_00001_00241 Concentration Units: ug/L

CCV Source: MTHGCALW_01642

Analyte	CCV 240-299251/10-A 10/17/2017 10:56											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.92		5.00	98								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Method: 7470A Instrument ID: H3

Lab Sample ID: CRA 240-297729/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01633

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.175	J	88	50-150

Lab Sample ID: CRA 240-299251/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01642

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.208	J	104	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-298256/5 10/09/2017 10:41		CCB 240-298256/47 10/09/2017 14:08		CCB 240-298256/59 10/09/2017 15:23		CCB 240-298256/143 10/09/2017 21:51	
		Found	C	Found	C	Found	C	Found	C
Arsenic	10	3.3	U	3.3	U	3.3	U	3.3	U
Barium	200	2.4	U	2.4	U	2.4	U	2.4	U
Cadmium	2.0	0.29	U	0.29	U	0.29	U	0.29	U
Chromium	5.0	0.55	U	0.55	U	0.55	U	0.55	U
Lead	5.0	1.9	U	1.9	U	1.9	U	1.9	U
Selenium	15	5.1	U	5.1	U	5.1	U	5.1	U
Silver	5.0	0.92	U	0.92	U	0.92	U	0.92	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-298256/155 10/09/2017 22:46							
		Found	C	Found	C	Found	C	Found	C
Arsenic	10	3.3	U						
Barium	200	2.4	U						
Cadmium	2.0	0.29	U						
Chromium	5.0	0.55	U						
Lead	5.0	1.9	U						
Selenium	15	5.1	U						
Silver	5.0	0.92	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299318/5 10/16/2017 09:05		CCB 240-299318/91 10/16/2017 15:14		CCB 240-299318/103 10/16/2017 17:25		CCB 240-299318/115 10/16/2017 18:16	
		Found	C	Found	C	Found	C	Found	C
Arsenic	10	3.3	U	3.3	U	3.3	U	3.3	U
Barium	200	2.4	U	2.4	U	2.4	U	2.4	U
Cadmium	2.0	0.29	U	0.29	U	0.29	U	0.29	U
Chromium	5.0	0.55	U	0.55	U	0.55	U	0.55	U
Lead	5.0	1.9	U	1.9	U	1.9	U	1.9	U
Selenium	15	5.1	U	5.1	U	5.1	U	5.1	U
Silver	5.0	0.92	U	0.92	U	0.92	U	0.92	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-299318/199 10/17/2017 00:17		CCB 240-299318/211 10/17/2017 01:08					
		Found	C	Found	C	Found	C	Found	C
Arsenic	10	3.3	U	3.3	U				
Barium	200	2.4	U	2.4	U				
Cadmium	2.0	0.29	U	0.29	U				
Chromium	5.0	0.55	U	0.55	U				
Lead	5.0	1.9	U	1.9	U				
Selenium	15	5.1	U	5.1	U				
Silver	5.0	0.92	U	0.92	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-297729/8-A 10/06/2017 09:31		CCB 240-297729/11-A 10/06/2017 18:43		CCB 240-297729/11-A 10/06/2017 19:00		CCB 240-297729/11-A 10/06/2017 19:16	
		Found	C	Found	C	Found	C	Found	C
Mercury	2.0	0.13	U	0.13	U	0.13	U	0.13	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-297729/11-A 10/06/2017 19:23							
		Found	C	Found	C	Found	C	Found	C
Mercury	2.0	0.13	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299251/8-A 10/17/2017 09:24		CCB 240-299251/11-A 10/17/2017 10:08		CCB 240-299251/11-A 10/17/2017 10:33		CCB 240-299251/11-A 10/17/2017 10:58	
		Found	C	Found	C	Found	C	Found	C
Mercury	2.0	0.13	U	0.13	U	0.13	U	0.13	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 240-297935/2-A

Instrument Code: I12 Batch No.: 298256

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.0033	U		6010B
7440-39-3	Barium	0.0024	U		6010B
7440-43-9	Cadmium	0.00029	U		6010B
7440-47-3	Chromium	0.00055	U		6010B
7439-92-1	Lead	0.0019	U		6010B
7782-49-2	Selenium	0.0051	U		6010B
7440-22-4	Silver	0.00092	U		6010B

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB 240-297819/1-B

Instrument Code: I12 Batch No.: 298256

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.0033	U		6010B
7440-39-3	Barium	0.100	J		6010B
7440-43-9	Cadmium	0.00029	U		6010B
7440-47-3	Chromium	0.00248	J		6010B
7439-92-1	Lead	0.0019	U		6010B
7782-49-2	Selenium	0.00819	J		6010B
7440-22-4	Silver	0.00092	U		6010B

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 240-298960/2-A

Instrument Code: I9 Batch No.: 299318

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.0033	U		6010B
7440-39-3	Barium	0.0024	U		6010B
7440-43-9	Cadmium	0.00029	U		6010B
7440-47-3	Chromium	0.00055	U		6010B
7439-92-1	Lead	0.0019	U		6010B
7782-49-2	Selenium	0.0051	U		6010B
7440-22-4	Silver	0.00092	U		6010B

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB 240-298849/1-B

Instrument Code: I9 Batch No.: 299318

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.00471	J		6010B
7440-39-3	Barium	0.0024	U		6010B
7440-43-9	Cadmium	0.00029	U		6010B
7440-47-3	Chromium	0.000691	J		6010B
7439-92-1	Lead	0.0019	U		6010B
7782-49-2	Selenium	0.00834	J		6010B
7440-22-4	Silver	0.00092	U		6010B

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 240-297936/2-A

Instrument Code: H3 Batch No.: 298170

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00013	U		7470A

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB 240-297819/1-C

Instrument Code: H3 Batch No.: 298170

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00013	U		7470A

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 240-298961/2-A

Instrument Code: H3 Batch No.: 299450

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00013	U		7470A

FORM III-IN

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB 240-298849/1-C

Instrument Code: H3 Batch No.: 299450

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00013	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICSA 240-298256/8 Instrument ID: I12

Lab File ID: I12100917A.asc ICS Source: MTTRICSAW_00035

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**-5.08**	
Barium		**0.249**	
Cadmium		**1.20**	
Chromium		**2.81**	
Lead		**-0.0094**	
Selenium		**1.31**	
Silver		**-1.96**	
Aluminum	*500000*	*508720*	*102*
Antimony		*-2.05*	
Beryllium		*0.183*	
Boron		*2.55*	
Calcium	*500000*	*470060*	*94*
Cobalt		*-4.43*	
Copper		*-1.35*	
Iron	*200000*	*187940*	*94*
Lithium		*13.6*	
Magnesium	*500000*	*502980*	*101*
Manganese		*1.64*	
Molybdenum		*-0.610*	
Nickel		*3.04*	
Potassium		*25.8*	
Silicon		*6.91*	
Sodium		*54.3*	
Strontium		*10.1*	
Thallium		*5.98*	
Tin		*2.09*	
Titanium		*-1.59*	
Vanadium		*1.01*	
Zinc		*-0.249*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICSAB 240-298256/9 Instrument ID: I12

Lab File ID: I12100917A.asc ICS Source: MTICPICSABW_00015

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Arsenic	**1000**	**1047**	**105**
Barium	**500**	**490**	**98**
Cadmium	**1000**	**1060**	**106**
Chromium	**500**	**483**	**97**
Lead	**1000**	**913**	**91**
Selenium	**1000**	**1035**	**104**
Silver	**1000**	**1091**	**109**
Aluminum	*500000*	*505580*	*101*
Antimony	*1000*	*1027*	*103*
Beryllium	*500*	*477*	*95*
Boron	*500*	*523*	*105*
Calcium	*500000*	*461530*	*92*
Cobalt	*500*	*511*	*102*
Copper	*500*	*528*	*106*
Iron	*200000*	*185810*	*93*
Lithium	*500*	*538*	*108*
Magnesium	*500000*	*499070*	*100*
Manganese	*500*	*487*	*97*
Molybdenum	*1000*	*978*	*98*
Nickel	*1000*	*1026*	*103*
Potassium	*10000*	*10242*	*102*
Silicon	*10000*	*9732*	*97*
Sodium	*10000*	*10196*	*102*
Strontium	*1500*	*1417*	*94*
Thallium	*1000*	*983*	*98*
Tin	*500*	*527*	*105*
Titanium	*500*	*496*	*99*
Vanadium	*500*	*484*	*97*
Zinc	*1000*	*1055*	*106*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICSA 240-299318/8 Instrument ID: I9

Lab File ID: I9101617A.asc ICS Source: MTTRICSAW_00035

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**1.16**	
Barium		**-0.156**	
Cadmium		**1.10**	
Chromium		**4.00**	
Lead		**-4.37**	
Selenium		**-1.03**	
Silver		**-0.0577**	
Aluminum	*500000*	*517830*	*104*
Antimony		*-6.33*	
Beryllium		*0.261*	
Boron		*-0.701*	
Calcium	*500000*	*479710*	*96*
Cobalt		*0.329*	
Copper		*-2.24*	
Iron	*200000*	*193110*	*97*
Lithium		*6.29*	
Magnesium	*500000*	*510310*	*102*
Manganese		*0.209*	
Molybdenum		*-0.533*	
Nickel		*1.24*	
Potassium		*11.4*	
Silicon		*9.16*	
Sodium		*93.1*	
Strontium		*8.13*	
Thallium		*5.18*	
Tin		*7.60*	
Titanium		*-0.281*	
Vanadium		*-5.78*	
Zinc		*-9.14*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Lab Sample ID: ICSAB 240-299318/9 Instrument ID: I9

Lab File ID: I9101617A.asc ICS Source: MTICPICSABW_00015

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Arsenic	**1000**	**1044**	**104**
Barium	**500**	**500**	**100**
Cadmium	**1000**	**1058**	**106**
Chromium	**500**	**483**	**97**
Lead	**1000**	**935**	**93**
Selenium	**1000**	**1026**	**103**
Silver	**1000**	**1085**	**109**
Aluminum	*500000*	*518290*	*104*
Antimony	*1000*	*1030*	*103*
Beryllium	*500*	*482*	*96*
Boron	*500*	*524*	*105*
Calcium	*500000*	*483120*	*97*
Cobalt	*500*	*507*	*101*
Copper	*500*	*535*	*107*
Iron	*200000*	*192820*	*96*
Lithium	*500*	*552*	*110*
Magnesium	*500000*	*511750*	*102*
Manganese	*500*	*494*	*99*
Molybdenum	*1000*	*1002*	*100*
Nickel	*1000*	*1000*	*100*
Potassium	*10000*	*10352*	*104*
Silicon	*10000*	*9891*	*99*
Sodium	*10000*	*10482*	*105*
Strontium	*1500*	*1449*	*97*
Thallium	*1000*	*994*	*99*
Tin	*500*	*522*	*104*
Titanium	*500*	*505*	*101*
Vanadium	*500*	*494*	*99*
Zinc	*1000*	*1007*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TCLP

Client ID: _____ Lab ID: 240-85914-D-1-L MS ^5

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.: _____

Matrix: Water Concentration Units: mg/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	5.34		0.0053	J	5.00	107	75-125		6010B
Barium	49.9		0.84		50.0	98	75-125		6010B
Cadmium	1.03		0.00029	U	1.00	103	75-125		6010B
Chromium	4.80		0.0039	J	5.00	96	75-125		6010B
Lead	4.85		0.0019	U	5.00	97	75-125		6010B
Selenium	1.09		0.0060	J	1.00	108	75-125		6010B
Silver	0.784		0.00092	U	1.00	78	75-125		6010B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TCLP

Client ID: Lab ID: 240-85914-D-1-O MS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.00493		0.00013	U	0.00500	99	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TCLP

Client ID: _____ Lab ID: 240-86307-E-1-C MS ^5

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	5.40		0.0071	J	5.00	108	75-125		6010B
Barium	49.5		0.22	J	50.0	99	75-125		6010B
Cadmium	1.05		0.00087	J	1.00	104	75-125		6010B
Chromium	4.88		0.0015	J	5.00	98	75-125		6010B
Lead	4.93		0.0019	U	5.00	99	75-125		6010B
Selenium	1.13		0.0075	J	1.00	112	75-125		6010B
Silver	1.02		0.00092	U	1.00	102	75-125		6010B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TCLP

Client ID: _____ Lab ID: 240-86307-E-1-F MS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.00513		0.00013	U	0.00500	103	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TCLP

Client ID: _____ Lab ID: 240-85914-D-1-M MSD ^5

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.: _____

Matrix: Water Concentration Units: mg/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	5.28		5.00	106	75-125	1	20		6010B
Barium	49.3		50.0	97	75-125	1	20		6010B
Cadmium	1.02		1.00	102	75-125	1	20		6010B
Chromium	4.71		5.00	94	75-125	2	20		6010B
Lead	4.80		5.00	96	75-125	1	20		6010B
Selenium	1.06		1.00	105	75-125	2	20		6010B
Silver	1.01		1.00	101	75-125	26	20	F2	6010B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TCLP

Client ID: _____ Lab ID: 240-85914-D-1-P MSD

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.: _____

Matrix: Water Concentration Units: mg/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.00497		0.00500	99	80-120	1	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TCLP

Client ID: _____ Lab ID: 240-86307-E-1-D MSD ^5

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	5.31		5.00	106	75-125	2	20		6010B
Barium	48.9		50.0	97	75-125	1	20		6010B
Cadmium	1.04		1.00	104	75-125	0	20		6010B
Chromium	4.84		5.00	97	75-125	1	20		6010B
Lead	4.92		5.00	98	75-125	0	20		6010B
Selenium	1.11		1.00	110	75-125	2	20		6010B
Silver	1.02		1.00	102	75-125	0	20		6010B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TCLP

Client ID: Lab ID: 240-86307-E-1-G MSD

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid Concentration Units: mg/L

% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.00510		0.00500	102	80-120	1	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-297935/3-A

Lab Name: TestAmerica Canton Job No.: 240-85941-1

Sample Matrix: Water LCS Source: MTICP1_00068

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	2.00	2.32		116	50	150		6010B
Barium	2.00	2.14		107	50	150		6010B
Cadmium	0.0500	0.0561		112	50	150		6010B
Chromium	0.200	0.207		103	50	150		6010B
Lead	0.500	0.479		96	50	150		6010B
Selenium	2.00	2.38		119	50	150		6010B
Silver	0.0500	0.0582		116	50	150		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-298960/3-A

Lab Name: TestAmerica Canton Job No.: 240-85941-1

Sample Matrix: Water LCS Source: MTICP1_00068

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	2.00	2.26		113	50	150		6010B
Barium	2.00	1.98		99	50	150		6010B
Cadmium	0.0500	0.0545		109	50	150		6010B
Chromium	0.200	0.198		99	50	150		6010B
Lead	0.500	0.479		96	50	150		6010B
Selenium	2.00	2.32		116	50	150		6010B
Silver	0.0500	0.0547		109	50	150		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-297936/3-A

Lab Name: TestAmerica Canton Job No.: 240-85941-1

Sample Matrix: Water LCS Source: MTHGCALW_01634

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00500	0.00488		98	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-298961/3-A

Lab Name: TestAmerica Canton | Job No.: 240-85941-1

Sample Matrix: Water | LCS Source: MTHGCALW_01641

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00500	0.00495		99	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TCLP

Lab ID: 240-85914-D-1-K SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-85941-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	0.0053	J	0.017	U	NC		6010B
Barium	0.84		0.844	J	0.13		6010B
Cadmium	0.00029	U	0.0015	U	NC		6010B
Chromium	0.0039	J	0.00512	J	NC		6010B
Lead	0.0019	U	0.0095	U	NC		6010B
Selenium	0.0060	J	0.026	U	NC		6010B
Silver	0.00092	U	0.0046	U	NC		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TCLP

Lab ID: 240-86307-E-1-B SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-85941-1

Matrix: Solid Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	0.0071	J	0.017	U	NC		6010B
Barium	0.22	J	0.215	J	0.01		6010B
Cadmium	0.00087	J	0.0015	U	NC		6010B
Chromium	0.0015	J	0.00599	J	NC		6010B
Lead	0.0019	U	0.0095	U	NC		6010B
Selenium	0.0075	J	0.026	U	NC		6010B
Silver	0.00092	U	0.0046	U	NC		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Water Instrument ID: I12

Method: 6010B MDL Date: 05/09/2016 09:01

Prep Method: 3010A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Arsenic	189.042	0.05	0.0033
Barium	493.409	0.5	0.0024
Cadmium	226.502	0.05	0.00029
Chromium	267.716	0.05	0.00055
Lead	220.353	0.05	0.0019
Selenium	196.026	0.05	0.0051
Silver	328.068	0.05	0.00092

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Water Instrument ID: I12

Method: 6010B XMDL Date: 05/09/2016 09:02

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (mg/L)
Arsenic	189.042	10	0.0033
Barium	493.409	200	0.0024
Cadmium	226.502	2	0.00029
Chromium	267.716	5	0.00055
Lead	220.353	5	0.0019
Selenium	196.026	15	0.0051
Silver	328.068	5	0.00092

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010B MDL Date: 05/09/2016 09:01

Prep Method: 3010A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Arsenic	189.042	0.05	0.0033
Barium	493.409	0.5	0.0024
Cadmium	226.502	0.05	0.00029
Chromium	267.716	0.05	0.00055
Lead	220.353	0.05	0.0019
Selenium	196.026	0.05	0.0051
Silver	328.068	0.05	0.00092

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010B XMDL Date: 05/09/2016 09:02

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (mg/L)
Arsenic	189.042	10	0.0033
Barium	493.409	200	0.0024
Cadmium	226.502	2	0.00029
Chromium	267.716	5	0.00055
Lead	220.353	5	0.0019
Selenium	196.026	15	0.0051
Silver	328.068	5	0.00092

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:32

Prep Method: 7470A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Mercury	253.7	0.002	0.00013

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:32

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (mg/L)
Mercury	253.7	2	0.00013

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:32

Prep Method: 7470A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Mercury	253.7	0.002	0.00013

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:32

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (mg/L)
Mercury	253.7	2	0.00013

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG No.:

ICP-AES Instrument ID: I12 Date: 07/10/2017

Analyte	Wave Length	Al	As	Ca	Co	Cr	Cu	Fe	Mn	Mo	Ni	Si	Ti	V	
Aluminum										0.043461331				0.024533	
Antimony		-0.000068			-0.000244			-0.000050						0.002100	
Arsenic		0.000024			-0.000333	0.000782			-0.000355	0.002123					
Beryllium														0.000097	
Cadmium			0.012425					0.000002							
Chromium									0.000062						
Cobalt													0.001895		
Copper				0.000018	0.000361			-0.000039					-0.003104		
Lead		-0.000097					0.000101	0.000043			0.000131	0.00004			
Lithium				0.000011											
Nickel					0.000518			0.000081							
Selenium		-0.000001							0.000338						
Thallium		0.000022			0.003453			-0.000025	0.000571					0.001707	
Vanadium								0.000065							
Zinc						-0.001092									

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG No.:

ICP-AES Instrument ID: I9 Date: 08/09/2017

Analyte	Wave Length	Al	As	Ca	Co	Cr	Cu	Fe	Mn	Mo	Ni	Si	Ti	Tl	V
Aluminum										0.021446					0.040875
Antimony		-0.00005			-0.000451			-0.00004							0.002916
Arsenic		0.000045			-0.000852	0.000538			-0.000355	0.001291					
Barium															
Beryllium															0.000165
Boron															
Cadmium			0.006370					0.000001							
Calcium															
Chromium															
Cobalt													0.001914		
Copper				0.000018	0.000453			0.000001					-0.000463		
Iron													-		
Lead		-0.000134					0.000183	0.00006			0.000260	0.000147			
Lithium															
Magnesium															
Manganese															
Molybdenum															
Nickel					0.000799			0.000075							
Potassium															
Selenium		-0.000039							0.000643						
Silver															
Sodium															
Strontium															
Thallium		-0.000010			0.005066			0.000007	0.001101				-0.000497		-0.001658
Tin															
Titanium															
Vanadium								0.000032							
Zinc						-0.000286									

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-85941-1

SDG No.:

Instrument ID: I12 Date: 07/20/2017 15:23

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		5000	6010B
Barium		25000	6010B
Cadmium		2000	6010B
Chromium		20000	6010B
Lead		15000	6010B
Selenium		10000	6010B
Silver		2000	6010B

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-85941-1

SDG No.:

Instrument ID: I9 Date: 08/10/2017 15:49

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		5000	6010B
Barium		20000	6010B
Cadmium		2000	6010B
Chromium		20000	6010B
Lead		15000	6010B
Selenium		10000	6010B
Silver		2000	6010B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 240-297819/1-B	10/06/2017 14:00	297935		50	50
MB 240-297935/2-A	10/06/2017 14:00	297935		50	50
LCS 240-297935/3-A	10/06/2017 14:00	297935		50	50
240-85914-D-1-L MS ^5	10/06/2017 14:00	297935		50	50
240-85914-D-1-M MSD ^5	10/06/2017 14:00	297935		50	50
240-85941-3	10/06/2017 14:00	297935		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 240-298849/1-B	10/13/2017 14:00	298960		50	50
MB 240-298960/2-A	10/13/2017 14:00	298960		50	50
LCS 240-298960/3-A	10/13/2017 14:00	298960		50	50
240-86307-E-1-C MS ^5	10/13/2017 14:00	298960		50	50
240-86307-E-1-D MSD ^5	10/13/2017 14:00	298960		50	50
240-85941-2	10/13/2017 14:00	298960		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 240-297819/1-C	10/06/2017 14:00	297936		50	50
MB 240-297936/2-A	10/06/2017 14:00	297936		50	50
LCS 240-297936/3-A	10/06/2017 14:00	297936		50	50
240-85914-D-1-O MS	10/06/2017 14:00	297936		50	50
240-85914-D-1-P MSD	10/06/2017 14:00	297936		50	50
240-85941-3	10/06/2017 14:00	297936		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 240-298849/1-C	10/13/2017 14:00	298961		50	50
MB 240-298961/2-A	10/13/2017 14:00	298961		50	50
LCS 240-298961/3-A	10/13/2017 14:00	298961		50	50
240-86307-E-1-F MS	10/13/2017 14:00	298961		50	50
240-86307-E-1-G MSD	10/13/2017 14:00	298961		50	50
240-85941-2	10/13/2017 14:00	298961		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ICIS 240-298256/1	1		10:22	X	X	X	X	X	X	X																		
CALSTD 240-298256/2 IC			10:27	X	X	X	X	X	X	X																		
CALSTD 240-298256/3 IC			10:32	X	X	X	X	X	X	X																		
ICV 240-298256/4	1		10:36	X	X	X	X	X	X	X																		
ICB 240-298256/5	1		10:41	X	X	X	X	X	X	X																		
ICVL 240-298256/6	1		10:45	X	X	X	X	X	X	X																		
ZZZZZZ			10:50																									
ICSA 240-298256/8	1		10:55	X	X	X	X	X	X	X																		
ICSAB 240-298256/9	1		11:00	X	X	X	X	X	X	X																		
CCV 240-298256/10			11:04																									
CCB 240-298256/11			11:08																									
ZZZZZZ			11:13																									
ZZZZZZ			11:18																									
ZZZZZZ			11:23																									
ZZZZZZ			11:27																									
ZZZZZZ			11:32																									
ZZZZZZ			11:37																									
CCV 240-298256/18			11:41																									
CCB 240-298256/19			11:46																									
ZZZZZZ			11:51																									
CCV 240-298256/21			11:55																									
CCB 240-298256/22			12:00																									
ZZZZZZ			12:16																									
ZZZZZZ			12:20																									
ZZZZZZ			12:25																									
ZZZZZZ			12:29																									
ZZZZZZ			12:34																									
ZZZZZZ			12:39																									
ZZZZZZ			12:43																									
CCV 240-298256/30			12:48																									
CCB 240-298256/31			12:52																									
ZZZZZZ			12:57																									
ZZZZZZ			13:01																									
ZZZZZZ			13:06																									
CCV 240-298256/35			13:11																									
CCB 240-298256/36			13:15																									
CCVL 240-298256/37			13:20																									
ZZZZZZ			13:25																									
ZZZZZZ			13:30																									
ZZZZZZ			13:34																									
ZZZZZZ			13:39																									
CCV 240-298256/42			13:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
CCB 240-298256/43			13:48																									
ZZZZZZ			13:53																									
ZZZZZZ			13:58																									
CCV 240-298256/46	1		14:03	X	X	X	X	X	X	X																		
CCB 240-298256/47	1		14:08	X	X	X	X	X	X	X																		
LB 240-297819/1-B	1	P	14:30	X	X	X	X	X	X	X																		
MB 240-297935/2-A	1	T	14:35	X	X	X	X	X	X	X																		
LCS 240-297935/3-A	1	T	14:40	X	X	X	X	X	X	X																		
ZZZZZZ			14:44																									
240-85914-D-1-K SD ^5	5	P	14:49	X	X	X	X	X	X	X																		
ZZZZZZ			14:54																									
240-85914-D-1-L MS ^5	5	P	14:59	X	X	X	X	X	X	X																		
240-85914-D-1-M MSD ^5	5	P	15:04	X	X	X	X	X	X	X																		
ZZZZZZ			15:08																									
ZZZZZZ			15:14																									
CCV 240-298256/58	1		15:19	X	X	X	X	X	X	X																		
CCB 240-298256/59	1		15:23	X	X	X	X	X	X	X																		
ZZZZZZ			15:28																									
ZZZZZZ			15:33																									
ZZZZZZ			15:37																									
ZZZZZZ			15:42																									
ZZZZZZ			15:47																									
ZZZZZZ			15:52																									
ZZZZZZ			15:56																									
ZZZZZZ			16:01																									
ZZZZZZ			16:06																									
ZZZZZZ			16:11																									
CCV 240-298256/70			16:15																									
CCB 240-298256/71			16:19																									
ZZZZZZ			16:24																									
ZZZZZZ			16:29																									
ZZZZZZ			16:33																									
ZZZZZZ			16:38																									
ZZZZZZ			16:42																									
ZZZZZZ			16:47																									
ZZZZZZ			16:52																									
ZZZZZZ			16:56																									
ZZZZZZ			17:01																									
ZZZZZZ			17:05																									
CCV 240-298256/82			17:10																									
CCB 240-298256/83			17:14																									
ZZZZZZ			17:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			17:23																									
ZZZZZZ			17:27																									
ZZZZZZ			17:32																									
ZZZZZZ			17:37																									
ZZZZZZ			17:41																									
ZZZZZZ			17:46																									
ZZZZZZ			17:50																									
ZZZZZZ			17:55																									
ZZZZZZ			18:00																									
CCV 240-298256/94			18:05																									
CCB 240-298256/95			18:09																									
ZZZZZZ			18:14																									
ZZZZZZ			18:18																									
ZZZZZZ			18:23																									
ZZZZZZ			18:28																									
ZZZZZZ			18:32																									
ZZZZZZ			18:37																									
ZZZZZZ			18:42																									
ZZZZZZ			18:47																									
ZZZZZZ			18:52																									
ZZZZZZ			18:56																									
CCV 240-298256/106			19:01																									
CCB 240-298256/107			19:06																									
CCVL 240-298256/108			19:10																									
ZZZZZZ			19:15																									
ZZZZZZ			19:20																									
ZZZZZZ			19:24																									
ZZZZZZ			19:29																									
ZZZZZZ			19:33																									
ZZZZZZ			19:38																									
ZZZZZZ			19:42																									
ZZZZZZ			19:46																									
ZZZZZZ			19:51																									
CCV 240-298256/118			19:55																									
CCB 240-298256/119			20:00																									
ZZZZZZ			20:05																									
ZZZZZZ			20:09																									
ZZZZZZ			20:14																									
ZZZZZZ			20:18																									
ZZZZZZ			20:23																									
ZZZZZZ			20:28																									
ZZZZZZ			20:33																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			20:37																									
ZZZZZZ			20:42																									
ZZZZZZ			20:47																									
CCV 240-298256/130			20:51																									
CCB 240-298256/131			20:56																									
ZZZZZZ			21:00																									
CCV 240-298256/133			21:05																									
CCB 240-298256/134			21:09																									
CCVL 240-298256/135			21:14																									
ZZZZZZ			21:19																									
ZZZZZZ			21:24																									
ZZZZZZ			21:28																									
ZZZZZZ			21:33																									
ZZZZZZ			21:37																									
ZZZZZZ			21:42																									
CCV 240-298256/142	1		21:47	X	X	X	X	X	X	X																		
CCB 240-298256/143	1		21:51	X	X	X	X	X	X	X																		
ZZZZZZ			21:56																									
ZZZZZZ			22:01																									
240-85941-3	1	P	22:05	X	X	X	X	X	X	X																		
ZZZZZZ			22:10																									
ZZZZZZ			22:15																									
ZZZZZZ			22:19																									
ZZZZZZ			22:24																									
ZZZZZZ			22:28																									
ZZZZZZ			22:33																									
ZZZZZZ			22:37																									
CCV 240-298256/154	1		22:42	X	X	X	X	X	X	X																		
CCB 240-298256/155	1		22:46	X	X	X	X	X	X	X																		
ZZZZZZ			22:51																									
ZZZZZZ			22:55																									
ZZZZZZ			23:00																									
ZZZZZZ			23:05																									
ZZZZZZ			23:09																									
ZZZZZZ			23:14																									
ZZZZZZ			23:18																									
ZZZZZZ			23:23																									
ZZZZZZ			23:28																									
ZZZZZZ			23:32																									
CCV 240-298256/166			23:37																									
CCB 240-298256/167			23:42																									
ZZZZZZ			23:46																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			23:51																									
ZZZZZZ			23:56																									
ZZZZZZ			00:01																									
ZZZZZZ			00:06																									
ZZZZZZ			00:10																									
ZZZZZZ			00:15																									
ZZZZZZ			00:20																									
ZZZZZZ			00:24																									
ZZZZZZ			00:29																									
CCV 240-298256/178			00:34																									
CCB 240-298256/179			00:38																									
ZZZZZZ			00:43																									
ZZZZZZ			00:47																									
ZZZZZZ			00:52																									
ZZZZZZ			00:57																									
ZZZZZZ			01:01																									
ZZZZZZ			01:06																									
ZZZZZZ			01:11																									
ZZZZZZ			01:16																									
ZZZZZZ			01:21																									
ZZZZZZ			01:26																									
CCV 240-298256/190			01:30																									
CCB 240-298256/191			01:35																									
ZZZZZZ			01:39																									
ZZZZZZ			01:44																									
ZZZZZZ			01:49																									
ZZZZZZ			01:53																									
ZZZZZZ			01:58																									
ZZZZZZ			02:03																									
ZZZZZZ			02:08																									
ZZZZZZ			02:12																									
ZZZZZZ			02:17																									
ZZZZZZ			02:22																									
CCV 240-298256/202			02:27																									
CCB 240-298256/203			02:31																									
ZZZZZZ			02:36																									
ZZZZZZ			02:41																									
ZZZZZZ			02:46																									
ZZZZZZ			02:50																									
ZZZZZZ			02:56																									
ZZZZZZ			03:00																									
ZZZZZZ			03:05																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			03:10																									
ZZZZZZ			03:15																									
ZZZZZZ			03:19																									
CCV 240-298256/214			03:24																									
CCB 240-298256/215			03:28																									
ZZZZZZ			03:33																									
ZZZZZZ			03:38																									
ZZZZZZ			03:43																									
ZZZZZZ			03:47																									
ZZZZZZ			03:52																									
ZZZZZZ			03:57																									
ZZZZZZ			04:01																									
ZZZZZZ			04:06																									
ZZZZZZ			04:10																									
ZZZZZZ			04:15																									
CCV 240-298256/226			04:20																									
CCB 240-298256/227			04:24																									
ZZZZZZ			04:29																									
ZZZZZZ			04:34																									
ZZZZZZ			04:38																									
ZZZZZZ			04:42																									
ZZZZZZ			04:47																									
ZZZZZZ			04:52																									
ZZZZZZ			04:56																									
ZZZZZZ			05:01																									
ZZZZZZ			05:06																									
ZZZZZZ			05:10																									
CCV 240-298256/238			05:15																									
CCB 240-298256/239			05:19																									
ZZZZZZ			05:24																									
ZZZZZZ			05:28																									
ZZZZZZ			05:33																									
ZZZZZZ			05:37																									
ZZZZZZ			05:42																									
ZZZZZZ			05:47																									
ZZZZZZ			05:51																									
ZZZZZZ			05:56																									
ZZZZZZ			06:00																									
ZZZZZZ			06:05																									
CCV 240-298256/250			06:10																									
CCB 240-298256/251			06:14																									
ZZZZZZ			06:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010B

Start Date: 10/09/2017 10:22 End Date: 10/10/2017 06:38

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	As	Ba	Cd	Cr	Pb	Se																			
ZZZZZZ			06:24																										
ZZZZZZ			06:28																										
CCV 240-298256/255			06:33																										
CCB 240-298256/256			06:38																										

Prep Types:
P = TCLP
T = Total/NA

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ICIS 240-299318/1	1		08:48	X	X	X	X	X	X	X																		
CALSTD 240-299318/2 IC			08:52	X	X	X	X	X	X	X																		
CALSTD 240-299318/3 IC			08:57	X	X	X	X	X	X	X																		
ICV 240-299318/4	1		09:01	X	X	X	X	X	X	X																		
ICB 240-299318/5	1		09:05	X	X	X	X	X	X	X																		
ICVL 240-299318/6	1		09:10	X	X	X	X	X	X	X																		
ZZZZZZ			09:14																									
ICSA 240-299318/8	1		09:18	X	X	X	X	X	X	X																		
ICSAB 240-299318/9	1		09:23	X	X	X	X	X	X	X																		
CCV 240-299318/10			09:27																									
CCB 240-299318/11			09:31																									
ZZZZZZ			09:35																									
ZZZZZZ			09:39																									
ZZZZZZ			09:44																									
ZZZZZZ			09:48																									
ZZZZZZ			09:52																									
ZZZZZZ			09:57																									
CCV 240-299318/18			10:01																									
CCB 240-299318/19			10:05																									
ZZZZZZ			10:10																									
ZZZZZZ			10:14																									
ZZZZZZ			10:18																									
ZZZZZZ			10:23																									
ZZZZZZ			10:27																									
ZZZZZZ			10:31																									
CCV 240-299318/26			10:36																									
CCB 240-299318/27			10:40																									
ZZZZZZ			10:44																									
ZZZZZZ			10:48																									
CCV 240-299318/30			10:53																									
CCB 240-299318/31			10:57																									
ZZZZZZ			11:01																									
ZZZZZZ			11:06																									
ZZZZZZ			11:09																									
ZZZZZZ			11:14																									
ZZZZZZ			11:18																									
ZZZZZZ			11:22																									
ZZZZZZ			11:26																									
ZZZZZZ			11:31																									
ZZZZZZ			11:35																									
ZZZZZZ			11:40																									
CCV 240-299318/42			11:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
CCB 240-299318/43			11:48																									
ZZZZZZ			11:52																									
ZZZZZZ			11:57																									
ZZZZZZ			12:01																									
ZZZZZZ			12:05																									
ZZZZZZ			12:09																									
ZZZZZZ			12:13																									
ZZZZZZ			12:18																									
ZZZZZZ			12:22																									
ZZZZZZ			12:27																									
ZZZZZZ			12:32																									
CCV 240-299318/54			12:36																									
CCB 240-299318/55			12:40																									
ZZZZZZ			12:44																									
ZZZZZZ			12:49																									
ZZZZZZ			12:53																									
ZZZZZZ			12:57																									
ZZZZZZ			13:02																									
ZZZZZZ			13:06																									
ZZZZZZ			13:11																									
ZZZZZZ			13:15																									
ZZZZZZ			13:20																									
ZZZZZZ			13:24																									
CCV 240-299318/66			13:28																									
CCB 240-299318/67			13:32																									
ZZZZZZ			13:37																									
ZZZZZZ			13:41																									
ZZZZZZ			13:45																									
ZZZZZZ			13:49																									
ZZZZZZ			13:53																									
ZZZZZZ			13:57																									
ZZZZZZ			14:01																									
ZZZZZZ			14:06																									
ZZZZZZ			14:10																									
ZZZZZZ			14:14																									
CCV 240-299318/78			14:19																									
CCB 240-299318/79			14:23																									
CCV 240-299318/80			14:27																									
CCB 240-299318/81			14:32																									
CCVL 240-299318/82			14:36																									
ICSA 240-299318/83			14:40																									
ICSAB 240-299318/84			14:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			14:48																									
ZZZZZZ			14:53																									
ZZZZZZ			14:57																									
ZZZZZZ			15:02																									
ZZZZZZ			15:06																									
CCV 240-299318/90	1		15:10	X	X	X	X	X	X	X																		
CCB 240-299318/91	1		15:14	X	X	X	X	X	X	X																		
ZZZZZZ			15:19																									
ZZZZZZ			15:23																									
ZZZZZZ			15:28																									
LB 240-298849/1-B	1	P	16:50	X	X	X	X	X	X	X																		
MB 240-298960/2-A	1	T	16:55	X	X	X	X	X	X	X																		
LCS 240-298960/3-A	1	T	16:59	X	X	X	X	X	X	X																		
ZZZZZZ			17:03																									
240-86307-E-1-B SD ^5	5	P	17:08	X	X	X	X	X	X	X																		
ZZZZZZ			17:12																									
240-86307-E-1-C MS ^5	5	P	17:17	X	X	X	X	X	X	X																		
CCV 240-299318/102	1		17:21	X	X	X	X	X	X	X																		
CCB 240-299318/103	1		17:25	X	X	X	X	X	X	X																		
240-86307-E-1-D MSD ^5	5	P	17:29	X	X	X	X	X	X	X																		
ZZZZZZ			17:34																									
ZZZZZZ			17:38																									
ZZZZZZ			17:42																									
ZZZZZZ			17:47																									
ZZZZZZ			17:51																									
ZZZZZZ			17:55																									
ZZZZZZ			17:59																									
ZZZZZZ			18:04																									
ZZZZZZ			18:08																									
CCV 240-299318/114	1		18:12	X	X	X	X	X	X	X																		
CCB 240-299318/115	1		18:16	X	X	X	X	X	X	X																		
ZZZZZZ			18:20																									
ZZZZZZ			18:25																									
ZZZZZZ			18:29																									
ZZZZZZ			18:33																									
ZZZZZZ			18:38																									
ZZZZZZ			18:42																									
ZZZZZZ			18:47																									
ZZZZZZ			18:51																									
ZZZZZZ			18:56																									
ZZZZZZ			19:00																									
CCV 240-299318/126			19:04																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
CCB 240-299318/127			19:08																									
ZZZZZZ			19:13																									
ZZZZZZ			19:17																									
ZZZZZZ			19:21																									
ZZZZZZ			19:26																									
ZZZZZZ			19:30																									
ZZZZZZ			19:34																									
ZZZZZZ			19:39																									
ZZZZZZ			19:43																									
ZZZZZZ			19:48																									
ZZZZZZ			19:52																									
CCV 240-299318/138			19:56																									
CCB 240-299318/139			20:00																									
ZZZZZZ			20:04																									
CCVL 240-299318/141			20:09																									
ZZZZZZ			20:13																									
ZZZZZZ			20:17																									
ZZZZZZ			20:21																									
ZZZZZZ			20:26																									
ZZZZZZ			20:30																									
ZZZZZZ			20:34																									
ZZZZZZ			20:38																									
ZZZZZZ			20:42																									
CCV 240-299318/150			20:46																									
CCB 240-299318/151			20:50																									
ZZZZZZ			20:55																									
ZZZZZZ			20:59																									
ZZZZZZ			21:03																									
ZZZZZZ			21:07																									
ZZZZZZ			21:11																									
ZZZZZZ			21:16																									
ZZZZZZ			21:20																									
ZZZZZZ			21:24																									
ZZZZZZ			21:29																									
ZZZZZZ			21:33																									
CCV 240-299318/162			21:37																									
CCB 240-299318/163			21:41																									
ZZZZZZ			21:46																									
ZZZZZZ			21:50																									
ZZZZZZ			21:55																									
ZZZZZZ			21:59																									
ZZZZZZ			22:03																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			22:07																									
CCV 240-299318/170			22:12																									
CCB 240-299318/171			22:16																									
CCVL 240-299318/172			22:20																									
ZZZZZZ			22:24																									
CCV 240-299318/174			22:29																									
CCB 240-299318/175			22:33																									
ZZZZZZ			22:37																									
ZZZZZZ			22:41																									
ZZZZZZ			22:46																									
ZZZZZZ			22:50																									
ZZZZZZ			22:54																									
ZZZZZZ			22:59																									
ZZZZZZ			23:03																									
ZZZZZZ			23:07																									
ZZZZZZ			23:12																									
ZZZZZZ			23:16																									
CCV 240-299318/186			23:20																									
CCB 240-299318/187			23:24																									
ZZZZZZ			23:29																									
ZZZZZZ			23:33																									
ZZZZZZ			23:38																									
ZZZZZZ			23:42																									
ZZZZZZ			23:46																									
ZZZZZZ			23:51																									
ZZZZZZ			23:55																									
ZZZZZZ			00:00																									
ZZZZZZ			00:04																									
ZZZZZZ			00:08																									
CCV 240-299318/198	1		00:13	X	X	X	X	X	X	X																		
CCB 240-299318/199	1		00:17	X	X	X	X	X	X	X																		
240-85941-2	1	P	00:21	X	X	X	X	X	X	X																		
ZZZZZZ			00:26																									
ZZZZZZ			00:30																									
ZZZZZZ			00:34																									
ZZZZZZ			00:38																									
ZZZZZZ			00:43																									
ZZZZZZ			00:47																									
ZZZZZZ			00:51																									
ZZZZZZ			00:55																									
ZZZZZZ			00:59																									
CCV 240-299318/210	1		01:04	X	X	X	X	X	X	X																		

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
CCB 240-299318/211	1		01:08	X	X	X	X	X	X	X																		
ZZZZZZ			01:12																									
ZZZZZZ			01:16																									
ZZZZZZ			01:20																									
ZZZZZZ			01:25																									
ZZZZZZ			01:29																									
ZZZZZZ			01:33																									
ZZZZZZ			01:37																									
ZZZZZZ			01:41																									
ZZZZZZ			01:45																									
ZZZZZZ			01:49																									
CCV 240-299318/222			01:54																									
CCB 240-299318/223			01:58																									
ZZZZZZ			02:02																									
ZZZZZZ			02:07																									
ZZZZZZ			02:11																									
ZZZZZZ			02:15																									
ZZZZZZ			02:20																									
ZZZZZZ			02:24																									
ZZZZZZ			02:28																									
ZZZZZZ			02:32																									
ZZZZZZ			02:37																									
ZZZZZZ			02:41																									
CCV 240-299318/234			02:45																									
CCB 240-299318/235			02:49																									
ZZZZZZ			02:54																									
ZZZZZZ			02:58																									
ZZZZZZ			03:02																									
ZZZZZZ			03:07																									
ZZZZZZ			03:11																									
ZZZZZZ			03:15																									
ZZZZZZ			03:19																									
ZZZZZZ			03:24																									
ZZZZZZ			03:28																									
ZZZZZZ			03:32																									
CCV 240-299318/246			03:37																									
CCB 240-299318/247			03:41																									
ZZZZZZ			03:45																									
ZZZZZZ			03:49																									
ZZZZZZ			03:54																									
ZZZZZZ			03:58																									
ZZZZZZ			04:02																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: I9 Analysis Method: 6010B

Start Date: 10/16/2017 08:48 End Date: 10/17/2017 06:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			04:06																									
ZZZZZZ			04:10																									
ZZZZZZ			04:14																									
ZZZZZZ			04:19																									
ZZZZZZ			04:23																									
CCV 240-299318/258			04:27																									
CCB 240-299318/259			04:31																									
ZZZZZZ			04:35																									
ZZZZZZ			04:39																									
ZZZZZZ			04:44																									
ZZZZZZ			04:48																									
ZZZZZZ			04:52																									
ZZZZZZ			04:56																									
ZZZZZZ			05:00																									
ZZZZZZ			05:05																									
ZZZZZZ			05:09																									
ZZZZZZ			05:13																									
CCV 240-299318/270			05:17																									
CCB 240-299318/271			05:21																									
ZZZZZZ			05:26																									
ZZZZZZ			05:30																									
ZZZZZZ			05:34																									
ZZZZZZ			05:38																									
ZZZZZZ			05:42																									
ZZZZZZ			05:47																									
ZZZZZZ			05:52																									
ZZZZZZ			05:56																									
ZZZZZZ			06:00																									
ZZZZZZ			06:04																									
CCV 240-299318/282			06:08																									
CCB 240-299318/283			06:13																									
ZZZZZZ			06:17																									
CCV 240-299318/285			06:21																									
CCB 240-299318/286			06:25																									

Prep Types:
P = TCLP
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-297729/1-A			09:08	X																								
IC 240-297729/2-A			09:10	X																								
IC 240-297729/3-A			09:12	X																								
IC 240-297729/4-A			09:14	X																								
IC 240-297729/5-A			09:16	X																								
IC 240-297729/6-A			09:18	X																								
ICV 240-297729/7-A	1		09:29	X																								
ICB 240-297729/8-A	1		09:31	X																								
CRA 240-297729/9-A	1		09:33	X																								
CCV 240-297729/10-A			09:35																									
CCB 240-297729/11-A			09:37																									
CCV 240-297729/10-A			09:40																									
CCB 240-297729/11-A			09:42																									
CCV 240-297729/10-A			11:07																									
CCB 240-297729/11-A			11:09																									
ZZZZZZ			11:11																									
ZZZZZZ			11:13																									
ZZZZZZ			11:15																									
ZZZZZZ			11:17																									
ZZZZZZ			11:19																									
ZZZZZZ			11:21																									
ZZZZZZ			11:24																									
ZZZZZZ			11:26																									
ZZZZZZ			11:28																									
ZZZZZZ			11:30																									
CCV 240-297729/10-A			11:32																									
CCB 240-297729/11-A			11:34																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
CCV 240-297729/10-A			11:40																									
CCB 240-297729/11-A			11:42																									
ZZZZZZ			11:45																									
ZZZZZZ			11:46																									
ZZZZZZ			11:48																									
ZZZZZZ			11:50																									
ZZZZZZ			11:53																									
ZZZZZZ			11:55																									
CCV 240-297729/10-A			11:57																									
CCB 240-297729/11-A			11:59																									
ZZZZZZ			12:02																									
ZZZZZZ			12:03																									
CCV 240-297729/10-A			12:05																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
CCB 240-297729/11-A			12:08	
ZZZZZZ			12:10	
ZZZZZZ			12:12	
ZZZZZZ			12:14	
ZZZZZZ			12:16	
ZZZZZZ			12:18	
ZZZZZZ			12:20	
ZZZZZZ			12:22	
ZZZZZZ			12:24	
ZZZZZZ			12:26	
ZZZZZZ			12:28	
CCV 240-297729/10-A			12:30	
CCB 240-297729/11-A			12:32	
ZZZZZZ			12:34	
CCV 240-297729/10-A			12:36	
CCB 240-297729/11-A			12:38	
ZZZZZZ			12:40	
ZZZZZZ			12:42	
ZZZZZZ			12:44	
ZZZZZZ			12:47	
ZZZZZZ			12:49	
ZZZZZZ			12:51	
ZZZZZZ			12:53	
ZZZZZZ			12:55	
ZZZZZZ			12:57	
CCV 240-297729/10-A			12:58	
CCB 240-297729/11-A			13:01	
ZZZZZZ			13:03	
ZZZZZZ			13:05	
ZZZZZZ			13:07	
ZZZZZZ			13:09	
ZZZZZZ			13:11	
ZZZZZZ			13:13	
ZZZZZZ			13:15	
ZZZZZZ			13:17	
ZZZZZZ			13:19	
ZZZZZZ			13:20	
CCV 240-297729/10-A			13:22	
CCB 240-297729/11-A			13:24	
ZZZZZZ			13:27	
ZZZZZZ			13:29	
ZZZZZZ			13:31	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			13:33																									
ZZZZZZ			13:35																									
ZZZZZZ			13:37																									
CCV 240-297729/10-A			13:39																									
CCB 240-297729/11-A			13:41																									
ZZZZZZ			13:43																									
ZZZZZZ			13:45																									
ZZZZZZ			13:47																									
ZZZZZZ			13:49																									
CCV 240-297729/10-A			13:51																									
CCB 240-297729/11-A			13:53																									
ZZZZZZ			13:56																									
ZZZZZZ			13:57																									
ZZZZZZ			14:00																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:07																									
ZZZZZZ			14:09																									
ZZZZZZ			14:11																									
ZZZZZZ			14:13																									
CCV 240-297729/10-A			14:15																									
CCB 240-297729/11-A			14:17																									
ZZZZZZ			14:19																									
ZZZZZZ			14:21																									
ZZZZZZ			14:23																									
ZZZZZZ			14:25																									
ZZZZZZ			14:27																									
ZZZZZZ			14:29																									
ZZZZZZ			14:31																									
ZZZZZZ			14:33																									
ZZZZZZ			14:35																									
ZZZZZZ			14:37																									
CCV 240-297729/10-A			14:39																									
CCB 240-297729/11-A			14:41																									
CCV 240-297729/10-A			14:43																									
CCB 240-297729/11-A			14:45																									
ZZZZZZ			18:01																									
ZZZZZZ			18:03																									
ZZZZZZ			18:06																									
ZZZZZZ			18:08																									
ZZZZZZ			18:09																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			18:11	
ZZZZZZ			18:14	
ZZZZZZ			18:16	
ZZZZZZ			18:18	
ZZZZZZ			18:20	
ZZZZZZ			18:22	
ZZZZZZ			18:24	
ZZZZZZ			18:26	
CCV 240-297729/10-A	1		18:41	X
CCB 240-297729/11-A	1		18:43	X
LB 240-297819/1-C	1	P	18:45	X
MB 240-297936/2-A	1	T	18:47	X
LCS 240-297936/3-A	1	T	18:49	X
ZZZZZZ			18:51	
240-85914-D-1-O MS	1	P	18:53	X
240-85914-D-1-P MSD	1	P	18:55	X
CCV 240-297729/10-A	1		18:58	X
CCB 240-297729/11-A	1		19:00	X
ZZZZZZ			19:02	
ZZZZZZ			19:04	
ZZZZZZ			19:06	
CCV 240-297729/10-A			19:08	
CCB 240-297729/11-A			19:10	
ZZZZZZ			19:13	
CCV 240-297729/10-A	1		19:14	X
CCB 240-297729/11-A	1		19:16	X
240-85941-3	1	P	19:19	X
CCV 240-297729/10-A	1		19:21	X
CCB 240-297729/11-A	1		19:23	X
ZZZZZZ			19:25	
ZZZZZZ			19:27	
ZZZZZZ			19:29	
ZZZZZZ			19:31	
ZZZZZZ			19:33	
CCV 240-297729/10-A			19:36	
CCB 240-297729/11-A			19:38	
ZZZZZZ			19:40	
ZZZZZZ			19:42	
ZZZZZZ			19:44	
ZZZZZZ			19:46	
CCV 240-297729/10-A			19:49	
CCB 240-297729/11-A			19:50	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			19:53																									
ZZZZZZ			19:55																									
ZZZZZZ			19:57																									
ZZZZZZ			19:59																									
ZZZZZZ			20:01																									
ZZZZZZ			20:03																									
ZZZZZZ			20:05																									
ZZZZZZ			20:07																									
ZZZZZZ			20:09																									
ZZZZZZ			20:11																									
CCV 240-297729/10-A			20:13																									
CCB 240-297729/11-A			20:15																									
ZZZZZZ			20:17																									
ZZZZZZ			20:19																									
ZZZZZZ			20:21																									
CCV 240-297729/10-A			20:23																									
CCB 240-297729/11-A			20:25																									
ZZZZZZ			20:27																									
ZZZZZZ			20:29																									
ZZZZZZ			20:31																									
ZZZZZZ			20:33																									
ZZZZZZ			20:36																									
ZZZZZZ			20:37																									
ZZZZZZ			20:40																									
CCV 240-297729/10-A			20:42																									
CCB 240-297729/11-A			20:44																									
ZZZZZZ			20:46																									
ZZZZZZ			20:48																									
ZZZZZZ			20:50																									
ZZZZZZ			20:52																									
ZZZZZZ			20:54																									
ZZZZZZ			20:56																									
CCV 240-297729/10-A			20:58																									
CCB 240-297729/11-A			21:00																									
ZZZZZZ			21:02																									
ZZZZZZ			21:04																									
ZZZZZZ			21:06																									
ZZZZZZ			21:08																									
CCV 240-297729/10-A			21:11																									
CCB 240-297729/11-A			21:13																									
ZZZZZZ			21:15																									
ZZZZZZ			21:17																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			21:20																									
ZZZZZZ			21:23																									
CCV 240-297729/10-A			21:25																									
CCB 240-297729/11-A			21:27																									
ZZZZZZ			21:29																									
ZZZZZZ			21:31																									
ZZZZZZ			21:33																									
ZZZZZZ			21:35																									
ZZZZZZ			21:37																									
ZZZZZZ			21:39																									
CCV 240-297729/10-A			21:41																									
CCB 240-297729/11-A			21:43																									
ZZZZZZ			21:46																									
ZZZZZZ			21:48																									
ZZZZZZ			21:50																									
ZZZZZZ			21:52																									
ZZZZZZ			21:54																									
ZZZZZZ			21:55																									
ZZZZZZ			21:57																									
ZZZZZZ			21:59																									
ZZZZZZ			22:01																									
ZZZZZZ			22:03																									
CCV 240-297729/10-A			22:05																									
CCB 240-297729/11-A			22:07																									
ZZZZZZ			22:09																									
ZZZZZZ			22:11																									
ZZZZZZ			22:13																									
ZZZZZZ			22:15																									
CCV 240-297729/10-A			22:17																									
CCB 240-297729/11-A			22:20																									
CCV 240-297729/10-A			22:23																									
CCB 240-297729/11-A			22:25																									
ZZZZZZ			22:27																									
ZZZZZZ			22:29																									
ZZZZZZ			22:31																									
ZZZZZZ			22:33																									
ZZZZZZ			22:35																									
ZZZZZZ			22:37																									
CCV 240-297729/10-A			22:39																									
CCB 240-297729/11-A			22:41																									
ZZZZZZ			22:43																									
ZZZZZZ			22:45																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/06/2017 09:08 End Date: 10/06/2017 23:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			22:47																									
ZZZZZZ			22:49																									
ZZZZZZ			22:51																									
ZZZZZZ			22:53																									
ZZZZZZ			22:55																									
ZZZZZZ			22:57																									
ZZZZZZ			22:59																									
ZZZZZZ			23:01																									
CCV 240-297729/10-A			23:03																									
CCB 240-297729/11-A			23:05																									
ZZZZZZ			23:08																									
ZZZZZZ			23:10																									
ZZZZZZ			23:11																									
ZZZZZZ			23:13																									
ZZZZZZ			23:15																									
ZZZZZZ			23:17																									
ZZZZZZ			23:19																									
ZZZZZZ			23:21																									
ZZZZZZ			23:23																									
CCV 240-297729/10-A			23:25																									
CCB 240-297729/11-A			23:27																									
CRA 240-297729/9-A			23:30																									
CCV 240-297729/10-A			23:32																									
CCB 240-297729/11-A			23:34																									
CCV 240-297729/10-A			23:36																									
CCB 240-297729/11-A			23:38																									
ZZZZZZ			23:40																									
ZZZZZZ			23:42																									
ZZZZZZ			23:44																									
ZZZZZZ			23:46																									
CCV 240-297729/10-A			23:48																									
CCB 240-297729/11-A			23:50																									

Prep Types:
P = TCLP
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/17/2017 09:08 End Date: 10/17/2017 14:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-299251/1-A			09:08	X																								
IC 240-299251/2-A			09:10	X																								
IC 240-299251/3-A			09:12	X																								
IC 240-299251/4-A			09:14	X																								
IC 240-299251/5-A			09:16	X																								
IC 240-299251/6-A			09:18	X																								
ICV 240-299251/7-A	1		09:21	X																								
ICB 240-299251/8-A	1		09:24	X																								
CRA 240-299251/9-A	1		09:26	X																								
CCV 240-299251/10-A			09:28																									
CCB 240-299251/11-A			09:30																									
CCV 240-299251/10-A			09:33																									
CCB 240-299251/11-A			09:34																									
ZZZZZZ			09:39																									
ZZZZZZ			09:40																									
ZZZZZZ			09:45																									
ZZZZZZ			09:48																									
ZZZZZZ			09:51																									
ZZZZZZ			09:55																									
ZZZZZZ			09:57																									
ZZZZZZ			09:59																									
ZZZZZZ			10:02																									
ZZZZZZ			10:04																									
CCV 240-299251/10-A	1		10:06	X																								
CCB 240-299251/11-A	1		10:08	X																								
ZZZZZZ			10:10																									
ZZZZZZ			10:12																									
ZZZZZZ			10:14																									
ZZZZZZ			10:17																									
ZZZZZZ			10:19																									
ZZZZZZ			10:21																									
ZZZZZZ			10:22																									
ZZZZZZ			10:25																									
ZZZZZZ			10:27																									
LB 240-298849/1-C	1	P	10:29	X																								
CCV 240-299251/10-A	1		10:31	X																								
CCB 240-299251/11-A	1		10:33	X																								
MB 240-298961/2-A	1	T	10:36	X																								
LCS 240-298961/3-A	1	T	10:38	X																								
ZZZZZZ			10:39																									
240-86307-E-1-F MS	1	P	10:42	X																								
240-86307-E-1-G MSD	1	P	10:44	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/17/2017 09:08 End Date: 10/17/2017 14:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			10:46																									
240-85941-2	1	P	10:48	X																								
ZZZZZZ			10:50																									
ZZZZZZ			10:52																									
ZZZZZZ			10:54																									
CCV 240-299251/10-A	1		10:56	X																								
CCB 240-299251/11-A	1		10:58	X																								
ZZZZZZ			11:01																									
ZZZZZZ			11:02																									
ZZZZZZ			11:04																									
ZZZZZZ			11:07																									
ZZZZZZ			11:09																									
ZZZZZZ			11:11																									
ZZZZZZ			11:13																									
ZZZZZZ			11:15																									
ZZZZZZ			11:17																									
ZZZZZZ			11:19																									
CCV 240-299251/10-A			11:21																									
CCB 240-299251/11-A			11:23																									
ZZZZZZ			11:26																									
ZZZZZZ			11:27																									
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
ZZZZZZ			11:33																									
CCV 240-299251/10-A			11:35																									
CCB 240-299251/11-A			11:38																									
ZZZZZZ			11:40																									
CCV 240-299251/10-A			11:42																									
CCB 240-299251/11-A			11:44																									
ZZZZZZ			11:46																									
ZZZZZZ			11:48																									
ZZZZZZ			11:50																									
ZZZZZZ			11:52																									
CCV 240-299251/10-A			11:54																									
CCB 240-299251/11-A			11:57																									
ZZZZZZ			11:59																									
ZZZZZZ			12:01																									
ZZZZZZ			12:03																									
ZZZZZZ			12:05																									
ZZZZZZ			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/17/2017 09:08 End Date: 10/17/2017 14:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			12:13																									
ZZZZZZ			12:14																									
ZZZZZZ			12:16																									
CCV 240-299251/10-A			12:18																									
CCB 240-299251/11-A			12:20																									
ZZZZZZ			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
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ZZZZZZ			12:33																									
ZZZZZZ			12:35																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
CCV 240-299251/10-A			12:43																									
CCB 240-299251/11-A			12:45																									
ZZZZZZ			12:48																									
ZZZZZZ			12:50																									
ZZZZZZ			12:52																									
ZZZZZZ			12:54																									
ZZZZZZ			12:56																									
ZZZZZZ			12:58																									
ZZZZZZ			13:00																									
ZZZZZZ			13:02																									
ZZZZZZ			13:04																									
ZZZZZZ			13:06																									
CCV 240-299251/10-A			13:08																									
CCB 240-299251/11-A			13:09																									
ZZZZZZ			13:12																									
ZZZZZZ			13:14																									
ZZZZZZ			13:16																									
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ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
ZZZZZZ			13:24																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
CCV 240-299251/10-A			13:31																									
CCB 240-299251/11-A			13:33																									
ZZZZZZ			13:36																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/17/2017 09:08 End Date: 10/17/2017 14:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			13:38																									
ZZZZZZ			13:40																									
ZZZZZZ			13:41																									
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
ZZZZZZ			13:54																									
CCV 240-299251/10-A			13:56																									
CCB 240-299251/11-A			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:02																									
ZZZZZZ			14:04																									
ZZZZZZ			14:06																									
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
ZZZZZZ			14:18																									
CCV 240-299251/10-A			14:20																									
CCB 240-299251/11-A			14:22																									
ZZZZZZ			14:24																									
CCV 240-299251/10-A			14:26																									
CCB 240-299251/11-A			14:28																									

Prep Types:
P = TCLP
T = Total/NA

FORM XIII-IN

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297819 Batch Start Date: 10/05/17 16:05 Batch Analyst: Jones, Diane

Batch Method: 1311 Batch End Date: 10/06/17 08:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXpH(0-14) 00020	EXTCLPBUFF1 01291	EXTCLPFILTERS 00033	EXTCLPHCLW 00056	AnalysisComment	
LB 240-297819/1		1311, 3010A, 6010B		1 No Unit	1 mL	1	1 mL	Buffer 1	
240-85941-E-3	WC-IW-100317	1311, 3010A, 6010B	P	1 No Unit	1 mL	1	1 mL		

Batch Notes	
Tumbler Rotations per Minute	A, C, E, J, I = 31rpm

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297935 Batch Start Date: 10/06/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3010A Batch End Date: 10/06/17 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MT1to1HCL 00073	MTAGSPIKEW 00077	MTICP1 00068	MTICP2A 00075
LB 240-297819/1-A		3010A, 6010B		50 mL	50 mL	5 mL			
MB 240-297935/2		3010A, 6010B		50 mL	50 mL	5 mL			
LCS 240-297935/3		3010A, 6010B		50 mL	50 mL	5 mL	1 mL	1 mL	1 mL
240-85914-D-1-H MS		3010A, 6010B	P	50 mL	50 mL	5 mL			1 mL
240-85914-D-1-H MSD		3010A, 6010B	P	50 mL	50 mL	5 mL			1 mL
240-85941-E-3-A	WC-IW-100317	3010A, 6010B	P	50 mL	50 mL	5 mL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTNONRCRA+ODD 00009	MTRCRA 00012	MTTMHNO3 00131			
LB 240-297819/1-A		3010A, 6010B				3 mL			
MB 240-297935/2		3010A, 6010B				3 mL			
LCS 240-297935/3		3010A, 6010B				3 mL			
240-85914-D-1-H MS		3010A, 6010B	P	1 mL	0.5 mL	3 mL			
240-85914-D-1-H MSD		3010A, 6010B	P	1 mL	0.5 mL	3 mL			
240-85941-E-3-A	WC-IW-100317	3010A, 6010B	P			3 mL			

Batch Notes	
Filter Paper ID	60412103
Hot Block ID	hb0
Pipette/Syringe/Dispenser ID	mp1 mp3 mp5
Digestion Tube/Cup ID	1703076

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 298849 Batch Start Date: 10/12/17 17:35 Batch Analyst: Jones, Diane

Batch Method: 1311 Batch End Date: 10/13/17 09:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXpH(0-14) 00020	EXTCLPBUFF1 01299	EXTCLPFILTERS 00033	EXTCLPHCLW 00056	AnalysisComment	
LB 240-298849/1		1311, 3010A, 6010B		1 No Unit	1 mL	1	1 mL	Buffer 1	
240-85941-C-2	WC-IS-100317	1311, 3010A, 6010B	P	1 No Unit	1 mL	1	1 mL		

Batch Notes	
Tumbler Rotations per Minute	A, C, J, I = 31rpm

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 298960 Batch Start Date: 10/13/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3010A Batch End Date: 10/13/17 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MT1to1HCL 00073	MTAGSPIKEW 00077	MTICP1 00068	MTICP2A 00076
LB 240-298849/1-A		3010A, 6010B		50 mL	50 mL	5 mL			
MB 240-298960/2		3010A, 6010B		50 mL	50 mL	5 mL			
LCS 240-298960/3		3010A, 6010B		50 mL	50 mL	5 mL	1 mL	1 mL	1 mL
240-86307-E-1-A MS		3010A, 6010B	P	50 mL	50 mL	5 mL			1 mL
240-86307-E-1-A MSD		3010A, 6010B	P	50 mL	50 mL	5 mL			1 mL
240-85941-C-2-D	WC-IS-100317	3010A, 6010B	P	50 mL	50 mL	5 mL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTNONRCRA+ODD 00009	MTRCRA 00012	MTTMHNO3 00132			
LB 240-298849/1-A		3010A, 6010B				3 mL			
MB 240-298960/2		3010A, 6010B				3 mL			
LCS 240-298960/3		3010A, 6010B				3 mL			
240-86307-E-1-A MS		3010A, 6010B	P	1 mL	0.5 mL	3 mL			
240-86307-E-1-A MSD		3010A, 6010B	P	1 mL	0.5 mL	3 mL			
240-85941-C-2-D	WC-IS-100317	3010A, 6010B	P			3 mL			

Batch Notes	
Filter Paper ID	60412103
Hot Block ID	hb0
Pipette/Syringe/Dispenser ID	mp1 mp3 mp5
Digestion Tube/Cup ID	1705110

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297729 Batch Start Date: 10/05/17 14:40 Batch Analyst: Nguyen, Diem

Batch Method: 7470A Batch End Date: 10/05/17 16:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00072	MTH2S04 00048	MTHGCALW 01633	MTHgICV_00001 00237
ICV 240-297729/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-297729/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-297729/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-297729/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-297729/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00143	MTTMHNO3 00131				
ICV 240-297729/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-297729/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-297729/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-297729/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-297729/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	takeout temp in range (90-95* Celsius)
Hot Block ID	C1
Pipette/Syringe/Dispenser ID	MP1, MP2, A8, A5, MP5
Digestion Tube/Cup ID	1703076

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297819 Batch Start Date: 10/05/17 16:05 Batch Analyst: Jones, Diane

Batch Method: 1311 Batch End Date: 10/06/17 08:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXpH(0-14) 00020	EXTCLPBUFF1 01291	EXTCLPFILTERS 00033	EXTCLPHCLW 00056	AnalysisComment	
LB 240-297819/1		1311, 7470A, 7470A		1 No Unit	1 mL	1	1 mL	Buffer 1	
240-85941-E-3	WC-IW-100317	1311, 7470A, 7470A	P	1 No Unit	1 mL	1	1 mL		

Batch Notes	
Tumbler Rotations per Minute	A, C, E, J, I = 31rpm

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297936 Batch Start Date: 10/06/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/06/17 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00072	MTH2S04 00048	MTHGCALW 01634	MTKMN04W 00143
LB 240-297819/1-A		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
MB 240-297936/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-297936/3		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-85914-D-1-H MS		7470A, 7470A	P	50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-85914-D-1-H MSD		7470A, 7470A	P	50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-85941-E-3-A	WC-IW-100317	7470A, 7470A	P	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00131					
LB 240-297819/1-A		7470A, 7470A		1.25 mL					
MB 240-297936/2		7470A, 7470A		1.25 mL					
LCS 240-297936/3		7470A, 7470A		1.25 mL					
240-85914-D-1-H MS		7470A, 7470A	P	1.25 mL					
240-85914-D-1-H MSD		7470A, 7470A	P	1.25 mL					
240-85941-E-3-A	WC-IW-100317	7470A, 7470A	P	1.25 mL					

Batch Notes	
Batch Comment	Take out temps in range
Hot Block ID	b1
Pipette/Syringe/Dispenser ID	mp2
Digestion Tube/Cup ID	1703076

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 298849 Batch Start Date: 10/12/17 17:35 Batch Analyst: Jones, Diane

Batch Method: 1311 Batch End Date: 10/13/17 09:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXpH(0-14) 00020	EXTCLPBUFF1 01299	EXTCLPFILTERS 00033	EXTCLPHCLW 00056	AnalysisComment	
LB 240-298849/1		1311, 7470A, 7470A		1 No Unit	1 mL	1	1 mL	Buffer 1	
240-85941-C-2	WC-IS-100317	1311, 7470A, 7470A	P	1 No Unit	1 mL	1	1 mL		

Batch Notes	
Tumbler Rotations per Minute	A, C, J, I = 31rpm

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 298961 Batch Start Date: 10/13/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/13/17 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01641	MTKMN04W 00144
LB 240-298849/1-A		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
MB 240-298961/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-298961/3		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-86307-E-1-A MS		7470A, 7470A	P	50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-86307-E-1-A MSD		7470A, 7470A	P	50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-85941-C-2-D	WC-IS-100317	7470A, 7470A	P	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
LB 240-298849/1-A		7470A, 7470A		1.25 mL					
MB 240-298961/2		7470A, 7470A		1.25 mL					
LCS 240-298961/3		7470A, 7470A		1.25 mL					
240-86307-E-1-A MS		7470A, 7470A	P	1.25 mL					
240-86307-E-1-A MSD		7470A, 7470A	P	1.25 mL					
240-85941-C-2-D	WC-IS-100317	7470A, 7470A	P	1.25 mL					

Batch Notes	
Batch Comment	Take out temps in range
Hot Block ID	b1
Pipette/Syringe/Dispenser ID	mp2
Digestion Tube/Cup ID	1705110

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 299251 Batch Start Date: 10/16/17 08:15 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 10/16/17 10:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01642	MTHgICV_00001 00241
ICV 240-299251/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-299251/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-299251/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-299251/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-299251/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00144	MTTMHNO3 00132				
ICV 240-299251/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-299251/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-299251/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-299251/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-299251/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	takeout temp in range (90-95* Celsius)
Hot Block ID	C1
Pipette/Syringe/Dispenser ID	MP1, MP2, A8, A5, MP5
Digestion Tube/Cup ID	1703076

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Sample Name: Blank Acquired: 10/9/2017 10:22:47 Type: Cal
Method: ICP I12 6010 200.7 Methods(v297) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00038	.00105	.00037	.00121	.01460	.00150	.01411
Stddev	.00005	.00049	.00009	.00014	.00235	.00046	.00052
%RSD	12.852	46.140	25.420	11.700	16.086	30.641	3.6802

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0007	-.00238	.00007	.00110	.00059	-.00034	.01074
Stddev	.0002	.00018	.00008	.00020	.00010	.00117	.00289
%RSD	32.70	7.3626	115.15	17.976	16.505	341.78	26.887

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00013	.00035	.00028	.01656	.00216	-.00005	-.0004
Stddev	.00027	.00010	.00012	.00149	.00015	.00021	.0000
%RSD	214.62	29.085	43.018	8.9973	6.8268	395.70	9.706

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00018	.00018	.00002	.00024	.00001	.00040	.00164
Stddev	.00007	.00011	.00011	.00004	.00020	.00008	.00012
%RSD	40.173	60.317	617.89	18.731	1779.7	19.059	7.3502

Elem	Sr3464
IS Ref	(Y_3710)
Units	Cts/S
Avg	-.00092
Stddev	.00054
%RSD	58.857

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6186.1	3392.5	35852.	5335.1
Stddev	3.0	3.6	68.	10.2
%RSD	.04914	.10651	.18865	.19131

Sample Name: SCAL-3053251 Acquired: 10/9/2017 10:27:30 Type: Cal
Method: ICP I12 6010 200.7 Methods(v297) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	As1890	B_1826	Ba4554	Be3130	Cd2288	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.76013	.08150	2.1653	32.806	15.358	2.939	3.3791	1.1878
Stddev	.00170	.00018	.0060	.056	.022	.002	.0080	.0021
%RSD	.22341	.21883	.27833	.17017	.14355	.0609	.23731	.17539

Elem	Cu3273	Li6707	Mn2576	Mo2020	Ni2316	Pb2203	Sb2175	Se1960
IS Ref	(Y_3600)	(Y_3710)	(Y_3600)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.0338	15.930	7.5793	3.0659	1.2879	.28100	.1519	.06841
Stddev	.0024	.040	.0314	.0035	.0024	.00065	.0002	.00015
%RSD	.23137	.25017	.41448	.11410	.18386	.23251	.1575	.22572

Elem	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Sr3464
IS Ref	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.7382	9.5636	.12025	.48146	2.7584	1.8312
Stddev	.0029	.0386	.00035	.00228	.0047	.0037
%RSD	.16891	.40345	.29413	.47352	.17015	.19946

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5675.9	3294.5	35031.	5359.6
Stddev	16.7	6.0	49.	23.4
%RSD	.29496	.18070	.13847	.43584

Sample Name: SCAL2-3272878 Acquired: 10/9/2017 10:32:06 Type: Cal
Method: ICP I12 6010 200.7 Methods(v297) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Al3082	Ca3179	Fe2599	K_7664	Mg2790	Na5895	Si2516
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.2983	15.250	7.0271	6.2217	1.3194	29.398	.51731
Stddev	.0013	.016	.0097	.0090	.0017	.018	.00093
%RSD	.09649	.10508	.13736	.14453	.12955	.06069	.18069

Int. Std.	Y_3710
Units	Cts/S
Avg	5270.5
Stddev	5.0
%RSD	.09548

Sample Name: ICV-3210720 Acquired: 10/9/2017 10:36:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	765.99	12504.	389.59	1550.4	1504.2	1519.9	24226.
Stddev	3.24	34.	1.14	2.8	2.2	4.3	57.
%RSD	.42245	.27027	.29333	.17774	.14579	.28553	.23429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	382.1	1483.7	1511.8	1494.1	12652.	24447.	1022.6
Stddev	.4	.5	3.4	8.7	46.	38.	2.8
%RSD	.0958	.03212	.22462	.57974	.36581	.15443	.27532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24945.	1524.2	1482.5	24506.	1505.1	375.93	377.1
Stddev	147.	2.1	.9	54.	1.1	1.40	1.6
%RSD	.58771	.13820	.06247	.21867	.07619	.37358	.4180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICV-3210720 Acquired: 10/9/2017 10:36:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	387.18	W 1411.6	1483.7	757.74	1526.5	1530.6	5271.7
Stddev	1.71	1.2	2.9	4.49	12.5	3.0	38.0
%RSD	.44285	.08207	.19314	.59220	.81656	.19440	.72162
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		1500.0					
Range		-5.5000%					

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4566.5
Stddev	14.6
%RSD	.31884
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5582.2	3306.3	34704.	5332.3
Stddev	.7	1.2	64.	7.5
%RSD	.01212	.03640	.18466	.14085

Sample Name: ICB Acquired: 10/9/2017 10:41:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20613	-12.692	-1.2961	3.7177	.14315	.02321	-1.6657	.1203
Stddev	.30508	17.793	1.2070	.2700	.06504	.09221	3.1973	.1689
%RSD	148.00	140.19	93.127	7.2615	45.433	397.32	191.96	140.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22113	.09156	.27948	1.7785	2.9604	2.2529	-5.0680	.05636
Stddev	.13177	.29252	.19431	.2659	17.095	.1436	11.452	.03151
%RSD	59.592	319.47	69.527	14.952	577.46	6.3727	225.97	55.900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.52912	2.9234	.08997	.58160	.5180	-.37339	.34285	.45592
Stddev	.24800	1.1640	.29558	.85982	.7702	.67769	.34607	.07891
%RSD	46.870	39.817	328.53	147.84	148.7	181.50	100.94	17.307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 10/9/2017 10:41:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.85137	3.9025	-.28909	-6.9255	.44973
Stddev	.34436	3.2649	.04450	.4613	.56787
%RSD	40.448	83.662	15.394	6.6609	126.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6183.1	3399.0	35993.	5365.3
Stddev	11.2	4.6	18.	6.5
%RSD	.18114	.13403	.05139	.12192

Sample Name: ICVL-3260526 Acquired: 10/9/2017 10:45:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.7991	190.96	13.708	101.00	192.95	4.7221	4851.2	4.964
Stddev	.2290	13.83	1.246	.80	.30	.1041	11.3	.052
%RSD	2.3370	7.2427	9.0876	.78754	.15505	2.2043	.23266	1.057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.3242	10.136	20.224	199.35	4725.5	50.741	4891.8	15.069
Stddev	.1005	.513	.229	1.18	30.8	.281	33.2	.059
%RSD	1.0783	5.0609	1.1346	.59335	.65280	.55338	.67872	.39054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	40.261	4725.6	37.987	10.174	18.71	19.515	94.786	49.325
Stddev	.294	11.0	.158	.527	1.33	2.197	.553	.364
%RSD	.73012	.23329	.41691	5.1832	7.110	11.260	.58352	.73808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: ICVL-3260526 Acquired: 10/9/2017 10:45:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	18.860	12.682	49.194	482.60	50.539
Stddev	.857	2.398	.169	5.72	3.519
%RSD	4.5422	18.909	.34288	1.1846	6.9636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6042.4	3381.1	35741.	5383.7
Stddev	7.3	1.8	99.	22.4
%RSD	.12156	.05453	.27787	.41696

Sample Name: CRILL-3123691 Acquired: 10/9/2017 10:50:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.2360	209.27	8.4068	209.63	202.82	4.9422	5051.8
Stddev	.2630	12.59	1.0487	.81	1.03	.1396	33.2
%RSD	5.0221	6.0170	12.475	.38438	.50606	2.8249	.65777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.180	6.8338	5.5284	25.873	102.45	4934.0	51.001
Stddev	.040	.1548	.1114	.922	2.18	50.4	1.265
%RSD	1.834	2.2645	2.0153	3.5654	2.1311	1.0224	2.4804
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5116.2	15.688	10.120	4957.4	39.642	F 4.9847	10.82
Stddev	51.2	.068	.116	25.3	.121	.8772	1.75
%RSD	1.0006	.43563	1.1448	.51069	.30419	17.598	16.18
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value						3.0000	
Range						50.500%	

Sample Name: CRILL-3123691 Acquired: 10/9/2017 10:50:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.0408	100.20	52.116	10.641	F 11.201	19.589	495.63
Stddev	4.2753	.38	.067	1.559	1.609	.047	.96
%RSD	70.774	.38004	.12941	14.650	14.363	.23768	.19398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					7.0000		
Range					50.500%		

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	53.072
Stddev	1.663
%RSD	3.1327
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6043.0	3378.2	35790.	5402.8
Stddev	8.6	1.8	77.	21.1
%RSD	.14160	.05257	.21594	.39044

Sample Name: ICSA-3123693 Acquired: 10/9/2017 10:55:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9603	508720.	-5.0818	2.5459	.24896	.18289	470060.
Stddev	.2210	1243.	4.4455	1.1662	.19810	.09015	2081.
%RSD	11.275	.24440	87.478	45.807	79.570	49.292	.44264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.196	-4.4254	2.8112	-1.3543	187940.	25.757	13.585
Stddev	.167	.3883	.6174	.8406	606.	16.558	.271
%RSD	13.97	8.7752	21.961	62.072	.32243	64.287	1.9985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	502980.	1.6449	-.60997	54.291	3.0433	-.00940	-2.054
Stddev	1653.	.0432	.54387	6.979	.5394	1.3485	1.430
%RSD	.32873	2.6275	89.164	12.854	17.724	14349.	69.61
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA-3123693 Acquired: 10/9/2017 10:55:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.3129	2.0879	-1.5880	5.9771	1.0082	-.24942	6.9104
Stddev	5.8436	1.0517	.1442	3.5215	2.5115	.30570	7.8798
%RSD	445.09	50.370	9.0795	58.917	249.11	122.56	114.03
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	10.063
Stddev	3.536
%RSD	35.137
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4616.6	2999.3	30741.	5205.7
Stddev	3.6	2.7	87.	13.9
%RSD	.07845	.08943	.28151	.26650

Sample Name: ICSAB-3123692 Acquired: 10/9/2017 11:00:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1090.6	505580.	1046.6	522.99	489.60	477.02	461530.
Stddev	.8	1243.	50.2	27.41	.77	1.65	3088.
%RSD	.07635	.24587	4.7965	5.2419	.15817	.34606	.66911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1060.	510.64	483.36	528.16	185810.	10242.	537.54
Stddev	57.	27.50	3.54	1.51	414.	49.	4.19
%RSD	5.383	5.3845	.73181	.28516	.22258	.48070	.78019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	499070.	487.00	978.22	10196.	1025.6	913.14	1027.
Stddev	861.	.97	50.54	23.	56.6	45.81	54.
%RSD	.17254	.19952	5.1667	.22350	5.5205	5.0172	5.236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICSAB-3123692 Acquired: 10/9/2017 11:00:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1035.0	527.28	496.44	983.32	483.89	1055.3	9731.7
Stddev	57.8	25.89	1.32	56.01	5.93	59.0	60.4
%RSD	5.5846	4.9098	.26575	5.6963	1.2261	5.5921	.62110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1416.7
Stddev	7.3
%RSD	.51483
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4454.2	2911.8	30681.	5216.5
Stddev	193.3	126.5	42.	12.7
%RSD	4.3388	4.3444	.13754	.24413

Sample Name: CCV-3260525 Acquired: 10/9/2017 11:04:30 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	992.72	24382.	494.21	4983.0	1951.9	1951.8	49152.	491.1
Stddev	1.54	50.	3.29	14.6	2.2	2.2	54.	.6
%RSD	.15526	.20523	.66642	.29352	.11326	.11360	.10886	.1258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1965.8	1935.8	1953.8	24709.	48207.	4992.8	49162.	1969.3
Stddev	3.0	3.4	2.3	12.	35.	5.7	219.	2.3
%RSD	.15122	.17694	.11978	.05013	.07351	.11412	.44489	.11781
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1936.4	48582.	1977.1	472.93	492.5	493.44	5002.9	4961.6
Stddev	4.0	33.	1.6	4.07	1.4	1.27	13.2	1.3
%RSD	.20654	.06860	.08282	.86138	.2893	.25681	.26343	.02646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 11:04:30 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	973.64	1975.6	2015.6	5173.9	4901.4
Stddev	5.64	3.5	3.5	60.7	6.1
%RSD	.57976	.17764	.17593	1.1732	.12382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5327.4	3244.8	33808.	5267.7
Stddev	7.7	3.6	40.	5.6
%RSD	.14456	.10994	.11807	.10569

Sample Name: CCB Acquired: 10/9/2017 11:08:49 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28910	1.1944	-1.8411	4.1772	.16692	.07611	-10.312	.0350
Stddev	.14549	4.8766	.4103	.2664	.13093	.08069	3.869	.0492
%RSD	50.324	408.29	22.285	6.3779	78.437	106.01	37.517	140.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17433	.02890	.32374	3.0711	11.056	2.2788	.45580	.03846
Stddev	.13714	.36517	.72685	.8051	26.689	1.6855	28.232	.03296
%RSD	78.669	1263.5	224.52	26.214	241.39	73.966	6194.1	85.688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.38957	.60331	.25758	-.37138	1.630	.98731	.17624	1.3349
Stddev	.17281	3.5466	.31664	1.2063	.903	2.6993	.26590	.0961
%RSD	44.359	587.86	122.93	324.81	55.40	273.40	150.87	7.1990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 11:08:49 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.44091	1.6034	-.53807	-11.908	2.8469
Stddev	.31275	3.4589	.10449	4.713	2.4207
%RSD	70.933	215.73	19.418	39.581	85.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6195.8	3406.7	36095.	5381.1
Stddev	8.2	3.9	11.	9.4
%RSD	.13265	.11332	.03076	.17449

Sample Name: IEC Check As Acquired: 10/9/2017 11:13:32 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27138	10.079	5194.8	1.9059	-.04847	-.01160	-10.192	-.0747
Stddev	.21746	25.617	12.1	.3951	.05145	.09442	2.583	.2686
%RSD	80.131	254.16	.23364	20.730	106.14	813.61	25.347	359.4
Check ?	None	None	None	None	None	None	None	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.24006	-.21879	-.00060	-.89537	8.1642	-2.2514	1.4458	.02893
Stddev	.22248	.22380	.32143	.61159	27.987	.7047	19.052	.05747
%RSD	92.677	102.29	53252.	68.306	342.80	31.302	1317.8	198.61
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.05558	-18.235	-.16815	-1.3813	3.074	.62343	-.76928	.11609
Stddev	.08298	2.505	.52671	.7378	2.117	3.5226	.20102	.13481
%RSD	149.29	13.738	313.24	53.413	68.89	565.03	26.130	116.12
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: IEC Check As Acquired: 10/9/2017 11:13:32 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.01320	.74112	.71164	-20.106	1.7658
Stddev	.76815	3.2717	.22959	6.107	3.6250
%RSD	5817.9	441.46	32.261	30.377	205.29
Check ?	None	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6444.2	3509.0	37146.	5488.8
Stddev	16.9	9.3	41.	10.6
%RSD	.26302	.26447	.10998	.19319

Sample Name: IEC Check Ti Acquired: 10/9/2017 11:18:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.85965	37.165	-3.6742	4.8444	-.04975	-.47994	-9.8657	.3018
Stddev	.49081	7.388	1.4290	.3560	.23030	.11685	1.7846	.0453
%RSD	57.095	19.879	38.894	7.3488	462.90	24.347	18.089	15.00
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3319	2.2156	8.4064	.44364	-26.356	-1.8819	-44.371	.07736
Stddev	.3384	.3293	.7091	1.4380	9.822	.5878	28.365	.04989
%RSD	10.157	14.865	8.4355	324.13	37.269	31.236	63.928	64.500
Check ?	Chk Pass	None	Chk Pass	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06042	-16.289	-.51907	-.30944	-.7306	-1.8835	2.2501	29086.
Stddev	.09724	3.340	.18739	1.2209	1.786	1.1679	.3283	161.
%RSD	160.94	20.506	36.100	394.54	244.5	62.006	14.593	.55375
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: IEC Check Ti Acquired: 10/9/2017 11:18:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	4.0536	2.8435	1.4545	8611.4	6.5117
Stddev	.1890	3.3532	.1120	1712.7	1.9662
%RSD	4.6613	117.93	7.7002	19.888	30.195
Check ?	None	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6350.4	3507.0	36867.	5482.8
Stddev	14.2	5.5	28.	12.7
%RSD	.22291	.15806	.07663	.23140

Sample Name: IEC Check Co Acquired: 10/9/2017 11:23:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09925	2.3250	-3.5110	.20088	-.08605	-.06799	13.832	.3784
Stddev	.13534	10.169	1.9266	.61459	.15519	.07509	4.370	.0463
%RSD	136.36	437.38	54.873	305.94	180.36	110.45	31.592	12.24
Check ?	None	None	Chk Pass	None	None	None	None	None
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9643.2	.08399	.23496	.56033	4.5358	-1.2485	1.7162	.14533
Stddev	13.8	.21874	.24681	1.8841	20.804	1.2476	13.063	.02505
%RSD	.14264	260.42	105.04	336.26	458.66	99.928	761.18	17.239
Check ?	None	None	Chk Pass	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.35283	-25.521	-.23337	1.8575	1.370	1.5862	.10593	5.1912
Stddev	.02684	3.817	.11722	1.3723	.375	2.0364	.25536	.0826
%RSD	7.6082	14.955	50.228	73.878	27.34	128.38	241.07	1.5912
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	None
Value								
Range								

Sample Name: IEC Check Co Acquired: 10/9/2017 11:23:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	4.3024	4.9836	.77415	1.8664	-1.8285
Stddev	.9038	2.7535	.09720	4.2459	2.4009
%RSD	21.007	55.252	12.556	227.49	131.31
Check ?	Chk Pass	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6362.3	3493.9	36880.	5481.3
Stddev	8.8	4.5	132.	9.7
%RSD	.13910	.12878	.35841	.17787

Sample Name: IEC Check Al Acquired: 10/9/2017 11:27:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16780	496800.	-2.0779	-.11286	.12079	-.09087	13.271
Stddev	.28931	919.	4.7989	1.1787	.15517	.11060	.900
%RSD	172.42	.18493	230.94	1044.4	128.46	121.71	6.7799
Check ?	None	None	Chk Pass	None	None	None	None
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0890	-.77374	-.02265	1.2407	.77870	-7.5442	-1.9270
Stddev	.1270	.11969	.39979	.5506	.70156	13.306	.1395
%RSD	142.7	15.469	1765.0	44.379	90.094	176.37	7.2382
Check ?	None	None	None	None	None	None	None
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.9106	.54452	.16311	-26.604	1.0232	-2.0513	.1848
Stddev	7.3646	.07318	.18868	5.184	.5225	.4448	5.643
%RSD	93.098	13.439	115.67	19.488	51.069	21.683	3053.
Check ?	None	None	None	None	None	Chk Pass	Chk Pass
Value							
Range							

Sample Name: IEC Check Al Acquired: 10/9/2017 11:27:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.81948	.25462	1.6386	3.1663	3.7874	-.19607	-16.482
Stddev	5.0858	.90845	.1556	2.1485	.1221	.48991	3.215
%RSD	620.61	356.79	9.4982	67.857	3.2240	249.86	19.503
Check ?	Chk Pass	None	None	None	None	None	None
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1.9459
Stddev	2.4090
%RSD	123.80
Check ?	None
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5541.3	3437.1	33841.	5562.8
Stddev	36.5	25.6	82.	19.8
%RSD	.65832	.74517	.24236	.35595

Sample Name: IEC Check Fe Acquired: 10/9/2017 11:32:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.82006	.02927	-4.0614	-.51177	.09225	.02665	-20.996
Stddev	.25756	16.637	3.7766	.73502	.07240	.09632	2.639
%RSD	31.407	56844.	92.987	143.62	78.485	361.48	12.570
Check ?	None	None	None	None	None	None	None
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3717	-2.6137	1.8378	-4.0499	486290.	-110.61	-.95847
Stddev	.0569	.1315	.1818	.5184	2184.	11.08	.26148
%RSD	15.31	5.0325	9.8946	12.801	.44910	10.017	27.281
Check ?	Chk Pass	None	None	Chk Pass	None	None	None
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-51.261	7.3222	-2.2645	-31.291	-.44275	2.4633	-1.873
Stddev	14.747	.0643	.1625	8.718	.48309	1.5201	3.574
%RSD	28.769	.87763	7.1748	27.862	109.11	61.708	190.8
Check ?	None	None	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: IEC Check Fe Acquired: 10/9/2017 11:32:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.7446	3.2254	.89051	.57288	-2.0161	1.2207	-15.234
Stddev	3.6409	.5070	.13390	.62551	3.2939	.0879	2.876
%RSD	208.70	15.720	15.036	109.19	163.38	7.2025	18.881
Check ?	None	None	None	None	Chk Pass	None	None
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	8.2657
Stddev	2.2131
%RSD	26.775
Check ?	None
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5913.6	3338.9	35133.	5404.6
Stddev	2.7	2.4	178.	15.4
%RSD	.04487	.07213	.50668	.28566

Sample Name: DNUIEC Check V Acquired: 10/9/2017 11:37:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20467	sF 226.61	k .43412	-.84579	s .20281	s 1.5598	s -7.6545
Stddev	.38862	378.14	1.3601	.89047	.46270	2.7422	19.113
%RSD	189.88	166.87	313.31	105.28	228.14	175.80	249.69
Check ?	None	Chk Fail	None	None	None	Chk Pass	None
Value		200.00					
Range		-200.00					

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	k .3133	.13633	-.29304	k -.71316	s 20.134	s -1.4162	s -1.5580
Stddev	.1578	.12213	.50359	.19115	5.718	23.241	.6171
%RSD	50.36	89.581	171.85	26.804	28.401	1641.1	39.612
Check ?	None	None	None	None	None	None	None
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	s .08279	.28047	-1.9661	s -32.085	k .07443	k -.83789	kF 6.459
Stddev	3.2543	.02143	.3680	6.142	.98079	.47383	8.923
%RSD	3930.8	7.6411	18.716	19.144	1317.8	56.550	138.1
Check ?	None	None	None	None	None	None	Chk Fail
Value							5.000
Range							-5.000

Sample Name: DNUIEC Check V Acquired: 10/9/2017 11:37:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	k -.52870	.14596	.53255	k 6.9413	s 5847.4	-.01300	s -14.762
Stddev	1.5153	.31311	.09457	5.4930	1327.4	.04000	3.439
%RSD	286.60	214.52	17.758	79.134	22.701	307.77	23.296
Check ?	None	None	None	Chk Pass	None	None	None
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	s -1.0810
Stddev	5.9443
%RSD	549.89
Check ?	None
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6355.8	3494.3	36970.	^ *****
Stddev	11.4	5.6	89.	-----
%RSD	.17981	.16035	.23942	-----

Sample Name: CCV-3260525 Acquired: 10/9/2017 11:41:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	986.39	24090.	501.24	4988.7	1950.6	1932.1	48512.	490.3
Stddev	.88	33.	3.38	15.7	1.3	3.6	200.	.7
%RSD	.08949	.13553	.67527	.31501	.06613	.18716	.41300	.1327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1972.5	1918.7	1938.7	24255.	48115.	4904.0	48344.	1949.4
Stddev	2.9	1.3	3.1	75.	43.	10.8	311.	1.4
%RSD	.14566	.06842	.16205	.31018	.09004	.22082	.64235	.06941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1953.3	48130.	1992.1	476.59	493.5	498.56	5016.2	4946.3
Stddev	3.1	82.	2.3	1.21	2.6	6.20	3.0	1.5
%RSD	.15636	.16977	.11496	.25395	.5259	1.2437	.05918	.03054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 11:41:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	980.66	1955.9	2025.2	5026.9	4854.2
Stddev	3.96	9.5	4.0	66.4	20.9
%RSD	.40421	.48676	.19587	1.3216	.43010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5312.7	3241.7	33880.	5330.7
Stddev	9.3	6.7	29.	6.6
%RSD	.17565	.20781	.08565	.12315

Sample Name: CCB Acquired: 10/9/2017 11:46:18 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28473	-3.6888	-2.6323	4.0023	.11011	.14447	-18.354	.0628
Stddev	.03556	3.4898	1.8313	.5456	.17987	.10966	2.684	.0708
%RSD	12.488	94.606	69.569	13.631	163.36	75.904	14.622	112.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17610	.25775	.39531	1.0510	22.543	1.9978	-10.389	.06433
Stddev	.13773	.24504	.36656	.8950	21.291	.3181	16.194	.03244
%RSD	78.208	95.069	92.728	85.155	94.447	15.920	155.88	50.423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28704	-12.211	.18366	-.44346	-.0966	-1.5788	.56667	2.3919
Stddev	.32562	4.393	.19790	.68673	1.078	1.3721	.38573	.0847
%RSD	113.44	35.978	107.75	154.86	1115.	86.907	68.069	3.5400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 11:46:18 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.66104	2.3648	-.37615	-9.0198	-2.6516
Stddev	.12274	3.4954	.13187	3.1998	2.6340
%RSD	18.567	147.81	35.057	35.475	99.337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6175.0	3398.4	36190.	5410.2
Stddev	14.2	8.5	59.	14.3
%RSD	.22968	.25003	.16335	.26353

Sample Name: IEC Check V Acquired: 10/9/2017 11:51:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.44308	-12.015	-1.1589	1.1410	.03670	.00132	-30.656	.3110
Stddev	.54057	16.736	.4435	.4989	.06190	.15493	1.978	.0733
%RSD	122.00	139.29	38.264	43.723	168.67	11781.	6.4505	23.58
Check ?	None	Chk Pass	None	None	None	Chk Pass	None	None
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.33490	-.32651	-.37563	1.5859	6.6488	-1.5806	6.0000	.92194
Stddev	.10143	.11698	.23212	.3555	21.471	1.1118	12.539	.04171
%RSD	30.288	35.829	61.795	22.416	322.93	70.340	208.98	4.5243
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.0975	-36.060	-.03571	-.70672	3.509	2.8596	-.31742	.24391
Stddev	.3431	6.864	.20221	.61943	.139	1.5313	.50781	.14815
%RSD	16.356	19.033	566.22	87.648	3.960	53.549	159.98	60.741
Check ?	None	None	None	None	Chk Pass	None	None	None
Value								
Range								

Sample Name: IEC Check V Acquired: 10/9/2017 11:51:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.1564	4958.6	-.59566	-12.080	-2.7795
Stddev	.0536	10.0	.15308	10.004	3.0024
%RSD	2.4835	.20122	25.699	82.815	108.02
Check ?	Chk Pass	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6345.4	3496.1	36948.	5506.5
Stddev	12.3	5.9	28.	20.5
%RSD	.19406	.16958	.07499	.37258

Sample Name: CCV-3260525 Acquired: 10/9/2017 11:55:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	977.61	23960.	495.44	4995.4	1948.8	1922.8	48269.	489.8
Stddev	3.45	96.	1.69	6.6	2.9	2.5	80.	.4
%RSD	.35246	.40215	.34083	.13213	.14831	.12963	.16654	.0793
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1971.6	1906.7	1919.7	24044.	48014.	4881.3	48079.	1933.8
Stddev	1.6	4.3	7.4	57.	77.	8.0	153.	4.5
%RSD	.08070	.22530	.38297	.23635	.15956	.16474	.31899	.23296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1954.3	47966.	1990.6	475.43	485.9	501.37	5009.2	4924.3
Stddev	1.5	38.	1.4	2.29	2.1	5.02	1.9	11.7
%RSD	.07610	.07958	.06795	.48076	.4356	1.0007	.03731	.23730
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 11:55:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	976.75	1958.6	2021.9	5004.9	4822.8
Stddev	2.29	5.4	1.8	54.4	.5
%RSD	.23448	.27780	.08993	1.0867	.01030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5302.0	3234.4	33948.	5326.2
Stddev	7.0	4.6	61.	4.9
%RSD	.13159	.14296	.17857	.09190

Sample Name: CCB Acquired: 10/9/2017 12:00:04 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23012	-1.0502	.04698	4.7354	.18826	.04305	16.273	-.0495
Stddev	.30613	17.860	2.3139	.3830	.32340	.04484	2.112	.0726
%RSD	133.03	1700.6	4925.7	8.0877	171.78	104.16	12.977	146.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06010	.14504	.37347	-1.9967	11.361	1.9619	6.0994	.12741
Stddev	.32134	.19977	.80710	.7235	25.875	1.2391	9.7837	.07371
%RSD	534.68	137.74	216.11	36.233	227.76	63.158	160.41	57.854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.26075	-9.6057	.14423	-.05443	2.074	1.9894	.56255	2.2101
Stddev	.15041	6.4396	.21955	.50122	1.193	1.0645	.48856	.2206
%RSD	57.683	67.039	152.22	920.85	57.52	53.508	86.848	9.9834
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 12:00:04 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.68977	-.58809	.18501	-3.9584	-.04328
Stddev	.68964	1.7919	.13708	2.5728	4.7110
%RSD	99.982	304.70	74.095	64.996	10885.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6178.4	3405.5	36123.	5421.7
Stddev	5.2	8.3	19.	7.5
%RSD	.08356	.24294	.05232	.13911

Sample Name: MB 240-297995/1-A Acquired: 10/9/2017 12:16:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19292	-.05512	.45849	2.5835	.10358	-.00906	137.59	-.0856
Stddev	.34232	2.5841	1.8777	.0539	.15349	.05737	4.38	.1357
%RSD	177.44	4687.7	409.53	2.0876	148.18	633.08	3.1852	158.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14490	.24172	.31525	6.2733	21.956	-.50340	1.4985	.20202
Stddev	.17618	.40523	.25130	1.4252	4.976	.52796	19.605	.01734
%RSD	121.59	167.64	79.715	22.718	22.666	104.88	1308.3	8.5811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.00822	53.485	-.01529	-.46569	.8137	.68964	-.47277	1.1663
Stddev	.22255	4.905	.73813	.79594	.7889	3.7759	.41303	.2420
%RSD	2707.2	9.1704	4827.3	170.92	96.96	547.51	87.364	20.748
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: MB 240-297995/1-A Acquired: 10/9/2017 12:16:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.49545	-.08764	6.9629	-10.393	1.3722
Stddev	.87449	1.3467	.0712	3.284	2.1942
%RSD	176.51	1536.6	1.0231	31.601	159.90
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6225.9	3436.3	36387.	5468.2
Stddev	7.9	7.4	33.	13.3
%RSD	.12724	.21614	.09143	.24308

Sample Name: LCS 240-297995/2-A Acquired: 10/9/2017 12:20:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.387	1920.0	2093.3	1046.2	1951.7	48.337	48985.	51.92
Stddev	.473	27.9	3.1	4.1	1.7	.122	238.	.15
%RSD	.92017	1.4520	.14600	.39033	.08948	.25287	.48596	.2893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	492.03	192.70	248.10	982.59	48051.	974.92	48176.	497.14
Stddev	1.00	.73	1.43	4.21	58.	5.33	122.	1.61
%RSD	.20374	.38074	.57770	.42827	.12061	.54671	.25382	.32338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	969.20	47805.	507.62	496.83	502.7	2099.7	2005.0	987.12
Stddev	.34	50.	1.28	.94	1.7	5.2	3.9	2.35
%RSD	.03528	.10515	.25280	.18858	.3447	.25002	.19275	.23780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: LCS 240-297995/2-A Acquired: 10/9/2017 12:20:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2013.8	496.09	521.21	1088.5	976.81
Stddev	10.0	7.05	.73	24.1	9.16
%RSD	.49604	1.4219	.13945	2.2131	.93753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5445.4	3257.7	34140.	5392.5
Stddev	7.8	6.5	118.	23.9
%RSD	.14324	.19898	.34486	.44284

Sample Name: 240-85980-U-1-A Acquired: 10/9/2017 12:25:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27492	-13.013	-.91297	7.1137	2.9258	.00919	2139.2	-.0850
Stddev	.36122	18.013	2.1930	.5290	.1104	.07723	8.4	.1830
%RSD	131.39	138.42	240.20	7.4360	3.7743	840.84	.39125	215.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04954	-.16266	.28497	67.480	402.64	3.5776	394.47	4.6987
Stddev	.11014	.26504	.56535	1.292	15.26	.5937	13.29	.0206
%RSD	222.31	162.94	198.39	1.9143	3.7909	16.594	3.3695	.43769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.37000	4320.8	.31996	1.6597	2.954	-.58716	.65091	.79081
Stddev	.21977	12.6	.10515	2.3021	.848	3.0182	.42286	.20663
%RSD	59.399	.29095	32.862	138.71	28.71	514.04	64.964	26.129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85980-U-1-A Acquired: 10/9/2017 12:25:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.42504	.00639	185.77	194.19	79.502
Stddev	.66121	3.6372	.22	5.32	1.171
%RSD	155.57	56943.	.12097	2.7418	1.4731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6161.5	3421.2	36090.	5488.2
Stddev	5.3	4.4	61.	7.4
%RSD	.08552	.12923	.16990	.13543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.602%	100.85%	100.66%	102.87%
Range				

Sample Name: 240-85980-U-1-A@10 Acquired: 10/9/2017 12:29:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00480	-1.4304	-1.3214	1.1724	.28415	-.04577	198.90	.0502
Stddev	.42036	8.1346	.8886	.3468	.10059	.10755	.92	.0896
%RSD	8763.6	568.69	67.252	29.576	35.399	234.97	.46490	178.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06166	-.00481	.27691	6.2169	37.366	1.6178	34.972	.42903
Stddev	.04470	.13123	.11284	.8627	20.249	.7653	14.512	.03725
%RSD	72.492	2726.9	40.750	13.876	54.191	47.309	41.496	8.6824
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16751	411.58	.44127	.42911	-.1471	-.16047	.24001	.13818
Stddev	.06066	2.95	.57414	.44287	.9586	.55909	.14978	.04194
%RSD	36.216	.71583	130.11	103.21	651.9	348.41	62.405	30.354
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85980-U-1-A@10 Acquired: 10/9/2017 12:29:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.12868	4.1802	18.016	8.6754	7.5969
Stddev	.66248	3.6031	.065	3.7309	1.8899
%RSD	514.82	86.194	.35968	43.006	24.877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6148.1	3407.3	36003.	5376.1
Stddev	2.7	2.1	66.	19.8
%RSD	.04383	.06157	.18226	.36822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.386%	100.44%	100.42%	100.77%
Range				

Sample Name: MB 240-297975/1-A Acquired: 10/9/2017 12:34:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11062	-.99590	-1.3089	2.0321	.12590	-.04152	104.49	-.1317
Stddev	.05015	4.3829	.5150	.0830	.08706	.11114	1.85	.1144
%RSD	45.337	440.10	39.348	4.0862	69.149	267.71	1.7740	86.88
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13215	.14728	.02995	4.1711	23.381	.73421	6.7091	1.7987
Stddev	.21304	.28317	.36172	1.2649	27.010	.53809	10.341	.0224
%RSD	161.20	192.27	1207.6	30.325	115.52	73.287	154.14	1.2459
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08786	43.620	.40373	-.64759	.9864	-.47863	-.04387	.11229
Stddev	.21674	9.902	.19128	.27945	.6738	2.3418	.49512	.14985
%RSD	246.68	22.700	47.378	43.153	68.31	489.28	1128.7	133.45
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: MB 240-297975/1-A Acquired: 10/9/2017 12:34:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.06264	1.1570	4.9766	-10.062	2.9418
Stddev	1.1425	3.6778	.1378	.378	4.7149
%RSD	1823.8	317.89	2.7687	3.7610	160.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6126.8	3383.8	36275.	5451.3
Stddev	190.0	107.6	98.	6.7
%RSD	3.1016	3.1785	.26919	.12304

Sample Name: LCS 240-297975/2-A Acquired: 10/9/2017 12:39:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.341	1901.7	2058.1	1028.4	1935.5	47.452	48530.	51.38
Stddev	.445	11.6	4.1	3.5	3.2	.077	214.	.08
%RSD	.88494	.60876	.19994	.34436	.16684	.16179	.44059	.1488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	484.53	190.54	244.87	964.28	47417.	966.80	47788.	490.68
Stddev	1.41	.25	.89	3.10	105.	3.97	338.	.91
%RSD	.29024	.13167	.36204	.32133	.22066	.41034	.70734	.18481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	956.14	47136.	500.34	489.06	498.9	2081.4	1983.2	974.86
Stddev	1.30	115.	.25	.65	2.5	4.2	3.3	1.85
%RSD	.13642	.24403	.04973	.13268	.4981	.20338	.16834	.19022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: LCS 240-297975/2-A Acquired: 10/9/2017 12:39:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1994.8	491.87	514.44	1061.8	970.68
Stddev	8.2	4.67	1.52	9.5	7.64
%RSD	.40939	.94950	.29522	.89639	.78672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5462.1	3269.3	34217.	5364.8
Stddev	3.2	1.5	67.	17.2
%RSD	.05808	.04692	.19619	.31988

Sample Name: 240-85980-Q-1-B Acquired: 10/9/2017 12:43:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22772	.18498	-.97394	6.7119	3.2917	-.00365	2240.9	-.1168
Stddev	.33712	7.6965	1.8170	.1712	.1015	.03742	14.0	.1179
%RSD	148.04	4160.7	186.56	2.5508	3.0834	1025.3	.62279	101.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12757	.19721	.46891	60.284	420.45	2.1821	404.92	4.6510
Stddev	.00421	.09944	.56844	1.006	5.13	.8481	18.55	.0798
%RSD	3.3019	50.424	121.23	1.6689	1.2210	38.865	4.5816	1.7149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.29397	4535.0	.32945	.21108	1.477	1.3724	.44667	.77188
Stddev	.25365	3.4	.21172	.44906	.991	1.9071	.59785	.17532
%RSD	86.283	.07563	64.263	212.74	67.08	138.96	133.85	22.714
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85980-Q-1-B Acquired: 10/9/2017 12:43:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.43331	4.4584	193.08	168.64	79.560
Stddev	.49668	5.3001	.45	3.59	2.655
%RSD	114.63	118.88	.23329	2.1313	3.3374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6157.1	3418.2	36101.	5463.0
Stddev	9.8	8.4	28.	11.5
%RSD	.15843	.24440	.07650	.21136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.531%	100.76%	100.69%	102.40%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 12:48:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	988.09	23905.	499.27	4968.0	1961.7	1917.2	48929.	487.9
Stddev	1.93	19.	1.06	5.2	8.2	6.9	258.	.4
%RSD	.19530	.08000	.21201	.10409	.41643	.35756	.52724	.0729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1983.0	1905.0	1932.9	24165.	48330.	4905.7	48698.	1943.1
Stddev	2.1	9.0	5.5	147.	238.	27.9	307.	5.8
%RSD	.10426	.47233	.28639	.60775	.49306	.56870	.63001	.29755
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1966.0	48197.	2007.4	478.62	485.5	500.70	5032.6	4955.9
Stddev	2.0	215.	1.1	3.27	5.8	7.48	3.5	9.2
%RSD	.09936	.44547	.05272	.68401	1.198	1.4947	.07034	.18594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 12:48:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	987.54	1966.7	2043.8	5060.1	4890.5
Stddev	4.00	6.0	.6	53.8	16.0
%RSD	.40485	.30377	.02957	1.0641	.32749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5287.7	3237.6	33738.	5260.3
Stddev	3.5	6.3	76.	19.8
%RSD	.06577	.19428	.22641	.37652

Sample Name: CCB Acquired: 10/9/2017 12:52:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03229	-6.6018	-2.2404	4.5550	.13400	.00611	-14.286	.0868
Stddev	.01984	10.839	.6331	1.3151	.08803	.07859	1.922	.0241
%RSD	61.457	164.19	28.257	28.872	65.693	1286.3	13.453	27.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23649	.34909	-.02097	1.3300	19.823	2.6496	-6.3863	.02638
Stddev	.07304	.33675	.45124	1.1628	16.211	.1641	23.278	.01745
%RSD	30.887	96.464	2152.3	87.424	81.778	6.1935	364.49	66.161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07950	-13.110	.15700	.88242	.1664	-1.1656	.62876	1.9284
Stddev	.04029	3.746	.37069	1.6641	2.017	.6462	.45674	.1482
%RSD	50.680	28.576	236.11	188.58	1212.	55.443	72.642	7.6849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 12:52:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.88406	1.5701	-.09541	-8.7629	.99833
Stddev	.70817	4.5765	.08273	4.7118	2.3691
%RSD	80.105	291.48	86.712	53.770	237.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6228.2	3440.5	36048.	5367.2
Stddev	9.4	5.9	52.	8.9
%RSD	.15156	.17159	.14469	.16544

Sample Name: 240-85980-Q-1-B@10 Acquired: 10/9/2017 12:57:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12169	-11.341	-2.2351	2.1327	.41103	-.10033	202.83	.0370
Stddev	.12610	13.448	1.6156	.7252	.01877	.12680	2.42	.0868
%RSD	103.62	118.58	72.285	34.002	4.5661	126.38	1.1912	234.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10049	.14535	.22816	6.5207	26.037	.70863	24.659	.44693
Stddev	.06305	.31946	.47056	.5464	13.845	.99255	16.466	.02261
%RSD	62.746	219.79	206.25	8.3792	53.174	140.07	66.772	5.0585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.19936	431.36	.34640	-.40536	.8249	-.55672	.41049	.59919
Stddev	.25640	3.28	.42754	1.5814	.5491	2.3992	.54559	.08352
%RSD	128.62	.76028	123.42	390.12	66.56	430.96	132.91	13.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85980-Q-1-B@10 Acquired: 10/9/2017 12:57:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.33086	-.17795	18.296	6.4403	8.1039
Stddev	.87921	1.5539	.182	3.5865	4.8067
%RSD	265.74	873.21	.99343	55.688	59.313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6187.2	3434.7	36228.	5410.4
Stddev	2.2	1.6	53.	17.2
%RSD	.03533	.04544	.14639	.31735
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.02%	101.24%	101.05%	101.41%
Range				

Sample Name: 240-85834-F-4-A@5 Acquired: 10/9/2017 13:01:55 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.45121	24095.	18.925	5.6836	410.29	2.7849	5891.9	.4778
Stddev	.04183	74.	3.632	.0693	1.20	.1254	4.6	.1901
%RSD	9.2714	.30665	19.194	1.2198	.29230	4.5038	.07725	39.79
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	75.513	47.340	40.639	68396.	2681.2	26.964	6833.8	4292.8
Stddev	.235	.664	.617	116.	28.1	1.336	16.1	32.6
%RSD	.31068	1.4034	1.5190	.16949	1.0467	4.9551	.23580	.76019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.7284	73.193	56.719	51.133	1.410	.29113	5.6118	355.94
Stddev	.1780	4.815	.270	1.309	1.849	.43594	.1646	.43
%RSD	10.296	6.5782	.47658	2.5607	131.2	149.74	2.9339	.12099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85834-F-4-A@5 Acquired: 10/9/2017 13:01:55 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.16462	82.431	148.90	476.65	44.224
Stddev	.72588	2.654	.31	3.93	.988
%RSD	440.93	3.2196	.20942	.82439	2.2332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5893.4	3489.9	36685.	5556.9
Stddev	8.5	5.3	27.	19.6
%RSD	.14358	.15103	.07269	.35281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.269%	102.87%	102.32%	104.16%
Range				

Sample Name: 240-85834-F-5-A@5 Acquired: 10/9/2017 13:06:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.30261	24902.	21.890	5.2919	411.27	3.6739	6180.8	.5678
Stddev	.30346	25.	.985	.1271	.49	.0931	30.5	.0792
%RSD	100.28	.10233	4.5007	2.4024	.12024	2.5330	.49285	13.94
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	38.501	46.646	38.406	61334.	2263.7	37.385	5726.3	3917.0
Stddev	.330	.433	1.008	188.	31.7	.859	29.5	11.5
%RSD	.85681	.92780	2.6237	.30642	1.4020	2.2988	.51579	.29377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0300	1590.8	59.421	41.850	-.3380	.69652	6.3990	323.14
Stddev	.2780	4.5	.068	2.053	1.571	1.3639	.2077	.49
%RSD	9.1762	.28477	.11405	4.9058	464.7	195.82	3.2458	.15085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85834-F-5-A@5 Acquired: 10/9/2017 13:06:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.6085	75.041	139.87	549.84	364.89
Stddev	1.4671	1.711	.30	4.90	2.04
%RSD	91.206	2.2806	.21445	.89142	.55808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5887.6	3525.7	37213.	5630.5
Stddev	15.8	12.2	74.	19.9
%RSD	.26871	.34495	.19830	.35322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.175%	103.93%	103.80%	105.54%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 13:11:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	988.61	23777.	500.96	4972.6	1942.1	1903.8	48239.	487.5
Stddev	3.40	46.	2.86	5.1	6.1	5.1	349.	.2
%RSD	.34372	.19542	.57111	.10186	.31200	.26666	.72318	.0451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1982.3	1903.8	1929.5	23809.	47964.	4833.9	47934.	1942.6
Stddev	1.0	3.5	3.3	134.	46.	18.2	386.	4.3
%RSD	.04828	.18355	.16952	.56417	.09638	.37680	.80586	.21917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1964.4	47708.	2005.2	481.04	486.1	500.57	5034.2	4945.1
Stddev	1.3	120.	3.1	2.55	3.5	3.79	5.0	9.4
%RSD	.06798	.25194	.15434	.53060	.7260	.75707	.10009	.19091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 13:11:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	998.53	1939.8	2044.0	4970.0	4816.1
Stddev	8.37	13.9	1.5	103.0	37.4
%RSD	.83844	.71819	.07105	2.0723	.77591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5304.9	3250.0	33901.	5326.1
Stddev	.5	.5	39.	26.5
%RSD	.00978	.01654	.11436	.49688

Sample Name: CCB Acquired: 10/9/2017 13:15:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19223	-.38277	-.43978	3.8682	.08237	.08046	40.150	-.0398
Stddev	.52365	13.683	1.4134	.6807	.10473	.11465	1.329	.0273
%RSD	272.41	3574.7	321.39	17.598	127.14	142.48	3.3104	68.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03317	.33356	.27842	2.0608	17.990	2.4615	-16.325	.19843
Stddev	.12445	.42091	.54913	1.4095	18.718	.7683	11.478	.05664
%RSD	375.19	126.19	197.23	68.395	104.05	31.214	70.305	28.544
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.45920	-15.447	.46867	-.01089	1.752	-.80425	.43229	2.0986
Stddev	.13383	4.840	.13925	2.5654	1.528	.78236	.19859	.3024
%RSD	29.144	31.332	29.712	23562.	87.21	97.277	45.940	14.410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 13:15:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.37710	.80098	.73237	-7.6602	-.09425
Stddev	1.5722	3.0641	.04868	1.4619	4.0129
%RSD	416.92	382.55	6.6464	19.085	4257.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6179.9	3412.1	36157.	5373.8
Stddev	15.5	5.1	54.	16.8
%RSD	.25064	.14960	.14880	.31184

Sample Name: CCVL-3260526 Acquired: 10/9/2017 13:20:26 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.153	172.98	14.188	99.834	193.05	4.7386	4803.2	4.978
Stddev	.088	4.21	.988	.355	.37	.0512	13.0	.103
%RSD	.86527	2.4357	6.9618	.35578	.19340	1.0813	.27066	2.078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.4767	11.853	20.255	201.38	4665.4	48.578	4840.9	15.025
Stddev	.2240	.286	.012	2.24	17.6	1.683	16.2	.057
%RSD	2.3640	2.4165	.05739	1.1130	.37774	3.4642	.33477	.37657
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41.232	4644.8	39.158	10.521	20.61	21.585	95.216	50.292
Stddev	.222	8.8	.578	1.526	1.23	3.258	.325	.385
%RSD	.53867	.19041	1.4765	14.501	5.977	15.094	.34116	.76521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCVL-3260526 Acquired: 10/9/2017 13:20:26 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	19.094	11.045	50.202	476.16	50.102
Stddev	2.094	2.491	.163	9.80	3.031
%RSD	10.968	22.556	.32512	2.0581	6.0486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6030.5	3389.7	35740.	5378.5
Stddev	5.8	1.7	9.	12.0
%RSD	.09558	.04995	.02634	.22360

Sample Name: 190-14571-a-1-b@5 Acquired: 10/9/2017 13:25:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.2978	-5.9141	-3.1276	218.60	92.862	-.01992
Stddev	.3553	15.362	1.5164	.86	.292	.11143
%RSD	15.461	259.75	48.486	.39285	.31433	559.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	17614.	1.808	20.876	1.9857	1233.6	.54265
Stddev	40.	.049	.271	.1474	2.9	1.5461
%RSD	.22590	2.731	1.3004	7.4220	.23232	284.92
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1784.5	14.561	463.90	7233.6	20.417	276080.
Stddev	37.0	.434	10.95	11.8	.226	446.
%RSD	2.0749	2.9826	2.3593	.16346	1.1084	.16150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 190-14571-a-1-b@5 Acquired: 10/9/2017 13:25:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	87.051	-.56755	2.126	1.0068	1.5431	.33505
Stddev	.313	1.9102	1.212	1.5293	.5047	.19828
%RSD	.35956	336.58	56.99	151.89	32.710	59.178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.29670	3.0591	F 159510.	280.30	36.624
Stddev	1.7105	3.0209	707.	1.08	4.166
%RSD	576.50	98.753	.44311	.38387	11.376
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5280.4	3209.3	33378.	5380.5
Stddev	19.6	12.8	8.	8.6
%RSD	.37081	.39951	.02513	.15999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.358%	94.600%	93.099%	100.85%
Range				

Sample Name: SD 190-14571-a-1b@25 Acquired: 10/9/2017 13:30:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.30056	-6.2580	-2.1940	42.155	18.312	-.02368	3541.2
Stddev	.27276	12.234	.9230	1.323	.144	.08041	12.1
%RSD	90.749	195.50	42.069	3.1390	.78706	339.51	.34222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3937	3.9204	.28713	245.55	-1.1195	352.60	5.6120
Stddev	.1956	.1822	.20689	.81	1.2398	18.21	2.0883
%RSD	49.69	4.6468	72.056	.32893	110.75	5.1647	37.212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	76.048	1479.2	4.1991	55224.	16.818	-.54139	-.1000
Stddev	20.995	3.5	.1160	140.	.500	1.4311	.0865
%RSD	27.608	.23453	2.7635	.25321	2.9706	264.33	86.52
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 190-14571-a-1b@25 Acquired: 10/9/2017 13:30:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9396	.68341	.16660	-.06303	3.9947	F 39639.	45.947
Stddev	1.5799	.40131	.27378	.95139	2.4866	660.	7.278
%RSD	81.455	58.722	164.33	1509.5	62.248	1.6655	15.840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit						10000.	
Low Limit						-500000.	

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	9.4981
Stddev	2.7541
%RSD	28.996
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5760.3	3329.4	35194.	5430.0
Stddev	67.9	36.1	34.	18.2
%RSD	1.1790	1.0838	.09800	.33496
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.118%	98.141%	98.164%	101.78%
Range				

Sample Name: PDS 190-14571-a-1b@5 Acquired: 10/9/2017 13:34:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	57.627	1950.2	2164.6	1264.6	2091.1	48.996
Stddev	.178	12.2	4.6	.1	13.4	.415
%RSD	.30953	.62747	.21286	.00968	.64157	.84606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	67001.	55.27	540.99	199.56	1474.0	989.55
Stddev	444.	.25	.36	.31	3.5	9.02
%RSD	.66203	.4491	.06742	.15338	.23816	.91155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52561.	1037.4	49268.	7468.9	1069.0	323560.
Stddev	339.	8.4	331.	16.4	.7	6047.
%RSD	.64406	.81313	.67138	.21993	.06125	1.8690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: PDS 190-14571-a-1b@5 Acquired: 10/9/2017 13:34:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	610.81	489.16	528.8	2150.9	2172.2	1042.8
Stddev	1.00	2.50	1.4	5.8	6.9	1.6
%RSD	.16416	.51059	.2738	.27054	.31974	.15780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1991.5	506.68	F 158460.	1369.4	1025.0
Stddev	6.1	2.87	184.	20.2	7.3
%RSD	.30687	.56556	.11623	1.4760	.71455
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5063.5	3154.6	32930.	5390.4
Stddev	8.7	4.2	25.	26.8
%RSD	.17100	.13405	.07445	.49688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.852%	92.987%	91.849%	101.04%
Range				

Sample Name: 190-14571-a-1-c ms@5 Acquired: 10/9/2017 13:39:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 206.33	378.64	1048.5	419.39	9679.3	9.5453
Stddev	.57	6.25	4.8	2.64	11.1	.0880
%RSD	.27748	1.6501	.45536	.63012	.11426	.92190
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00					
Low Limit	-500000.					

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26767.	204.2	120.42	961.37	1261.6	190.89
Stddev	52.	.3	.55	2.31	4.2	2.03
%RSD	.19247	.1306	.46083	.24047	.33497	1.0611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11723.	211.82	9981.3	7130.1	220.26	274710.
Stddev	33.	2.26	74.2	17.3	1.00	2158.
%RSD	.27836	1.0659	.74300	.24286	.45276	.78542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 190-14571-a-1-c ms@5 Acquired: 10/9/2017 13:39:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	186.12	964.55	99.98	210.73	409.48	199.02
Stddev	.27	2.28	1.87	3.50	.42	.54
%RSD	.14242	.23596	1.866	1.6613	.10240	.27370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	391.02	101.97	F 155320.	505.03	229.52
Stddev	.64	2.34	71.	7.44	3.00
%RSD	.16420	2.2949	.04543	1.4729	1.3078
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5257.1	3204.5	33432.	5459.6
Stddev	5.3	.7	105.	12.6
%RSD	.10173	.02320	.31410	.23152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.982%	94.459%	93.248%	102.33%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 13:44:40 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	977.65	24067.	495.40	4981.7	1949.1	1922.2	48355.	488.6
Stddev	1.79	45.	.64	4.6	5.1	5.0	198.	.3
%RSD	.18284	.18742	.13006	.09227	.26192	.26115	.40976	.0517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1976.4	1902.0	1912.6	23973.	48217.	4871.0	48147.	1931.3
Stddev	1.0	3.6	3.5	102.	110.	20.8	184.	1.8
%RSD	.04871	.18694	.18082	.42356	.22819	.42672	.38254	.09305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1959.9	47808.	1998.5	480.05	488.5	496.63	5020.8	4916.7
Stddev	2.8	134.	3.3	2.24	1.6	4.44	3.8	.1
%RSD	.14307	.28034	.16353	.46621	.3207	.89438	.07660	.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 13:44:40 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	991.51	1948.8	2045.8	4965.9	4846.9
Stddev	3.44	11.9	.6	63.2	16.1
%RSD	.34667	.60976	.03132	1.2732	.33253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5339.8	3268.3	34179.	5300.3
Stddev	2.1	1.5	27.	15.9
%RSD	.04021	.04559	.07960	.30064

Sample Name: CCB Acquired: 10/9/2017 13:48:57 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50720	-12.973	-1.8897	3.4094	.15885	.07161	-13.561	-.0380
Stddev	.18999	19.631	.3595	.6242	.10208	.05603	1.247	.0564
%RSD	37.459	151.32	19.026	18.307	64.258	78.250	9.1975	148.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.26636	.41006	.77551	-.23895	33.234	4.9088	-4.1890	.73118
Stddev	.22561	.26942	.59440	1.3844	4.803	.4153	9.3471	.58279
%RSD	84.699	65.702	76.647	579.36	14.454	8.4609	223.13	79.706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23636	29.615	.04944	-.32292	2.012	1.2989	.79310	2.8608
Stddev	.19054	8.033	.51022	.31501	.739	3.5148	.54536	1.0070
%RSD	80.617	27.126	1032.0	97.548	36.75	270.59	68.764	35.198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 13:48:57 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.45381	3.8365	4.1094	-5.9532	-.99482
Stddev	.73947	.3381	1.8695	5.9981	.90851
%RSD	162.95	8.8134	45.493	100.75	91.324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6242.7	3443.1	35061.	5383.4
Stddev	11.0	7.4	2427.	9.4
%RSD	.17580	.21601	6.9231	.17440

Sample Name: 190-14571-a-1d msd@5 Acquired: 10/9/2017 13:53:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 205.48	373.15	1046.8	420.02	9706.8	9.5411
Stddev	.48	26.75	8.5	1.76	67.0	.0795
%RSD	.23127	7.1690	.81455	.41840	.69029	.83360
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00					
Low Limit	-500000.					

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26921.	205.2	121.40	954.79	1264.8	191.08
Stddev	152.	.5	.04	1.26	5.0	.76
%RSD	.56542	.2529	.02885	.13151	.39567	.39854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11701.	212.42	9996.5	7148.3	221.06	276530.
Stddev	19.	1.28	41.3	44.2	.95	2320.
%RSD	.16050	.60194	.41286	.61880	.42982	.83895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 190-14571-a-1d msd@5 Acquired: 10/9/2017 13:53:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	187.88	970.24	100.2	212.45	411.96	198.51
Stddev	.46	1.28	1.0	.03	.53	.82
%RSD	.24436	.13195	1.020	.01570	.12755	.41118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	396.77	102.83	F 155880.	504.38	229.88
Stddev	2.38	6.19	497.	7.24	2.03
%RSD	.59944	6.0208	.31895	1.4345	.88257
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5251.2	3201.8	33524.	5457.4
Stddev	6.0	5.2	56.	26.8
%RSD	.11347	.16120	.16773	.49095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.887%	94.378%	93.506%	102.29%
Range				

Sample Name: 190-14575-a-1-b@5 Acquired: 10/9/2017 13:58:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.2383	1.0884	-.41139	251.52	98.722	-.03726
Stddev	.4562	19.483	1.3693	.54	.455	.08769
%RSD	20.381	1790.1	332.84	.21501	.46072	235.36
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9859.0	3.161	11.623	2.3025	2177.7	-.46149
Stddev	35.7	.055	.168	.3749	3.5	1.1205
%RSD	.36165	1.752	1.4440	16.284	.16217	242.80
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1540.3	11.016	302.40	6937.0	7.2085	269160.
Stddev	23.1	.217	7.52	10.9	.5249	1898.
%RSD	1.4977	1.9714	2.4870	.15695	7.2821	.70511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 190-14575-a-1-b@5 Acquired: 10/9/2017 13:58:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.470	-.33074	.4291	1.4977	1.6453	.12441
Stddev	.282	1.2212	.9046	4.9166	.4639	.11355
%RSD	.53840	369.22	210.8	328.27	28.197	91.269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.2716	6.0780	F 164070.	305.06	28.417
Stddev	1.3926	4.7687	132.	5.66	3.348
%RSD	109.52	78.458	.08022	1.8550	11.783
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5330.2	3235.9	33669.	5441.2
Stddev	10.0	4.7	14.	23.1
%RSD	.18825	.14573	.04175	.42431
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.164%	95.383%	93.911%	101.99%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 14:03:48 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	972.99	23869.	498.99	4950.1	1934.9	1903.0	47945.	485.2
Stddev	.75	91.	3.39	9.1	4.9	4.7	42.	.7
%RSD	.07713	.38145	.67915	.18410	.25525	.24667	.08860	.1474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1973.4	1893.8	1901.9	23685.	47855.	4805.5	47653.	1918.9
Stddev	1.6	1.3	3.2	42.	110.	7.6	64.	2.5
%RSD	.07871	.06965	.16880	.17588	.22944	.15912	.13493	.13102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1955.6	47295.	1995.6	480.00	485.1	498.59	5010.1	4903.3
Stddev	1.9	124.	2.5	1.92	1.8	3.79	2.1	2.9
%RSD	.09494	.26215	.12529	.39944	.3633	.76072	.04226	.05872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 14:03:48 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	986.46	1930.0	2040.9	4919.1	4789.8
Stddev	5.09	1.2	2.0	55.6	14.3
%RSD	.51614	.06129	.09745	1.1309	.29896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5367.4	3289.5	34379.	5362.2
Stddev	3.2	4.5	21.	14.4
%RSD	.05927	.13610	.06046	.26923

Sample Name: CCB Acquired: 10/9/2017 14:08:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03039	-.88105	-2.0659	4.4369	.17530	.19180	506.09	.0214
Stddev	.12680	15.780	2.1652	.9037	.19350	.04551	1.43	.0193
%RSD	417.19	1791.1	104.80	20.368	110.38	23.728	.28247	90.47
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.33310	.48935	.14928	2.8609	53.368	5.0978	-9.2139	1.4120
Stddev	.12915	.39047	.53801	1.6382	25.645	.7066	3.3035	.0152
%RSD	38.772	79.793	360.41	57.260	48.054	13.862	35.853	1.0779
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.43323	52.488	.31034	-1.0714	.6713	-.14174	2.2678	2.1437
Stddev	.08591	3.015	.16076	.5888	2.407	4.4515	.2584	.1366
%RSD	19.831	5.7452	51.801	54.960	358.5	3140.5	11.396	6.3703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 14:08:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.84189	1.7146	14.746	-13.350	.58932
Stddev	1.8281	1.2647	.630	6.284	3.0218
%RSD	217.15	73.764	4.2724	47.071	512.76
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6251.0	3457.9	36615.	5431.4
Stddev	20.7	11.6	48.	15.0
%RSD	.33153	.33662	.13146	.27537

Sample Name: lb 240-297819/1-b Acquired: 10/9/2017 14:30:51 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23978	7.7326	2.0750	F 298.32	100.19	-.02719
Stddev	.35254	8.0667	1.6151	.55	.11	.01483
%RSD	147.03	104.32	77.836	.18518	.10758	54.546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				200.00		
Low Limit				-1000.0		

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1988.3	.0142	-.68768	2.4757	1.6466	7.0790
Stddev	7.2	.0328	.11643	.3862	.4457	1.3123
%RSD	.36434	231.5	16.931	15.600	27.067	18.537
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	658.59	3.1050	245.31	1.1462	.22444	1355300.
Stddev	44.39	.3704	36.93	.0584	.08646	20701.
%RSD	6.7408	11.929	15.052	5.0986	38.524	1.5274
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit						
Low Limit						

Sample Name: lb 240-297819/1-b Acquired: 10/9/2017 14:30:51 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.6253	.02028	-1.434	8.1894	1.3861	.94114
Stddev	.5619	1.0075	1.339	1.3247	.8652	.08488
%RSD	9.9891	4968.8	93.38	16.176	62.419	9.0185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.0919	4.5618	F 96.846	496.33	3.7582
Stddev	.7904	4.1149	.746	4.45	2.5119
%RSD	19.318	90.204	.77071	.89609	66.839
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			50.000		
Low Limit			-1000.0		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4735.1	3037.7	30398.	5256.2
Stddev	8.5	5.2	24.	9.0
%RSD	.17908	.17143	.07880	.17076

Sample Name: mb 240-297935/2-a Acquired: 10/9/2017 14:35:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03912	-17.464	-1.6947	.12679	-.02009	-.10628	-25.175	.0497
Stddev	.23356	14.949	1.9177	.13098	.05651	.02860	1.293	.1067
%RSD	596.98	85.600	113.16	103.31	281.25	26.908	5.1354	214.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17015	.35431	-.02619	.39784	73.717	.78268	8.0376	-.03067
Stddev	.13736	.13632	.18475	.08568	31.448	1.3134	3.8794	.02815
%RSD	80.726	38.474	705.36	21.536	42.660	167.81	48.265	91.786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15418	308.95	.17272	.87438	.9334	.63955	-.24689	.12720
Stddev	.22293	40.53	.33346	1.3448	2.298	2.9932	.43359	.11762
%RSD	144.59	13.120	193.07	153.81	246.2	468.03	175.62	92.465
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297935/2-a Acquired: 10/9/2017 14:35:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.74864	1.2757	-.21043	-15.526	2.1551
Stddev	.27281	2.0464	.04379	2.772	5.2878
%RSD	36.441	160.41	20.809	17.856	245.36
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6376.3	3502.2	37261.	5519.9
Stddev	5.3	4.0	119.	6.6
%RSD	.08364	.11422	.31855	.11905

Sample Name: lcs 240-297935/3-a Acquired: 10/9/2017 14:40:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58.192	2009.5	2324.3	F 1294.7	2138.2	49.358
Stddev	.313	12.2	7.9	.5	9.9	.167
%RSD	.53831	.60778	.34052	.03754	.46069	.33911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1000.0		
Range				20.500%		

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52370.	56.07	532.51	206.64	269.83	1000.4
Stddev	246.	.12	.28	.49	.66	5.0
%RSD	.47051	.2166	.05279	.23544	.24595	.50166
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55527.	1075.5	49346.	519.14	1016.5	1361100.
Stddev	258.	4.9	188.	.52	1.7	21853.
%RSD	.46398	.45933	.38093	.10078	.17026	1.6055
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None
Value						
Range						

Sample Name: lcs 240-297935/3-a Acquired: 10/9/2017 14:40:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	553.19	479.16	507.3	2375.5	2117.9	1041.9
Stddev	.82	2.28	6.9	10.2	3.6	1.0
%RSD	.14780	.47606	1.353	.42770	.16974	.09390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1973.1	518.66	F 681.34	F 1697.1	1011.0
Stddev	6.5	4.37	.62	24.7	7.0
%RSD	.33062	.84176	.09067	1.4569	.69357
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
Value			500.00	1000.0	
Range			20.500%	20.500%	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4610.8	3008.4	30486.	5341.5
Stddev	4.6	6.9	56.	18.5
%RSD	.09963	.22839	.18312	.34693

Sample Name: 240-85914-d-1-k Acquired: 10/9/2017 14:44:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9138	-6.3834	5.3082	469.93	842.64	.33822
Stddev	.8926	26.480	2.9332	2.55	.99	.05671
%RSD	46.641	414.82	55.258	.54183	.11692	16.767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 761290.	.1828	-.90627	3.9031	1.4509	3.6476
Stddev	2769.	.0309	.23040	.5560	.9950	.8607
%RSD	.36368	16.89	25.423	14.245	68.574	23.596
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	720000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3732.8	60.438	8840.7	10002.	2.2724	F 1305600.
Stddev	19.1	1.594	11.0	35.	.2412	7349.
%RSD	.51045	2.6378	.12445	.34589	10.612	.56293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85914-d-1-k Acquired: 10/9/2017 14:44:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21.449	-.52887	8.470	6.0390	6.5282	-.36011
Stddev	.926	.34169	1.037	1.8261	1.1114	.06489
%RSD	4.3179	64.608	12.25	30.239	17.025	18.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.7780	4.5772	40.188	27873.	1055.7
Stddev	1.3598	3.8829	.348	1681.	7.5
%RSD	28.461	84.831	.86560	6.0312	.71463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4315.2	2872.9	29711.	5166.9
Stddev	5.8	2.0	46.	20.3
%RSD	.13386	.07094	.15545	.39273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	69.756%	84.684%	82.870%	96.847%
Range				

Sample Name: SD 240-85914-d-1-k@5 Acquired: 10/9/2017 14:49:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.42909	-11.108	-.71490	94.570	168.75	.00046	158950.
Stddev	.08039	14.075	2.0429	1.551	.49	.07517	227.
%RSD	18.736	126.71	285.77	1.6402	.28835	16191.	.14283
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0340	-.76833	1.0236	.73125	-2.4923	817.95	20.255
Stddev	.0881	.45322	.2913	.92784	1.2485	16.71	1.357
%RSD	259.1	58.989	28.456	126.88	50.095	2.0424	6.7004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1821.6	2114.2	.29841	291170.	5.2546	-1.2158	2.142
Stddev	6.1	4.3	.23077	3226.	.6042	1.7352	1.895
%RSD	.33533	.20154	77.333	1.1080	11.499	142.72	88.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 240-85914-d-1-k@5 Acquired: 10/9/2017 14:49:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.74934	.73551	-.12161	-.60178	1.0277	8.0606	5793.7
Stddev	1.9181	.67818	.07784	1.4593	.7530	.2528	271.2
%RSD	255.98	92.206	64.005	242.49	73.270	3.1363	4.6807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	220.49
Stddev	3.48
%RSD	1.5782
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5080.5	3155.2	32952.	5340.9
Stddev	92.5	54.2	2.	7.0
%RSD	1.8198	1.7171	.00721	.13150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.128%	93.007%	91.910%	100.11%
Range				

Sample Name: PDS 240-85914-d-1-k Acquired: 10/9/2017 14:54:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58.557	1990.8	2288.4	1495.5	2836.2	47.608
Stddev	.153	17.5	5.7	5.2	4.8	.362
%RSD	.26172	.88006	.24895	.35091	.16807	.76127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 791660.	56.17	530.40	193.32	264.29	954.12
Stddev	3136.	.23	.59	.73	.95	3.26
%RSD	.39608	.4176	.11158	.37841	.35816	.34137
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	720000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	57575.	1137.1	55865.	10226.	1027.2	F 1314700.
Stddev	65.	4.6	205.	5.	.1	16455.
%RSD	.11245	.40578	.36628	.04472	.01112	1.2516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: PDS 240-85914-d-1-k Acquired: 10/9/2017 14:54:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	552.78	457.11	555.9	2339.3	2217.7	1038.3
Stddev	.93	1.72	3.8	1.2	4.6	.5
%RSD	.16762	.37576	.6873	.05177	.20696	.05180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1917.9	502.32	601.73	29883.	1990.8
Stddev	1.8	2.13	.97	1487.	5.0
%RSD	.09465	.42465	.16093	4.9771	.25331
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4237.8	2848.7	29508.	5187.1
Stddev	4.7	4.7	59.	18.2
%RSD	.11137	.16565	.19912	.35038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	68.506%	83.971%	82.304%	97.225%
Range				

Sample Name: 240-85914-d-1-l ms@5 Acquired: 10/9/2017 14:59:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 156.87	389.53	1068.3	297.77	9975.7	9.7317	165140.
Stddev	.23	13.78	4.0	1.70	18.8	.1724	586.
%RSD	.14543	3.5379	.37406	.57052	.18848	1.7712	.35488
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	205.1	101.05	960.50	50.104	191.38	10852.	216.58
Stddev	.8	.22	2.53	.253	1.03	43.	.86
%RSD	.4071	.21341	.26305	.50516	.53648	.39633	.39793
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11367.	2172.2	201.92	296000.	109.11	970.86	103.4
Stddev	90.	5.1	.63	2184.	.67	5.56	1.4
%RSD	.78761	.23369	.31282	.73771	.61113	.57259	1.377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85914-d-1-l ms@5 Acquired: 10/9/2017 14:59:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	217.30	416.34	202.01	392.32	101.75	116.85	7936.7
Stddev	2.36	1.81	.57	3.44	3.13	.48	79.0
%RSD	1.0861	.43491	.28192	.87621	3.0810	.41013	.99492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	412.38
Stddev	1.55
%RSD	.37659
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5112.2	3179.7	33065.	5389.4
Stddev	8.4	3.6	46.	26.3
%RSD	.16407	.11357	.13846	.48795
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.641%	93.728%	92.227%	101.02%
Range				

Sample Name: 240-85914-d-1m msd@5 Acquired: 10/9/2017 15:04:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 202.81	373.84	1056.2	298.44	9858.6	9.5801	164130.
Stddev	.68	7.54	5.8	.53	129.8	.0669	521.
%RSD	.33364	2.0164	.55290	.17600	1.3165	.69862	.31718
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	203.0	100.48	942.85	48.805	188.11	10730.	210.93
Stddev	.7	.50	.57	.159	3.24	50.	2.16
%RSD	.3652	.49668	.06054	.32635	1.7212	.46590	1.0218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11256.	2158.2	200.47	298600.	108.62	959.80	101.4
Stddev	26.	4.9	.33	771.	.58	4.56	2.1
%RSD	.23492	.22826	.16391	.25808	.52975	.47489	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85914-d-1m msd@5 Acquired: 10/9/2017 15:04:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	211.96	411.90	198.71	390.31	101.59	115.40	6860.1
Stddev	2.66	1.88	.01	1.28	2.73	.39	88.6
%RSD	1.2572	.45728	.00589	.32748	2.6877	.33478	1.2909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	402.92
Stddev	5.60
%RSD	1.3900
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5085.0	3163.5	32993.	5384.8
Stddev	6.5	5.3	22.	29.3
%RSD	.12868	.16707	.06744	.54464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.200%	93.251%	92.026%	100.93%
Range				

Sample Name: 240-85914-d-2-i Acquired: 10/9/2017 15:08:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.8436	-10.448	5.4513	762.80	629.67	.35735
Stddev	.1401	17.243	.3771	1.94	2.14	.10941
%RSD	7.5991	165.04	6.9178	.25452	.33974	30.618
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 753750.	.4830	-1.2934	9.0302	1.5866	22.779
Stddev	2903.	.0709	.5085	.4565	.3409	.591
%RSD	.38512	14.67	39.312	5.0551	21.484	2.5954
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	720000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3631.8	52.941	9025.8	7642.8	2.9143	F 1269300.
Stddev	43.6	1.990	40.4	37.4	.4406	17471.
%RSD	1.2005	3.7581	.44712	.48957	15.119	1.3764
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85914-d-2-i Acquired: 10/9/2017 15:08:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11.487	.15929	8.979	4.5770	.85454	.98999
Stddev	.375	1.2621	.260	2.5660	.84866	.22336
%RSD	3.2614	792.28	2.900	56.062	99.311	22.562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.1991	4.7861	10.401	39482.	1175.0
Stddev	.5417	2.3329	.157	1278.	7.4
%RSD	16.932	48.744	1.5078	3.2362	.63182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4320.8	2879.7	29886.	5228.4
Stddev	3.3	1.0	15.	18.6
%RSD	.07564	.03490	.04926	.35621
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	69.847%	84.884%	83.359%	97.999%
Range				

Sample Name: 240-85914-d-3-o Acquired: 10/9/2017 15:14:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5160	34.773	4.6749	1080.8	463.96	.21392
Stddev	.2348	7.487	2.3860	1.2	2.18	.09071
%RSD	15.491	21.530	51.038	.11520	.46998	42.402
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	713100.	.4081	-1.1772	8.2731	1.4229	23.065
Stddev	4225.	.0628	.2706	.4557	.5679	.896
%RSD	.59241	15.39	22.984	5.5082	39.914	3.8828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4056.9	63.227	10143.	8221.5	2.8073	F 1248200.
Stddev	41.0	.652	63.	21.4	.2309	8705.
%RSD	1.0099	1.0314	.61664	.26047	8.2249	.69738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85914-d-3-o Acquired: 10/9/2017 15:14:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21.258	.72417	7.963	4.0562	.77993	-.68583
Stddev	.171	.60921	1.873	.8815	.79998	.23854
%RSD	.80254	84.125	23.52	21.733	102.57	34.781
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.9378	3.2832	29.973	29967.	967.15
Stddev	.4544	2.5177	.022	1131.	12.21
%RSD	23.447	76.684	.07268	3.7735	1.2623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4345.6	2888.2	30045.	5237.5
Stddev	7.6	2.1	48.	22.1
%RSD	.17498	.07305	.16020	.42235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	70.248%	85.135%	83.802%	98.171%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 15:19:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	973.61	23522.	498.91	4950.4	1930.0	1880.9	47270.
Stddev	2.57	28.	2.12	20.5	6.1	3.6	173.
%RSD	.26443	.11996	.42524	.41402	.31408	.18990	.36516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	484.5	1973.2	1876.7	1904.9	23202.	47439.	4753.7
Stddev	1.0	2.3	1.3	6.0	75.	87.	14.4
%RSD	.2005	.11587	.06861	.31593	.32281	.18415	.30283
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	46947.	1907.8	1964.8	F 44687.	2000.7	478.94	483.5
Stddev	147.	1.0	2.4	148.	3.3	2.57	2.5
%RSD	.31308	.05010	.12308	.33163	.16706	.53742	.5109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				50000.			
Range				-10.500%			

Sample Name: CCV-3260525 Acquired: 10/9/2017 15:19:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	500.45	4994.9	4901.1	985.65	1911.0	2027.9	5083.9
Stddev	3.23	7.7	4.4	2.98	7.3	3.2	114.9
%RSD	.64481	.15415	.08912	.30256	.38290	.15537	2.2608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4747.1
Stddev	12.3
%RSD	.25953
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5395.5	3302.3	34737.	5502.2
Stddev	2.5	5.1	45.	20.3
%RSD	.04717	.15383	.12921	.36803

Sample Name: CCB Acquired: 10/9/2017 15:23:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04897	-12.386	-1.6635	4.0160	.17054	.10678	-2.2853	.0212
Stddev	.26542	18.006	.8291	.2657	.10080	.16672	3.2453	.1533
%RSD	541.95	145.37	49.842	6.6168	59.104	156.14	142.00	721.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04319	.04499	.03735	1.3609	107.26	6.4292	-1.7817	.17211
Stddev	.20599	.18686	.55321	.6923	12.81	1.2760	11.224	.06038
%RSD	476.96	415.31	1481.0	50.872	11.945	19.846	629.99	35.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.52152	295.84	-.15730	-.44309	.2466	-1.2165	.46119	2.1969
Stddev	.09088	14.41	.62355	1.8316	1.790	3.3605	.51001	.2878
%RSD	17.425	4.8703	396.41	413.38	725.8	276.26	110.59	13.100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 15:23:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.63356	.96493	-.03934	39.517	-1.8946
Stddev	.47693	2.3436	.08363	9.588	2.5983
%RSD	75.277	242.88	212.61	24.262	137.15
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6283.2	3470.5	36908.	5488.8
Stddev	12.9	9.2	36.	7.8
%RSD	.20514	.26546	.09840	.14196

Sample Name: 240-85914-d-1-f@5 Acquired: 10/9/2017 15:28:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.76696	57262.	17.169	145.53	736.59	10.004	329770.
Stddev	.50660	84.	1.115	.64	.25	.078	1820.
%RSD	66.053	.14703	6.4920	.43845	.03359	.77682	.55185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.769	9.0132	121.54	80.935	69580.	3926.4	77.629
Stddev	.018	.2378	.64	.970	240.	11.1	1.845
%RSD	1.047	2.6388	.52759	1.1981	.34467	.28366	2.3761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24900.	9380.8	6.3675	3458.0	77.336	131.21	1.715
Stddev	150.	80.6	.1033	7.3	.343	.80	1.563
%RSD	.60137	.85895	1.6223	.21095	.44376	.61177	91.16
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85914-d-1-f@5 Acquired: 10/9/2017 15:28:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.1005	15.521	1230.1	-1.0722	37.518	146.41	553.59
Stddev	4.5509	.561	4.5	1.4504	1.860	.41	5.68
%RSD	89.224	3.6143	.36800	135.27	4.9583	.28321	1.0255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	651.73
Stddev	2.50
%RSD	.38316
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5233.6	3563.2	37050.	5968.2
Stddev	8.9	4.9	108.	8.3
%RSD	.17053	.13640	.29154	.13837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.603%	105.03%	103.34%	111.87%
Range				

Sample Name: 240-85914-d-2-d@5 Acquired: 10/9/2017 15:33:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.85948	70473.	5.9380	173.27	765.71	12.965	346630.
Stddev	.48942	223.	1.1472	.41	.56	.119	1735.
%RSD	56.944	.31691	19.320	.23944	.07300	.91603	.50051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.038	2.0121	22.841	65.255	14538.	5001.5	93.889
Stddev	.072	.0702	.289	.499	29.	24.8	1.160
%RSD	6.952	3.4880	1.2665	.76421	.20009	.49674	1.2350
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	31122.	8824.4	1.5999	4314.9	17.329	112.98	1.719
Stddev	49.	75.3	.1242	10.7	.434	.79	1.956
%RSD	.15659	.85373	7.7637	.24905	2.5034	.69563	113.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85914-d-2-d@5 Acquired: 10/9/2017 15:33:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.0252	11.281	1694.3	-.35039	18.222	74.821	393.24
Stddev	2.5318	1.060	3.3	.62171	2.251	.111	9.61
%RSD	42.020	9.3958	.19439	177.43	12.352	.14870	2.4427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	742.48
Stddev	6.23
%RSD	.83973
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5160.9	3734.9	38578.	6192.1
Stddev	3.9	3.8	150.	9.7
%RSD	.07504	.10197	.38766	.15621
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.427%	110.09%	107.60%	116.06%
Range				

Sample Name: 240-85914-d-3-f@2 Acquired: 10/9/2017 15:37:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5585	125450.	17.604	253.69	1285.6	22.528	605800.
Stddev	.0942	255.	1.804	1.07	3.0	.071	4877.
%RSD	6.0463	.20292	10.249	.42182	.23629	.31549	.80510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.274	8.3221	37.997	81.159	27866.	8194.0	157.11
Stddev	.077	.2905	.567	.639	14.	6.2	.43
%RSD	3.388	3.4906	1.4934	.78711	.04904	.07627	.27156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	71429.	10902.	3.1072	11601.	47.891	333.70	5.508
Stddev	98.	61.	.1306	4.	.203	2.31	1.989
%RSD	.13664	.56255	4.2016	.03793	.42298	.69156	36.10
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85914-d-3-f@2 Acquired: 10/9/2017 15:37:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.4933	136.51	2975.8	3.9427	34.698	214.79	670.74
Stddev	2.0979	.74	4.3	2.1561	2.315	.33	5.70
%RSD	24.700	.54091	.14503	54.686	6.6731	.15183	.84992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1246.6
Stddev	4.1
%RSD	.32580
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4753.6	4196.5	43138.	7156.7
Stddev	4.0	6.0	39.	8.5
%RSD	.08458	.14292	.09090	.11862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.844%	123.70%	120.32%	134.14%
Range				

Sample Name: 240-85911-j-6-a Acquired: 10/9/2017 15:42:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00356	15.737	1.6752	45.990	39.565	.10352	115800.
Stddev	.34745	13.942	1.2555	.388	.103	.08267	225.
%RSD	9764.6	88.591	74.947	.84313	.26044	79.858	.19400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4746	-.38762	.76977	.45207	577.76	459.86	14.040
Stddev	.1439	.21876	.14894	.22517	2.97	13.96	.477
%RSD	30.32	56.437	19.349	49.809	.51474	3.0348	3.3977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	31373.	2256.9	4.0172	13298.	7.8960	-1.0730	-.1367
Stddev	127.	4.0	.0987	21.	.0521	1.5377	.3915
%RSD	.40636	.17806	2.4580	.16090	.66032	143.31	286.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85911-j-6-a Acquired: 10/9/2017 15:42:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5665	-.72779	1.5829	.82336	3.3111	1.1429	14012.
Stddev	5.2478	.25161	.1163	2.6709	2.2106	.0527	28.
%RSD	335.00	34.571	7.3462	324.39	66.761	4.6126	.19633
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	200.62
Stddev	4.70
%RSD	2.3422
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5615.9	3318.5	35152.	5520.5
Stddev	57.1	31.9	38.	33.1
%RSD	1.0165	.96018	.10916	.60046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.783%	97.819%	98.048%	103.48%
Range				

Sample Name: 240-85911-j-7-a Acquired: 10/9/2017 15:47:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.45819	-21.779	.68043	44.195	37.764	-.02539	114830.
Stddev	.08491	9.231	1.1648	.531	.197	.03907	237.
%RSD	18.532	42.384	171.19	1.2010	.52245	153.91	.20660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.5176	-.30696	.51284	.73741	387.97	442.60	14.068
Stddev	.0902	.26210	.13408	.42258	4.90	9.97	.871
%RSD	17.43	85.387	26.144	57.305	1.2627	2.2537	6.1895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	31194.	2016.2	3.8361	13384.	6.6732	-.84394	1.209
Stddev	35.	3.7	.0900	35.	.3451	.35173	.298
%RSD	.11293	.18113	2.3471	.25948	5.1720	41.677	24.68
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85911-j-7-a Acquired: 10/9/2017 15:47:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.0212	-.01182	.04651	.78208	-2.2890	1.1509	13680.
Stddev	1.4723	.79041	.21508	.67305	2.4388	.1799	37.
%RSD	144.17	6684.7	462.48	86.059	106.55	15.629	.27278
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	203.73
Stddev	1.14
%RSD	.56070
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5644.6	3333.1	35095.	5530.5
Stddev	9.5	9.8	75.	13.9
%RSD	.16834	.29549	.21335	.25182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.247%	98.249%	97.889%	103.66%
Range				

Sample Name: 240-85911-j-9-a Acquired: 10/9/2017 15:52:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07287	-6.7392	105.23	39.003	285.44	-.06079	45647.	.1149
Stddev	.26009	12.018	.63	.251	.77	.10988	232.	.1485
%RSD	356.94	178.33	.60195	.64270	.27077	180.76	.50913	129.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.43884	2.5248	-.16350	52445.	1812.7	4.0209	9986.2	4557.3
Stddev	.18364	.3266	.32778	246.	22.3	1.9065	116.6	86.4
%RSD	41.846	12.937	200.48	.46977	1.2281	47.416	1.1677	1.8966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.6829	3834.6	.57733	-.21181	.1367	-.68992	-.39480	.32165
Stddev	.1782	7.6	.41119	1.4535	1.407	1.1037	.54857	.12278
%RSD	3.8058	.19928	71.222	686.24	1029.	159.97	138.95	38.173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85911-j-9-a Acquired: 10/9/2017 15:52:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.0465	2.1643	1.2202	9338.3	199.22
Stddev	2.3783	1.3478	.0940	86.5	1.97
%RSD	227.26	62.274	7.7011	.92608	.98927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5934.7	3405.6	35447.	5589.4
Stddev	5.2	3.2	853.	34.8
%RSD	.08686	.09280	2.4053	.62247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.936%	100.39%	98.869%	104.77%
Range				

Sample Name: 240-85911-j-10-a Acquired: 10/9/2017 15:56:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.30448	65.450	45.782	173.09	275.95	-.00482	97908.	.2721
Stddev	.51215	14.602	.387	.54	.21	.07128	552.	.0555
%RSD	168.20	22.311	.84483	.31318	.07608	1479.6	.56409	20.38
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.51933	.81556	1.0713	6458.8	1220.3	5.1642	19629.	156.47
Stddev	.23866	.19808	.2758	36.1	15.5	1.3246	121.	.41
%RSD	45.956	24.288	25.746	.55876	1.2690	25.650	.61537	.26154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.7536	55938.	8.2761	-.73628	.9309	.96644	.29170	1.4995
Stddev	.1510	157.	.6485	.86643	1.151	3.3513	.92773	.0894
%RSD	2.6250	.28067	7.8355	117.68	123.7	346.77	318.05	5.9601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85911-j-10-a Acquired: 10/9/2017 15:56:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.55065	2.3865	1.5237	12434.	336.01
Stddev	.85441	2.6704	.0651	95.	2.70
%RSD	155.16	111.90	4.2752	.76682	.80290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5577.2	3317.2	34817.	5482.7
Stddev	1.4	2.1	39.	39.5
%RSD	.02519	.06449	.11299	.72119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.158%	97.781%	97.114%	102.77%
Range				

Sample Name: lb 240-297883/1-b Acquired: 10/9/2017 16:01:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11435	-1.1081	-1.3528	2.3076	2.7700	-.05103	137.38
Stddev	.16400	7.3675	.4302	.5268	.1176	.04116	.18
%RSD	143.42	664.86	31.800	22.830	4.2447	80.657	.13218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0840	-.12422	.50170	.12405	F 115.31	66.743	2.0519
Stddev	.1233	.13923	.33621	.14782	.87	23.250	2.3548
%RSD	146.8	112.08	67.013	119.16	.75462	34.836	114.76
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
High Limit					100.00		
Low Limit					-1000.0		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.0443	1.9966	.10433	12792.	.97309	-.26795	.7959
Stddev	25.839	.0439	.02017	23.	.23236	.52598	2.471
%RSD	285.69	2.1969	19.336	.17768	23.879	196.30	310.5
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: lb 240-297883/1-b Acquired: 10/9/2017 16:01:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.63448	39.241	.51925	.08508	2.4811	5.2413	33.451
Stddev	1.1770	.618	.33527	.32109	4.4517	.1479	17.824
%RSD	185.50	1.5739	64.568	377.42	179.42	2.8214	53.284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	-1.6384
Stddev	1.3945
%RSD	85.113
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6054.5	3398.2	36058.	5430.3
Stddev	5.7	4.7	51.	9.9
%RSD	.09481	.13861	.14239	.18303

Sample Name: mb 240-297944/2-a Acquired: 10/9/2017 16:06:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14082	-.30626	-3.2814	-.41586	.13869	-.14462	101.87	-.0310
Stddev	.10510	15.675	1.9850	.71774	.08969	.05550	1.04	.0103
%RSD	74.635	5118.3	60.494	172.59	64.674	38.376	1.0206	33.20
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08636	.33138	.06890	6.6405	65.103	1.4822	7.0611	.18517
Stddev	.08430	.15771	.49689	1.3624	21.224	.4022	14.861	.04294
%RSD	97.619	47.593	721.21	20.516	32.600	27.138	210.46	23.190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04296	134.51	.60134	.44371	.3661	1.1265	25.084	.21070
Stddev	.17266	4.72	.43741	.61978	1.342	3.3890	1.139	.18915
%RSD	401.91	3.5054	72.738	139.68	366.7	300.85	4.5399	89.773
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297944/2-a Acquired: 10/9/2017 16:06:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.98906	1.3042	3.5717	14.071	-.77354
Stddev	1.4994	3.2673	.1968	10.892	4.5570
%RSD	151.60	250.52	5.5088	77.411	589.11
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6108.4	3390.6	36603.	5465.0
Stddev	186.8	102.0	71.	.5
%RSD	3.0584	3.0072	.19321	.00933

Sample Name: lcs 240-297944/3-a Acquired: 10/9/2017 16:11:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	47.185	1829.8	1901.2	931.51	1894.9	45.730	150.35	48.23
Stddev	.203	12.8	2.8	1.70	2.0	.219	2.67	.08
%RSD	.43050	.70152	.14621	.18216	.10317	.47875	1.7776	.1722
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	462.45	185.02	234.33	924.58	60.201	904.84	10.788	476.90
Stddev	.87	.77	.67	2.94	29.156	1.93	15.099	.36
%RSD	.18903	.41488	.28676	.31833	48.432	.21382	139.96	.07646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	945.02	12791.	477.49	485.35	458.4	1865.4	1868.2	946.77
Stddev	.76	9.	1.18	2.76	4.0	5.0	5.9	1.13
%RSD	.08071	.07270	.24737	.56941	.8659	.26984	.31608	.11937
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-297944/3-a Acquired: 10/9/2017 16:11:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1889.7	467.59	473.70	1007.9	954.71
Stddev	6.2	2.94	1.60	31.5	3.81
%RSD	.32722	.62913	.33808	3.1256	.39878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5970.9	3401.6	35978.	5437.7
Stddev	11.0	7.1	116.	22.9
%RSD	.18424	.21000	.32209	.42055

Sample Name: CCV-3260525 Acquired: 10/9/2017 16:15:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	970.15	23562.	499.34	4943.7	1938.1	1882.8	47587.	484.7
Stddev	.88	33.	2.60	8.1	3.5	4.4	71.	.7
%RSD	.09120	.14121	.51998	.16450	.18132	.23192	.14933	.1501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1982.5	1875.1	1896.8	23272.	47849.	4751.4	47307.	1902.1
Stddev	1.3	.3	4.1	60.	85.	9.2	76.	1.2
%RSD	.06353	.01453	.21443	.25817	.17661	.19387	.16164	.06314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1972.5	46934.	2012.6	481.99	485.0	497.35	5017.1	4899.3
Stddev	3.5	69.	1.3	2.51	4.1	4.75	1.7	4.1
%RSD	.17678	.14754	.06485	.52173	.8391	.95458	.03467	.08377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 16:15:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	991.49	1924.3	2041.8	4991.8	4775.1
Stddev	.78	7.1	1.2	91.4	5.7
%RSD	.07889	.36837	.05685	1.8303	.11989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5383.3	3303.7	34645.	5426.1
Stddev	4.8	2.4	10.	17.5
%RSD	.08883	.07123	.02949	.32216

Sample Name: CCB Acquired: 10/9/2017 16:19:43 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23897	-15.358	-2.2407	2.4304	-.08575	.04483	-16.763	-.0133
Stddev	.13470	7.052	1.6903	.6648	.10245	.13789	3.387	.1261
%RSD	56.367	45.916	75.435	27.354	119.48	307.59	20.204	946.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.30676	.51361	.14500	-.65119	9.5121	.80187	-8.2949	.05321
Stddev	.07372	.23336	.38444	2.3375	12.176	1.0416	.2878	.06632
%RSD	24.032	45.436	265.13	358.95	128.01	129.89	3.4699	124.64
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17432	62.138	.30068	.59978	1.382	-1.0835	.12727	2.0922
Stddev	.12034	.814	.27394	.96911	.848	3.7717	.33841	.1650
%RSD	69.032	1.3098	91.109	161.58	61.38	348.12	265.89	7.8861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 16:19:43 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.0105	3.7502	-.07297	4.3051	1.6860
Stddev	.4071	1.7639	.16682	1.4379	1.6196
%RSD	40.288	47.034	228.62	33.401	96.062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6280.0	3473.7	36822.	5492.6
Stddev	12.8	7.7	79.	11.7
%RSD	.20398	.22057	.21553	.21231

Sample Name: 240-85978-a-1-b Acquired: 10/9/2017 16:24:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10250	-2.4649	-2.9196	2.1895	.24391	-.07293	103.71	.2259
Stddev	.32156	21.328	1.2248	.5756	.12816	.05983	1.51	.1310
%RSD	313.72	865.27	41.950	26.290	52.542	82.044	1.4568	57.99
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27125	1.1759	11.073	28.889	53.999	3.5283	9.3194	.56887
Stddev	.12236	.0647	.636	.871	13.177	1.0897	10.152	.06937
%RSD	45.109	5.5033	5.7416	3.0145	24.402	30.884	108.93	12.195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.3894	113.15	.56344	1.4269	1.477	-.26627	29.749	.81064
Stddev	.2827	3.49	.18349	1.2485	1.350	.06755	.513	.08054
%RSD	6.4408	3.0827	32.566	87.496	91.37	25.370	1.7231	9.9353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85978-a-1-b Acquired: 10/9/2017 16:24:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.38611	1.5921	262.68	33.920	-.37922
Stddev	.98094	.7338	.63	12.388	2.7206
%RSD	254.06	46.089	.24012	36.522	717.42
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6331.4	3476.0	37355.	5642.7
Stddev	11.8	5.4	71.	19.2
%RSD	.18587	.15627	.18937	.34037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.35%	102.46%	104.19%	105.77%
Range				

Sample Name: SD 240-85978-a-1-b@5 Acquired: 10/9/2017 16:29:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15190	-.05993	-2.8717	-.00012	-.04470	-.08606	11.051	.0344
Stddev	.49676	5.8634	2.2262	.48530	.10641	.03821	2.486	.0532
%RSD	327.02	9784.6	77.523	420170.	238.08	44.403	22.490	154.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05281	.16199	2.0264	4.3470	25.693	1.4008	5.6207	.09840
Stddev	.20081	.13725	.7614	1.1673	5.907	.6502	22.465	.05283
%RSD	380.27	84.722	37.575	26.853	22.988	46.414	399.68	53.693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.80962	58.336	.49213	.45631	.9589	.33595	5.7402	.23932
Stddev	.23150	4.379	.08849	.32085	1.202	4.2237	.1754	.21826
%RSD	28.594	7.5064	17.981	70.315	125.3	1257.2	3.0556	91.198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-85978-a-1-b@5 Acquired: 10/9/2017 16:29:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.62636	2.7560	54.080	4.9598	-.59182
Stddev	.81003	1.4281	.327	9.0173	1.5318
%RSD	129.32	51.820	.60494	181.81	258.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6282.1	3482.4	37125.	5554.0
Stddev	7.8	4.1	124.	12.0
%RSD	.12406	.11651	.33386	.21679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.55%	102.65%	103.55%	104.10%
Range				

Sample Name: PDS 240-85978-a-1-b Acquired: 10/9/2017 16:33:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.196	1944.5	2100.8	1027.8	1998.5	48.484	49186.	53.02
Stddev	.142	3.3	8.6	2.4	7.8	.279	379.	.06
%RSD	.26663	.16954	.40909	.23630	.39214	.57612	.76957	.1189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	508.30	194.69	263.80	993.68	48948.	987.05	48374.	486.69
Stddev	.97	.82	.24	8.78	213.	6.24	416.	.58
%RSD	.19176	.42026	.09115	.88329	.43588	.63185	.86092	.11893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1060.2	48363.	516.98	500.88	513.2	2086.9	2117.6	1030.6
Stddev	2.2	193.	2.17	3.05	3.3	11.3	10.5	1.4
%RSD	.20621	.39816	.41975	.60808	.6460	.54087	.49705	.13363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: PDS 240-85978-a-1-b Acquired: 10/9/2017 16:33:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2018.9	503.92	789.29	1131.5	984.71
Stddev	6.7	7.72	1.68	32.2	9.95
%RSD	.33337	1.5326	.21239	2.8440	1.0104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5476.5	3278.6	34829.	5524.7
Stddev	8.1	7.1	43.	27.7
%RSD	.14834	.21714	.12351	.50173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.529%	96.645%	97.147%	103.55%
Range				

Sample Name: 240-85978-a-1-c ms@5 Acquired: 10/9/2017 16:38:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 193.56	363.11	982.78	193.31	9602.8	9.1407	10.183
Stddev	1.14	2.58	3.91	1.30	48.1	.0502	.973
%RSD	.58961	.71000	.39780	.67469	.50039	.54936	9.5596
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	194.9	94.246	943.77	50.698	194.58	39.486	184.66
Stddev	1.4	1.129	2.49	1.074	2.74	39.410	1.90
%RSD	.6947	1.1979	.26406	2.1180	1.4103	99.809	1.0308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.2101	98.173	197.25	62.660	97.091	1033.8	95.20
Stddev	14.863	.627	1.89	3.437	.707	7.8	.93
%RSD	463.00	.63837	.95878	5.4851	.72856	.75405	.9746
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85978-a-1-c ms@5 Acquired: 10/9/2017 16:38:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	195.06	383.31	192.71	392.52	96.102	149.26	202.44
Stddev	1.45	3.16	.48	6.02	3.872	1.15	11.41
%RSD	.74289	.82400	.24954	1.5340	4.0291	.76998	5.6356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	195.25
Stddev	3.28
%RSD	1.6774
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6219.3	3467.7	36963.	5547.5
Stddev	7.4	3.1	168.	4.3
%RSD	.11868	.08837	.45433	.07805
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.54%	102.22%	103.10%	103.98%
Range				

Sample Name: 240-85978-a-1d msd@5 Acquired: 10/9/2017 16:42:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 191.91	370.32	969.09	190.87	9497.4	9.0328	4.5462
Stddev	.74	9.64	5.24	1.45	62.4	.1160	.7981
%RSD	.38619	2.6022	.54114	.75751	.65678	1.2842	17.555
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	192.6	93.073	932.89	49.528	191.63	20.974	182.94
Stddev	1.0	.794	.41	.631	1.17	16.549	1.20
%RSD	.4954	.85292	.04369	1.2748	.61035	78.904	.65680
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.80561	96.957	194.42	54.823	95.847	1019.6	93.81
Stddev	7.5632	.186	1.02	3.708	.331	5.1	.13
%RSD	938.82	.19197	.52453	6.7645	.34571	.49952	.1364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85978-a-1d msd@5 Acquired: 10/9/2017 16:42:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	193.74	379.38	190.30	387.61	95.204	147.26	199.42
Stddev	3.18	2.83	.05	3.61	.938	.84	13.86
%RSD	1.6426	.74661	.02664	.93067	.98496	.56810	6.9483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	195.23
Stddev	5.17
%RSD	2.6503
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6235.4	3475.0	37020.	5527.7
Stddev	3.8	2.3	44.	10.4
%RSD	.06049	.06627	.11847	.18787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.80%	102.43%	103.26%	103.61%
Range				

Sample Name: mb 240-297896/1-a Acquired: 10/9/2017 16:47:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15796	-8.4639	-2.4554	.89294	.87448	-.05196	113.32	.0745
Stddev	.24851	9.6437	2.6117	.39528	.24600	.05498	.15	.0845
%RSD	157.32	113.94	106.37	44.268	28.131	105.82	.13669	113.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17623	.17782	.46074	4.6798	26.439	.56588	6.3313	.17307
Stddev	.06099	.20203	.50723	1.0639	4.685	1.1598	11.836	.01012
%RSD	34.607	113.62	110.09	22.733	17.719	204.95	186.95	5.8479
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08233	102.55	-.19719	-.68288	.9789	.34533	-.18040	.26353
Stddev	.20494	6.97	.46622	.50958	.7179	3.2363	.11046	.05150
%RSD	248.91	6.8002	236.43	74.622	73.34	937.13	61.230	19.543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297896/1-a Acquired: 10/9/2017 16:47:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.06928	.79357	4.8837	-1.2053	1.7359
Stddev	.67460	2.6861	.1558	1.7037	1.3884
%RSD	973.69	338.49	3.1896	141.35	79.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6361.0	3515.6	37261.	5592.5
Stddev	12.5	2.6	88.	20.3
%RSD	.19690	.07286	.23594	.36262

Sample Name: lcs 240-297896/2-a Acquired: 10/9/2017 16:52:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.220	1870.4	2051.0	1021.6	1905.7	46.847	47525.	51.56
Stddev	.271	10.8	5.1	2.6	2.9	.203	112.	.12
%RSD	.53992	.57840	.24735	.25219	.15437	.43300	.23565	.2349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	483.26	186.52	241.60	929.70	47188.	939.25	46541.	480.27
Stddev	.84	.18	.87	3.22	29.	1.97	109.	1.84
%RSD	.17408	.09399	.36180	.34611	.06143	.20955	.23348	.38275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	955.00	46266.	500.94	489.53	490.8	2081.0	1971.2	964.41
Stddev	.45	70.	.80	3.05	3.0	3.2	10.0	1.33
%RSD	.04758	.15089	.16059	.62285	.6182	.15148	.50678	.13803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-297896/2-a Acquired: 10/9/2017 16:52:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1986.6	479.66	513.41	1050.0	956.07
Stddev	11.4	1.69	4.21	19.9	1.25
%RSD	.57390	.35134	.82069	1.8920	.13078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5564.0	3334.3	35076.	5545.0
Stddev	12.6	8.0	81.	8.4
%RSD	.22722	.24044	.23197	.15185

Sample Name: 240-86012-e-1-a Acquired: 10/9/2017 16:56:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.25131	14.619	-1.8573	189.85	45.098	.06318	113920.
Stddev	.19924	7.675	3.0504	1.28	.152	.06923	255.
%RSD	79.281	52.499	164.24	.67190	.33629	109.57	.22372
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3554	-.14105	.92311	.57454	242.03	1085.5	5.6617
Stddev	.1252	.08289	.16148	.42722	2.82	.6	.8757
%RSD	35.23	58.767	17.493	74.359	1.1648	.05374	15.468
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21148.	1801.7	.84572	13694.	3.9795	-.04181	1.948
Stddev	83.	3.7	.11906	41.	.5834	1.5092	1.285
%RSD	.39071	.20793	14.079	.30166	14.661	3609.8	65.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-1-a Acquired: 10/9/2017 16:56:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0802	-.15499	.69830	.29058	4.2840	4.1096	6675.4
Stddev	1.9248	.52684	.11888	1.9836	1.2448	.2028	212.9
%RSD	178.20	339.91	17.024	682.64	29.057	4.9359	3.1897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	263.13
Stddev	4.91
%RSD	1.8672
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5707.8	3355.8	35344.	5500.0
Stddev	9.9	4.4	38.	25.3
%RSD	.17398	.13125	.10662	.45969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.268%	98.919%	98.583%	103.09%
Range				

Sample Name: SD 240-86012-e-1-a@5 Acquired: 10/9/2017 17:01:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14503	-8.3336	-2.1145	35.710	9.0774	-.00703	22755.	.1798
Stddev	.12229	5.2168	1.4859	.235	.1145	.02761	103.	.1522
%RSD	84.316	62.599	70.270	.65721	1.2617	392.69	.45256	84.64
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01460	.15688	.16264	49.316	236.95	1.2111	4243.8	368.05
Stddev	.04505	.27403	.19842	2.127	6.82	1.0532	16.4	.18
%RSD	308.46	174.68	122.00	4.3123	2.8773	86.966	.38731	.04980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.31853	2733.5	.25362	-1.0328	-.1715	.67727	-.42692	.13404
Stddev	.08375	5.7	.60579	.9923	2.194	2.2173	.35859	.06378
%RSD	26.291	.20885	238.85	96.083	1279.	327.39	83.994	47.581
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86012-e-1-a@5 Acquired: 10/9/2017 17:01:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.35269	2.2060	1.6614	1359.9	55.026
Stddev	.27727	3.0449	.1336	35.4	1.042
%RSD	78.616	138.03	8.0426	2.6036	1.8943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6113.1	3445.1	36394.	5518.0
Stddev	11.8	5.7	99.	27.5
%RSD	.19265	.16464	.27214	.49871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.820%	101.55%	101.51%	103.43%
Range				

Sample Name: PDS 240-86012-e-1-a Acquired: 10/9/2017 17:05:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.232	1991.4	2165.2	1260.0	2055.9	48.934	160700.
Stddev	1.155	2.4	1.5	4.8	4.3	.198	303.
%RSD	2.0913	.12201	.07084	.37896	.20817	.40528	.18830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.24	513.24	196.58	256.18	1214.4	51427.	1011.3
Stddev	.23	1.77	2.36	3.75	5.3	111.	3.1
%RSD	.4228	.34475	1.1982	1.4647	.43564	.21517	.30952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	69589.	2264.5	1043.7	63217.	525.78	501.81	525.7
Stddev	150.	36.4	2.4	130.	1.47	2.19	2.0
%RSD	.21518	1.6066	.23149	.20527	.28030	.43660	.3824
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 240-86012-e-1-a Acquired: 10/9/2017 17:05:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2178.7	2154.4	1048.5	2048.1	505.42	533.42	8027.1
Stddev	12.5	5.7	15.5	3.9	1.67	1.65	147.8
%RSD	.57177	.26495	1.4746	.19284	.33123	.30863	1.8410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1242.3
Stddev	3.9
%RSD	.31049
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5317.5	3267.1	33966.	5455.9
Stddev	9.2	2.7	362.	14.9
%RSD	.17332	.08158	1.0667	.27233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.958%	96.305%	94.740%	102.26%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 17:10:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	973.25	23414.	497.16	4947.0	1930.0	1875.2	47311.	482.5
Stddev	2.09	76.	1.76	17.2	7.3	8.0	277.	.9
%RSD	.21494	.32439	.35310	.34772	.37632	.42772	.58556	.1783
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1969.9	1869.3	1908.0	23075.	47548.	4746.2	46871.	1906.2
Stddev	.7	2.8	3.5	149.	228.	29.8	294.	2.7
%RSD	.03386	.15043	.18581	.64472	.47851	.62748	.62686	.14373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1961.0	46854.	1996.0	478.90	481.7	496.96	4986.4	4897.2
Stddev	4.2	248.	.3	1.57	2.7	4.77	5.4	7.0
%RSD	.21563	.52930	.01673	.32749	.5579	.96023	.10818	.14284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 17:10:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	988.91	1911.0	2024.0	4961.6	4749.9
Stddev	4.36	3.2	1.0	119.0	35.0
%RSD	.44107	.16654	.05149	2.3991	.73638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5417.1	3319.6	34718.	5482.5
Stddev	5.1	6.1	64.	18.6
%RSD	.09455	.18440	.18341	.33965

Sample Name: CCB Acquired: 10/9/2017 17:14:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27944	-1.2712	-2.1360	3.0816	.02882	-.00125	103.31	.0652
Stddev	.15004	1.7807	1.5398	.5179	.14312	.10025	2.55	.1063
%RSD	53.695	140.07	72.087	16.806	496.52	8032.4	2.4688	163.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17879	.33382	-.17406	2.3224	42.465	2.2776	9.2594	.47056
Stddev	.14584	.23000	.74970	.8996	20.215	.7106	3.2386	.02662
%RSD	81.571	68.899	430.70	38.738	47.603	31.201	34.976	5.6570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50531	37.272	.14529	.05678	.8053	1.2652	.18998	1.8147
Stddev	.27077	7.237	.38968	.48532	1.454	2.2757	.30606	.0869
%RSD	53.585	19.417	268.20	854.75	180.6	179.87	161.10	4.7886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 17:14:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.64352	3.7127	3.3427	17.085	2.0211
Stddev	.28721	2.3386	.0309	8.442	3.0162
%RSD	44.630	62.988	.92340	49.413	149.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6310.5	3491.4	36949.	5493.1
Stddev	10.7	4.7	19.	18.9
%RSD	.16922	.13420	.05220	.34440

Sample Name: 240-86012-e-1-b ms Acquired: 10/9/2017 17:19:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.000	1957.2	2127.0	1251.9	1995.8	47.483	159560.
Stddev	.219	3.7	1.9	5.9	3.2	.434	178.
%RSD	.42072	.18862	.08812	.47468	.16205	.91347	.11148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.22	497.36	189.67	247.56	1177.3	49978.	976.44
Stddev	.17	.57	.99	.33	2.6	83.	2.72
%RSD	.3157	.11462	.51983	.13387	.22395	.16639	.27815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	67637.	2257.3	983.78	61546.	516.07	491.39	508.7
Stddev	203.	4.2	1.20	107.	.91	.41	1.1
%RSD	.29961	.18780	.12192	.17310	.17599	.08428	.2066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-1-b ms Acquired: 10/9/2017 17:19:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2131.2	2051.1	986.45	2042.7	489.29	524.95	9264.4
Stddev	6.8	10.5	.32	6.2	1.00	2.27	57.0
%RSD	.31893	.51198	.03201	.30551	.20386	.43176	.61478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1217.0
Stddev	9.0
%RSD	.73770
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5305.3	3264.0	34340.	5515.1
Stddev	4.6	.8	54.	19.0
%RSD	.08682	.02582	.15835	.34520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.762%	96.212%	95.782%	103.37%
Range				

Sample Name: 240-86012-e-1-c msd Acquired: 10/9/2017 17:23:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.382	1925.7	2150.1	1259.8	2004.2	47.725	159830.
Stddev	.468	14.8	30.7	17.1	5.7	.052	638.
%RSD	.90991	.76695	1.4274	1.3534	.28244	.10982	.39908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.09	503.57	187.64	248.18	1173.9	50073.	979.68
Stddev	.69	7.27	.24	.93	3.6	138.	2.42
%RSD	1.284	1.4430	.12791	.37493	.30532	.27461	.24651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	67674.	2250.6	994.32	61493.	522.43	498.24	512.4
Stddev	190.	9.2	10.69	179.	6.81	6.47	4.5
%RSD	.28130	.40854	1.0751	.29187	1.3038	1.2984	.8832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-1-c msd Acquired: 10/9/2017 17:23:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2154.2	2078.2	985.16	2065.3	490.63	530.61	9248.8
Stddev	21.5	23.0	2.01	19.2	3.03	7.78	38.4
%RSD	.99941	1.1059	.20382	.92853	.61853	1.4665	.41558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1213.2
Stddev	2.6
%RSD	.21582
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5248.8	3232.1	34427.	5515.1
Stddev	57.3	32.7	83.	12.0
%RSD	1.0914	1.0118	.24068	.21723
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.849%	95.274%	96.025%	103.37%
Range				

Sample Name: 240-86012-d-2-a Acquired: 10/9/2017 17:27:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.18979	-14.635	-2.8774	4.7299	.19373	-.04209	141.01	-.0726
Stddev	.32239	5.965	.2312	.5856	.14021	.03715	1.42	.0238
%RSD	169.87	40.758	8.0339	12.381	72.375	88.259	1.0062	32.72
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.33774	.46026	-.03765	13.020	56.567	1.0557	16.230	7.8295
Stddev	.19779	.35426	.35254	.129	19.450	.5489	29.444	.0524
%RSD	58.564	76.970	936.40	.99081	34.384	51.998	181.41	.66883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.30959	190.08	.82341	-.43994	1.564	-2.7390	.58405	.45966
Stddev	.11513	3.67	.17167	.38694	1.505	3.1498	.01195	.21336
%RSD	37.189	1.9314	20.848	87.953	96.18	115.00	2.0458	46.416
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-d-2-a Acquired: 10/9/2017 17:27:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.49932	2.0780	.38476	46.921	.63184
Stddev	.93424	2.6147	.19753	5.013	1.0062
%RSD	187.10	125.83	51.338	10.685	159.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6377.2	3529.7	37523.	5660.7
Stddev	10.6	2.9	77.	21.0
%RSD	.16605	.08082	.20428	.37118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.09%	104.04%	104.66%	106.10%
Range				

Sample Name: 240-86012-j-4-a Acquired: 10/9/2017 17:32:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.34838	148.74	36.055	125.65	214.07	.10814	137210.
Stddev	.37916	7.20	1.279	.85	.80	.08796	563.
%RSD	108.84	4.8424	3.5465	.67610	.37477	81.338	.41007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1126	.51844	12.198	1.5087	25901.	4024.1	3.4543
Stddev	.1004	.29607	.249	.3265	102.	39.7	1.8374
%RSD	89.13	57.108	2.0387	21.640	.39520	.98552	53.191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7939.7	880.86	2.3213	3492.9	7.4437	-.02166	2.309
Stddev	70.8	1.72	.3270	10.3	.3313	1.2164	2.766
%RSD	.89154	.19484	14.087	.29465	4.4506	5616.4	119.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-j-4-a Acquired: 10/9/2017 17:32:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17220	-.01482	4.2571	.72676	4.1206	7.5025	6708.3
Stddev	.72703	.35895	.1869	.31440	4.4646	.0887	50.0
%RSD	422.19	2422.5	4.3907	43.261	108.35	1.1818	.74532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	190.17
Stddev	3.33
%RSD	1.7520
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5723.1	3373.3	35731.	5636.7
Stddev	9.4	8.3	52.	4.9
%RSD	.16502	.24548	.14476	.08663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.515%	99.435%	99.662%	105.65%
Range				

Sample Name: 240-86012-j-5-a Acquired: 10/9/2017 17:37:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.36867	39.229	5.1817	372.20	106.76	.03145	133980.
Stddev	.28707	4.625	1.2043	1.21	.16	.06470	616.
%RSD	77.865	11.788	23.242	.32606	.14753	205.71	.45974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3235	-.59064	1.3403	1.2831	17729.	1809.2	5.6621
Stddev	.0522	.08673	.3914	.1452	69.	4.9	.9055
%RSD	16.14	14.685	29.202	11.316	.39022	.27006	15.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22754.	2919.5	-.18128	24662.	1.0260	.74028	1.363
Stddev	44.	11.8	.11464	17.	.5700	1.4103	.379
%RSD	.19318	.40358	63.241	.06701	55.553	190.50	27.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-j-5-a Acquired: 10/9/2017 17:37:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.67869	-.08489	.25186	1.3939	.98464	5.4816	10484.
Stddev	3.0820	.51216	.33555	.9097	2.2608	.0238	36.
%RSD	454.11	603.31	133.23	65.260	229.60	.43397	.34715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	326.76
Stddev	1.48
%RSD	.45441
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5599.4	3347.6	35496.	5618.9
Stddev	9.8	1.8	42.	7.5
%RSD	.17428	.05462	.11780	.13367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.516%	98.676%	99.007%	105.32%
Range				

Sample Name: 240-86012-e-7-a Acquired: 10/9/2017 17:41:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00696	40.339	2.9052	66.322	168.43	-.05182	73566.	.4100
Stddev	.13635	12.646	.5184	.059	.58	.11583	90.	.1134
%RSD	1960.0	31.348	17.845	.08963	.34514	223.51	.12189	27.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.5897	1.1902	.87996	2672.0	3126.1	2.2304	8290.8	1878.4
Stddev	.2071	.1620	.09246	9.4	25.2	.3288	77.9	4.7
%RSD	5.7695	13.607	10.508	.35247	.80517	14.741	.94012	.24956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.63831	6229.1	17.796	-.33787	.3284	3.1351	-.38079	1.0826
Stddev	.41944	13.2	.388	1.0724	.1987	.8314	.40931	.2216
%RSD	65.710	.21248	2.1818	317.41	60.50	26.518	107.49	20.470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-e-7-a Acquired: 10/9/2017 17:41:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.4641	.59256	27.279	6134.9	228.61
Stddev	1.3017	1.4949	.066	35.0	1.43
%RSD	88.906	252.27	.24084	.57091	.62335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5881.7	3413.7	36078.	5611.9
Stddev	7.7	3.1	90.	7.6
%RSD	.13165	.08966	.24836	.13587
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.079%	100.63%	100.63%	105.19%
Range				

Sample Name: 240-86012-e-8-a Acquired: 10/9/2017 17:46:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.30648	492.86	-2.1047	123.04	34.551	.08234	79080.	.6555
Stddev	.22970	5.29	2.5941	1.07	.036	.09147	52.	.1382
%RSD	74.948	1.0723	123.25	.86570	.10301	111.09	.06623	21.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.05195	7.3811	1.9934	696.67	781.21	4.4601	17270.	986.40
Stddev	.21050	.3678	.2466	3.25	4.73	1.0564	81.	5.10
%RSD	405.20	4.9824	12.373	.46649	.60574	23.686	.46718	.51731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.47022	5291.8	6.5146	.94121	.9100	.27053	-.20561	9.3034
Stddev	.19871	8.4	.5910	.45395	2.302	.91592	.50304	.1893
%RSD	42.258	.15951	9.0723	48.231	252.9	338.57	244.65	2.0342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-e-8-a Acquired: 10/9/2017 17:46:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.26008	7.2871	8.8106	9407.3	195.64
Stddev	.48068	1.0629	.0959	21.1	4.39
%RSD	184.82	14.585	1.0882	.22462	2.2446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5853.2	3413.5	36204.	5611.9
Stddev	3.9	1.2	140.	7.0
%RSD	.06668	.03552	.38648	.12437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.618%	100.62%	100.98%	105.19%
Range				

Sample Name: 240-86012-e-9-a Acquired: 10/9/2017 17:50:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16681	19.185	-1.3243	196.83	46.438	-.01211	115840.
Stddev	.14796	2.771	.7315	1.68	.259	.09899	577.
%RSD	88.703	14.442	55.236	.85227	.55802	817.28	.49825
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3522	-.12549	.84972	.82956	298.98	1079.1	5.5993
Stddev	.1897	.26238	.38024	.38164	2.73	22.6	.8393
%RSD	53.86	209.09	44.749	46.005	.91465	2.0950	14.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21424.	1893.7	.54109	14082.	3.8655	.09841	1.500
Stddev	215.	3.4	.13401	55.	.5814	.92523	1.970
%RSD	1.0032	.18021	24.768	.39224	15.041	940.17	131.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-9-a Acquired: 10/9/2017 17:50:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22356	-.29732	.40647	1.1226	.20646	3.9152	8470.0
Stddev	2.6625	.76174	.08192	1.2490	3.2877	.2328	59.2
%RSD	1190.9	256.20	20.155	111.25	1592.4	5.9468	.69891
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	263.40
Stddev	4.72
%RSD	1.7914
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5679.0	3348.0	35423.	5572.1
Stddev	7.8	5.4	31.	25.6
%RSD	.13653	.16268	.08802	.45869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.802%	98.688%	98.803%	104.44%
Range				

Sample Name: 240-86012-e-11-a Acquired: 10/9/2017 17:55:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01283	6337.6	53.126	224.84	328.66	.40493	123650.
Stddev	.24003	79.2	2.083	.80	2.95	.08710	1157.
%RSD	1870.3	1.2498	3.9210	.35416	.89795	21.511	.93550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.6611	3.6827	47.952	13.486	77084.	3883.8	10.899
Stddev	.0560	.1663	5.737	1.619	706.	56.3	1.615
%RSD	8.466	4.5160	11.964	12.005	.91628	1.4507	14.821
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19522.	5745.0	3.1259	5419.0	24.051	16.863	-.6873
Stddev	199.	562.3	.0112	59.7	.266	.196	2.719
%RSD	1.0212	9.7875	.35683	1.1024	1.1062	1.1644	395.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-11-a Acquired: 10/9/2017 17:55:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.65388	1.3684	144.18	1.3098	19.745	46.488	24236.
Stddev	3.0693	.5696	17.18	2.4844	1.176	.065	262.
%RSD	469.40	41.621	11.919	189.68	5.9539	.13902	1.0801
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	291.57
Stddev	4.69
%RSD	1.6080
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5667.2	3388.1	34063.	5606.6
Stddev	11.3	2.5	3190.	43.0
%RSD	.19853	.07396	9.3649	.76642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.612%	99.870%	95.009%	105.09%
Range				

Sample Name: 240-86012-e-12-a Acquired: 10/9/2017 18:00:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01026	15431.	164.01	76.959	306.25	.77764	89310.
Stddev	.33552	44.	2.98	1.192	.43	.08369	236.
%RSD	3268.6	.28493	1.8176	1.5485	.14128	10.762	.26464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.9181	13.619	32.259	35.288	110890.	5322.8	20.589
Stddev	.1091	.205	.020	.176	213.	9.8	1.556
%RSD	11.88	1.5062	.06234	.49976	.19237	.18389	7.5571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28213.	7831.3	11.654	12548.	53.231	112.01	-.5521
Stddev	88.	52.9	.295	24.	1.127	1.98	2.223
%RSD	.31188	.67563	2.5342	.18745	2.1179	1.7672	402.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-12-a Acquired: 10/9/2017 18:00:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5010	2.6310	308.19	.16317	37.597	117.92	32244.
Stddev	2.2326	.4264	.12	3.4747	2.280	.99	733.
%RSD	148.74	16.205	.03900	2129.5	6.0636	.84241	2.2738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	231.92
Stddev	2.94
%RSD	1.2692
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5660.6	3431.6	36347.	5731.8
Stddev	8.2	4.5	77.	11.7
%RSD	.14568	.13221	.21194	.20391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.505%	101.15%	101.38%	107.43%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 18:05:12 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	973.19	23525.	497.90	4931.6	1941.7	1879.1	47792.	483.3
Stddev	3.83	135.	3.41	6.6	7.8	9.7	220.	.7
%RSD	.39367	.57180	.68508	.13405	.40178	.51719	.46088	.1398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1973.9	1867.9	1902.9	23247.	47875.	4779.3	47248.	1901.8
Stddev	3.2	7.6	10.3	111.	139.	20.1	227.	8.2
%RSD	.16178	.40807	.53916	.47609	.29099	.42011	.47945	.43027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1964.5	47224.	2002.9	478.28	481.6	498.41	4991.2	4896.0
Stddev	.5	159.	2.6	.97	1.2	2.65	10.5	15.3
%RSD	.02549	.33698	.12751	.20265	.2482	.53226	.20948	.31304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 18:05:12 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	991.97	1926.8	2030.2	5261.1	4793.0
Stddev	2.83	13.7	4.9	165.1	25.6
%RSD	.28548	.71092	.24127	3.1381	.53424
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5406.7	3314.9	34699.	5436.6
Stddev	8.2	3.5	74.	28.5
%RSD	.15109	.10559	.21421	.52499

Sample Name: CCB Acquired: 10/9/2017 18:09:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08362	11.015	-2.8013	2.5103	-.02500	.06790	102.14	.1354
Stddev	.22754	16.626	.4622	.8168	.12708	.05448	1.46	.0659
%RSD	272.11	150.94	16.498	32.538	508.32	80.236	1.4255	48.69
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22527	.16936	.20804	2.1333	43.034	1.4556	9.7019	.54530
Stddev	.13857	.11192	.11646	.8270	17.724	.4822	10.137	.00154
%RSD	61.512	66.081	55.980	38.767	41.185	33.127	104.48	.28328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22088	23.434	-.02081	.92403	1.957	.43887	.17030	1.9738
Stddev	.19038	1.181	.28737	.28932	2.929	.76862	.79126	.1710
%RSD	86.194	5.0386	1381.1	31.311	149.7	175.14	464.63	8.6625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 18:09:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.32065	2.8295	3.5031	67.850	2.4820
Stddev	.43495	1.1607	.0625	19.980	3.5051
%RSD	135.65	41.021	1.7854	29.447	141.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6301.3	3496.1	36993.	5503.2
Stddev	7.7	6.8	31.	15.0
%RSD	.12271	.19340	.08471	.27344

Sample Name: 240-86012-e-13-a Acquired: 10/9/2017 18:14:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.13726	935.98	52.011	47.610	345.72	.10370	79967.	.2044
Stddev	.56425	13.08	.268	.952	.86	.13401	289.	.0858
%RSD	411.09	1.3973	.51583	2.0002	.24804	129.23	.36165	41.97
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.29192	1.7640	.86786	9643.8	911.05	7.3051	16492.	288.21
Stddev	.15382	.1013	.19768	43.5	4.25	.3621	97.	.45
%RSD	52.694	5.7398	22.778	.45151	.46602	4.9567	.59042	.15458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13.254	7114.2	1.1399	1.5144	.6902	-.74417	-.02629	13.184
Stddev	.060	25.1	.4334	1.7546	.6674	2.3781	.54784	.189
%RSD	.45047	.35214	38.024	115.87	96.70	319.57	2083.9	1.4303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-e-13-a Acquired: 10/9/2017 18:14:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.14049	2.1024	10.346	13663.	159.84
Stddev	1.3785	1.0140	.144	27.	2.76
%RSD	981.20	48.231	1.3935	.19946	1.7293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5846.4	3422.0	36182.	5628.1
Stddev	6.7	4.6	54.	27.3
%RSD	.11413	.13445	.14991	.48537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.509%	100.87%	100.92%	105.49%
Range				

Sample Name: 240-86012-j-15-a Acquired: 10/9/2017 18:18:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.65227	524.04	22.013	511.95	208.57	.02587	177160.
Stddev	.35867	15.68	4.582	2.10	.59	.07374	509.
%RSD	54.989	2.9924	20.815	.40997	.28493	284.99	.28742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3224	-.47120	15.728	1.1779	29913.	3623.4	7.7982
Stddev	.1465	.26219	.080	.8076	87.	6.9	1.7473
%RSD	45.43	55.643	.50822	68.556	.28969	.18927	22.406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28442.	1482.1	.52503	47567.	8.8938	.97725	2.157
Stddev	168.	5.6	.13658	37.	.5699	2.3068	1.573
%RSD	.59174	.38090	26.013	.07802	6.4074	236.05	72.95
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-j-15-a Acquired: 10/9/2017 18:18:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.13892	-.04175	8.3317	1.2886	4.7286	10.888	9566.8
Stddev	3.0814	1.0830	.2819	.8902	1.7753	.207	198.9
%RSD	2218.1	2594.2	3.3832	69.084	37.543	1.9014	2.0791
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	431.49
Stddev	6.30
%RSD	1.4592
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5478.8	3314.2	34914.	5581.2
Stddev	5.7	1.8	119.	2.6
%RSD	.10318	.05482	.33978	.04581
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.567%	97.692%	97.385%	104.61%
Range				

Sample Name: 240-86012-e-16-a Acquired: 10/9/2017 18:23:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.78655	89.652	-.92504	290.93	128.22	.22138	105190.
Stddev	.30068	13.200	1.1028	1.64	.48	.07185	282.
%RSD	38.227	14.723	119.21	.56397	.37771	32.457	.26784
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2638	-.59453	.93568	-.07066	21190.	971.59	5.8544
Stddev	.0996	.29512	.12841	.39273	79.	11.98	1.2881
%RSD	37.76	49.639	13.724	555.83	.37271	1.2330	22.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18230.	1790.2	.66945	40295.	.67534	.98825	.2512
Stddev	23.	3.6	.10092	83.	.32467	.84623	.3172
%RSD	.12695	.20291	15.076	.20593	48.074	85.630	126.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-16-a Acquired: 10/9/2017 18:23:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.3930	.26028	1.0545	1.2434	2.2507	5.7191	13661.
Stddev	1.8104	.73480	.1349	1.0171	1.2435	.1210	255.
%RSD	53.355	282.31	12.794	81.799	55.252	2.1153	1.8673
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	229.29
Stddev	.73
%RSD	.31899
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5628.7	3360.4	35374.	5575.5
Stddev	1.3	4.2	94.	14.6
%RSD	.02386	.12642	.26648	.26263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.990%	99.054%	98.665%	104.51%
Range				

Sample Name: 240-86012-e-17-a Acquired: 10/9/2017 18:28:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.65767	227.40	.94168	288.94	160.53	.46256	105240.
Stddev	.25877	20.36	2.6878	11.60	.30	.05181	41.
%RSD	39.346	8.9517	285.42	4.0154	.18727	11.201	.03878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3142	-.62498	.99202	.51545	28253.	1004.3	6.0725
Stddev	.1518	.03908	.31165	.59963	30.	17.7	1.0773
%RSD	48.31	6.2522	31.416	116.33	.10550	1.7627	17.740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18280.	1782.7	.79816	41302.	1.3391	2.0660	1.272
Stddev	68.	1.4	.10401	59.	.4988	.5996	1.101
%RSD	.37375	.07867	13.031	.14275	37.245	29.022	86.53
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-e-17-a Acquired: 10/9/2017 18:28:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.84798	.62170	2.7634	.61554	1.9749	19.108	16004.
Stddev	2.6592	.27511	.1020	1.9660	.6525	.491	42.
%RSD	313.59	44.251	3.6921	319.40	33.039	2.5694	.26372
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	234.98
Stddev	2.24
%RSD	.95284
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5536.4	3310.3	35416.	5570.7
Stddev	154.8	89.0	44.	8.2
%RSD	2.7959	2.6889	.12491	.14780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.498%	97.578%	98.785%	104.42%
Range				

Sample Name: 240-86012-j-19-a Acquired: 10/9/2017 18:32:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17127	54.431	.41152	95.236	103.95	.01887	90010.	.4170
Stddev	.04710	4.517	.95377	.625	.18	.15481	173.	.0785
%RSD	27.500	8.2981	231.77	.65621	.17141	820.47	.19205	18.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.0750	3.7456	.18174	919.50	576.80	6.7864	36540.	294.39
Stddev	.0848	.3003	.42095	7.31	11.05	1.4859	187.	.17
%RSD	1.3961	8.0178	231.63	.79500	1.9161	21.896	.51158	.05761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0965	5863.6	5.6661	.71779	1.989	1.2584	-.38262	1.2522
Stddev	.3421	9.7	.4253	.71652	.579	2.1391	.58177	.2314
%RSD	11.049	.16580	7.5055	99.823	29.08	169.98	152.05	18.483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-j-19-a Acquired: 10/9/2017 18:32:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.27498	2.3099	2.5481	7914.9	172.09
Stddev	1.1362	1.4830	.1364	36.1	2.78
%RSD	413.19	64.203	5.3519	.45614	1.6151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5746.4	3375.7	35506.	5575.1
Stddev	7.1	4.2	29.	2.2
%RSD	.12328	.12374	.08229	.03901
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.892%	99.507%	99.036%	104.50%
Range				

Sample Name: 240-86012-j-20-a Acquired: 10/9/2017 18:37:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.09415	-10.596	-2.7070	1.5306	-.07190	-.01073	23.737	-.0800
Stddev	.23042	17.343	.7980	.3668	.08387	.04769	2.340	.0970
%RSD	244.73	163.68	29.480	23.967	116.64	444.63	9.8597	121.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22387	.15558	.24673	8.2748	22.131	.82592	.35987	.55659
Stddev	.14891	.25522	.15613	.5294	27.406	.21002	12.194	.02168
%RSD	66.516	164.04	63.280	6.3975	123.84	25.429	3388.5	3.8958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04327	89.456	.25111	-.81141	.8377	-1.8094	-.47297	.22170
Stddev	.09102	7.894	.17542	.81823	1.134	3.6453	.25715	.13207
%RSD	210.33	8.8242	69.856	100.84	135.3	201.46	54.370	59.569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-j-20-a Acquired: 10/9/2017 18:37:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.88990	3.8657	.48843	64.417	1.4341
Stddev	.81456	2.5928	.05587	18.227	1.3760
%RSD	91.533	67.073	11.439	28.295	95.955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6370.9	3527.6	37328.	5616.7
Stddev	19.9	10.1	154.	26.2
%RSD	.31231	.28673	.41317	.46589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.99%	103.98%	104.12%	105.28%
Range				

Sample Name: 240-85919-k-1-a Acquired: 10/9/2017 18:42:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.8245	12403.	F 70416.	2770.8	40.601	60.423
Stddev	.0746	11.	36.	2.9	.067	.308
%RSD	1.9499	.09201	.05172	.10499	.16434	.50999
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit			5000.0			
Low Limit			-500000.			

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	15161.	429.6	149.59	4691.3	15157.	59197.
Stddev	25.	1.2	1.28	11.7	90.	107.
%RSD	.16503	.2698	.85604	.24951	.59302	.18023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 877100.	42098.	12661.	2179.0	1842.0	F 636390.
Stddev	65186.	261.	29.	6.1	5.5	13162.
%RSD	7.4320	.62013	.22661	.28042	.29768	2.0682
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit	500000.					500000.
Low Limit	-500000.					-500000.

Sample Name: 240-85919-k-1-a Acquired: 10/9/2017 18:42:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 79201.	204.58	438.9	F 34522.	F 52133.	7853.3
Stddev	461.	1.38	1.0	10.	308.	189.3
%RSD	.58192	.67512	.2373	.02851	.59118	2.4098
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit	30000.			10000.	30000.	
Low Limit	-500000.			-500000.	-500000.	

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-85.323	17.571	F 41064.	8231.4	125.30
Stddev	6.677	1.262	228.	1106.7	1.10
%RSD	7.8259	7.1849	.55626	13.445	.87485
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3231.9	W 10165.	W 99537.	W 19952.
Stddev	11.5	23.	237.	20.
%RSD	.35589	.22769	.23773	.10128
Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Warn
Value	52.244%	299.64%	277.63%	373.97%
Range		50.500%	50.500%	50.500%

Sample Name: 240-85989-d-1-a Acquired: 10/9/2017 18:47:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20775	-7.3105	13.342	69.950	104.75	-.06779	49836.
Stddev	.27227	4.2686	2.239	.458	.39	.14297	95.
%RSD	131.06	58.390	16.781	.65488	.37281	210.89	.19040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0857	2.0785	1.4389	4.3841	509.98	9139.0	125.96
Stddev	.1471	.1612	.3538	.3212	3.38	471.7	7.01
%RSD	171.7	7.7556	24.584	7.3257	.66212	5.1613	5.5622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10544.	524.32	10.802	197520.	4.4606	1.3154	2.749
Stddev	62.	.60	.227	2501.	.2807	.7242	.491
%RSD	.58717	.11394	2.1016	1.2662	6.2921	55.052	17.86
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85989-d-1-a Acquired: 10/9/2017 18:47:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.4771	10.580	9.7613	.68951	3.9360	2.0767	6260.4
Stddev	1.7397	.065	.4948	.75236	4.4928	.1967	18.7
%RSD	20.522	.61299	5.0692	109.12	114.15	9.4720	.29817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	173.60
Stddev	1.89
%RSD	1.0883
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5413.4	3311.1	34172.	5519.4
Stddev	3.1	5.6	103.	20.2
%RSD	.05742	.16990	.30276	.36525
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.509%	97.600%	95.314%	103.45%
Range				

Sample Name: 240-85989-d-2-a Acquired: 10/9/2017 18:52:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13853	1000.4	19.619	62.797	32.116	.15942	8258.9
Stddev	.32363	14.6	1.984	.674	.049	.03696	72.5
%RSD	233.61	1.4564	10.113	1.0729	.15119	23.186	.87814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2007	7.1888	4.5020	31.306	925.54	4156.4	156.23
Stddev	.0476	.1271	.3794	.341	6.82	69.0	2.17
%RSD	23.70	1.7681	8.4263	1.0881	.73659	1.6612	1.3913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	998.24	98.646	4.5737	225430.	15.485	.28342	.4044
Stddev	12.71	.423	.3046	1215.	.667	.55742	2.851
%RSD	1.2733	.42860	6.6593	.53883	4.3052	196.68	705.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85989-d-2-a Acquired: 10/9/2017 18:52:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.0796	3.4848	16.309	.54163	7.6287	9.6765	6048.3
Stddev	2.7853	.5838	.357	1.0928	2.7520	.0527	95.5
%RSD	68.273	16.752	2.1909	201.77	36.074	.54514	1.5782
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	24.426
Stddev	3.194
%RSD	13.077
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5440.0	3333.0	34603.	5551.0
Stddev	4.9	2.1	126.	20.2
%RSD	.08975	.06380	.36403	.36324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.939%	98.248%	96.515%	104.05%
Range				

Sample Name: 240-85989-d-3-a Acquired: 10/9/2017 18:56:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14523	212.77	5.8735	81.134	60.576	.05548	15409.
Stddev	.04782	14.61	1.9982	.478	.102	.02945	31.
%RSD	32.923	6.8679	34.021	.58914	.16920	53.074	.20272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0786	8.6402	2.1150	47.654	981.81	3699.7	75.775
Stddev	.0825	.2227	.2099	.973	2.55	36.6	1.657
%RSD	105.0	2.5771	9.9260	2.0426	.25969	.98808	2.1869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2211.1	312.54	4.4970	222150.	12.821	-.83042	2.248
Stddev	27.8	.91	.2677	1011.	.327	1.0744	.496
%RSD	1.2593	.28971	5.9529	.45496	2.5520	129.38	22.06
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85989-d-3-a Acquired: 10/9/2017 18:56:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.2657	1.2751	8.5894	1.3646	2.2962	6.9893	3863.7
Stddev	1.9085	.2281	.1128	.8825	1.8274	.0919	48.3
%RSD	58.441	17.887	1.3127	64.671	79.584	1.3144	1.2512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	58.122
Stddev	1.462
%RSD	2.5146
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5461.4	3341.4	34377.	5518.2
Stddev	6.0	2.7	62.	10.0
%RSD	.11019	.07938	.17996	.18140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.284%	98.494%	95.886%	103.43%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 19:01:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	978.54	23621.	504.37	4947.1	1948.5	1880.8	47902.	485.3
Stddev	3.03	70.	1.54	5.0	2.0	4.5	77.	.5
%RSD	.30944	.29762	.30471	.10034	.10436	.23916	.16007	.1101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1986.0	1877.6	1915.1	23238.	47907.	4796.6	47223.	1913.4
Stddev	1.1	2.1	9.1	37.	48.	3.7	127.	3.2
%RSD	.05340	.11056	.47716	.15909	.10009	.07744	.26954	.16902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1971.3	44887.	2016.1	483.44	487.0	503.52	5022.8	4914.5
Stddev	4.0	110.	3.1	2.25	1.6	5.04	4.2	5.5
%RSD	.20477	.24456	.15295	.46564	.3358	1.0018	.08349	.11235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 19:01:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	999.04	1933.7	2042.0	5005.0	4801.3
Stddev	3.76	9.5	2.7	106.8	7.4
%RSD	.37617	.49268	.13143	2.1341	.15331
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5395.0	3308.7	34625.	5429.0
Stddev	7.2	4.1	119.	13.4
%RSD	.13385	.12482	.34308	.24659

Sample Name: CCB Acquired: 10/9/2017 19:06:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21084	-6.4491	-1.8704	3.6752	.03459	.12201	105.61	.0978
Stddev	.31886	1.2935	1.8865	.8052	.20727	.04429	2.37	.1023
%RSD	151.24	20.057	100.86	21.910	599.19	36.299	2.2471	104.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12464	-.08380	-.27784	.32988	791.75	19.751	-12.227	.46782
Stddev	.16527	.18959	.10957	1.4303	65.84	1.321	26.957	.00633
%RSD	132.61	226.25	39.435	433.59	8.3153	6.6881	220.47	1.3536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.4577	374.04	-.23502	-1.0960	1.202	-2.2875	.76933	2.5421
Stddev	.2055	14.81	.27191	.4035	1.925	.8206	.15813	.3691
%RSD	14.095	3.9590	115.70	36.817	160.1	35.872	20.554	14.518
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 19:06:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.80570	4.1087	3.5954	15.185	-2.7198
Stddev	.78725	1.2711	.0629	4.738	4.0842
%RSD	97.710	30.936	1.7485	31.205	150.17
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6300.5	3492.0	36864.	5452.8
Stddev	16.9	9.2	101.	32.0
%RSD	.26816	.26269	.27440	.58760

Sample Name: CCVL-3260526 Acquired: 10/9/2017 19:10:47 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.088	188.21	13.601	99.760	192.03	4.6780	4752.0	4.903
Stddev	.236	5.74	1.603	.559	.26	.1257	11.1	.046
%RSD	2.3393	3.0484	11.784	.56018	.13755	2.6861	.23263	.9325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.1783	9.6082	19.872	189.47	5109.1	60.851	4789.0	14.774
Stddev	.2136	.0967	.503	1.22	30.8	1.568	1.3	.093
%RSD	2.3276	1.0065	2.5302	.64181	.60282	2.5766	.02646	.63070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41.633	4736.0	38.380	8.9688	19.30	21.630	94.826	50.179
Stddev	.052	10.5	.380	.8549	2.22	1.446	.820	.282
%RSD	.12426	.22068	.98934	9.5317	11.49	6.6839	.86459	.56187
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCVL-3260526 Acquired: 10/9/2017 19:10:47 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	19.931	11.539	49.806	489.75	49.634
Stddev	1.506	1.272	.205	19.25	2.690
%RSD	7.5581	11.020	.41206	3.9300	5.4197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6198.3	3493.7	36820.	5529.4
Stddev	7.8	8.6	16.	7.1
%RSD	.12517	.24640	.04210	.12860

Sample Name: mb 240-297910/1-a Acquired: 10/9/2017 19:15:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08108	-18.579	-1.1106	3.0171	-.25353	-.03559	-5.0921	-.0530
Stddev	.32937	11.941	2.0023	.4245	.20398	.02946	3.0806	.0172
%RSD	406.21	64.270	180.29	14.071	80.458	82.755	60.497	32.41
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22080	.18622	.19699	-.19141	477.28	9.5836	-8.9226	.27465
Stddev	.06691	.18670	.08405	1.1653	9.17	.5363	26.425	.02325
%RSD	30.304	100.25	42.667	608.81	1.9204	5.5955	296.16	8.4641
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23687	235.03	.20235	.61254	.0353	1.1990	-.30507	.23453
Stddev	.26807	5.10	.52233	.68278	2.250	1.2617	.56518	.08284
%RSD	113.18	2.1698	258.13	111.47	6371.	105.23	185.27	35.322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297910/1-a Acquired: 10/9/2017 19:15:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.61943	1.9386	.57815	2.0032	2.6031
Stddev	.63176	1.5113	.03623	3.9452	3.5661
%RSD	101.99	77.958	6.2669	196.95	136.99
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6414.3	3553.7	37747.	5698.9
Stddev	12.3	9.9	79.	6.6
%RSD	.19241	.27761	.20797	.11666

Sample Name: lcs 240-297910/2-a Acquired: 10/9/2017 19:20:11 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.038	1877.0	2103.1	1043.9	1945.6	46.962	48235.	52.90
Stddev	.249	17.8	9.2	4.3	4.0	.167	281.	.28
%RSD	.48827	.94925	.43817	.41170	.20386	.35484	.58301	.5265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	494.28	190.18	245.53	929.93	48121.	961.48	47140.	489.79
Stddev	.93	.36	.69	7.26	76.	3.04	322.	.59
%RSD	.18760	.19140	.28001	.78048	.15837	.31657	.68364	.12003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	983.71	46118.	512.13	502.84	499.8	2119.2	2019.7	983.64
Stddev	1.49	120.	1.31	1.16	3.3	5.9	7.9	1.80
%RSD	.15116	.26016	.25574	.23028	.6507	.27870	.39250	.18255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-297910/2-a Acquired: 10/9/2017 19:20:11 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2038.6	487.94	517.11	1060.4	967.08
Stddev	6.1	1.34	.55	30.5	3.54
%RSD	.29691	.27393	.10555	2.8740	.36606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5590.9	3362.1	35273.	5555.2
Stddev	5.3	6.3	76.	25.5
%RSD	.09508	.18729	.21514	.45853

Sample Name: 240-86012-d-1-b Acquired: 10/9/2017 19:24:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31102	5.3148	-1.1410	194.71	44.104	.05569	112740.
Stddev	.31497	13.503	1.1685	1.31	.384	.09103	139.
%RSD	101.27	254.06	102.41	.67030	.87177	163.47	.12312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3440	-.26044	.55273	1.1240	1.1717	1433.7	14.179
Stddev	.0634	.26869	.47183	.0266	.4237	26.0	.426
%RSD	18.42	103.17	85.363	2.3671	36.161	1.8118	3.0047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20795.	1769.2	1.3069	13590.	3.4466	-1.6015	3.187
Stddev	80.	2.4	.4588	26.	.1980	.8853	.633
%RSD	.38387	.13460	35.108	.18778	5.7441	55.282	19.86
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-1-b Acquired: 10/9/2017 19:24:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1414	.64768	.28033	1.1557	1.0191	3.1866	8100.2
Stddev	2.3825	.69866	.11684	1.8862	3.0296	.1023	51.0
%RSD	208.73	107.87	41.681	163.21	297.29	3.2117	.62912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	258.02
Stddev	3.58
%RSD	1.3862
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5764.1	3398.8	35844.	5643.7
Stddev	12.8	7.1	36.	34.2
%RSD	.22290	.20961	.10084	.60606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.178%	100.19%	99.976%	105.79%
Range				

Sample Name: SD 240-86012-d-1-b@5 Acquired: 10/9/2017 19:29:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01526	-4.4692	-1.8994	38.840	8.9390	-.05052	23518.	.0558
Stddev	.23814	6.7930	2.0548	.713	.1774	.15618	61.	.0510
%RSD	1560.6	152.00	108.18	1.8355	1.9841	309.14	.25837	91.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08566	.11037	.21919	-.21336	511.98	7.6244	4388.7	372.13
Stddev	.01456	.10191	.64946	1.0150	14.64	1.1189	9.2	.81
%RSD	16.996	92.331	296.31	475.72	2.8584	14.675	.20930	.21769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.61095	2935.9	1.0081	-.01177	1.386	-.78538	.13416	.26711
Stddev	.23256	5.7	.1427	2.7052	1.527	2.5033	.19375	.02627
%RSD	38.065	.19362	14.152	22976.	110.2	318.73	144.42	9.8363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86012-d-1-b@5 Acquired: 10/9/2017 19:29:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.32413	.98900	.41616	1679.7	55.455
Stddev	1.3442	.84037	.06554	5.8	3.365
%RSD	414.71	84.971	15.749	.34294	6.0671
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6179.6	3497.2	36944.	5614.0
Stddev	2.2	2.0	74.	10.0
%RSD	.03513	.05592	.20095	.17747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.894%	103.09%	103.05%	105.23%
Range				

Sample Name: 240-86012-d-1-c ms Acquired: 10/9/2017 19:33:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.658	1939.8	2166.0	1264.7	2036.0	48.514	167370.
Stddev	.332	7.8	5.1	1.6	6.3	.070	375.
%RSD	.63020	.40328	.23401	.12828	.30995	.14414	.22407
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.49	505.89	192.39	252.64	955.91	51028.	1003.4
Stddev	.03	.44	.30	.99	5.87	162.	3.3
%RSD	.0470	.08644	.15732	.39208	.61399	.31778	.33352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	70032.	2309.1	989.17	62423.	523.87	495.88	514.8
Stddev	87.	6.1	.65	179.	1.16	1.82	3.7
%RSD	.12456	.26445	.06523	.28691	.22150	.36662	.7128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-1-c ms Acquired: 10/9/2017 19:33:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2164.7	2091.8	1000.4	2051.3	498.76	531.37	9636.2
Stddev	7.1	10.3	1.5	11.8	1.01	2.04	43.4
%RSD	.32747	.49470	.14646	.57637	.20209	.38471	.45049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1252.2
Stddev	4.3
%RSD	.34488
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5341.7	3297.0	34514.	5503.1
Stddev	4.4	1.7	8.	30.8
%RSD	.08314	.05144	.02195	.56046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.351%	97.186%	96.269%	103.15%
Range				

Sample Name: 240-86012-d-1-d msd Acquired: 10/9/2017 19:38:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.781	1920.2	2155.4	1259.6	2037.2	48.033	168080.
Stddev	.248	18.1	11.7	5.4	4.9	.241	423.
%RSD	.47958	.94144	.54479	.42684	.24201	.50154	.25168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.14	505.27	191.51	252.40	956.75	50790.	1003.7
Stddev	.10	.99	.67	1.20	6.34	154.	3.5
%RSD	.1781	.19529	.35221	.47361	.66274	.30344	.34376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	70337.	2301.5	995.09	62102.	524.74	498.94	514.6
Stddev	86.	4.5	.99	168.	.73	.55	3.8
%RSD	.12186	.19533	.09908	.27089	.13953	.10981	.7381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-1-d msd Acquired: 10/9/2017 19:38:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2162.5	2082.9	1001.2	2051.4	507.58	533.07	9665.5
Stddev	9.0	10.0	1.6	11.6	3.23	4.29	64.7
%RSD	.41658	.48071	.15964	.56680	.63696	.80532	.66913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1256.5
Stddev	12.4
%RSD	.98714
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5327.9	3290.2	34451.	5490.5
Stddev	10.6	13.0	55.	19.7
%RSD	.19838	.39383	.15862	.35953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.127%	96.984%	96.093%	102.91%
Range				

Sample Name: PDS 240-86012-d-1-b Acquired: 10/9/2017 19:42:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.394	1961.6	2200.9	1283.3	2052.9	48.768	159180.
Stddev	.042	30.3	6.2	5.0	9.4	.333	692.
%RSD	.07678	1.5435	.28204	.38885	.45730	.68372	.43446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.38	522.03	194.42	252.51	953.04	51477.	999.31
Stddev	.02	.45	1.58	1.63	4.06	223.	3.39
%RSD	.0304	.08613	.81243	.64700	.42639	.43263	.33942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	68358.	2192.7	1060.2	62056.	536.29	510.41	534.1
Stddev	367.	4.2	3.7	321.	.84	3.42	4.8
%RSD	.53757	.19335	.34636	.51687	.15678	.66938	.8928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 240-86012-d-1-b Acquired: 10/9/2017 19:42:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2217.2	2184.5	1038.4	2089.0	499.05	544.68	8990.0
Stddev	8.2	10.7	1.8	7.7	1.16	3.21	37.4
%RSD	.37100	.48993	.17437	.37034	.23186	.59014	.41585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1238.1
Stddev	2.7
%RSD	.21782
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5332.4	3292.3	34763.	5588.8
Stddev	6.5	2.7	59.	17.7
%RSD	.12273	.08196	.16839	.31719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.200%	97.046%	96.962%	104.76%
Range				

Sample Name: 240-86012-g-4-b Acquired: 10/9/2017 19:46:37 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.51445	-1.8899	4.5772	105.54	165.34	-.04127	138030.
Stddev	.27276	18.774	1.1011	.57	.65	.00936	313.
%RSD	53.021	993.36	24.055	.54221	.39266	22.670	.22665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1381	.35545	.19393	-.45173	7450.0	3769.3	8.7033
Stddev	.3113	.17136	.21885	.71116	29.4	14.2	1.1919
%RSD	225.4	48.210	112.85	157.43	.39449	.37750	13.695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7729.1	850.98	1.6678	3651.1	1.8827	.12645	4.048
Stddev	19.1	1.63	.1615	10.8	.3101	1.5660	1.516
%RSD	.24699	.19141	9.6858	.29673	16.473	1238.4	37.45
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-g-4-b Acquired: 10/9/2017 19:46:37 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.44505	.53742	.43982	.89369	.04214	.59569	5969.2
Stddev	1.6249	.44643	.03891	.13441	.53305	.02274	6.4
%RSD	365.12	83.069	8.8472	15.039	1264.8	3.8181	.10703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	184.79
Stddev	1.20
%RSD	.64877
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5778.4	3396.6	36142.	5718.3
Stddev	8.6	5.9	27.	24.5
%RSD	.14883	.17251	.07486	.42838
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.410%	100.12%	100.81%	107.18%
Range				

Sample Name: 240-86012-h-5-b Acquired: 10/9/2017 19:51:17 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14746	-13.628	1.8923	378.57	70.184	.05940	134380.
Stddev	.56403	5.237	2.4289	2.49	.223	.10192	699.
%RSD	382.49	38.429	128.35	.65870	.31825	171.57	.52023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2679	-.54107	.82281	.32199	6516.3	1950.9	10.617
Stddev	.0361	.28273	.32465	.77122	32.0	54.9	1.138
%RSD	13.48	52.254	39.457	239.51	.49151	2.8129	10.721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23240.	2854.6	.41015	26207.	1.1220	.50692	4.271
Stddev	234.	1.8	.25070	78.	.4822	.27796	2.488
%RSD	1.0072	.06285	61.123	.29757	42.974	54.833	58.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-h-5-b Acquired: 10/9/2017 19:51:17 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.79712	.05553	.04847	.06065	1.8390	1.2294	10137.
Stddev	3.1827	.59015	.26425	1.3230	4.7647	.1173	55.
%RSD	399.28	1062.7	545.18	2181.4	259.09	9.5434	.54675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	317.85
Stddev	6.08
%RSD	1.9131
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5642.5	3371.2	35820.	5667.3
Stddev	4.9	4.1	54.	22.0
%RSD	.08661	.12200	.15137	.38873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.212%	99.373%	99.912%	106.23%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 19:55:57 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	960.60	23112.	496.91	4879.2	1927.4	1847.3	47041.	479.1
Stddev	3.22	68.	1.51	9.0	5.8	3.5	137.	.2
%RSD	.33512	.29351	.30433	.18374	.30029	.18730	.29188	.0342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1966.2	1838.8	1880.9	22606.	47490.	4680.6	46258.	1873.2
Stddev	2.3	5.6	4.1	45.	60.	13.8	208.	4.4
%RSD	.11469	.30412	.22035	.19887	.12625	.29543	.44918	.23257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1959.5	46190.	1997.1	477.93	478.8	494.37	4955.8	4851.1
Stddev	2.3	118.	1.5	1.49	2.6	3.78	5.0	9.0
%RSD	.11810	.25464	.07355	.31202	.5361	.76492	.10073	.18537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 19:55:57 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	977.35	1898.7	2017.9	4903.9	4722.2
Stddev	6.73	4.3	.6	114.0	17.8
%RSD	.68824	.22559	.02746	2.3244	.37719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5461.5	3353.7	35170.	5534.1
Stddev	8.2	2.7	43.	11.4
%RSD	.14953	.07957	.12361	.20587

Sample Name: CCB Acquired: 10/9/2017 20:00:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05132	-16.758	-.23740	3.5405	-.00093	.05746	102.12	.1036
Stddev	.28022	22.670	1.2385	.8204	.12006	.02541	2.17	.0531
%RSD	545.98	135.28	521.69	23.171	12891.	44.214	2.1286	51.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.26071	.22073	.19560	3.0627	181.63	4.6796	12.600	.46015
Stddev	.05160	.15023	.14682	.4000	6.50	.9902	16.423	.01884
%RSD	19.791	68.058	75.061	13.062	3.5806	21.160	130.35	4.0950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1419	85.721	-.00980	.11289	1.761	.28384	.89006	2.4594
Stddev	.1647	2.161	.18365	.92949	.584	1.0351	.17051	.2431
%RSD	14.426	2.5214	1874.8	823.32	33.19	364.68	19.157	9.8855
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 20:00:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.0757	3.5643	3.5240	3.1905	1.8635
Stddev	.8187	2.2720	.0522	4.7918	3.3901
%RSD	76.104	63.744	1.4808	150.19	181.92
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6367.3	3525.2	37477.	5604.3
Stddev	12.5	3.2	72.	8.1
%RSD	.19648	.08967	.19302	.14368

Sample Name: 240-86012-d-7-b Acquired: 10/9/2017 20:05:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15014	-6.3017	-.02644	67.952	161.63	-.01863	73041.	.4590
Stddev	.28535	12.105	3.6237	.570	.25	.10844	122.	.0869
%RSD	190.06	192.09	13704.	.83845	.15443	582.12	.16701	18.94
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3889	.60039	.46071	1073.0	3220.7	6.2565	8219.3	1868.7
Stddev	.1135	.34261	.05481	2.6	9.7	1.1072	23.5	1.3
%RSD	3.3500	57.064	11.896	.24680	.30161	17.697	.28563	.07013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.86499	6209.9	17.096	-.68215	1.862	1.2308	.12237	.28752
Stddev	.28258	8.0	.201	2.1006	1.190	1.0327	.13022	.22090
%RSD	32.668	.12866	1.1737	307.94	63.94	83.900	106.42	76.830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-d-7-b Acquired: 10/9/2017 20:05:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.21767	.22726	24.418	5892.0	223.65
Stddev	2.3040	4.1885	.085	37.3	2.05
%RSD	1058.4	1843.1	.34711	.63232	.91448
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5957.5	3459.3	36465.	5673.0
Stddev	5.2	5.2	32.	5.0
%RSD	.08682	.15032	.08772	.08894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.305%	101.97%	101.71%	106.33%
Range				

Sample Name: 240-86012-d-8-b Acquired: 10/9/2017 20:09:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.21661	-10.064	-1.3510	131.50	18.900	-.02330	82582.	.3432
Stddev	.42583	3.045	.4214	.35	.151	.03445	389.	.1113
%RSD	196.59	30.251	31.191	.26295	.79779	147.84	.47076	32.42
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.66569	.31692	.33351	-.64948	800.87	6.3958	17775.	7.5785
Stddev	.07566	.28611	.09868	.88177	7.75	2.2299	147.	.0976
%RSD	11.366	90.279	29.588	135.76	.96710	34.865	.82653	1.2878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11362	5547.6	.56691	.50905	.1019	.65876	-.53544	-.00644
Stddev	.15089	12.9	.40392	1.9890	.2502	1.9742	.43435	.06076
%RSD	132.81	.23183	71.248	390.72	245.5	299.69	81.120	942.95
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-d-8-b Acquired: 10/9/2017 20:09:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.97022	4.2199	.11926	8858.1	204.60
Stddev	2.7569	2.0424	.07143	59.4	4.46
%RSD	284.15	48.400	59.894	.67076	2.1816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5883.0	3432.9	36292.	5672.7
Stddev	9.0	2.8	66.	17.8
%RSD	.15329	.08274	.18222	.31301
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.100%	101.19%	101.23%	106.33%
Range				

Sample Name: 240-86012-d-9-b Acquired: 10/9/2017 20:14:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16884	-9.8472	-2.5234	194.97	43.590	.01361	113810.
Stddev	.14426	8.5931	.7938	.69	.233	.08272	364.
%RSD	85.442	87.265	31.457	.35611	.53350	607.60	.31966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3813	-.07345	.44752	.87719	.69569	1188.2	6.6023
Stddev	.0670	.22063	.46246	.50922	1.4861	51.3	1.1416
%RSD	17.57	300.37	103.34	58.051	213.61	4.3148	17.292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20934.	1801.9	.49963	13774.	3.3349	.05566	1.521
Stddev	48.	1.1	.12972	24.	.2301	1.3917	1.658
%RSD	.22919	.06017	25.963	.17224	6.8999	2500.6	109.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-9-b Acquired: 10/9/2017 20:14:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.5078	.31802	-.15101	1.8234	-1.9212	3.8518	8124.3
Stddev	.3061	.70245	.08161	1.2343	4.4664	.0663	24.8
%RSD	12.207	220.88	54.039	67.690	232.47	1.7202	.30503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	262.63
Stddev	5.02
%RSD	1.9128
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5762.8	3395.7	35785.	5642.9
Stddev	6.3	1.4	49.	3.5
%RSD	.10958	.04144	.13782	.06123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.157%	100.09%	99.814%	105.77%
Range				

Sample Name: 240-86012-d-11-b Acquired: 10/9/2017 20:18:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12966	-14.221	.21101	226.11	36.797	.07632	119020.
Stddev	.30100	6.606	2.4301	1.26	.140	.09600	336.
%RSD	232.14	46.451	1151.7	.55857	.38025	125.79	.28219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1381	1.1757	1.1939	.24175	2430.5	2548.8	9.0526
Stddev	.2176	.1145	.1229	.11495	6.5	4.4	1.5259
%RSD	157.6	9.7353	10.298	47.548	.26884	.17077	16.855
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18694.	5015.7	2.1309	5152.1	.89300	-.46095	.3689
Stddev	101.	15.6	.3027	16.8	.41071	1.3211	1.142
%RSD	.54220	.31136	14.207	.32571	45.992	286.61	309.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-11-b Acquired: 10/9/2017 20:18:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.4240	-.32639	-.20762	.06650	3.6652	.77298	10506.
Stddev	2.4386	.40053	.00638	2.0217	1.5822	.16987	45.
%RSD	171.25	122.72	3.0730	3040.3	43.169	21.976	.42405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	251.05
Stddev	3.23
%RSD	1.2871
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5776.5	3385.0	35759.	5602.5
Stddev	8.8	6.3	49.	16.2
%RSD	.15181	.18585	.13581	.28870
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.379%	99.779%	99.740%	105.01%
Range				

Sample Name: 240-86012-d-12-b Acquired: 10/9/2017 20:23:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04135	13.844	.65851	66.808	103.66	-.07883	69165.	.2339
Stddev	.24609	9.710	1.7799	.427	.74	.06160	441.	.0495
%RSD	595.07	70.138	270.29	.63948	.71053	78.143	.63707	21.18
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.7457	1.2349	-.12791	6458.8	1218.3	6.8630	19343.	3897.5
Stddev	.1144	.2566	.44593	53.9	26.1	.4794	132.	18.9
%RSD	4.1667	20.781	348.64	.83502	2.1463	6.9858	.68257	.48572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.8764	12059.	9.7618	-.92510	1.564	1.2905	1.3268	-.09293
Stddev	.2116	71.	.1880	1.1575	.609	1.1953	.9045	.09934
%RSD	3.6006	.58780	1.9260	125.12	38.94	92.624	68.177	106.90
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-d-12-b Acquired: 10/9/2017 20:23:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.71678	1.6897	1.4416	9868.4	196.02
Stddev	.45175	4.4135	.0540	73.9	4.77
%RSD	63.025	261.20	3.7468	.74916	2.4323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5866.4	3444.5	36406.	5701.2
Stddev	7.8	1.5	57.	52.2
%RSD	.13292	.04304	.15716	.91611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.833%	101.53%	101.54%	106.86%
Range				

Sample Name: 240-86012-d-13-b Acquired: 10/9/2017 20:28:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.49678	-23.078	6.1328	48.034	344.86	-.06230	78842.	.1989
Stddev	.18906	17.653	.6049	.625	1.00	.04061	146.	.0835
%RSD	38.058	76.493	9.8629	1.3009	.28881	65.195	.18536	41.99
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.57891	-.11397	.70196	1.2163	826.37	8.7733	16307.	181.93
Stddev	.06293	.03879	.45429	1.7248	13.10	.6866	63.	.55
%RSD	10.870	34.041	64.716	141.81	1.5850	7.8258	.38875	.30425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13.400	7086.2	.76559	-.22635	.1715	-.17980	-.25798	-.27684
Stddev	.071	13.3	.37624	1.6614	.6321	1.6627	.16564	.12387
%RSD	.53288	.18758	49.144	733.99	368.7	924.74	64.206	44.744
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-d-13-b Acquired: 10/9/2017 20:28:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.00980	.90408	-.00056	10433.	154.16
Stddev	1.4343	2.8634	.12077	10.	2.46
%RSD	14635.	316.72	21500.	.09811	1.5982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5888.6	3441.3	36394.	5731.7
Stddev	6.5	4.5	44.	11.6
%RSD	.11023	.13095	.12055	.20209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.191%	101.44%	101.51%	107.43%
Range				

Sample Name: 240-86012-g-15-b Acquired: 10/9/2017 20:33:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.42350	-5.3999	2.3340	523.88	125.64	-.01079	178450.
Stddev	.08841	4.5906	1.0757	4.62	.14	.04495	199.
%RSD	20.876	85.012	46.090	.88129	.10900	416.47	.11159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3483	-.79554	.61341	.17192	5248.0	3589.8	9.6453
Stddev	.0761	.10413	.15169	.35532	13.0	13.0	1.8325
%RSD	21.84	13.089	24.729	206.68	.24731	.36304	18.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28738.	1467.6	.04310	48300.	1.5820	.05475	1.405
Stddev	212.	3.9	.14011	79.	.3210	1.4664	1.039
%RSD	.73619	.26706	325.07	.16289	20.290	2678.6	73.92
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-g-15-b Acquired: 10/9/2017 20:33:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.7012	-.88422	-.41914	.37548	3.0634	3.8687	9314.8
Stddev	3.0758	.23104	.08887	2.4879	5.1287	.1009	57.5
%RSD	180.80	26.129	21.202	662.59	167.42	2.6073	.61686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	427.87
Stddev	8.39
%RSD	1.9610
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5507.9	3313.3	35014.	5622.8
Stddev	9.8	6.1	77.	22.1
%RSD	.17829	.18505	.22058	.39302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.037%	97.666%	97.661%	105.39%
Range				

Sample Name: 240-86012-d-16-b Acquired: 10/9/2017 20:37:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14488	8.7847	-1.7124	288.48	65.334	.02156	104060.
Stddev	.27884	5.1652	2.0160	.85	.312	.11086	448.
%RSD	192.46	58.797	117.73	.29479	.47693	514.21	.43099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2214	-.77657	.87222	.29894	3029.1	1030.0	5.9357
Stddev	.0420	.21063	.18429	.40514	8.5	5.5	.5723
%RSD	18.97	27.123	21.129	135.53	.28153	.53713	9.6417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18092.	1591.9	.98865	41076.	.80367	-.25140	2.017
Stddev	82.	4.9	.19311	33.	.27227	.60419	1.746
%RSD	.45570	.30899	19.533	.08071	33.879	240.33	86.57
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-16-b Acquired: 10/9/2017 20:37:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15355	.37428	-.34231	.06306	3.7000	.88769	13989.
Stddev	2.6200	.27093	.10848	.62172	3.7722	.13290	54.
%RSD	1706.3	72.388	31.690	985.88	101.95	14.972	.38822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	223.34
Stddev	1.92
%RSD	.85851
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5686.9	3391.5	35650.	5612.3
Stddev	13.7	4.2	42.	2.6
%RSD	.24048	.12529	.11801	.04685
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.931%	99.973%	99.437%	105.19%
Range				

Sample Name: 240-86012-d-17-b Acquired: 10/9/2017 20:42:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23195	-18.128	1.6339	300.28	63.874	-.01723	106360.
Stddev	.27686	7.466	1.7917	2.60	.329	.07371	587.
%RSD	119.36	41.183	109.66	.86605	.51525	427.74	.55145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3207	-.69381	.71856	.21112	1690.1	1076.3	7.3723
Stddev	.1619	.26738	.20183	.92140	7.9	45.5	.6551
%RSD	50.48	38.538	28.088	436.43	.46560	4.2232	8.8863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18475.	1699.8	.76775	41504.	.59815	-.30863	.9271
Stddev	159.	2.4	.27625	128.	.39203	.71162	1.377
%RSD	.86069	.14046	35.982	.30809	65.540	230.57	148.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86012-d-17-b Acquired: 10/9/2017 20:42:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.0594	-.28270	-.39296	.13128	3.2975	.57396	14387.
Stddev	2.0292	.70718	.24218	.69742	2.7281	.15877	57.
%RSD	98.534	250.15	61.630	531.26	82.732	27.662	.39505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	230.84
Stddev	5.12
%RSD	2.2200
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5672.4	3384.4	35613.	5639.8
Stddev	12.5	12.2	17.	48.8
%RSD	.21987	.35966	.04753	.86442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.697%	99.763%	99.334%	105.71%
Range				

Sample Name: 240-86012-g-19-b Acquired: 10/9/2017 20:47:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17152	14.355	-1.4012	95.870	102.91	-.02226	89367.	.2592
Stddev	.27233	5.232	.4626	.501	.31	.06672	156.	.1252
%RSD	158.77	36.448	33.016	.52235	.29982	299.73	.17479	48.30
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.6460	.23443	.16609	17.113	638.39	7.3096	36208.	287.75
Stddev	.0684	.40583	.14022	1.470	20.86	2.5722	224.	.57
%RSD	1.2120	173.12	84.422	8.5892	3.2669	35.189	.61931	.19946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.1391	5825.0	3.6790	.47592	2.167	-1.3769	.31052	-.20709
Stddev	.0587	2.8	.2201	.98963	1.535	1.0101	.91264	.12938
%RSD	1.8712	.04799	5.9834	207.94	70.81	73.356	293.90	62.476
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-g-19-b Acquired: 10/9/2017 20:47:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.99178	1.5495	1.1021	7574.1	167.39
Stddev	1.5464	2.9949	.1933	59.7	2.33
%RSD	155.92	193.28	17.537	.78805	1.3893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5768.4	3395.1	35789.	5583.3
Stddev	5.3	3.3	78.	11.9
%RSD	.09199	.09750	.21914	.21261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.249%	100.08%	99.823%	104.65%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 20:51:49 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	970.82	23179.	497.04	4869.1	1927.3	1850.5	47105.	479.0
Stddev	1.00	50.	.46	4.7	2.0	1.0	120.	1.1
%RSD	.10267	.21520	.09311	.09678	.10343	.05651	.25557	.2335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1977.4	1846.5	1896.3	22586.	47558.	4662.9	46316.	1886.9
Stddev	1.7	1.8	3.3	46.	46.	4.1	93.	2.8
%RSD	.08664	.09726	.17384	.20288	.09634	.08890	.20004	.15039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1969.6	46427.	2013.2	481.32	478.7	500.85	4981.3	4881.3
Stddev	4.1	14.	4.8	1.43	.9	3.20	4.1	4.1
%RSD	.20750	.03122	.23956	.29783	.1947	.63920	.08255	.08452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 20:51:49 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	989.20	1903.5	2035.4	4891.6	4730.2
Stddev	4.78	6.7	2.0	105.6	8.9
%RSD	.48314	.35261	.09989	2.1588	.18817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5450.2	3352.8	35079.	5510.2
Stddev	3.8	3.3	70.	2.3
%RSD	.07010	.09776	.19942	.04228

Sample Name: CCB Acquired: 10/9/2017 20:56:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07722	3.2217	-2.2675	3.0234	-.07927	.09768	102.61	.0224
Stddev	.17740	14.643	2.1196	1.1998	.07621	.01091	1.67	.0368
%RSD	229.72	454.51	93.477	39.685	96.144	11.166	1.6269	164.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14437	-.01976	.62065	.68240	96.653	2.2199	7.2467	.47466
Stddev	.13638	.25524	.74829	1.1842	12.571	.9273	11.594	.03161
%RSD	94.460	1291.7	120.57	173.54	13.006	41.773	160.00	6.6592
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.74882	30.504	.37083	.41740	1.813	-.48555	.49762	2.4526
Stddev	.27531	7.350	.21504	2.2140	1.412	3.2971	.19475	.1622
%RSD	36.767	24.094	57.989	530.43	77.88	679.04	39.136	6.6132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 20:56:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.53736	1.7226	3.4489	1.0824	-.78597
Stddev	.75004	2.2755	.0390	6.3706	.31653
%RSD	139.58	132.10	1.1310	588.58	40.272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6342.8	3522.0	37438.	5585.4
Stddev	11.7	7.7	67.	8.4
%RSD	.18371	.21813	.17966	.15048

Sample Name: 240-86012-g-20-b Acquired: 10/9/2017 21:00:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21477	.76591	-.22834	3.3140	-.10324	-.10171	33.810	-.0953
Stddev	.69596	22.527	1.2838	.3541	.21112	.05771	3.464	.0586
%RSD	324.05	2941.2	562.25	10.685	204.49	56.736	10.245	61.49
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06175	.20452	-.39186	.59491	77.522	.64004	-8.0591	.31382
Stddev	.07733	.53247	.18034	.39600	7.302	1.7647	4.4835	.02459
%RSD	125.23	260.35	46.021	66.563	9.4192	275.71	55.632	7.8354
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28045	86.663	.00309	-.00334	.3038	-.76527	-.05180	.46670
Stddev	.07383	4.571	.34267	1.3254	.5066	.36803	.53357	.05788
%RSD	26.324	5.2740	11088.	39731.	166.8	48.091	1030.1	12.403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86012-g-20-b Acquired: 10/9/2017 21:00:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.66795	5.2224	.69777	16.794	-2.4024
Stddev	.89293	1.4528	.06774	6.807	1.7016
%RSD	133.68	27.818	9.7082	40.536	70.831
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6406.0	3559.7	37664.	5664.3
Stddev	14.1	1.3	106.	25.4
%RSD	.22072	.03538	.28259	.44848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.56%	104.93%	105.06%	106.17%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 21:05:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	957.51	23063.	496.27	4873.6	1919.4	1842.3	46791.	478.6
Stddev	.18	75.	.60	14.4	4.4	5.7	251.	.7
%RSD	.01908	.32374	.12120	.29538	.23171	.31177	.53649	.1409
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1968.7	1837.6	1867.6	22377.	47354.	4627.9	46054.	1867.6
Stddev	1.1	4.6	3.1	148.	91.	17.0	338.	.7
%RSD	.05583	.25285	.16473	.66235	.19199	.36837	.73477	.03906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1963.7	46222.	2005.9	479.99	476.8	494.65	4961.7	4845.6
Stddev	4.3	112.	2.1	1.07	1.1	2.05	2.7	4.2
%RSD	.21867	.24235	.10475	.22239	.2410	.41390	.05415	.08760
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 21:05:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	983.42	1893.4	2029.8	4807.8	4696.4
Stddev	3.01	7.8	2.0	115.0	22.9
%RSD	.30622	.40941	.09642	2.3918	.48757
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5449.9	3355.6	35176.	5505.9
Stddev	2.7	4.0	31.	15.4
%RSD	.05012	.12025	.08861	.28058

Sample Name: CCB Acquired: 10/9/2017 21:09:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07989	.82544	-2.4881	3.9353	-.10903	.11663	122.82	.0327
Stddev	.17233	6.5243	1.3281	.8897	.04675	.06739	1.70	.1019
%RSD	215.72	790.40	53.378	22.609	42.882	57.780	1.3863	311.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01276	.27933	-.09216	2.2802	100.89	2.4726	-7.3560	.48541
Stddev	.07421	.35235	.32877	1.3581	33.72	.7233	8.6676	.03807
%RSD	581.75	126.14	356.72	59.560	33.420	29.251	117.83	7.8433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.69066	30.793	.12889	-.69481	.8471	-.76253	.81488	2.4151
Stddev	.09639	5.178	.52833	1.2969	1.467	2.7634	1.0188	.2808
%RSD	13.957	16.814	409.92	186.65	173.1	362.40	125.03	11.628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 21:09:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.20222	.54113	3.1608	1.4643	-.50853
Stddev	.53205	1.4385	.0594	3.7172	1.5793
%RSD	263.10	265.83	1.8779	253.85	310.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6351.6	3527.2	37237.	5561.0
Stddev	1.9	.4	359.	13.7
%RSD	.02965	.01025	.96315	.24567

Sample Name: CCVL-3260526 Acquired: 10/9/2017 21:14:35 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.210	160.06	12.999	98.926	191.43	4.5574	4699.0	4.813
Stddev	.088	1.14	.631	.520	.83	.1420	1.9	.115
%RSD	.85899	.71519	4.8538	.52548	.43176	3.1161	.03982	2.398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.4233	9.5869	18.827	182.03	4679.6	47.004	4725.6	14.706
Stddev	.0288	.3854	.311	3.50	15.1	1.548	46.9	.101
%RSD	.30529	4.0205	1.6504	1.9254	.32241	3.2927	.99274	.68652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41.489	4566.5	38.827	11.083	20.79	18.106	94.680	49.975
Stddev	.054	9.4	.366	.746	1.31	1.135	1.228	.018
%RSD	.13013	.20532	.94194	6.7289	6.277	6.2660	1.2965	.03622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCVL-3260526 Acquired: 10/9/2017 21:14:35 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	19.392	11.918	50.028	463.42	44.597
Stddev	.546	4.576	.106	10.62	.986
%RSD	2.8137	38.392	.21113	2.2922	2.2116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6196.8	3500.2	36933.	5567.2
Stddev	10.6	5.7	148.	22.3
%RSD	.17123	.16252	.39987	.40093

Sample Name: 240-84549-a-1-f@5 Acquired: 10/9/2017 21:19:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9786	11024.	2.1409	22.150	13897.	-.15979	5256.7	-.6915
Stddev	.3519	2.	.2835	.086	95.	.10429	31.1	.0307
%RSD	17.783	.01855	13.240	.38882	.68459	65.268	.59203	4.442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.6377	17.936	61.538	3978.7	219.01	52.526	193.49	39.251
Stddev	.2078	.212	.361	15.7	14.15	1.543	18.37	.163
%RSD	12.688	1.1807	.58711	.39369	6.4598	2.9383	9.4925	.41642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.5514	686.80	15.431	84.666	2.598	-.39121	25590.	343.10
Stddev	.2492	4.14	.365	1.599	.449	1.6189	24.	.61
%RSD	2.6091	.60293	2.3660	1.8880	17.27	413.81	.09484	.17872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-84549-a-1-f@5 Acquired: 10/9/2017 21:19:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.26633	1314.5	443.31	514.25	206.80
Stddev	.55239	4.6	2.72	3.83	2.22
%RSD	207.41	.35328	.61405	.74460	1.0750
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6212.9	4088.7	43450.	6598.1
Stddev	4.4	4.5	58.	4.6
%RSD	.07100	.10922	.13256	.06946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.43%	120.52%	121.19%	123.67%
Range				

Sample Name: 240-85838-k-2-a@20 Acquired: 10/9/2017 21:24:00 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16725	-4.7822	-2.3910	18.988	1.4480	.02391	6204.8
Stddev	.54351	2.6669	2.3363	1.107	.2466	.10604	27.6
%RSD	324.97	55.767	97.712	5.8311	17.033	443.58	.44520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0333	-.34480	.22253	.50213	1.2071	1040.9	4.8763
Stddev	.0665	.26064	.34438	.16211	1.6364	6.3	1.5750
%RSD	199.9	75.592	154.76	32.284	135.56	.60879	32.300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2420.8	3.4942	.05198	153730.	2.9396	.50771	-.4743
Stddev	12.6	.0766	.08232	498.	.4961	2.3648	1.003
%RSD	.52080	2.1923	158.35	.32421	16.875	465.78	211.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85838-k-2-a@20 Acquired: 10/9/2017 21:24:00 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.91929	3.3533	.44582	.17675	1.4850	.13502	132.65
Stddev	1.6182	1.3806	.12380	.71737	2.4323	.25429	8.80
%RSD	176.03	41.171	27.768	405.88	163.80	188.34	6.6339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	487.99
Stddev	6.22
%RSD	1.2741
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5655.8	3392.1	35235.	5498.2
Stddev	13.2	4.7	17.	12.4
%RSD	.23254	.13974	.04923	.22578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.428%	99.990%	98.279%	103.06%
Range				

Sample Name: SD 240-85838-k2a@100 Acquired: 10/9/2017 21:28:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22432	4.5741	-3.2516	3.4460	-.01716	.01489	1260.5	.0528
Stddev	.54701	23.213	1.6696	.4062	.23131	.04416	2.9	.0849
%RSD	243.85	507.48	51.346	11.788	1347.7	296.61	.23140	160.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.11272	.19814	-.15307	-.44423	252.27	1.8691	500.53	.72033
Stddev	.03775	.15097	.29055	1.0881	19.20	1.7391	12.26	.04789
%RSD	33.492	76.194	189.81	244.93	7.6124	93.043	2.4504	6.6478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05076	31200.	1.0084	.66095	-.7012	-.37854	-.17620	.22012
Stddev	.35153	20.	.3506	.42916	2.832	2.2028	.46429	.09379
%RSD	692.47	.06311	34.772	64.930	403.8	581.93	263.50	42.607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-85838-k2a@100 Acquired: 10/9/2017 21:28:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.64230	2.6720	-.38484	16.534	101.83
Stddev	1.3044	1.2815	.08979	4.196	.60
%RSD	203.09	47.960	23.332	25.375	.59005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6094.0	3486.4	36720.	5536.6
Stddev	12.2	5.2	330.	14.8
%RSD	.19966	.14951	.89912	.26655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.511%	102.77%	102.42%	103.78%
Range				

Sample Name: PDS 240-85838-k2a@20 Acquired: 10/9/2017 21:33:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.110	1877.9	2140.7	1041.6	1966.3	47.537	54361.
Stddev	.547	3.8	3.7	2.0	1.4	.141	104.
%RSD	1.0308	.20472	.17493	.19317	.07218	.29719	.19096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.12	518.64	191.41	244.37	939.78	50379.	961.35
Stddev	.18	.78	.15	.76	4.87	73.	2.20
%RSD	.3393	.15026	.08058	.31157	.51772	.14409	.22851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	49933.	486.70	1047.7	196160.	532.29	494.04	511.9
Stddev	63.	.24	1.1	1096.	.23	1.81	3.9
%RSD	.12596	.04844	.10386	.55864	.04392	.36725	.7622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 240-85838-k2a@20 Acquired: 10/9/2017 21:33:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2102.7	2163.4	1027.8	1999.9	494.86	542.18	1174.0
Stddev	8.7	6.2	.2	3.9	2.54	.69	28.4
%RSD	.41479	.28721	.02101	.19444	.51303	.12812	2.4217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1444.3
Stddev	2.0
%RSD	.14014
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5331.9	3305.6	34354.	5482.7
Stddev	2.4	2.4	33.	6.2
%RSD	.04589	.07247	.09584	.11344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.191%	97.440%	95.821%	102.77%
Range				

Sample Name: 240-85838-k-2b ms@20 Acquired: 10/9/2017 21:37:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.6122	93.623	103.92	69.718	98.473	2.3004	8652.1
Stddev	.2948	18.526	2.62	.323	.545	.1218	44.3
%RSD	11.284	19.787	2.5215	.46396	.55306	5.2953	.51177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.694	25.294	10.107	12.433	46.927	3590.4	54.879
Stddev	.110	.189	.212	.627	.862	31.4	.988
%RSD	4.094	.74603	2.0990	5.0422	1.8371	.87452	1.7995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4844.9	29.015	51.314	154750.	29.636	24.285	26.03
Stddev	46.8	.042	.384	217.	.418	.554	1.21
%RSD	.96682	.14537	.74808	.14009	1.4088	2.2803	4.662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85838-k-2b ms@20 Acquired: 10/9/2017 21:37:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	71.261	103.08	52.222	101.37	28.822	32.186	181.09
Stddev	1.934	.39	.317	1.24	1.459	.196	5.73
%RSD	2.7144	.37773	.60607	1.2250	5.0621	.60948	3.1636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	534.63
Stddev	10.17
%RSD	1.9017
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5641.1	3394.1	35018.	5453.6
Stddev	10.6	6.2	51.	15.4
%RSD	.18866	.18157	.14581	.28279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.190%	100.05%	97.673%	102.22%
Range				

Sample Name: 240-85838-k2c msd@20 Acquired: 10/9/2017 21:42:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.6069	90.151	104.82	68.838	94.850	2.2965	8455.0
Stddev	.2595	6.639	.80	.127	.340	.0880	29.5
%RSD	9.9555	7.3641	.76374	.18392	.35895	3.8323	.34897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.740	25.110	10.125	12.632	48.150	3560.5	53.648
Stddev	.048	.418	.098	.262	.241	29.9	1.118
%RSD	1.750	1.6656	.96914	2.0719	.49990	.83916	2.0837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4733.4	28.894	50.843	151570.	29.372	25.202	25.35
Stddev	56.0	.091	.308	163.	.310	2.673	1.61
%RSD	1.1841	.31464	.60560	.10758	1.0540	10.607	6.346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85838-k2c msd@20 Acquired: 10/9/2017 21:42:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	69.922	102.87	51.663	102.50	29.445	32.173	170.25
Stddev	2.958	.26	.128	1.82	1.021	.327	8.58
%RSD	4.2310	.25369	.24762	1.7760	3.4679	1.0152	5.0417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	518.94
Stddev	2.71
%RSD	.52130
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5650.0	3396.4	35080.	5507.8
Stddev	10.6	3.1	32.	9.6
%RSD	.18706	.09124	.09223	.17435
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.333%	100.12%	97.846%	103.24%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 21:47:12 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	968.59	23428.	507.02	4928.9	1943.8	1865.9	47454.	484.5
Stddev	3.17	49.	3.34	4.3	3.6	4.6	97.	.8
%RSD	.32740	.20758	.65932	.08718	.18721	.24456	.20478	.1653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2001.9	1862.2	1887.7	22772.	47983.	4688.3	46759.	1893.2
Stddev	3.7	1.6	9.3	82.	101.	10.4	93.	4.8
%RSD	.18279	.08835	.49317	.36227	.20950	.22229	.19804	.25482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1990.9	46800.	2039.4	489.44	482.6	504.56	5043.1	4908.6
Stddev	1.2	79.	4.9	1.18	.7	1.99	5.8	7.1
%RSD	.06039	.16911	.24154	.24196	.1538	.39389	.11415	.14454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 21:47:12 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1000.4	1915.0	2067.6	4851.9	4786.7
Stddev	2.4	3.7	2.4	71.7	19.8
%RSD	.23683	.19403	.11419	1.4772	.41395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5426.3	3343.4	35023.	5454.9
Stddev	2.8	5.3	75.	19.0
%RSD	.05124	.15982	.21503	.34785

Sample Name: CCB Acquired: 10/9/2017 21:51:32 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.11762	-5.5993	-1.5795	3.4334	.05890	.03415	-14.515	.1238
Stddev	.08703	9.0990	2.3504	.5760	.16489	.09544	1.482	.0699
%RSD	73.993	162.50	148.80	16.778	279.92	279.46	10.210	56.47
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08211	.13751	.16217	-.12439	92.688	2.2406	-1.7881	.00999
Stddev	.07294	.13558	.25087	2.3732	46.306	1.2448	19.230	.04249
%RSD	88.832	98.599	154.70	1907.9	49.959	55.557	1075.4	425.29
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.75214	34.762	.16347	1.1537	1.550	-1.1216	.01793	2.3591
Stddev	.17981	7.244	.38632	.3306	1.745	1.6047	.52559	.0889
%RSD	23.907	20.838	236.33	28.653	112.6	143.08	2931.9	3.7679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 21:51:32 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.95711	1.9055	-.42331	-.79028	1.5255
Stddev	.73802	2.8834	.09975	4.4621	.8342
%RSD	77.109	151.32	23.565	564.61	54.684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6347.8	3531.1	37196.	5523.1
Stddev	11.3	9.3	30.	22.0
%RSD	.17824	.26299	.08133	.39780

Sample Name: 240-85797-A-1-B Acquired: 10/9/2017 21:56:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14240	6757.8	3.4547	5521.5	401.65	.10606
Stddev	.08784	30.9	1.2933	9.2	.61	.15329
%RSD	61.687	.45775	37.435	.16702	.15288	144.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28865.	.8604	7.0407	10.588	107.54	280.75
Stddev	188.	.1494	.1052	.196	.95	1.60
%RSD	.65284	17.36	1.4947	1.8527	.88621	.56935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	37005.	144.28	12306.	172.18	1.4682	F 1303700.
Stddev	46.	3.38	98.	.24	.1966	21070.
%RSD	.12428	2.3442	.79921	.13905	13.394	1.6162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85797-A-1-B Acquired: 10/9/2017 21:56:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	125.94	.43352	.6295	1.1182	1.1083	1.5274
Stddev	.89	.53354	1.884	3.9036	.4179	.0502
%RSD	.70384	123.07	299.2	349.10	37.706	3.2885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.8370	3.0545	585.93	9272.4	579.78
Stddev	1.5742	3.1054	.69	231.7	1.93
%RSD	85.691	101.67	.11722	2.4989	.33300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4733.4	3135.6	31751.	5480.5
Stddev	6.1	5.0	41.	27.8
%RSD	.12921	.16004	.12949	.50761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.517%	92.429%	88.562%	102.73%
Range				

Sample Name: 240-85892-A-2-B@10 Acquired: 10/9/2017 22:01:00 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20972	6.3999	-.37674	73.293	9.1497	-.09036	2688.7	1.962
Stddev	.16059	17.210	.15460	.300	.1675	.06061	7.0	.075
%RSD	76.575	268.90	41.037	.40890	1.8305	67.078	.26178	3.841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.45278	2.0989	81.181	958.99	1905.0	12.217	1153.4	18.452
Stddev	.13287	.2612	1.107	7.90	20.3	1.040	17.9	.101
%RSD	29.346	12.444	1.3633	.82364	1.0654	8.5131	1.5499	.54725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.84249	82317.	9.3839	8.8576	1.062	2.1705	2.1479	.81023
Stddev	.22889	91.	.2639	.5771	.954	1.5465	.2346	.07720
%RSD	27.168	.11095	2.8121	6.5155	89.86	71.249	10.924	9.5286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85892-A-2-B@10 Acquired: 10/9/2017 22:01:00 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.7787	3.1641	523.96	3241.9	15.142
Stddev	.8146	2.8344	.93	32.9	4.828
%RSD	29.317	89.579	.17799	1.0140	31.887
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5793.0	3394.7	35888.	5696.4
Stddev	7.5	9.0	113.	.7
%RSD	.12883	.26446	.31466	.01276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.646%	100.07%	100.10%	106.77%
Range				

Sample Name: 240-85941-E-3-B Acquired: 10/9/2017 22:05:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25739	45.931	-2.1566	141.17	21.046	-.08281	6533.8	.2298
Stddev	.05367	11.882	2.0984	.23	.099	.04926	31.8	.1637
%RSD	20.851	25.868	97.300	.16439	.47242	59.483	.48742	71.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.38678	6.7905	.84380	16.022	6597.3	17.763	641.37	.71576
Stddev	.22531	.1965	.43273	.932	28.4	.576	19.05	.01428
%RSD	58.253	2.8931	51.283	5.8156	.42997	3.2402	2.9702	1.9954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.305	55764.	2.4736	-1.1481	.5183	.28539	.26010	.36946
Stddev	.153	118.	.3265	2.0395	2.193	3.3917	.16238	.07143
%RSD	1.4809	.21182	13.197	177.65	423.1	1188.4	62.430	19.333
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85941-E-3-B Acquired: 10/9/2017 22:05:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.03338	4.3404	4.2481	4823.3	95.385
Stddev	1.0323	2.6572	.1598	15.4	2.035
%RSD	3092.6	61.220	3.7625	.31853	2.1336
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5915.6	3419.0	36174.	5600.5
Stddev	8.8	2.6	45.	18.7
%RSD	.14811	.07483	.12427	.33392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.627%	100.78%	100.90%	104.97%
Range				

Sample Name: 240-85798-A-1-B Acquired: 10/9/2017 22:10:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.63700	57.011	24.327	829.57	568.26	.41526
Stddev	.35437	21.438	1.338	4.01	.80	.03488
%RSD	55.631	37.603	5.5012	.48396	.14120	8.3998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	30221.	.5561	6.1930	4.1684	1.6527	298.41
Stddev	83.	.0944	.0513	.1937	.4093	4.75
%RSD	.27573	16.98	.82890	4.6465	24.766	1.5921
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	29075.	114.58	9982.6	131.79	.69526	F 1208500.
Stddev	87.	2.34	120.8	.19	.36829	11748.
%RSD	.29844	2.0384	1.2103	.14078	52.971	.97206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85798-A-1-B Acquired: 10/9/2017 22:10:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20.013	1.8327	-.1767	2.3382	.40307	1.5951
Stddev	.250	1.9035	.6815	1.1330	.37281	.0678
%RSD	1.2498	103.86	385.6	48.456	92.492	4.2528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.1636	1.9084	633.43	11059.	1029.9
Stddev	2.1239	1.9930	1.13	206.	9.0
%RSD	182.53	104.44	.17824	1.8641	.87035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4769.5	3209.3	32295.	5550.7
Stddev	4.5	1.5	10.	31.3
%RSD	.09379	.04689	.03167	.56380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	77.100%	94.601%	90.077%	104.04%
Range				

Sample Name: mb 240-297963/1-a Acquired: 10/9/2017 22:15:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12912	-7.0910	-3.0292	3.8813	.04145	-.00824	123.00	.0287
Stddev	.10158	21.711	1.5654	.2065	.05279	.12938	2.89	.1287
%RSD	78.670	306.18	51.677	5.3204	127.36	1569.6	2.3473	448.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07687	.36459	.06904	10.532	332.33	10.461	4.8999	.96873
Stddev	.11487	.33366	.36985	2.037	20.87	1.654	16.322	.04846
%RSD	149.42	91.516	535.70	19.343	6.2809	15.807	333.11	5.0021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.31131	489.42	.61737	.26544	-.9471	.31028	26.996	.32283
Stddev	.07652	31.33	.75046	.38951	1.690	.97859	.405	.09196
%RSD	24.579	6.4009	121.56	146.74	178.5	315.39	1.5015	28.486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297963/1-a Acquired: 10/9/2017 22:15:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.92693	3.5483	2.9248	16.701	-.38519
Stddev	1.3515	1.7262	.0547	4.488	1.5690
%RSD	145.81	48.650	1.8692	26.875	407.33
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6274.0	3500.9	37229.	5520.2
Stddev	13.3	4.1	30.	13.8
%RSD	.21173	.11788	.08097	.24912

Sample Name: lcs 240-297963/2-a Acquired: 10/9/2017 22:19:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	47.802	1816.4	1972.8	951.31	1902.9	44.944	47158.	50.28
Stddev	.435	8.8	4.2	5.67	5.4	.062	72.	.18
%RSD	.90995	.48669	.21407	.59602	.28151	.13795	.15234	.3482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	476.48	182.39	234.97	904.43	46356.	926.38	45841.	475.79
Stddev	.59	1.20	.85	4.76	39.	2.24	299.	.26
%RSD	.12376	.65631	.36319	.52644	.08427	.24168	.65265	.05388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	964.24	44599.	493.64	479.81	469.8	1945.7	1959.1	960.68
Stddev	1.81	64.	.62	1.25	1.6	1.4	3.8	1.12
%RSD	.18763	.14282	.12629	.26152	.3325	.06989	.19482	.11667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-297963/2-a Acquired: 10/9/2017 22:19:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1925.4	473.46	502.56	1009.1	951.34
Stddev	2.1	2.87	.68	32.9	1.94
%RSD	.10698	.60558	.13588	3.2600	.20418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5520.7	3306.5	34707.	5373.1
Stddev	6.2	1.6	70.	18.3
%RSD	.11200	.04792	.20207	.34109

Sample Name: 240-86032-b-1-a Acquired: 10/9/2017 22:24:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.5348	40071.	179.48	99.640	494.94	2.3938	407420.
Stddev	.3734	98.	2.26	.306	.37	.0554	3865.
%RSD	10.563	.24579	1.2604	.30739	.07405	2.3124	.94874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.830	45.836	100.03	132.22	116710.	8755.9	47.089
Stddev	.077	.255	.87	1.67	232.	25.6	1.775
%RSD	4.214	.55524	.86983	1.2651	.19857	.29222	3.7688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	72687.	2882.0	5.9668	2686.4	124.65	121.54	2.248
Stddev	198.	7.4	.4593	2.6	.43	.30	.913
%RSD	.27238	.25818	7.6984	.09599	.34582	.24495	40.62
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86032-b-1-a Acquired: 10/9/2017 22:24:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.19095	36.415	1460.3	3.5477	128.04	335.48	6534.0
Stddev	3.4832	.444	3.6	1.8670	1.35	.54	30.3
%RSD	1824.1	1.2181	.24652	52.624	1.0573	.16219	.46348
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	534.65
Stddev	8.53
%RSD	1.5952
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5142.2	3431.7	35871.	5764.1
Stddev	8.7	3.7	67.	5.3
%RSD	.16915	.10743	.18663	.09157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.124%	101.16%	100.05%	108.04%
Range				

Sample Name: SD 240-86032-b-1-a@5 Acquired: 10/9/2017 22:28:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0151	8323.0	35.398	21.426	104.27	.47281	89349.	.4106
Stddev	.0275	52.8	.727	.432	.47	.04154	299.	.1020
%RSD	2.7109	.63410	2.0530	2.0180	.44757	8.7859	.33463	24.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.7289	21.016	27.579	25331.	1868.1	12.320	15727.	618.13
Stddev	.0591	.316	.305	107.	26.9	.382	138.	1.34
%RSD	.67719	1.5013	1.1067	.42289	1.4415	3.1026	.87988	.21676
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1701	612.31	23.954	27.198	1.922	-1.5833	7.0399	306.07
Stddev	.1452	4.47	.104	.700	1.947	2.7807	.4289	.37
%RSD	12.405	.72926	.43557	2.5721	101.3	175.62	6.0920	.11953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86032-b-1-a@5 Acquired: 10/9/2017 22:28:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.75699	29.976	65.310	1346.5	112.49
Stddev	.69659	2.441	.024	12.2	1.47
%RSD	92.021	8.1437	.03639	.90330	1.3063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5829.6	3484.5	36563.	5594.6
Stddev	11.6	4.5	20.	9.3
%RSD	.19864	.12941	.05432	.16693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.237%	102.71%	101.98%	104.86%
Range				

Sample Name: PDS 240-86032-b-1-a Acquired: 10/9/2017 22:33:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48.857	40940.	2173.6	1048.6	2367.9	45.779	453420.
Stddev	.629	71.	3.6	.9	5.6	.106	7372.
%RSD	1.2871	.17367	.16351	.08335	.23790	.23160	1.6259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.15	563.40	273.04	368.74	116020.	56396.	990.03
Stddev	.14	1.45	1.74	2.10	501.	190.	3.54
%RSD	.2674	.25823	.63571	.56980	.43182	.33778	.35792
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	117710.	3253.6	979.72	48988.	647.15	567.03	482.0
Stddev	688.	48.8	3.60	122.	1.20	2.53	5.0
%RSD	.58412	1.5007	.36764	.24987	.18502	.44677	1.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 240-86032-b-1-a Acquired: 10/9/2017 22:33:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1956.0	2174.1	2423.7	1980.1	588.68	855.18	7427.2
Stddev	7.0	5.7	17.1	4.9	5.48	2.88	26.3
%RSD	.35828	.26248	.70367	.24963	.93010	.33728	.35375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1427.3
Stddev	11.8
%RSD	.82633
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4938.9	3374.3	35023.	5673.6
Stddev	10.8	2.2	143.	36.1
%RSD	.21768	.06553	.40871	.63710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.838%	99.463%	97.686%	106.34%
Range				

Sample Name: 240-86032-b-1-b ms Acquired: 10/9/2017 22:37:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	38.872	55145.	1779.5	929.42	2191.4	38.703	486850.
Stddev	.358	261.	7.6	3.80	10.3	.233	2700.
%RSD	.92012	.47368	.42952	.40904	.46933	.60107	.55448
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43.37	461.44	252.16	297.27	105270.	52136.	820.30
Stddev	.36	.40	.66	.69	549.	318.	5.13
%RSD	.8281	.08723	.26063	.23075	.52168	.61082	.62533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	118230.	6206.9	728.21	39628.	544.63	487.23	232.8
Stddev	705.	47.2	1.09	194.	1.22	.85	.8
%RSD	.59627	.76002	.15033	.48838	.22479	.17502	.3226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86032-b-1-b ms Acquired: 10/9/2017 22:37:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1584.2	1659.8	2694.7	1613.9	520.43	752.48	20091.
Stddev	9.3	11.1	9.0	9.5	1.49	2.05	70.
%RSD	.58777	.66661	.33575	.59158	.28711	.27237	.34830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1212.4
Stddev	5.2
%RSD	.43290
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4911.6	3361.1	35063.	5700.6
Stddev	5.0	3.4	161.	36.1
%RSD	.10277	.10093	.46016	.63321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.397%	99.075%	97.800%	106.85%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 22:42:26 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	976.23	23084.	501.58	4910.4	1930.9	1839.6	47074.
Stddev	.23	62.	.49	11.2	3.4	6.8	36.
%RSD	.02386	.26892	.09784	.22733	.17781	.36856	.07560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	481.0	1991.2	1841.1	1901.4	F 22352.	47679.	4634.9
Stddev	1.0	.7	1.0	4.3	23.	39.	3.4
%RSD	.1977	.03484	.05268	.22640	.10187	.08166	.07287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	46368.	1887.5	1989.2	46191.	2028.2	489.15	484.4
Stddev	113.	2.8	1.6	45.	1.9	1.11	2.0
%RSD	.24340	.14663	.08032	.09709	.09222	.22684	.4230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV-3260525 Acquired: 10/9/2017 22:42:26 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	504.29	5007.3	4906.3	1003.4	1908.0	2054.5	4818.6
Stddev	4.03	2.5	.3	2.1	10.0	3.2	91.0
%RSD	.79983	.05027	.00533	.21376	.52397	.15375	1.8895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4736.3
Stddev	6.4
%RSD	.13488
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5483.4	3378.8	35370.	5534.4
Stddev	4.7	.4	66.	6.6
%RSD	.08586	.01249	.18705	.11996

Sample Name: CCB Acquired: 10/9/2017 22:46:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03778	-14.691	-3.1501	4.0923	-.28006	-.07440	-17.111	.0260
Stddev	.18065	17.417	.3049	.1417	.13638	.09902	1.000	.0760
%RSD	478.16	118.55	9.6798	3.4633	48.696	133.09	5.8412	292.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08571	.08639	-.36821	.17567	98.668	2.3621	7.4189	.00303
Stddev	.13361	.27164	.70348	.34313	10.598	.6579	9.1372	.03040
%RSD	155.89	314.44	191.06	195.32	10.741	27.854	123.16	1002.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.68673	46.844	.00160	-.16331	2.439	.04701	.28875	2.1209
Stddev	.13523	3.812	.23865	1.0724	.262	1.3482	.11578	.3482
%RSD	19.691	8.1370	14881.	656.65	10.73	2867.8	40.098	16.416
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 22:46:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.23459	1.9621	-.40969	1.0886	-2.2851
Stddev	1.0605	1.4379	.15438	7.4771	3.3143
%RSD	452.05	73.282	37.683	686.83	145.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6366.5	3538.2	37550.	5601.3
Stddev	23.6	13.4	29.	38.5
%RSD	.37039	.37967	.07649	.68711

Sample Name: 240-86032-b-1-c msd Acquired: 10/9/2017 22:51:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	40.228	53180.	1819.7	950.07	2025.7	39.350	466170.
Stddev	.533	145.	1.9	1.73	2.1	.080	2272.
%RSD	1.3237	.27296	.10714	.18216	.10231	.20298	.48745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44.26	465.83	253.21	294.17	88254.	52957.	836.95
Stddev	.22	.94	1.65	1.66	199.	33.	.83
%RSD	.5074	.20106	.65311	.56530	.22553	.06171	.09931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	123740.	3339.6	750.05	40593.	536.38	486.97	233.8
Stddev	178.	36.1	.84	34.	.65	1.32	4.6
%RSD	.14375	1.0817	.11263	.08473	.12108	.27042	1.952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86032-b-1-c msd Acquired: 10/9/2017 22:51:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1637.9	1704.1	2282.1	1655.8	511.19	722.93	21858.
Stddev	4.8	9.9	2.7	8.6	5.10	.76	117.
%RSD	.29329	.58151	.11851	.51705	.99736	.10471	.53628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1198.3
Stddev	5.9
%RSD	.49376
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4924.7	3358.2	35030.	5737.2
Stddev	6.4	5.3	72.	6.0
%RSD	.13024	.15829	.20695	.10381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.609%	98.990%	97.708%	107.54%
Range				

Sample Name: 240-86032-b-2-a Acquired: 10/9/2017 22:55:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.6269	48503.	125.33	90.625	482.81	2.9978	216680.
Stddev	.2897	87.	.12	.667	.97	.1681	1475.
%RSD	17.808	.17987	.09263	.73631	.20084	5.6071	.68055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.686	56.353	93.497	93.917	83766.	12481.	52.005
Stddev	.117	.193	.536	1.111	212.	38.	.926
%RSD	6.928	.34253	.57343	1.1831	.25366	.30433	1.7805
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	47697.	2225.3	2.2541	814.24	116.84	84.594	4.012
Stddev	152.	4.2	.1923	1.87	.79	2.421	1.040
%RSD	.31845	.18976	8.5332	.23024	.67964	2.8618	25.92
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86032-b-2-a Acquired: 10/9/2017 22:55:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.7217	32.584	1068.0	2.6484	115.59	262.80	9079.8
Stddev	3.1510	.277	.9	.8780	1.49	.39	170.4
%RSD	115.77	.85086	.08852	33.152	1.2900	.14729	1.8769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	271.18
Stddev	2.82
%RSD	1.0397
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5399.7	3526.1	36980.	5869.8
Stddev	8.6	7.2	55.	21.9
%RSD	.15999	.20455	.14762	.37386
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.287%	103.94%	103.15%	110.02%
Range				

Sample Name: 240-86032-b-3-a Acquired: 10/9/2017 23:00:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5220	42738.	36.858	72.477	263.61	2.3801	15495.
Stddev	.3296	137.	3.151	.528	.96	.0837	118.
%RSD	21.658	.31943	8.5488	.72807	.36583	3.5176	.76017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.7706	53.783	107.82	92.369	109590.	8807.6	52.127
Stddev	.0908	.146	.35	1.248	852.	23.7	1.205
%RSD	11.78	.27109	.32192	1.3511	.77764	.26941	2.3114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	15534.	715.07	1.8544	1534.6	144.58	27.435	.2823
Stddev	102.	2.87	.0586	13.9	.93	1.683	1.022
%RSD	.65362	.40134	3.1609	.90644	.63977	6.1326	362.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86032-b-3-a Acquired: 10/9/2017 23:00:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0133	27.211	877.92	3.0747	162.17	124.45	2438.9
Stddev	3.9198	.341	2.14	.6190	4.12	.27	34.2
%RSD	130.08	1.2518	.24412	20.133	2.5405	.21654	1.4025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	91.594
Stddev	4.648
%RSD	5.0749
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5870.1	3789.1	39853.	6093.5
Stddev	15.3	12.4	37.	13.1
%RSD	.26093	.32629	.09321	.21567
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.891%	111.69%	111.16%	114.22%
Range				

Sample Name: 240-86032-b-4-a Acquired: 10/9/2017 23:05:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1220	67706.	37.791	191.62	190.01	5.0924	80352.	.5518
Stddev	.0850	315.	1.936	.89	.25	.0240	495.	.1492
%RSD	4.0038	.46513	5.1234	.46445	.13335	.47208	.61647	27.03
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	128.35	120.58	104.85	93324.	35095.	82.406	44749.	1736.8
Stddev	.71	.49	.51	521.	163.	1.115	369.	3.2
%RSD	.55284	.40659	.48958	.55857	.46562	1.3537	.82426	.18586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.76346	1930.2	237.14	26.558	-1.089	.38057	23.907	330.22
Stddev	.50226	5.4	1.55	1.218	.695	1.5822	.722	.34
%RSD	65.788	.28153	.65327	4.5874	63.81	415.74	3.0206	.10292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86032-b-4-a Acquired: 10/9/2017 23:05:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.8871	44.518	236.85	1878.6	298.97
Stddev	1.9187	1.447	.51	18.3	3.86
%RSD	66.459	3.2499	.21336	.97151	1.2925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5603.1	3817.0	39644.	6215.9
Stddev	2.3	3.8	64.	32.0
%RSD	.04064	.09841	.16218	.51478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.576%	112.51%	110.58%	116.51%
Range				

Sample Name: 240-86023-h-1-a Acquired: 10/9/2017 23:09:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.3099	46582.	29.377	25.397	429.72	2.3408	75479.
Stddev	.3543	609.	.362	.192	5.58	.1223	1000.
%RSD	27.045	1.3074	1.2336	.75750	1.2992	5.2244	1.3249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.157	58.856	113.78	95.344	103860.	6100.2	42.800
Stddev	.067	.614	.56	.827	1392.	71.9	.363
%RSD	5.790	1.0425	.49292	.86736	1.3407	1.1788	.84705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	33906.	3302.2	2.4923	908.28	137.82	53.270	.5704
Stddev	366.	18.0	.3268	10.63	.43	.992	.7247
%RSD	1.0789	.54574	13.113	1.1705	.31004	1.8614	127.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86023-h-1-a Acquired: 10/9/2017 23:09:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0891	30.559	2159.8	.71117	194.21	214.41	2440.5
Stddev	2.6855	.819	1.6	2.3096	3.35	.94	63.9
%RSD	86.936	2.6802	.07608	324.76	1.7237	.43803	2.6196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	102.32
Stddev	3.30
%RSD	3.2218
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5666.7	3675.5	38667.	5990.9
Stddev	9.2	1.9	35.	72.9
%RSD	.16258	.05178	.08996	1.2172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.604%	108.34%	107.85%	112.29%
Range				

Sample Name: 240-86023-g-2-a Acquired: 10/9/2017 23:14:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.2969	46783.	24.567	42.255	536.63	2.7681	95579.	1.070
Stddev	.0270	42.	1.803	.459	.13	.0841	64.	.114
%RSD	2.0836	.09031	7.3376	1.0854	.02403	3.0374	.06682	10.62
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	67.651	106.79	166.08	97351.	3977.7	43.346	35549.	2369.5
Stddev	.352	.33	1.94	42.	23.3	.885	48.	5.2
%RSD	.52054	.30608	1.1699	.04269	.58691	2.0424	.13486	.22042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.6000	1654.3	148.22	48.204	3.468	.48130	25.680	1441.7
Stddev	.0895	55.1	.47	2.049	1.438	4.0177	.948	2.0
%RSD	3.4431	3.3322	.31671	4.2503	41.47	834.76	3.6907	.13591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86023-g-2-a Acquired: 10/9/2017 23:14:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.7504	186.05	208.05	1991.9	156.27
Stddev	.9678	2.66	.44	9.1	3.14
%RSD	55.290	1.4310	.21354	.45830	2.0089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5657.6	3682.4	38680.	6048.1
Stddev	2.4	3.6	44.	18.9
%RSD	.04326	.09739	.11325	.31219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.456%	108.55%	107.89%	113.37%
Range				

Sample Name: 240-86023-h-3-a Acquired: 10/9/2017 23:18:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.6881	61194.	48.805	59.792	600.97	3.3394	129070.
Stddev	.4364	66.	1.041	.354	1.03	.0759	335.
%RSD	25.854	.10813	2.1323	.59276	.17108	2.2722	.25955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.489	120.47	141.58	165.54	151880.	9270.6	60.651
Stddev	.071	.65	.89	.92	170.	20.9	.675
%RSD	2.037	.54277	.63041	.55352	.11190	.22543	1.1133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50691.	5368.0	3.0252	3481.8	295.60	119.90	2.821
Stddev	124.	35.7	.1191	1.5	.84	.78	1.938
%RSD	.24369	.66595	3.9378	.04382	.28305	.65354	68.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86023-h-3-a Acquired: 10/9/2017 23:18:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.3269	32.090	1572.4	.97714	221.63	372.25	3387.1
Stddev	5.0985	1.183	2.5	.62413	1.66	1.76	36.0
%RSD	117.83	3.6857	.15595	63.873	.74804	.47351	1.0626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	179.22
Stddev	2.18
%RSD	1.2167
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5470.3	3631.4	38290.	6002.2
Stddev	13.9	4.7	94.	11.3
%RSD	.25362	.12837	.24662	.18806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.430%	107.04%	106.80%	112.50%
Range				

Sample Name: 240-86023-i-4-a Acquired: 10/9/2017 23:23:35 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.2870	55908.	21.678	49.046	870.63	2.8983
Stddev	.1023	39.	3.965	.243	1.28	.0887
%RSD	3.1117	.06927	18.290	.49574	.14703	3.0603
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 963430.	3.059	70.556	77.449	67.118	69740.
Stddev	2454.	.103	.775	.162	.722	128.
%RSD	.25469	3.372	1.0982	.20953	1.0753	.18331
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2897.7	92.633	42547.	5840.2	2.8398	1579.0
Stddev	25.4	2.231	127.	1.9	.3806	4.6
%RSD	.87502	2.4086	.29850	.03276	13.401	.29025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-86023-i-4-a Acquired: 10/9/2017 23:23:35 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	154.30	37.672	.6155	1.5302	30.612	1094.7
Stddev	1.78	.598	.9538	1.2219	.858	2.2
%RSD	1.1542	1.5886	155.0	79.853	2.8020	.19842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.6107	161.33	210.51	2480.8	706.41
Stddev	3.0999	3.27	.55	2.2	2.78
%RSD	118.74	2.0262	.26122	.08823	.39383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4814.4	3334.5	34488.	5688.2
Stddev	5.1	7.8	62.	13.7
%RSD	.10664	.23424	.17868	.24010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	77.826%	98.292%	96.195%	106.62%
Range				

Sample Name: 240-86023-i-5-a Acquired: 10/9/2017 23:28:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5466	60739.	25.089	47.541	717.16	2.9632	95914.	1.007
Stddev	.1491	192.	2.914	.813	1.88	.0491	436.	.097
%RSD	9.6389	.31542	11.615	1.7093	.26251	1.6552	.45482	9.607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	57.584	105.71	89.324	88225.	6360.3	43.119	16572.	2855.9
Stddev	.220	.37	1.182	374.	36.1	.964	112.	3.3
%RSD	.38180	.34905	1.3231	.42388	.56775	2.2362	.67578	.11522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.7272	2274.5	133.17	52.806	-2.510	2.7574	29.425	1530.7
Stddev	.2657	14.2	.49	.953	2.752	4.0687	.070	2.5
%RSD	9.7445	.62354	.36811	1.8051	109.7	147.56	.23804	.16256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86023-i-5-a Acquired: 10/9/2017 23:28:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.1433	163.63	213.34	2495.1	353.79
Stddev	1.0572	1.64	.58	1.1	2.54
%RSD	49.325	.99942	.27148	.04367	.71672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5658.4	3687.6	38759.	6057.6
Stddev	9.3	4.2	32.	21.7
%RSD	.16374	.11365	.08177	.35815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.470%	108.70%	108.11%	113.54%
Range				

Sample Name: 240-85998-h-1-a Acquired: 10/9/2017 23:32:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.50320	100060.	54.557	776.46	1355.0	2.7992
Stddev	.32841	333.	2.922	6.04	2.7	.0882
%RSD	65.264	.33322	5.3558	.77815	.19936	3.1523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	289360.	3.183	108.11	464.69	368.65	175370.
Stddev	1772.	.030	.17	1.04	.74	442.
%RSD	.61228	.9547	.16120	.22418	.19941	.25183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13450.	121.80	W 483460.	5227.4	6.1767	2413.6
Stddev	25.	2.38	1407.	15.8	.0169	11.5
%RSD	.18415	1.9543	.29099	.30139	.27336	.47683
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit			450000.			
Low Limit			-500000.			

Sample Name: 240-85998-h-1-a Acquired: 10/9/2017 23:32:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	597.84	1617.8	.6299	.19124	45.947	5665.0
Stddev	1.05	3.0	2.204	.43917	.554	13.6
%RSD	.17596	.18291	349.9	229.65	1.2052	.23928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.6470	456.99	827.93	3160.0	551.67
Stddev	3.4635	2.56	2.33	24.5	4.23
%RSD	210.29	.56042	.28090	.77447	.76665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4885.8	3426.8	35936.	5925.7
Stddev	7.3	.8	46.	15.3
%RSD	.15032	.02419	.12700	.25897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.980%	101.01%	100.23%	111.07%
Range				

Sample Name: CCV-3260525 Acquired: 10/9/2017 23:37:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	984.45	23366.	506.18	4939.5	1953.5	1863.9	48012.	483.8
Stddev	.77	28.	2.15	10.0	5.3	2.1	304.	.6
%RSD	.07815	.11885	.42431	.20330	.27297	.11156	.63285	.1290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2004.2	1865.8	1921.3	22854.	48180.	4711.0	47105.	1913.6
Stddev	1.3	4.9	1.3	87.	85.	18.7	228.	1.8
%RSD	.06486	.26277	.06595	.38063	.17651	.39790	.48386	.09495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1992.2	47003.	2039.3	491.95	485.9	512.79	5049.7	4952.7
Stddev	3.5	102.	.8	1.15	1.6	1.20	2.3	4.2
%RSD	.17571	.21768	.04157	.23473	.3390	.23319	.04575	.08551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/9/2017 23:37:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1010.3	1929.4	2068.5	4957.0	4820.9
Stddev	3.5	7.5	2.3	119.4	21.8
%RSD	.35033	.38942	.11327	2.4085	.45185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5499.5	3388.8	35290.	5506.2
Stddev	7.5	3.8	11.	15.4
%RSD	.13596	.11308	.03124	.28006

Sample Name: CCB Acquired: 10/9/2017 23:42:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22201	-7.6570	-2.0747	3.2732	.01452	.11219	-7.0654	.0432
Stddev	.48431	5.4428	1.5577	.7100	.05263	.09476	2.6975	.1745
%RSD	218.15	71.083	75.082	21.693	362.35	84.467	38.179	403.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08526	-.00918	-.27543	3.0363	76.850	1.4741	13.446	.15108
Stddev	.05570	.09925	.25964	1.6492	41.261	.6900	13.966	.03894
%RSD	65.323	1080.6	94.266	54.316	53.690	46.810	103.87	25.775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.49777	5.1248	.07632	-.15463	2.063	-.30063	.15574	2.4754
Stddev	.20287	3.1761	.77440	.72806	1.539	2.7767	.37614	.3118
%RSD	40.756	61.975	1014.7	470.83	74.62	923.65	241.52	12.594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/9/2017 23:42:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.6796	2.7772	-.36390	3.3165	.04760
Stddev	.7548	4.4043	.19147	3.7820	2.6054
%RSD	44.937	158.59	52.616	114.03	5473.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6387.7	3553.8	37422.	5528.1
Stddev	10.2	3.3	44.	3.8
%RSD	.15954	.09322	.11747	.06798

Sample Name: 240-85998-i-2-a Acquired: 10/9/2017 23:46:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.3008	147580.	62.731	12.530	975.59	4.5144	15222.
Stddev	.2954	455.	2.714	.763	1.93	.0857	52.
%RSD	22.709	.30841	4.3262	6.0922	.19768	1.8988	.33857
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.120	122.44	416.08	352.00	233260.	6980.5	185.20
Stddev	.067	.28	1.73	1.06	1209.	14.7	1.90
%RSD	5.946	.23261	.41647	.30083	.51832	.21065	1.0249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	107120.	2819.8	2.7054	5043.0	671.60	62.925	-1.497
Stddev	434.	17.3	.0931	4.5	3.13	1.511	1.476
%RSD	.40537	.61216	3.4429	.08891	.46639	2.4007	98.63
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85998-i-2-a Acquired: 10/9/2017 23:46:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.46886	30.865	2604.1	4.1620	387.44	603.57	1148.3
Stddev	2.6974	.782	5.6	.5682	1.50	.70	7.7
%RSD	575.31	2.5344	.21444	13.651	.38771	.11521	.67401
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	98.387
Stddev	2.304
%RSD	2.3419
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5514.9	3843.2	39875.	6339.6
Stddev	10.2	6.4	74.	23.1
%RSD	.18554	.16690	.18670	.36426
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.149%	113.29%	111.22%	118.83%
Range				

Sample Name: 240-85998-h-3-a Acquired: 10/9/2017 23:51:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04054	236090.	2.6132	85.038	1050.5	.74820	107140.
Stddev	.37786	286.	.3803	1.031	1.9	.10877	423.
%RSD	932.06	.12103	14.554	1.2128	.17836	14.538	.39450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.025	326.60	1397.3	695.03	382750.	19592.	185.76
Stddev	.202	2.75	3.0	1.56	3539.	24.	.98
%RSD	9.999	.84059	.21798	.22434	.92469	.12396	.52592
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	174960.	8164.1	-.51130	6021.9	385.86	7.6749	-5.280
Stddev	707.	9.7	.71074	14.4	2.50	2.4444	1.460
%RSD	.40404	.11865	139.01	.23876	.64693	31.850	27.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85998-h-3-a Acquired: 10/9/2017 23:51:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.9264	35.754	24997.	9.6593	1200.4	607.69	1497.1
Stddev	3.7069	1.493	47.	3.2753	5.4	1.30	9.1
%RSD	126.67	4.1765	.18850	33.908	.45055	.21326	.60558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	178.48
Stddev	4.97
%RSD	2.7870
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5134.8	3727.8	39156.	6343.6
Stddev	5.4	2.1	89.	16.0
%RSD	.10604	.05540	.22762	.25162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.005%	109.89%	109.21%	118.90%
Range				

Sample Name: 240-85998-i-4-a Acquired: 10/9/2017 23:56:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.26354	216890.	-1.1828	91.391	927.84	.77116	138510.
Stddev	.31929	776.	3.0124	1.385	4.84	.09552	559.
%RSD	121.15	.35771	254.67	1.5157	.52181	12.387	.40366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.914	337.66	1285.4	594.83	321020.	15329.	127.13
Stddev	.103	.39	3.2	.87	2865.	124.	1.01
%RSD	5.371	.11461	.24583	.14618	.89234	.81131	.79431
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	141930.	7107.3	-.75030	4915.6	382.98	5.5588	-5.736
Stddev	517.	22.9	.33697	18.5	.87	4.2894	1.758
%RSD	.36416	.32283	44.911	.37582	.22842	77.163	30.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85998-i-4-a Acquired: 10/9/2017 23:56:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.80150	35.278	22913.	8.3787	1092.0	517.16	1470.8
Stddev	1.9987	.482	26.	2.7958	8.1	1.54	14.0
%RSD	249.38	1.3662	.11399	33.368	.74158	.29796	.95075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	197.59
Stddev	1.82
%RSD	.92359
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5148.8	3760.0	39583.	6409.8
Stddev	5.8	4.4	89.	30.3
%RSD	.11188	.11822	.22488	.47337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.232%	110.83%	110.41%	120.14%
Range				

Sample Name: 240-85998-b-5-a Acquired: 10/10/2017 0:01:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0168	118150.	54.370	370.25	1891.8	3.2294	682110.
Stddev	.3475	290.	.606	1.93	2.1	.0532	3181.
%RSD	34.174	.24528	1.1150	.52009	.11299	1.6489	.46636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.945	114.87	468.18	362.93	187470.	18241.	139.48
Stddev	.080	.86	.91	1.45	445.	55.	1.06
%RSD	1.611	.74504	.19453	.39881	.23758	.30160	.76339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	371800.	4789.1	4.4492	6149.7	641.79	677.00	2.300
Stddev	904.	12.2	.1034	17.0	4.49	2.43	1.554
%RSD	.24302	.25461	2.3243	.27589	.69890	.35837	67.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85998-b-5-a Acquired: 10/10/2017 0:01:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.3423	65.693	4882.2	3.7931	498.56	982.20	3604.2
Stddev	2.8054	1.175	2.2	3.5904	2.43	1.54	40.4
%RSD	209.01	1.7893	.04475	94.655	.48734	.15690	1.1205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1121.0
Stddev	.2
%RSD	.01638
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4671.8	3414.2	36033.	6006.9
Stddev	6.8	2.0	39.	8.7
%RSD	.14624	.05783	.10705	.14562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.521%	100.64%	100.50%	112.59%
Range				

Sample Name: 240-85770-a-1-b Acquired: 10/10/2017 0:06:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	s 2.4982	1144.0	k -.85738	8.4946	7111.9	-.01830	6337.8
Stddev	.5038	9.7	1.5204	.0446	37.0	.06653	50.6
%RSD	20.165	.84907	177.33	.52552	.52062	363.46	.79786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	k -.2136	k 54.917	s 1.1932	s 1.9715	132.57	88.973	.93905
Stddev	.0185	.161	.6345	1.2276	9.89	13.028	.40475
%RSD	8.679	.29263	53.181	62.266	7.4613	14.643	43.102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	233.05	s 5.1523	781.12	112.90	k .56294	k .09587	k -.3841
Stddev	22.88	3.0300	2.80	2.75	.45324	.07505	1.187
%RSD	9.8190	58.809	.35898	2.4396	80.513	78.285	309.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85770-a-1-b Acquired: 10/10/2017 0:06:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	k 1.8518	62.309	s 40.673	k -.92497	4.6002	k 247.57	214.23
Stddev	3.4109	.073	9.629	.64818	4.8125	.22	8.27
%RSD	184.19	.11782	23.675	70.076	104.61	.08703	3.8623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	240.07
Stddev	.95
%RSD	.39716
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6283.0	3469.7	^ *****	5728.3
Stddev	14.1	8.4	-----	42.4
%RSD	.22459	.24331	-----	.74022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.57%	102.28%	96.989%	107.37%
Range				

Sample Name: lb 240-297884/1-b Acquired: 10/10/2017 0:10:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17697	-4.3781	-1.4506	4.7582	.91404	-.09906	61.566	.1240
Stddev	.01638	14.511	1.2742	.7037	.18745	.08489	4.125	.0692
%RSD	9.2536	331.43	87.837	14.789	20.507	85.695	6.7009	55.79
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09865	.55208	1.2100	7.7285	2.0815	-1.5572	3.0783	.16228
Stddev	.17042	.05243	.4388	1.0276	7.6631	.2232	16.186	.01246
%RSD	172.75	9.4967	36.262	13.296	368.15	14.332	525.81	7.6767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.29512	65.561	.07036	-.03055	.0391	3.3738	2.0922	1.3753
Stddev	.10788	1.091	.20135	1.9239	.9102	.7893	.6773	.0658
%RSD	36.555	1.6649	286.16	6298.6	2328.	23.395	32.371	4.7822
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: lb 240-297884/1-b Acquired: 10/10/2017 0:10:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.1089	-.14737	2.7333	55.002	1.7795
Stddev	.7920	2.0981	.1100	6.836	3.2696
%RSD	19.276	1423.7	4.0236	12.429	183.74
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6482.6	3556.4	38345.	5756.3
Stddev	12.5	7.8	41.	32.4
%RSD	.19255	.21997	.10768	.56202

Sample Name: mb 240-297941/2-a Acquired: 10/10/2017 0:15:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16354	15.673	-5.0387	1.3674	-.22437	-.17891	-2.6055	.1933
Stddev	.52776	4.679	2.3135	.5070	.11444	.02480	1.1452	.0483
%RSD	322.71	29.853	45.914	37.081	51.004	13.864	43.953	24.96
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04686	-.06964	-.39899	.07913	19.256	-1.9282	7.0176	.16865
Stddev	.18381	.08336	.59821	1.9478	42.328	.2818	24.709	.01564
%RSD	392.27	119.70	149.93	2461.4	219.82	14.613	352.10	9.2727
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20071	-7.8319	.04324	.29168	.1780	.66982	.28404	.77066
Stddev	.06965	2.1964	.27206	.76214	.7452	2.7947	.55617	.20354
%RSD	34.703	28.045	629.24	261.30	418.6	417.24	195.80	26.411
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297941/2-a Acquired: 10/10/2017 0:15:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.7586	2.8827	.18580	12.852	-.08303
Stddev	.9534	5.4098	.04885	8.198	2.9276
%RSD	54.210	187.67	26.289	63.788	3526.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6414.0	3562.8	38124.	5683.6
Stddev	8.7	4.3	37.	7.5
%RSD	.13612	.11979	.09645	.13207

Sample Name: lcs 240-297941/3-a Acquired: 10/10/2017 0:20:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.748	1903.0	2159.7	1015.4	2023.0	47.207	49313.	54.32
Stddev	.247	3.6	3.4	3.0	4.9	.213	296.	.21
%RSD	.47725	.18698	.15540	.29325	.24109	.45156	.60076	.3829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	503.20	190.53	251.68	934.92	49208.	961.46	47554.	491.93
Stddev	.57	.09	2.22	1.11	163.	5.22	196.	1.71
%RSD	.11311	.04845	.88078	.11894	.33149	.54276	.41143	.34823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1046.2	47923.	522.38	511.64	506.5	2213.6	2013.2	1018.5
Stddev	3.2	129.	.13	.47	1.3	7.9	2.1	3.2
%RSD	.30369	.27011	.02417	.09218	.2613	.35780	.10513	.30938
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-297941/3-a Acquired: 10/10/2017 0:20:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2024.5	498.98	520.32	1140.3	992.12
Stddev	6.0	2.27	1.76	30.9	4.32
%RSD	.29768	.45501	.33736	2.7113	.43526
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5638.7	3347.2	35677.	5639.7
Stddev	13.0	7.0	69.	20.9
%RSD	.22967	.20931	.19385	.37095

Sample Name: 240-85796-a-3-d Acquired: 10/10/2017 0:24:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-5.2957	80.179	3.1304	127.21	248.26	.68939
Stddev	.1725	16.427	2.2502	1.16	.28	.06524
%RSD	3.2577	20.488	71.880	.91361	.11450	9.4629
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1774500.	.1566	-2.4562	32.277	3.0678	2.7650
Stddev	9504.	.0564	.1586	.395	.1378	.7431
%RSD	.53560	36.00	6.4552	1.2238	4.4912	26.877
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23010.	87.271	1234.7	.20249	10.359	12962.
Stddev	53.	.480	13.2	.00802	.285	26.
%RSD	.23032	.54998	1.0658	3.9592	2.7560	.20312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85796-a-3-d Acquired: 10/10/2017 0:24:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6872	2.1024	2.405	.88920	.35307	-2.3248
Stddev	.5107	1.0393	2.579	1.7696	.52806	.1188
%RSD	13.851	49.433	107.2	199.01	149.56	5.1120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.2011	15.326	.48776	11049.	1699.1
Stddev	2.5016	.905	.09258	445.	8.6
%RSD	78.149	5.9020	18.981	4.0265	.50392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4577.6	2938.8	31093.	5302.8
Stddev	5.7	3.9	45.	9.2
%RSD	.12502	.13129	.14575	.17421
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.997%	86.626%	86.726%	99.395%
Range				

Sample Name: SD 240-85796-a-3-d@5 Acquired: 10/10/2017 0:29:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0373	11.879	-1.0068	24.223	49.272	.10826	383280.
Stddev	.1625	7.730	5.3049	.719	.343	.13055	1385.
%RSD	15.666	65.074	526.88	2.9677	.69544	120.59	.36135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1336	-.86426	6.4166	.37996	-.51430	4428.8	14.361
Stddev	.2236	.07972	.3576	.62533	.59244	22.8	1.347
%RSD	167.3	9.2244	5.5727	164.58	115.19	.51470	9.3800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	260.25	.02963	2.0995	2473.5	1.0329	-.12653	2.527
Stddev	10.15	.02954	.1499	15.4	.1481	1.5864	2.148
%RSD	3.8991	99.714	7.1382	.62458	14.337	1253.8	84.99
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 240-85796-a-3-d@5 Acquired: 10/10/2017 0:29:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.3934	.18609	-.58892	.16049	2.8187	.21566	2210.2
Stddev	1.8429	.17828	.11554	1.8055	5.4606	.10059	82.4
%RSD	132.26	95.804	19.618	1125.0	193.73	46.644	3.7268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	354.00
Stddev	5.52
%RSD	1.5601
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5396.0	3254.6	34468.	5473.9
Stddev	8.9	6.3	31.	26.2
%RSD	.16474	.19446	.08977	.47938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.228%	95.935%	96.141%	102.60%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 0:34:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	981.19	23088.	508.85	4945.2	1961.5	1838.2	47665.	483.8
Stddev	.84	41.	3.72	3.5	3.5	6.8	115.	1.0
%RSD	.08533	.17627	.73183	.06989	.18093	.37195	.24038	.2042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2016.0	1841.3	1911.7	22388.	48193.	4665.5	46745.	1888.2
Stddev	2.2	1.0	1.0	48.	57.	13.6	241.	1.8
%RSD	.11123	.05323	.05244	.21589	.11797	.29228	.51520	.09312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2019.5	46793.	2060.6	494.73	487.2	513.05	5054.4	4942.9
Stddev	3.3	59.	3.7	2.65	.9	1.93	10.2	5.9
%RSD	.16268	.12701	.18082	.53558	.1758	.37541	.20211	.11872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3260525 Acquired: 10/10/2017 0:34:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1020.9	1929.3	2075.2	4847.4	4798.7
Stddev	2.9	14.9	2.6	118.5	4.8
%RSD	.28638	.77138	.12403	2.4452	.10092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5438.0	3353.1	35204.	5507.2
Stddev	3.4	7.9	64.	18.6
%RSD	.06205	.23426	.18114	.33712

Sample Name: CCB Acquired: 10/10/2017 0:38:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11897	-21.069	-3.0169	2.6724	-.22135	.05871	-3.5657	.0574
Stddev	.39257	3.868	1.1436	.4512	.12683	.04936	1.8513	.0609
%RSD	329.97	18.357	37.906	16.883	57.297	84.074	51.921	106.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23752	.19874	-.04356	-1.1084	30.240	1.0926	-9.8161	.09114
Stddev	.25229	.10895	.60328	.4957	11.164	.4436	22.248	.03267
%RSD	106.22	54.822	1384.8	44.723	36.920	40.596	226.65	35.843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.33962	-7.3456	.09932	-.09068	2.491	-.24257	.08364	2.3394
Stddev	.08692	.4814	.35351	2.2271	1.363	3.1564	.69163	.1561
%RSD	25.592	6.5534	355.93	2456.0	54.69	1301.3	826.91	6.6720
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 0:38:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.02777	4.9224	-.45626	15.536	-2.2132
Stddev	.09234	1.7221	.16246	27.460	3.7388
%RSD	332.48	34.986	35.607	176.75	168.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6368.9	3539.7	37600.	5576.7
Stddev	2.8	6.5	17.	22.0
%RSD	.04396	.18272	.04639	.39536

Sample Name: PDS 240-85796-a-3-d Acquired: 10/10/2017 0:43:17 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.518	2082.6	2327.1	1190.7	2271.1	45.836
Stddev	.847	16.0	5.6	1.8	4.1	.079
%RSD	1.5528	.76609	.23997	.15138	.17983	.17288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1766200.	57.93	522.06	214.70	263.20	898.75
Stddev	1171.	.31	.82	.58	1.29	4.38
%RSD	.06632	.5281	.15620	.26964	.49161	.48766
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	75877.	1125.9	46371.	467.98	1061.1	63987.
Stddev	110.	2.1	170.	1.49	1.9	78.
%RSD	.14431	.18593	.36675	.31789	.17681	.12252
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: PDS 240-85796-a-3-d Acquired: 10/10/2017 0:43:17 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	533.69	476.08	550.7	2327.1	2161.2	1032.2
Stddev	.21	4.85	4.6	6.6	5.4	1.7
%RSD	.03909	1.0182	.8337	.28237	.25213	.16556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1962.4	501.87	537.88	12817.	2587.8
Stddev	5.9	3.48	2.66	346.	1.3
%RSD	.29968	.69366	.49370	2.6967	.04834
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4462.9	2908.8	30923.	5320.2
Stddev	6.5	2.2	71.	17.0
%RSD	.14489	.07715	.23111	.31898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.144%	85.744%	86.253%	99.721%
Range				

Sample Name: 240-85796-a-3-e ms@5 Acquired: 10/10/2017 0:47:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 204.00	382.40	1051.6	231.29	9818.0	9.1177	391890.
Stddev	.95	10.63	3.0	.86	84.5	.1375	2426.
%RSD	.46658	2.7790	.28190	.37333	.86084	1.5079	.61900
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	202.6	98.901	918.23	49.602	179.70	14342.	209.59
Stddev	1.7	.116	2.09	.803	.96	42.	1.25
%RSD	.8241	.11741	.22733	1.6181	.53606	.29629	.59847
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9549.9	96.394	206.52	12060.	105.37	1000.4	101.0
Stddev	35.7	.336	.17	24.	.15	2.2	2.9
%RSD	.37398	.34809	.08416	.20143	.14620	.21549	2.856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85796-a-3-e ms@5 Acquired: 10/10/2017 0:47:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	210.81	404.98	198.84	401.82	100.84	103.74	1838.0
Stddev	1.58	.86	1.08	.78	3.55	.51	21.7
%RSD	.75148	.21322	.54317	.19349	3.5253	.49635	1.1803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	540.69
Stddev	6.08
%RSD	1.1245
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5321.7	3234.1	34124.	5447.5
Stddev	7.3	1.5	104.	24.3
%RSD	.13639	.04659	.30548	.44685
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.027%	95.333%	95.181%	102.11%
Range				

Sample Name: 240-85796-a-3f msd@5 Acquired: 10/10/2017 0:52:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 198.90	366.86	1038.9	226.66	9698.2	8.9609	383010.
Stddev	.35	5.99	8.0	.36	34.5	.0703	2806.
%RSD	.17428	1.6322	.76895	.16068	.35583	.78465	.73255
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	199.9	97.336	901.38	48.218	175.38	14072.	203.34
Stddev	.4	.207	1.69	.234	3.00	11.	2.27
%RSD	.2210	.21293	.18730	.48549	1.7133	.08097	1.1148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9369.0	94.235	202.80	11813.	102.92	984.51	99.00
Stddev	16.9	.201	.46	31.	.12	4.48	1.09
%RSD	.18075	.21355	.22827	.26023	.11499	.45481	1.097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85796-a-3f msd@5 Acquired: 10/10/2017 0:52:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	207.44	397.67	193.76	396.34	99.594	102.19	786.28
Stddev	1.58	.68	.14	4.71	4.030	.24	6.02
%RSD	.76307	.17079	.07313	1.1871	4.0465	.23004	.76590
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	533.39
Stddev	4.26
%RSD	.79902
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5342.4	3254.9	34410.	5494.5
Stddev	2.4	1.8	23.	22.6
%RSD	.04513	.05550	.06780	.41071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.362%	95.945%	95.978%	102.99%
Range				

Sample Name: 240-85796-b-1-d Acquired: 10/10/2017 0:57:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.5735	-13.433	.68290	140.62	254.02	.65982
Stddev	.0983	9.652	2.7221	.59	.18	.07263
%RSD	2.1492	71.854	398.60	.41922	.07040	11.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1634100.	.4024	-2.5442	22.681	2.2666	-.91394
Stddev	13124.	.0790	.5341	.383	.6611	1.2792
%RSD	.80312	19.62	20.993	1.6907	29.167	139.97
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21315.	90.454	28864.	.09325	8.1642	11138.
Stddev	43.	.265	100.	.06688	.1652	30.
%RSD	.20104	.29260	.34506	71.722	2.0237	.26882
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85796-b-1-d Acquired: 10/10/2017 0:57:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.9473	.23709	4.628	.22114	.10735	-3.0290
Stddev	.2517	1.8618	1.915	2.7575	.96053	.1137
%RSD	8.5409	785.25	41.38	1246.9	894.80	3.7534
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.2065	24.607	.06083	19134.	1568.8
Stddev	2.1741	.117	.27322	255.	15.2
%RSD	180.19	.47613	449.14	1.3309	.97119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4597.6	2946.3	31305.	5350.5
Stddev	6.2	3.6	28.	4.9
%RSD	.13502	.12217	.09023	.09129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.321%	86.847%	87.318%	100.29%
Range				

Sample Name: 240-85796-b-5-d Acquired: 10/10/2017 1:01:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-5.2153	154.43	-.09143	153.49	290.27	.68278
Stddev	.5748	7.54	1.6713	2.19	1.12	.03819
%RSD	11.022	4.8828	1828.1	1.4256	.38652	5.5935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1727400.	.0432	-2.2713	35.148	2.1122	1.1505
Stddev	16324.	.0609	.3736	.389	.2249	.5383
%RSD	.94498	141.0	16.447	1.1055	10.646	46.784
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	16719.	85.413	393.58	.03039	18.442	9316.2
Stddev	41.	1.062	7.13	.02930	.148	29.6
%RSD	.24479	1.2439	1.8118	96.406	.80186	.31816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85796-b-5-d Acquired: 10/10/2017 1:01:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3763	.49230	4.361	-1.6061	-.11959	-3.3807
Stddev	.3528	.93436	1.944	3.8970	.64362	.2174
%RSD	10.448	189.79	44.58	242.64	538.19	6.4317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.3889	8.8680	.35607	9151.3	1644.0
Stddev	1.3816	5.0684	.15134	114.6	13.0
%RSD	40.768	57.154	42.503	1.2525	.79105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4597.4	2948.6	31210.	5320.6
Stddev	8.7	6.2	57.	15.5
%RSD	.18854	.21009	.18116	.29130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.319%	86.915%	87.053%	99.728%
Range				

Sample Name: 240-85796-b-7-d Acquired: 10/10/2017 1:06:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-5.0451	57.339	.54358	103.70	258.61	.70336
Stddev	.3232	16.345	2.0583	1.59	.41	.08442
%RSD	6.4055	28.506	378.65	1.5343	.15702	12.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1720500.	.3489	-2.3051	59.512	.88359	.16682
Stddev	3878.	.0567	.2289	.341	.53544	.74541
%RSD	.22542	16.24	9.9281	.57344	60.598	446.84
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22824.	80.645	1388.0	.20209	4.5142	12625.
Stddev	21.	.636	5.4	.03169	.4136	21.
%RSD	.09092	.78832	.38951	15.683	9.1622	.16962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85796-b-7-d Acquired: 10/10/2017 1:06:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.3634	-1.1245	4.091	-1.1454	.50889	-3.3261
Stddev	.2286	1.6597	.679	2.1619	.21649	.1624
%RSD	9.6748	147.60	16.60	188.74	42.542	4.8828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.6611	17.951	-.12027	10885.	1474.2
Stddev	.8091	.785	.34938	472.	3.8
%RSD	48.707	4.3758	290.50	4.3392	.25877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4607.3	2939.1	31190.	5320.5
Stddev	4.3	1.9	19.	9.3
%RSD	.09286	.06336	.06221	.17543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.478%	86.637%	86.996%	99.726%
Range				

Sample Name: 240-85796-b-9-c Acquired: 10/10/2017 1:11:37 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.7873	67.231	.66573	93.363	235.26	.49332
Stddev	.1182	7.415	.46370	1.042	.77	.03149
%RSD	2.4687	11.029	69.652	1.1164	.32881	6.3823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1632600.	.1406	-1.9868	66.103	1.4910	-1.6936
Stddev	12252.	.0856	.2492	.773	1.3572	.8716
%RSD	.75048	60.90	12.543	1.1691	91.023	51.466
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19108.	72.515	798.44	.07235	6.0601	12017.
Stddev	70.	1.043	3.73	.08650	.1968	34.
%RSD	.36654	1.4383	.46686	119.56	3.2481	.28457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85796-b-9-c Acquired: 10/10/2017 1:11:37 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0335	.72572	4.707	3.9052	.14465	-3.3274
Stddev	.5060	1.5726	.998	3.0947	.33307	.0557
%RSD	16.680	216.69	21.21	79.244	230.27	1.6728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.3174	10.889	-.10898	10514.	1369.0
Stddev	.1707	3.953	.14068	250.	1.5
%RSD	3.9532	36.304	129.09	2.3773	.11012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4647.8	2951.4	31329.	5369.3
Stddev	1.7	2.3	7.	9.9
%RSD	.03562	.07861	.02328	.18473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.133%	87.000%	87.385%	100.64%
Range				

Sample Name: 240-85796-b-11-c Acquired: 10/10/2017 1:16:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-5.2495	-14.763	2.4330	127.13	253.81	.55258
Stddev	.1469	18.815	.9966	1.39	.33	.25947
%RSD	2.7982	127.45	40.963	1.0937	.13063	46.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1697200.	.2390	-2.2217	61.743	2.0478	1.3963
Stddev	12929.	.0824	.2695	.322	.1439	2.3739
%RSD	.76177	34.46	12.129	.52079	7.0290	170.02
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23721.	78.357	14553.	.20123	4.6161	20298.
Stddev	35.	1.426	76.	.03731	.4130	58.
%RSD	.14947	1.8202	.52539	18.541	8.9470	.28801
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85796-b-11-c Acquired: 10/10/2017 1:16:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.0007	.99757	3.058	-1.2253	-.17135	-3.2894
Stddev	.2399	.70743	2.350	3.4746	.92693	.0966
%RSD	5.9966	70.916	76.86	283.58	540.95	2.9353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.1645	21.952	.41580	14852.	1466.3
Stddev	2.3386	4.143	.34869	260.	10.2
%RSD	108.04	18.871	83.859	1.7526	.69226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4574.5	2925.8	30970.	5300.1
Stddev	2.3	1.7	83.	20.8
%RSD	.05124	.05709	.26767	.39280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.949%	86.243%	86.384%	99.343%
Range				

Sample Name: 240-85995-i-1-e Acquired: 10/10/2017 1:21:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.1818	49.895	4.5073	170.76	382.15	.65673
Stddev	.2432	4.041	3.6466	.59	.80	.10134
%RSD	5.8160	8.0983	80.905	.34284	.20823	15.432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1363200.	2.850	19.084	1.8980	8.2044	52.174
Stddev	1942.	.025	.384	.2177	.2345	.604
%RSD	.14246	.8581	2.0107	11.470	2.8585	1.1575
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1312.1	39.701	158910.	2816.5	1.0244	5973.3
Stddev	2.0	.825	408.	5.8	.1238	12.2
%RSD	.15612	2.0784	.25658	.20471	12.085	.20444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85995-i-1-e Acquired: 10/10/2017 1:21:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26.278	15.983	3.273	-.31399	.05414	-1.9479
Stddev	.845	1.500	2.847	2.6304	.14959	.3262
%RSD	3.2140	9.3848	86.98	837.76	276.28	16.744
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.1480	2.2121	41.339	2340.8	1100.8
Stddev	.3421	2.2962	.073	26.4	5.3
%RSD	15.926	103.80	.17623	1.1278	.48557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4604.2	3022.5	32302.	5485.8
Stddev	6.7	1.1	25.	13.1
%RSD	.14581	.03642	.07614	.23923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.428%	89.095%	90.098%	102.82%
Range				

Sample Name: 240-85996-i-1-c Acquired: 10/10/2017 1:26:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.8014	135.48	1.6706	50.297	116.54	.84198
Stddev	.4285	10.92	1.7622	1.044	.23	.06203
%RSD	8.9256	8.0572	105.49	2.0764	.19307	7.3675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 1662300.	1.365	2.8221	2.2910	149.31	212.15
Stddev	11997.	.018	.3006	.2680	.83	2.93
%RSD	.72175	1.311	10.652	11.696	.55556	1.3816
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	875.98	44.831	22226.	819.63	4.7195	5135.5
Stddev	16.93	.652	84.	.48	.6045	7.8
%RSD	1.9331	1.4535	.37570	.05820	12.808	.15286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-85996-i-1-c Acquired: 10/10/2017 1:26:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.092	.26310	3.001	-.48223	.76791	-1.1463
Stddev	.758	.51479	2.222	.93145	.84099	.1066
%RSD	7.5136	195.66	74.04	193.16	109.52	9.2997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-6.0468	5.1342	126.18	1718.9	1063.4
Stddev	3.5426	3.0961	.75	15.9	5.0
%RSD	58.586	60.304	.59363	.92375	.47041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4619.8	2978.3	31790.	5419.3
Stddev	3.4	4.3	37.	5.3
%RSD	.07422	.14583	.11631	.09808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.681%	87.791%	88.669%	101.58%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 1:30:48 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	963.49	23030.	499.53	4906.4	1929.7	1840.0	46914.
Stddev	3.51	41.	3.84	4.5	2.6	2.1	133.
%RSD	.36387	.17753	.76840	.09106	.13520	.11601	.28408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	480.3	1981.9	1834.2	1881.1	F 22173.	47610.	4617.3
Stddev	.6	2.3	1.3	9.9	47.	126.	5.9
%RSD	.1303	.11390	.07242	.52601	.21343	.26454	.12814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45936.	1866.5	1983.0	46137.	2019.1	483.25	479.9
Stddev	78.	4.6	1.5	28.	3.2	2.78	3.3
%RSD	.16953	.24401	.07526	.05997	.16078	.57515	.6857
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV-3260525 Acquired: 10/10/2017 1:30:48 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	502.28	4985.1	4869.8	1000.3	1890.9	2037.8	4867.5
Stddev	3.81	9.1	8.2	4.5	4.0	4.5	98.1
%RSD	.75834	.18179	.16781	.44721	.21047	.22185	2.0145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4726.0
Stddev	9.1
%RSD	.19241
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5501.9	3388.4	35626.	5563.6
Stddev	7.2	1.7	83.	8.3
%RSD	.13057	.05083	.23188	.14942

Sample Name: CCB Acquired: 10/10/2017 1:35:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.32568	-11.517	-2.7211	1.9717	-.29599	.05823	22.198	.0267
Stddev	.16585	20.749	2.4415	.2556	.25529	.07809	3.449	.0678
%RSD	50.924	180.15	89.725	12.966	86.249	134.11	15.535	253.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02414	.36620	-.22706	-.49493	77.015	.93378	-8.3456	.05897
Stddev	.12883	.18207	.40057	.55933	19.165	2.1484	13.403	.04441
%RSD	533.76	49.718	176.42	113.01	24.885	230.07	160.60	75.313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.48100	15.756	.10895	.34236	1.252	-1.3591	.23785	2.4167
Stddev	.21004	5.197	.51587	1.1777	2.473	1.5351	.60589	.1468
%RSD	43.667	32.984	473.50	344.01	197.6	112.95	254.74	6.0737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 1:35:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.37063	2.3174	-.40305	12.164	1.1855
Stddev	1.6462	1.5089	.09454	8.469	4.3642
%RSD	444.17	65.111	23.456	69.618	368.14
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6433.6	3563.4	38093.	5661.3
Stddev	7.9	5.7	47.	12.8
%RSD	.12303	.16041	.12209	.22566

Sample Name: lb 240-297877/1-b Acquired: 10/10/2017 1:39:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17456	18.856	.40664	19.678	1.1636	.01560
Stddev	.37959	3.896	.84090	.592	.1797	.07748
%RSD	217.46	20.663	206.79	3.0108	15.444	496.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	77.387	.1632	-.83609	1.1114	.36034	16.413
Stddev	3.593	.0693	.27898	.0368	.55214	1.223
%RSD	4.6430	42.48	33.367	3.3098	153.23	7.4518
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	588.65	7.2915	16.501	.59410	.32848	1148700.
Stddev	68.43	2.0143	14.101	.04332	.19198	19597.
%RSD	11.625	27.625	85.458	7.2915	58.445	1.7061
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit						
Low Limit						

Sample Name: lb 240-297877/1-b Acquired: 10/10/2017 1:39:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.9599	-.52315	-.2383	5.2436	.96923	1.0965
Stddev	.1069	.35292	1.975	1.3265	.91035	.1361
%RSD	3.6103	67.460	828.9	25.297	93.925	12.410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.3040	1.4448	6.0391	304.40	-3.1098
Stddev	2.6959	1.5381	.1203	12.35	2.3329
%RSD	117.01	106.46	1.9912	4.0585	75.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4880.2	3130.1	31696.	5510.0
Stddev	11.6	4.7	70.	13.5
%RSD	.23839	.14915	.21984	.24576

Sample Name: mb 240-297939/2-a Acquired: 10/10/2017 1:44:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01158	-16.192	-1.9900	.59167	-.13019	-.09031	134.44	.1018
Stddev	.16464	2.035	1.8737	.13065	.19252	.08238	3.03	.1059
%RSD	1421.6	12.567	94.154	22.082	147.87	91.225	2.2519	104.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08966	-.12439	.41673	4.9312	226.49	2.6414	-2.4117	.14596
Stddev	.19751	.27575	.77370	.4355	33.23	.1365	6.8076	.04754
%RSD	220.29	221.68	185.66	8.8319	14.670	5.1666	282.28	32.570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25994	396.70	.29482	-.37433	.0004	2.0853	.11215	.31571
Stddev	.28664	35.00	.37151	1.8633	1.862	.4727	.30883	.19920
%RSD	110.27	8.8237	126.01	497.78	472200.	22.667	275.37	63.097
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-297939/2-a Acquired: 10/10/2017 1:44:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.61510	2.4012	5.3028	22.437	-.66756
Stddev	.55250	4.4939	.1518	11.650	3.6646
%RSD	89.823	187.15	2.8625	51.923	548.96
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6453.6	3576.2	38211.	5715.6
Stddev	7.8	3.1	49.	13.0
%RSD	.12034	.08565	.12813	.22735

Sample Name: lcs 240-297939/3-a Acquired: 10/10/2017 1:49:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.084	1776.0	2122.2	965.55	1848.5	44.104
Stddev	.246	24.2	10.9	1.41	6.6	.113
%RSD	.48089	1.3601	.51380	.14638	.35560	.25528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44906.	52.08	490.44	181.55	235.78	868.07
Stddev	119.	.41	.74	1.61	1.03	5.21
%RSD	.26400	.7906	.15007	.88808	.43890	.60013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48944.	935.82	43139.	457.80	935.81	1106500.
Stddev	149.	1.34	523.	.87	1.54	18871.
%RSD	.30368	.14288	1.2124	.18908	.16493	1.7055
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None
Value						
Range						

Sample Name: lcs 240-297939/3-a Acquired: 10/10/2017 1:49:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	509.17	445.93	481.6	2143.2	1984.0	938.86
Stddev	1.06	1.57	4.4	8.8	16.7	1.59
%RSD	.20827	.35257	.9039	.41216	.83931	.16948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1833.0	462.44	551.42	F 1322.8	904.37
Stddev	13.9	1.03	2.19	48.3	2.87
%RSD	.75897	.22360	.39642	3.6480	.31755
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				1000.0	
Range				20.500%	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4764.4	3105.6	31824.	5490.0
Stddev	5.5	4.1	37.	18.2
%RSD	.11539	.13157	.11713	.33161

Sample Name: 240-85710-b-2-f Acquired: 10/10/2017 1:53:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.7418	151.98	.85153	83.493	309.55	.28711
Stddev	.1358	3.90	4.2581	.209	1.16	.14378
%RSD	4.9538	2.5629	500.06	.25040	.37489	50.077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 752400.	.0982	-1.7086	18.606	.78732	-1.4454
Stddev	2976.	.0479	.0394	.245	.42528	.8188
%RSD	.39555	48.83	2.3044	1.3146	54.016	56.649
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	720000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	12039.	53.952	3192.3	.02323	9.2072	F 1121000.
Stddev	44.	.535	8.3	.02330	.3118	12505.
%RSD	.36909	.99089	.25949	100.29	3.3860	1.1155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85710-b-2-f Acquired: 10/10/2017 1:53:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.8407	-.85125	3.813	4.6976	1.0772	-1.7375
Stddev	.1689	.86439	3.679	4.8755	.3882	.1564
%RSD	5.9458	101.54	96.49	103.79	36.043	9.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.0494	8.3539	-.19066	11648.	9657.2
Stddev	2.2663	2.3814	.10420	617.	47.2
%RSD	55.967	28.506	54.652	5.2992	.48897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4464.2	2948.7	30698.	5368.7
Stddev	4.6	5.6	35.	28.0
%RSD	.10197	.18961	.11534	.52125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.164%	86.918%	85.625%	100.63%
Range				

Sample Name: SD 240-85710-b-2-f@5 Acquired: 10/10/2017 1:58:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17806	26.005	-1.5267	16.174	61.354	-.01275	154700.
Stddev	.41311	9.774	1.8636	.615	.118	.06290	459.
%RSD	232.01	37.584	122.06	3.8007	.19247	493.18	.29648
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2153	-.65373	3.7387	-.07829	-2.2509	2380.0	14.216
Stddev	.1438	.23754	.3260	.14841	1.1537	11.0	.930
%RSD	66.80	36.336	8.7203	189.57	51.256	.46125	6.5384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	660.41	.20449	2.0414	248510.	1.2595	-.83392	.3327
Stddev	14.04	.03679	.2883	513.	.6466	.71211	1.437
%RSD	2.1262	17.989	14.125	.20648	51.340	85.392	431.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 240-85710-b-2-f@5 Acquired: 10/10/2017 1:58:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.8126	-.19221	-.45603	1.8585	3.8332	.20799	2370.3
Stddev	3.3098	.32343	.11369	1.6826	1.9496	.22302	96.3
%RSD	182.60	168.27	24.930	90.536	50.862	107.23	4.0633
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2004.6
Stddev	10.6
%RSD	.52829
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5283.0	3267.6	34186.	5535.0
Stddev	4.8	1.2	20.	13.5
%RSD	.09048	.03684	.05877	.24320
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.401%	96.318%	95.352%	103.75%
Range				

Sample Name: PDS 240-85710-b-2-f Acquired: 10/10/2017 2:03:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	56.051	2085.5	2293.5	1120.3	2272.5	46.408
Stddev	.175	18.1	9.0	5.1	6.0	.310
%RSD	.31145	.86772	.39411	.45570	.26281	.66761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 775840.	57.31	525.66	204.84	254.85	885.29
Stddev	2721.	.13	1.25	.75	1.10	4.07
%RSD	.35077	.2291	.23798	.36517	.43299	.46021
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	720000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	64438.	1064.8	47343.	463.15	1040.6	F 1156900.
Stddev	165.	1.1	142.	.55	2.8	17295.
%RSD	.25570	.10490	.29942	.11909	.26548	1.4949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: PDS 240-85710-b-2-f Acquired: 10/10/2017 2:03:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	534.73	463.22	546.0	2319.0	2196.1	1015.3
Stddev	.26	1.23	2.5	16.9	5.8	1.4
%RSD	.04894	.26473	.4526	.72797	.26516	.14217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1922.8	483.93	561.95	13924.	10341.
Stddev	7.6	3.88	2.15	260.	47.
%RSD	.39682	.80221	.38259	1.8654	.45388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4367.8	2906.8	30534.	5357.1
Stddev	3.3	3.6	20.	13.9
%RSD	.07488	.12290	.06461	.25878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	70.606%	85.685%	85.168%	100.41%
Range				

Sample Name: 240-85710-b-2-g ms@5 Acquired: 10/10/2017 2:08:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 197.05	388.48	1034.7	215.60	9457.7	9.1288	162140.
Stddev	.86	18.07	5.6	1.76	17.3	.1672	523.
%RSD	.43772	4.6527	.53724	.81567	.18337	1.8316	.32275
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	199.4	97.934	910.07	47.593	173.29	11971.	199.15
Stddev	.3	.257	2.00	.249	.97	32.	1.27
%RSD	.1597	.26282	.21973	.52309	.55814	.26507	.63820
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9582.5	93.788	200.60	251520.	103.14	961.31	97.56
Stddev	26.3	.204	.59	1034.	.31	3.28	.93
%RSD	.27480	.21716	.29426	.41100	.29896	.34137	.9523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85710-b-2-g ms@5 Acquired: 10/10/2017 2:08:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	210.71	403.56	192.76	384.36	94.265	105.25	3169.4
Stddev	2.18	2.36	.17	2.66	1.017	.25	26.8
%RSD	1.0332	.58565	.08638	.69201	1.0785	.24067	.84456
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2171.1
Stddev	4.8
%RSD	.22036
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5264.6	3263.8	34089.	5531.3
Stddev	8.7	6.4	58.	18.9
%RSD	.16589	.19701	.17049	.34094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.104%	96.206%	95.083%	103.68%
Range				

Sample Name: 240-85710-b-2-h msd Acquired: 10/10/2017 2:12:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 194.03	358.14	1028.0	212.81	9263.1	8.9345	161480.
Stddev	1.19	13.17	9.2	.76	45.9	.1459	208.
%RSD	.61424	3.6763	.89013	.35535	.49512	1.6334	.12859
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	197.0	97.164	891.64	46.604	169.50	11766.	193.62
Stddev	1.4	1.208	2.20	1.419	1.06	29.	1.45
%RSD	.6916	1.2430	.24639	3.0438	.62279	.24608	.74728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9460.3	91.816	198.33	254130.	102.28	950.05	96.49
Stddev	37.9	.493	.74	1766.	.84	4.15	2.00
%RSD	.40062	.53744	.37436	.69477	.82075	.43678	2.076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85710-b-2-h msd Acquired: 10/10/2017 2:12:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	206.09	399.04	189.54	382.08	95.591	104.24	3103.3
Stddev	.24	2.01	.31	1.45	2.152	1.15	24.9
%RSD	.11833	.50363	.16093	.37955	2.2518	1.1007	.80355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2154.7
Stddev	.7
%RSD	.03141
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5246.7	3252.2	34219.	5535.8
Stddev	40.5	21.9	54.	8.8
%RSD	.77164	.67193	.15715	.15813
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.814%	95.867%	95.445%	103.76%
Range				

Sample Name: 240-85693-a-1-b Acquired: 10/10/2017 2:17:44 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14147	117.92	.76000	8.9669	107.57	-.07831	1633.8
Stddev	.25395	2.44	4.0050	.6748	.36	.02974	17.9
%RSD	179.50	2.0686	526.97	7.5259	.33871	37.972	1.0977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1721	-.18586	21.626	48.520	126.06	1077.8	6.3409
Stddev	.0677	.19799	.374	1.212	1.25	18.6	.4023
%RSD	39.33	106.52	1.7300	2.4990	.99231	1.7262	6.3441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23.331	.85195	.46779	125450.	1.1391	.41253	.3236
Stddev	6.053	.03057	.29882	354.	.2448	.91698	.5591
%RSD	25.943	3.5878	63.879	.28248	21.487	222.28	172.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85693-a-1-b Acquired: 10/10/2017 2:17:44 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.4365	.71746	8.4963	-.97747	2.0134	13.131	7210.3
Stddev	1.6133	.11860	.0427	.34185	2.6248	.174	72.7
%RSD	66.211	16.530	.50209	34.973	130.36	1.3281	1.0078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	9.0558
Stddev	2.6750
%RSD	29.539
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5676.1	3351.1	35408.	5653.1
Stddev	6.1	5.1	31.	38.4
%RSD	.10746	.15133	.08681	.67976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.756%	98.780%	98.762%	105.96%
Range				

Sample Name: 240-85710-d-1-f Acquired: 10/10/2017 2:22:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9898	51.431	-1.8134	81.580	116.61	.28307
Stddev	.2403	6.688	2.0856	1.027	.49	.01237
%RSD	12.077	13.004	115.01	1.2591	.41769	4.3690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	713910.	.2824	-1.8227	28.577	.52287	-.29293
Stddev	2186.	.1439	.1578	.363	.39651	1.4892
%RSD	.30618	50.94	8.6554	1.2710	75.834	508.38
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8964.5	46.745	7033.7	.00935	8.0536	F 1128900.
Stddev	57.2	1.585	54.3	.09220	.4869	21583.
%RSD	.63774	3.3911	.77186	985.91	6.0463	1.9118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85710-d-1-f Acquired: 10/10/2017 2:22:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.8882	-.28812	2.102	1.9971	.41477	-1.8065
Stddev	.3734	.54972	2.409	4.3734	1.2969	.0755
%RSD	12.928	190.79	114.6	218.99	312.68	4.1774
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.4714	9.6850	.88804	11992.	3948.8
Stddev	.7867	1.3445	.30367	379.	19.0
%RSD	22.661	13.882	34.195	3.1613	.48156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4458.2	2924.7	30593.	5340.5
Stddev	3.9	3.4	21.	20.4
%RSD	.08815	.11640	.07023	.38279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.068%	86.212%	85.333%	100.10%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 2:27:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	968.03	23181.	502.99	4931.1	1933.6	1849.5	46897.
Stddev	.83	53.	1.55	12.3	3.4	3.9	135.
%RSD	.08554	.22839	.30749	.24845	.17361	.21300	.28836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	484.3	1987.3	1843.2	1899.1	F 22246.	47425.	4646.2
Stddev	.6	3.5	1.5	.7	91.	18.	15.9
%RSD	.1217	.17806	.07909	.03618	.40839	.03888	.34245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45827.	1876.4	1990.4	44826.	2021.1	488.84	487.3
Stddev	165.	1.9	2.1	79.	5.3	2.22	1.8
%RSD	.35948	.10132	.10394	.17574	.26087	.45435	.3618
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV-3260525 Acquired: 10/10/2017 2:27:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	508.27	4999.1	4884.2	1010.2	1887.8	2035.9	4874.2
Stddev	1.11	8.7	3.0	3.7	10.4	6.1	104.6
%RSD	.21756	.17366	.06191	.36903	.55038	.29878	2.1451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4737.2
Stddev	16.4
%RSD	.34632
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5479.4	3366.8	35471.	5531.9
Stddev	3.1	2.4	53.	12.5
%RSD	.05598	.06984	.14992	.22657

Sample Name: CCB Acquired: 10/10/2017 2:31:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.35515	-13.200	-3.6406	2.2540	-.12638	-.04715	-.61015	.0469
Stddev	.03332	5.912	3.0948	1.2410	.07618	.07506	3.5452	.1410
%RSD	9.3819	44.786	85.007	55.058	60.284	159.19	581.03	301.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19194	.17069	.12740	-1.3558	119.58	3.4260	-2.3679	.05365
Stddev	.16720	.06319	.38991	1.0916	13.24	.5602	.2216	.02752
%RSD	87.110	37.018	306.05	80.514	11.070	16.350	9.3562	51.289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.58896	191.31	-.19735	-.20409	1.591	.77996	.33993	2.4139
Stddev	.20794	7.95	.34119	.76392	.574	3.3804	.36858	.2036
%RSD	35.307	4.1546	172.89	374.30	36.08	433.41	108.43	8.4325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 2:31:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.13989	2.9774	-.47179	14.860	.49635
Stddev	1.0693	3.7180	.10304	8.548	1.6544
%RSD	764.39	124.88	21.840	57.526	333.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6428.2	3567.6	37948.	5626.9
Stddev	8.5	7.1	35.	24.3
%RSD	.13298	.19805	.09143	.43187

Sample Name: 240-85710-d-3-d Acquired: 10/10/2017 2:36:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.2607	111.19	2.3403	84.427	261.12	.24016
Stddev	.4446	6.20	2.5907	1.223	.76	.08381
%RSD	19.666	5.5716	110.70	1.4484	.28961	34.897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 727740.	.2516	-1.8737	6.5036	.66555	2.4048
Stddev	3373.	.0987	.2195	.3377	.76826	.6620
%RSD	.46345	39.25	11.716	5.1929	115.43	27.530
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	720000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22446.	52.478	5021.1	.15153	10.710	F 1142600.
Stddev	108.	1.353	49.2	.02679	.168	8482.
%RSD	.48241	2.5775	.98071	17.680	1.5693	.74234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85710-d-3-d Acquired: 10/10/2017 2:36:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.7299	.50470	1.729	1.9745	.25592	-1.5111
Stddev	.1041	.61720	.791	.6447	.43081	.3456
%RSD	3.8127	122.29	45.78	32.650	168.34	22.874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.5432	10.548	.10443	12906.	7339.1
Stddev	1.7393	2.990	.21906	90.	25.2
%RSD	38.283	28.347	209.77	.69468	.34304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4475.1	2938.4	30667.	5387.6
Stddev	9.0	4.9	30.	25.5
%RSD	.20167	.16561	.09755	.47297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.342%	86.615%	85.538%	100.98%
Range				

Sample Name: 240-85738-c-4-c@5 Acquired: 10/10/2017 2:41:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13447	2534.5	-3.4444	103.75	52.200	-.07284	35266.
Stddev	.20351	32.4	1.3373	.79	.215	.10790	142.
%RSD	151.35	1.2769	38.826	.75980	.41255	148.12	.40186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.6184	12.490	100.48	-1.0115	83034.	1958.4	13.486
Stddev	.1067	.040	.36	.4855	324.	22.1	1.501
%RSD	17.25	.31997	.36283	47.994	.38969	1.1280	11.131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1626.3	933.69	5.1612	238560.	87.972	1.2289	1.536
Stddev	20.8	2.13	.3918	959.	.233	1.3585	.974
%RSD	1.2762	.22819	7.5920	.40185	.26467	110.55	63.39
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85738-c-4-c@5 Acquired: 10/10/2017 2:41:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.19535	1.7624	.93739	-.59114	3.9121	1203.5	1048.3
Stddev	1.0319	.3160	.12847	1.1425	1.0626	2.6	9.4
%RSD	528.21	17.929	13.705	193.27	27.162	.21633	.89611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	465.94
Stddev	3.56
%RSD	.76461
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5497.6	3353.3	35175.	5665.8
Stddev	.8	4.8	83.	32.2
%RSD	.01429	.14373	.23506	.56859
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.869%	98.844%	98.111%	106.20%
Range				

Sample Name: 240-85738-c-6-d Acquired: 10/10/2017 2:46:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11429	2002.1	7.1250	8281.1	85.109	.04246
Stddev	.33800	8.3	2.3589	13.4	.297	.10333
%RSD	295.74	.41351	33.107	.16152	.34853	243.34
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22468.	1.493	1.8202	4.2210	133.28	1984.9
Stddev	111.	.065	.1081	.3465	.57	4.0
%RSD	.49619	4.376	5.9408	8.2097	.42725	.20048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3888.1	69.422	4264.7	337.23	2.6662	F 1072400.
Stddev	47.0	.836	17.0	.05	.2634	24338.
%RSD	1.2100	1.2044	.39751	.01543	9.8779	2.2696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85738-c-6-d Acquired: 10/10/2017 2:46:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.6422	13.672	134.8	10.553	1.8999	.41840
Stddev	.2382	.637	1.3	1.498	.7947	.10112
%RSD	2.4705	4.6622	.9830	14.196	41.829	24.168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.4676	3.9271	F 10008.	1344.3	188.28
Stddev	.3264	2.3595	3.	3.9	3.93
%RSD	7.3052	60.084	.03431	.28712	2.0863
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4860.5	3132.2	32183.	5622.8
Stddev	1.5	2.1	18.	27.8
%RSD	.03083	.06733	.05747	.49486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.572%	92.329%	89.765%	105.39%
Range				

Sample Name: 240-85738-a-7-b Acquired: 10/10/2017 2:50:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.4646	298.87	2.4003	304.48	153.75	.34769
Stddev	.2596	3.28	2.5959	1.02	.31	.05773
%RSD	17.727	1.0991	108.15	.33550	.19936	16.603
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	469910.	2.835	10.561	9.4263	1.6314	14492.
Stddev	3762.	.061	.549	.0280	.4763	99.
%RSD	.80067	2.164	5.1993	.29707	29.194	.68230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3508.0	31.741	9959.5	5592.8	2.3686	F 1035600.
Stddev	39.3	1.274	58.0	29.4	.3661	19950.
%RSD	1.1208	4.0137	.58269	.52610	15.456	1.9265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85738-a-7-b Acquired: 10/10/2017 2:50:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	103.29	3.2708	2.440	4.1214	1.0916	-.62225
Stddev	.33	.7444	.970	3.4042	.9408	.07933
%RSD	.32316	22.759	39.73	82.598	86.192	12.749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-4.4115	2.4241	1848.4	6858.2	392.98
Stddev	1.5667	1.7415	.3	38.9	2.10
%RSD	35.514	71.843	.01752	.56651	.53331
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4606.4	3043.3	31827.	5527.5
Stddev	4.0	2.8	10.	6.7
%RSD	.08762	.09236	.03018	.12037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.463%	89.708%	88.772%	103.61%
Range				

Sample Name: 240-85794-a-1-d Acquired: 10/10/2017 2:56:02 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.43623	664.96	.12826	48.214	25.151	-.10408
Stddev	.18362	10.45	.78203	1.073	.232	.06254
%RSD	42.093	1.5717	609.71	2.2250	.92238	60.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2844.4	1.446	-.26695	3.9211	27.269	1789.6
Stddev	7.2	.061	.07504	.2822	.338	7.7
%RSD	.25375	4.249	28.109	7.1980	1.2410	.43208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	848.05	15.133	1214.0	26.304	.93258	F 1028500.
Stddev	31.73	.368	12.4	.073	.29163	7272.
%RSD	3.7414	2.4308	1.0189	.27866	31.271	.70706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85794-a-1-d Acquired: 10/10/2017 2:56:02 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.9220	-1.1134	-.6580	6.0924	2.9483	4.1654
Stddev	.2565	.7736	1.727	3.0318	.5243	.1370
%RSD	3.7058	69.480	262.5	49.763	17.785	3.2890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.4860	2.2066	33.014	1693.2	37.800
Stddev	.9008	2.6643	.198	7.5	2.270
%RSD	60.617	120.74	.60053	.44023	6.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4900.2	3161.3	32113.	5578.5
Stddev	7.1	5.3	63.	12.5
%RSD	.14422	.16757	.19715	.22422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.213%	93.185%	89.571%	104.56%
Range				

Sample Name: 240-85794-b-2-d Acquired: 10/10/2017 3:00:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.00361	1391.5	-.78166	54.910	23.477	.00612
Stddev	.40119	15.8	.77413	1.394	.088	.12388
%RSD	11112.	1.1328	99.037	2.5393	.37462	2022.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1150.5	1.175	-.72591	41.768	104.21	377.29
Stddev	6.5	.025	.20367	.611	.58	2.93
%RSD	.56756	2.145	28.057	1.4621	.55486	.77723
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2411.1	30.973	857.13	7.8958	13.688	F 1079500.
Stddev	40.6	1.432	19.26	.2963	.106	17212.
%RSD	1.6838	4.6228	2.2469	3.7525	.77299	1.5945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85794-b-2-d Acquired: 10/10/2017 3:00:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.8619	1.9778	.2825	4.4346	22.229	29.325
Stddev	.1776	.7098	3.001	2.6928	.373	.538
%RSD	4.5974	35.889	1062.	60.722	1.6767	1.8346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-5.0457	3.8296	21.443	2525.2	16.252
Stddev	1.1437	1.9977	.393	18.7	5.212
%RSD	22.667	52.165	1.8331	.74210	32.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4832.3	3119.8	31574.	5478.1
Stddev	65.4	44.0	423.	18.8
%RSD	1.3543	1.4103	1.3383	.34249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.116%	91.962%	88.067%	102.68%
Range				

Sample Name: 240-85796-a-13-c Acquired: 10/10/2017 3:05:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.37775	435.19	3.0701	512.82	135.94	.01133
Stddev	.38393	6.41	1.1493	2.24	.39	.04558
%RSD	101.64	1.4720	37.435	.43718	.28544	402.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45165.	237.4	70.451	11.772	779.31	595.59
Stddev	287.	2.3	.174	.269	3.84	5.17
%RSD	.63480	.9551	.24648	2.2849	.49271	.86847
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	37965.	37.649	10717.	1435.0	38.067	F 1023000.
Stddev	46.	.591	86.	5.4	.284	16668.
%RSD	.12204	1.5706	.80226	.37711	.74485	1.6293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85796-a-13-c Acquired: 10/10/2017 3:05:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	109.40	52.465	2.231	8.1945	3.6665	1.4429
Stddev	.54	1.600	1.307	3.2405	.6844	.0832
%RSD	.49064	3.0490	58.60	39.545	18.666	5.7625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-8.2294	8.0046	7614.3	807.29	243.60
Stddev	2.0885	1.0437	12.3	14.46	3.05
%RSD	25.379	13.038	.16187	1.7907	1.2521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4796.4	3094.2	31943.	5650.5
Stddev	3.8	1.6	86.	37.2
%RSD	.08012	.05311	.26843	.65849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	77.536%	91.208%	89.096%	105.91%
Range				

Sample Name: 240-85796-a-16-e Acquired: 10/10/2017 3:10:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.93096	625.37	2.5747	309.05	295.32	.17895
Stddev	.44605	13.50	1.4536	1.49	.60	.09750
%RSD	47.913	2.1586	56.458	.48195	.20428	54.487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	399520.	678.7	277.65	28.180	186.96	44904.
Stddev	2764.	.9	.63	.194	1.02	76.
%RSD	.69180	.1351	.22542	.68947	.54431	.16909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	35645.	40.111	12483.	3352.3	28.159	F 1010300.
Stddev	144.	1.410	78.	13.7	.277	4148.
%RSD	.40366	3.5162	.62445	.40930	.98262	.41063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85796-a-16-e Acquired: 10/10/2017 3:10:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	785.39	79.183	32.99	8.9661	1.3609	-.10566
Stddev	2.28	1.719	1.82	1.6377	.7994	.16537
%RSD	.29031	2.1710	5.512	18.266	58.738	156.51
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-5.6306	3.2225	F 32254.	2969.6	848.29
Stddev	.6226	1.9465	50.	20.9	2.24
%RSD	11.058	60.403	.15539	.70376	.26372
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			10000.		
Low Limit			-500000.		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4615.1	3023.6	31708.	5542.2
Stddev	9.5	7.6	77.	35.7
%RSD	.20644	.25056	.24253	.64385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.605%	89.126%	88.441%	103.88%
Range				

Sample Name: 240-85892-b-1-b Acquired: 10/10/2017 3:15:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.22345	-6.5538	.87038	338.16	7.4253	-.02754	49342.
Stddev	.53253	14.340	2.2368	2.37	.2317	.10784	105.
%RSD	238.32	218.81	256.99	.70051	3.1207	391.50	.21323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3532	5.0742	1.5500	.82330	43.230	10817.	17.836
Stddev	.0352	.1491	.4267	.81647	1.318	20.	.867
%RSD	9.980	2.9382	27.530	99.170	3.0488	.18424	4.8608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23299.	48.331	47.175	250580.	10.709	-.16275	1.418
Stddev	114.	.407	.438	251.	.179	1.7394	.963
%RSD	.49032	.84132	.92863	.10013	1.6726	1068.7	67.94
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85892-b-1-b Acquired: 10/10/2017 3:15:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1282	.14533	.01959	1.4364	9.8197	7.3580	4462.6
Stddev	1.4958	.41081	.11232	1.4023	1.1583	.1984	40.1
%RSD	132.57	282.68	573.39	97.620	11.796	2.6970	.89758
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	80.983
Stddev	.560
%RSD	.69119
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5417.2	3304.6	34513.	5583.2
Stddev	19.7	11.3	35.	11.1
%RSD	.36361	.34333	.10028	.19825
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.571%	97.410%	96.264%	104.65%
Range				

Sample Name: 190-14580-a-2-a Acquired: 10/10/2017 3:19:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00319	39.022	.16933	41.780	15.302	-.00215	25291.	2.518
Stddev	.11513	5.646	1.4425	.553	.151	.02750	95.	.094
%RSD	3607.0	14.468	851.87	1.3225	.98754	1280.3	.37530	3.731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.05629	.76499	5.7387	56.947	1744.3	5.9623	6938.4	2.1608
Stddev	.15303	.28156	.3099	1.983	6.0	.2350	77.7	.0803
%RSD	271.85	36.806	5.3997	3.4820	.34249	3.9421	1.1201	3.7182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.47543	5062.5	526.55	1.1419	.8787	-.86129	.22688	-.10202
Stddev	.26791	11.8	2.23	.8339	.8784	.62832	.56715	.04046
%RSD	56.352	.23310	.42356	73.030	99.96	72.950	249.98	39.656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14580-a-2-a Acquired: 10/10/2017 3:19:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.1217	4.2091	23.371	929.16	93.758
Stddev	1.4178	.6521	.142	7.89	2.530
%RSD	126.40	15.492	.60893	.84899	2.6981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6267.4	3566.7	37677.	5746.7
Stddev	1.4	3.3	62.	12.5
%RSD	.02266	.09345	.16583	.21822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.31%	105.14%	105.09%	107.72%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 3:24:39 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	964.61	23200.	501.62	4926.1	1918.0	1856.7	46704.
Stddev	1.58	96.	1.11	19.2	3.5	3.4	137.
%RSD	.16394	.41307	.22033	.38972	.18123	.18084	.29240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	483.5	1978.9	1858.6	1888.2	F 22180.	47346.	4641.8
Stddev	.5	.8	3.5	6.8	70.	122.	5.4
%RSD	.1059	.03797	.18644	.35852	.31468	.25806	.11652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45530.	1886.8	1975.0	45008.	2010.2	484.34	483.5
Stddev	115.	3.7	1.0	80.	.6	1.58	2.3
%RSD	.25183	.19354	.04857	.17761	.02787	.32630	.4751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV-3260525 Acquired: 10/10/2017 3:24:39 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	503.14	4993.1	4877.0	993.36	1882.1	2035.6	4830.0
Stddev	3.98	1.1	6.1	6.14	6.1	4.0	116.1
%RSD	.79181	.02267	.12568	.61858	.32448	.19407	2.4045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4718.4
Stddev	13.5
%RSD	.28557
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5537.3	3403.8	35724.	5586.7
Stddev	2.1	1.9	13.	23.6
%RSD	.03761	.05468	.03635	.42302

Sample Name: CCB Acquired: 10/10/2017 3:28:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.31713	-19.256	-1.4419	3.5852	-.22969	-.00901	-14.608	.1125
Stddev	.36095	28.473	.8829	.9745	.21572	.07286	1.022	.0919
%RSD	113.82	147.87	61.230	27.182	93.915	808.97	6.9964	81.76
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18569	.28039	-.20850	.38191	107.69	4.4593	3.4008	.05311
Stddev	.14517	.16644	.73045	1.3488	18.12	.6569	17.827	.03107
%RSD	78.182	59.361	350.34	353.17	16.825	14.732	524.21	58.505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.69711	206.28	.39702	-.47349	.5543	.91417	.29929	2.5415
Stddev	.13141	8.48	.21333	.95043	2.107	.51011	.86200	.2041
%RSD	18.850	4.1100	53.733	200.73	380.1	55.801	288.01	8.0314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 3:28:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.14653	1.7393	-.32194	9.8714	.75037
Stddev	.47072	2.2235	.08156	5.4074	3.9307
%RSD	321.24	127.83	25.334	54.778	523.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6457.8	3587.2	38242.	5701.0
Stddev	11.1	10.5	30.	2.3
%RSD	.17219	.29144	.07840	.03954

Sample Name: 190-14581-a-2-a Acquired: 10/10/2017 3:33:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.02851	43.963	-2.4511	38.620	15.037	.02405	25449.	1.242
Stddev	.28993	10.754	1.6602	.504	.132	.10103	47.	.051
%RSD	1016.8	24.462	67.732	1.3040	.87480	420.13	.18572	4.088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04180	.58542	4.8505	49.209	1502.8	3.2938	6950.5	1.0840
Stddev	.06173	.20632	.2585	2.458	5.0	1.5541	58.0	.0175
%RSD	147.66	35.244	5.3288	4.9956	.32957	47.182	.83514	1.6169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.64633	4774.6	602.19	-.51265	.5904	-1.2138	-.62805	.39143
Stddev	.27826	12.6	8.61	.34606	1.529	2.6934	.14947	.23470
%RSD	43.052	.26392	1.4294	67.504	259.0	221.90	23.799	59.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14581-a-2-a Acquired: 10/10/2017 3:33:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.25025	-.23106	19.646	911.07	93.895
Stddev	1.1886	5.0463	.282	.98	5.455
%RSD	474.94	2183.9	1.4368	.10777	5.8100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6206.2	3533.5	37581.	5743.5
Stddev	62.2	36.5	53.	5.7
%RSD	1.0018	1.0317	.14054	.09911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.32%	104.16%	104.82%	107.66%
Range				

Sample Name: 190-14583-c-1-a Acquired: 10/10/2017 3:38:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03160	109.19	-1.4123	161.95	19.319	-.05044	19416.	.2885
Stddev	.07482	17.62	2.2221	1.24	.227	.09139	61.	.1371
%RSD	236.78	16.136	157.34	.76563	1.1774	181.19	.31645	47.55
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.19353	1.6338	24.989	240.94	2123.1	64.192	6297.7	18.186
Stddev	.11783	.4662	.477	1.17	34.8	.706	78.7	.072
%RSD	60.886	28.535	1.9076	.48607	1.6403	1.0993	1.2492	.39620
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.44184	52970.	5.3911	3.6982	2.497	-.64052	.37511	.46586
Stddev	.18902	185.	.5725	.7169	1.364	1.4715	.08876	.11596
%RSD	42.781	.34994	10.619	19.386	54.63	229.73	23.661	24.891
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14583-c-1-a Acquired: 10/10/2017 3:38:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.87871	.77519	183.41	1625.1	77.564
Stddev	.55509	3.2172	.33	23.1	2.750
%RSD	63.171	415.03	.17873	1.4238	3.5460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6027.2	3512.2	37220.	5859.3
Stddev	9.7	7.5	104.	7.9
%RSD	.16170	.21418	.27826	.13472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.431%	103.53%	103.82%	109.83%
Range				

Sample Name: 190-14593-c-2-a Acquired: 10/10/2017 3:43:00 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19397	119.65	-1.5205	53.855	23.487	-.03799	30450.
Stddev	.26460	9.29	1.4656	.345	.146	.01852	198.
%RSD	136.41	7.7641	96.390	.64060	.62321	48.755	.64863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4457	.03609	9.7836	12.496	673.13	1327.1	3.8697
Stddev	.0537	.13922	.3573	.248	3.09	20.1	.6435
%RSD	12.06	385.80	3.6520	1.9882	.45871	1.5114	16.628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6107.8	12.027	6.3159	177960.	12.765	.20343	1.460
Stddev	42.4	.092	.3221	1056.	.401	1.5895	.401
%RSD	.69458	.76458	5.1004	.59356	3.1412	781.38	27.44
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 190-14593-c-2-a Acquired: 10/10/2017 3:43:00 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21052	1.5443	4.5542	-.14617	3.1370	68.193	1293.6
Stddev	2.6966	.1067	.1276	.62290	4.3000	.173	7.7
%RSD	1280.9	6.9085	2.8016	426.15	137.07	.25414	.59661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	100.08
Stddev	2.70
%RSD	2.6996
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5634.0	3416.6	35720.	5799.1
Stddev	5.1	3.2	38.	35.0
%RSD	.09022	.09289	.10750	.60402
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.076%	100.71%	99.633%	108.70%
Range				

Sample Name: 190-14593-c-4-a Acquired: 10/10/2017 3:47:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.41144	110.28	-1.1645	22.657	38.655	-.06048	25528.	.1049
Stddev	.22529	1.16	1.6998	.448	.193	.05454	83.	.0990
%RSD	54.757	1.0516	145.97	1.9762	.50016	90.181	.32536	94.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03728	2.5994	27.022	484.25	1074.7	3.3563	6117.3	17.980
Stddev	.20454	.2671	.830	3.54	1.2	.9582	51.0	.108
%RSD	548.65	10.275	3.0727	.73001	.11309	28.551	.83394	.59961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.5804	3947.7	6.1699	3.2990	1.307	-.22170	.09205	2.6560
Stddev	.2325	5.4	.2046	.7820	.178	1.0023	.35671	.0726
%RSD	2.7101	.13605	3.3155	23.704	13.66	452.09	387.51	2.7318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14593-c-4-a Acquired: 10/10/2017 3:47:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.22218	3.8893	22.230	1462.8	89.334
Stddev	.74252	1.9869	.015	1.5	3.853
%RSD	334.19	51.086	.06884	.10459	4.3130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6279.6	3570.7	37711.	5792.2
Stddev	14.5	7.5	49.	22.7
%RSD	.23150	.20883	.13081	.39135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.51%	105.25%	105.18%	108.57%
Range				

Sample Name: 240-85985-a-1-a Acquired: 10/10/2017 3:52:31 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07644	14.858	.73592	77.632	30.482	.04782	40992.	.1753
Stddev	.71181	5.486	1.8896	.379	.143	.03465	219.	.0229
%RSD	931.21	36.921	256.77	.48846	.46855	72.471	.53384	13.06
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08451	.65096	11.034	363.24	7722.9	6.5629	10555.	25.477
Stddev	.02577	.16764	.435	.48	5.3	1.5399	81.	.082
%RSD	30.499	25.753	3.9381	.13264	.06877	23.463	.76683	.32182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	85.422	57040.	2.4403	.61816	2.288	1.5265	-.24712	.45809
Stddev	.473	170.	.6784	.28163	1.418	1.0770	.46211	.14732
%RSD	.55383	.29749	27.799	45.559	61.96	70.551	187.00	32.159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85985-a-1-a Acquired: 10/10/2017 3:52:31 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.71431	2.2890	14.237	2901.7	246.79
Stddev	.38705	2.6686	.074	12.4	3.69
%RSD	54.185	116.58	.52020	.42623	1.4968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5880.0	3549.3	37403.	5846.3
Stddev	2.6	9.0	60.	26.6
%RSD	.04488	.25317	.16003	.45554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.052%	104.62%	104.33%	109.58%
Range				

Sample Name: SD 240-85985-a-1-a@5 Acquired: 10/10/2017 3:57:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21565	-4.5820	-2.6095	14.890	5.9939	-.10382	8358.1	.1067
Stddev	.11904	4.6864	2.2062	.681	.0259	.04723	38.1	.0713
%RSD	55.202	102.28	84.544	4.5744	.43159	45.491	.45609	66.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01583	.13604	2.2531	73.424	1630.5	2.7426	2171.7	5.3615
Stddev	.02950	.09062	.1407	1.802	24.0	1.3185	20.5	.1148
%RSD	186.32	66.610	6.2454	2.4541	1.4691	48.074	.94409	2.1405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	17.865	11741.	.71302	-.43051	1.161	-1.5254	-.19915	.14159
Stddev	.343	31.	.53499	1.6599	1.467	3.9352	.44985	.17490
%RSD	1.9216	.26499	75.031	385.56	126.4	257.98	225.89	123.53
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-85985-a-1-a@5 Acquired: 10/10/2017 3:57:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.12031	2.5247	2.3801	596.95	50.125
Stddev	.44443	2.9665	.1199	11.40	.396
%RSD	369.40	117.50	5.0356	1.9091	.79087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6251.0	3559.5	37465.	5689.1
Stddev	21.7	8.2	20.	25.9
%RSD	.34694	.23161	.05261	.45600
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.05%	104.92%	104.50%	106.64%
Range				

Sample Name: 240-85985-a-1-b ms Acquired: 10/10/2017 4:01:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.339	1861.9	2119.2	1112.7	1940.7	46.029	86617.
Stddev	.401	5.4	3.1	2.8	4.4	.135	195.
%RSD	.79579	.28871	.14617	.24996	.22525	.29423	.22484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.93	506.35	185.60	252.67	1224.6	55672.	927.60
Stddev	.14	.58	.71	1.65	3.2	158.	1.65
%RSD	.2606	.11414	.38455	.65303	.25839	.28326	.17762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55170.	500.63	1064.1	102170.	526.18	490.89	498.8
Stddev	231.	1.90	2.5	251.	.55	1.26	.4
%RSD	.41812	.37942	.23648	.24548	.10448	.25574	.0710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85985-a-1-b ms Acquired: 10/10/2017 4:01:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2109.4	2065.1	968.62	2051.9	473.74	542.19	3901.8
Stddev	8.8	14.3	1.46	17.8	4.85	1.35	29.6
%RSD	.41894	.69320	.15121	.86936	1.0237	.24843	.75744
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1181.5
Stddev	4.6
%RSD	.39142
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5442.6	3415.0	35952.	5762.3
Stddev	10.4	2.0	23.	15.7
%RSD	.19136	.05757	.06391	.27177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.981%	100.66%	100.28%	108.01%
Range				

Sample Name: 240-85985-a-1-c msd Acquired: 10/10/2017 4:06:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48.035	1786.1	2002.0	1056.5	1857.2	44.380	83669.	50.38
Stddev	.430	8.6	11.8	7.0	2.6	.060	413.	.16
%RSD	.89612	.48380	.59096	.66484	.14098	.13431	.49368	.3203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	478.66	177.25	241.61	1192.6	53062.	892.35	53051.	477.06
Stddev	2.60	.38	.81	3.8	78.	1.39	153.	.73
%RSD	.54386	.21257	.33482	.31513	.14681	.15560	.28889	.15317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1001.6	98402.	497.84	464.07	476.3	2006.4	1948.9	922.95
Stddev	4.4	250.	2.77	2.06	2.4	6.6	7.2	1.56
%RSD	.44106	.25456	.55539	.44421	.5038	.32775	.36794	.16865
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85985-a-1-c msd Acquired: 10/10/2017 4:06:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1940.3	450.90	520.96	3770.8	1137.0
Stddev	2.9	1.80	2.45	21.1	6.6
%RSD	.14845	.40009	.47082	.56045	.58451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5484.3	3423.1	36022.	5755.6
Stddev	20.2	14.2	72.	1.3
%RSD	.36816	.41569	.19919	.02257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.655%	100.90%	100.47%	107.88%
Range				

Sample Name: 240-85991-c-6-a Acquired: 10/10/2017 4:10:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20483	3077.2	1.7839	694.04	96.464	-.04235
Stddev	.08255	8.0	.2897	3.49	.354	.00903
%RSD	40.301	.25892	16.238	.50319	.36750	21.328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61599.	.9460	3.3580	43.365	661.16	6173.3
Stddev	195.	.1674	.2198	.337	1.96	13.8
%RSD	.31732	17.70	6.5472	.77674	.29609	.22331
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26223.	69.973	16513.	1160.6	48.625	F 2551400.
Stddev	45.	4.852	24.	2.4	.272	83514.
%RSD	.17020	6.9336	.14358	.20299	.55974	3.2732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85991-c-6-a Acquired: 10/10/2017 4:10:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	89.093	6.2082	4.692	4.8389	5.0378	14.946
Stddev	1.132	.8629	3.443	1.5840	.8750	.448
%RSD	1.2708	13.900	73.37	32.735	17.369	3.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.15741	6.9648	199.84	2857.8	377.78
Stddev	1.9935	2.0470	.55	15.4	4.59
%RSD	1266.5	29.391	.27711	.53942	1.2139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4031.3	2851.2	28353.	5331.2
Stddev	3.5	2.0	55.	14.4
%RSD	.08701	.07122	.19532	.27000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	65.167%	84.044%	79.084%	99.927%
Range				

Sample Name: 240-85994-a-1-a Acquired: 10/10/2017 4:15:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.4329	396.88	1.0372	392.96	297.35	.39193
Stddev	.5000	8.92	1.7048	1.10	1.34	.11269
%RSD	34.895	2.2471	164.37	.27917	.44912	28.751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	372950.	1.011	.41949	11.161	32.460	4916.9
Stddev	1607.	.081	.18687	.182	.911	23.3
%RSD	.43101	7.989	44.547	1.6285	2.8075	.47452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	17976.	55.496	106880.	1194.9	19.537	F 1429400.
Stddev	31.	1.554	351.	2.7	.127	5979.
%RSD	.17421	2.7995	.32852	.22953	.64759	.41830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85994-a-1-a Acquired: 10/10/2017 4:15:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28.313	2.2357	1.557	.75494	.86081	11.238
Stddev	.477	.9963	3.139	2.6579	1.5728	.146
%RSD	1.6849	44.565	201.6	352.07	182.71	1.2962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	3.7330	3.1726	79.780	5830.6	1770.8
Stddev	1.3467	3.2517	.117	28.2	15.6
%RSD	36.076	102.49	.14647	.48299	.88300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4371.8	2960.7	30439.	5367.6
Stddev	4.3	7.1	73.	20.3
%RSD	.09886	.23966	.23976	.37854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	70.672%	87.273%	84.902%	100.61%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 4:20:09 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	962.82	23144.	501.09	4944.5	1921.4	1852.2	46231.
Stddev	1.44	31.	1.11	14.0	2.3	.9	128.
%RSD	.15003	.13266	.22133	.28313	.12167	.05085	.27607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	483.9	1985.8	1858.0	1884.8	F 21830.	47338.	4613.0
Stddev	.5	2.5	3.0	2.9	60.	24.	13.8
%RSD	.1135	.12361	.15888	.15336	.27607	.04991	.29873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44848.	1879.8	1984.7	F 42626.	2021.7	485.02	483.3
Stddev	212.	2.7	1.3	109.	3.2	2.47	1.7
%RSD	.47203	.14419	.06725	.25542	.15787	.50892	.3545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				50000.			
Range				-10.500%			

Sample Name: CCV-3260525 Acquired: 10/10/2017 4:20:09 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	501.17	5005.6	4889.6	995.07	1863.6	2035.1	4700.1
Stddev	1.42	10.6	4.4	3.48	9.1	3.4	97.6
%RSD	.28365	.21219	.09099	.34930	.48680	.16948	2.0762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4689.6
Stddev	10.1
%RSD	.21538
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5511.4	3387.8	35629.	5612.7
Stddev	9.6	2.9	38.	7.2
%RSD	.17359	.08690	.10640	.12885

Sample Name: CCB Acquired: 10/10/2017 4:24:29 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03489	-14.164	-2.3751	2.9055	-.12058	-.03117	-6.9183	.0013
Stddev	.12203	4.609	1.7297	.6191	.15858	.12386	1.6502	.0960
%RSD	349.74	32.538	72.824	21.308	131.52	397.34	23.852	7249.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05603	.06072	-.19728	1.6599	169.24	4.0324	-9.1307	.06678
Stddev	.02139	.31052	.03640	.4113	5.66	.8365	3.2629	.03023
%RSD	38.171	511.36	18.452	24.775	3.3449	20.743	35.735	45.266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50790	448.18	-.14410	-.09608	.5228	-.57660	.53015	2.2019
Stddev	.07148	16.05	.12456	1.6556	4.045	2.3908	.29943	.2292
%RSD	14.074	3.5805	86.444	1723.1	773.8	414.63	56.480	10.409
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 4:24:29 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.23622	-.81529	1.0907	4.6517	.50162
Stddev	.47798	2.4216	.1068	7.1964	1.1401
%RSD	202.34	297.02	9.7886	154.71	227.28
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6450.5	3573.8	37994.	5668.7
Stddev	11.0	2.8	20.	20.8
%RSD	.17094	.07746	.05259	.36648

Sample Name: 240-85997-a-1-a Acquired: 10/10/2017 4:29:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02911	70.569	-.66095	129.38	51.702	.21809
Stddev	.08827	10.795	2.2897	2.05	1.984	.40452
%RSD	303.20	15.298	346.42	1.5812	3.8383	185.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	40917.	.1688	-1.1681	3.9723	30.380	382.93
Stddev	1217.	.1678	.2215	.1345	.567	14.70
%RSD	2.9742	99.42	18.959	3.3864	1.8657	3.8380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6907.6	62.468	15796.	45.485	2.9109	F 2489200.
Stddev	346.3	9.067	544.	.419	.2541	73577.
%RSD	5.0131	14.514	3.4434	.92102	8.7277	2.9559
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85997-a-1-a Acquired: 10/10/2017 4:29:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	33.205	-.24420	-.1075	-.00318	.86036	2.9647
Stddev	.913	1.5923	1.421	5.0166	.90045	.3192
%RSD	2.7500	652.06	1321.	157780.	104.66	10.768
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.7241	4.1748	20.756	3520.7	283.23
Stddev	1.9640	3.1622	.242	120.1	7.66
%RSD	113.91	75.745	1.1673	3.4103	2.7054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4018.3	2806.7	27616.	5182.3
Stddev	40.7	29.5	167.	134.4
%RSD	1.0136	1.0526	.60612	2.5940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	64.957%	82.732%	77.028%	97.136%
Range				

Sample Name: 240-85997-a-1-b ms Acquired: 10/10/2017 4:34:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	63.595	1983.5	2398.0	1177.1	1984.1	46.228
Stddev	1.058	11.6	5.1	3.8	2.9	.143
%RSD	1.6635	.58509	.21449	.32663	.14369	.30849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	86409.	59.74	533.97	193.40	301.16	1252.3
Stddev	91.	.17	.70	1.22	2.03	4.8
%RSD	.10485	.2877	.13085	.63037	.67426	.38541
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61576.	1121.1	59584.	531.36	950.35	F 2258900.
Stddev	96.	1.2	34.	.86	.73	45714.
%RSD	.15640	.10573	.05674	.16167	.07709	2.0237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85997-a-1-b ms Acquired: 10/10/2017 4:34:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	580.26	453.38	536.3	2332.9	2201.9	986.07
Stddev	.77	4.80	2.8	8.5	6.5	.85
%RSD	.13352	1.0595	.5218	.36322	.29616	.08620
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1947.8	478.45	630.35	4522.3	1212.0
Stddev	4.5	1.81	3.49	45.1	9.3
%RSD	.23151	.37841	.55408	.99753	.76462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3956.6	2802.7	27632.	5213.2
Stddev	3.6	4.4	38.	18.5
%RSD	.08989	.15731	.13686	.35519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	63.959%	82.616%	77.072%	97.715%
Range				

Sample Name: 240-85997-a-1-c msd Acquired: 10/10/2017 4:38:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	63.959	2017.2	2419.8	1183.6	2006.9	46.890
Stddev	.628	17.4	5.2	2.6	6.0	.103
%RSD	.98145	.86453	.21588	.21689	.29905	.21943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	86604.	60.20	539.13	196.41	304.57	1256.4
Stddev	391.	.05	.96	.48	.97	9.3
%RSD	.45195	.0761	.17883	.24676	.31926	.74052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	62142.	1135.6	59689.	534.38	960.45	F 2192400.
Stddev	140.	6.4	331.	1.87	.37	48137.
%RSD	.22519	.56786	.55445	.34954	.03817	2.1956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85997-a-1-c msd Acquired: 10/10/2017 4:38:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	584.78	458.08	548.0	2364.2	2228.6	994.83
Stddev	3.50	.73	1.7	12.0	11.7	1.95
%RSD	.59790	.15830	.3014	.50965	.52539	.19560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1967.8	484.60	636.94	4537.0	1219.0
Stddev	14.1	5.04	3.26	44.1	12.1
%RSD	.71611	1.0396	.51124	.97237	.99556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3968.1	2808.7	27873.	5257.1
Stddev	7.7	3.3	85.	8.6
%RSD	.19364	.11779	.30434	.16349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	64.146%	82.792%	77.744%	98.539%
Range				

Sample Name: 240-86028-o-2-a Acquired: 10/10/2017 4:42:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.22490	-19.466	-2.2680	172.90	13.300	.00305	128100.
Stddev	.13333	13.494	1.8601	1.47	.230	.07149	460.
%RSD	59.283	69.323	82.017	.84899	1.7288	2346.9	.35943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3401	-.63569	.26255	-.44155	342.63	3876.5	46.799
Stddev	.0442	.08395	.29122	.33806	2.52	24.5	1.201
%RSD	13.00	13.206	110.92	76.563	.73510	.63239	2.5668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53496.	7.2015	.26911	20483.	.63384	-.49519	3.276
Stddev	191.	.0601	.37367	27.	.35845	.82618	2.033
%RSD	.35729	.83406	138.86	.13166	56.552	166.84	62.06
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86028-o-2-a Acquired: 10/10/2017 4:42:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.0886	-.20189	-1.4298	2.0069	1.5318	.35607	2940.8
Stddev	1.4402	.57472	.1262	.2556	2.5220	.16242	71.3
%RSD	68.957	284.67	8.8252	12.737	164.65	45.614	2.4231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	18187.
Stddev	22.
%RSD	.11933
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5710.1	3382.9	35913.	5703.7
Stddev	5.5	1.9	50.	12.3
%RSD	.09639	.05691	.13921	.21538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.306%	99.719%	100.17%	106.91%
Range				

Sample Name: 240-86028-o-3-a Acquired: 10/10/2017 4:47:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32181	-11.487	-.24624	175.14	12.976	.01735	127950.
Stddev	.11217	5.803	1.9396	.49	.220	.06166	493.
%RSD	34.855	50.517	787.68	.28084	1.6973	355.33	.38533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4082	-.68115	.45746	-.96600	341.35	3733.3	42.268
Stddev	.0069	.33887	.33555	.30233	2.19	20.3	1.098
%RSD	1.679	49.750	73.352	31.297	.64288	.54506	2.5985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53272.	11.382	.25653	21222.	.81445	.05452	.5835
Stddev	231.	.063	.26066	45.	.53971	.74578	1.616
%RSD	.43451	.55411	101.61	.21317	66.267	1367.9	276.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86028-o-3-a Acquired: 10/10/2017 4:47:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32696	-.09934	-1.6919	1.0651	1.5473	.02699	2913.7
Stddev	1.2728	.18026	.0340	.9743	3.1721	.09084	81.7
%RSD	389.28	181.46	2.0112	91.479	205.01	336.61	2.8054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	18175.
Stddev	45.
%RSD	.24806
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5705.7	3384.4	36093.	5744.8
Stddev	10.6	1.6	62.	11.6
%RSD	.18510	.04629	.17058	.20211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.234%	99.761%	100.67%	107.68%
Range				

Sample Name: 240-86028-o-4-a Acquired: 10/10/2017 4:52:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.10453	-10.753	4.3908	70.654	36.079	-.11292	80654.
Stddev	.08476	5.148	1.8625	1.391	.064	.10044	361.
%RSD	81.082	47.874	42.417	1.9688	.17665	88.949	.44753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4200	-.63627	.67132	-.59051	147.53	1945.6	19.909
Stddev	.0769	.31795	.39664	.40293	2.18	7.6	1.401
%RSD	18.30	49.971	59.083	68.234	1.4760	.38942	7.0383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	34150.	3.7653	.21726	6885.3	2.1217	.34548	2.067
Stddev	111.	.0464	.08935	16.7	.7441	1.4950	1.144
%RSD	.32412	1.2325	41.125	.24221	35.071	432.73	55.34
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86028-o-4-a Acquired: 10/10/2017 4:52:11 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.8334	.17259	-2.4491	.90803	2.9464	.50175	4048.0
Stddev	3.9043	.19498	.3225	1.2594	1.0461	.21338	117.1
%RSD	137.79	112.97	13.170	138.70	35.505	42.527	2.8926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	W 45819.
Stddev	155.
%RSD	.33822
Check ?	Chk Warn
High Limit	45000.
Low Limit	-500000.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5821.6	3415.8	36438.	5758.6
Stddev	5.3	6.8	69.	13.4
%RSD	.09038	.20013	.18827	.23246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.108%	100.69%	101.63%	107.94%
Range				

Sample Name: 240-86048-a-1-a Acquired: 10/10/2017 4:56:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.25409	254910.	18.279	10922.	27.070	.12379
Stddev	.55026	121.	3.195	36.	.136	.05643
%RSD	216.56	.04759	17.480	.32947	.50199	45.585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	75183.	.4692	75.772	169.40	46.098	16848.
Stddev	102.	.1493	.475	.94	.665	28.
%RSD	.13564	31.82	.62653	.55581	1.4428	.16738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	436810.	118.02	518.96	53.095	2744.9	F 2601900.
Stddev	1151.	5.73	15.70	.261	3.1	113270.
%RSD	.26358	4.8546	3.0254	.49168	.11164	4.3533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86048-a-1-a Acquired: 10/10/2017 4:56:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1193.6	-29.765	47.55	71.015	16.731	5.3979
Stddev	4.3	2.038	2.81	3.435	1.200	.1830
%RSD	.36078	6.8459	5.906	4.8365	7.1718	3.3908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-6.9965	59.040	130.68	726.73	946.72
Stddev	3.6840	1.533	1.03	7.65	8.78
%RSD	52.654	2.5970	.78465	1.0529	.92698
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3357.9	2567.3	25106.	5064.4
Stddev	4.5	3.5	27.	18.8
%RSD	.13526	.13746	.10862	.37093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	54.281%	75.676%	70.027%	94.926%
Range				

Sample Name: 240-85982-c-3-a Acquired: 10/10/2017 5:01:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12527	77.290	.19764	347.15	244.90	.02772	101210.
Stddev	.31075	14.685	2.2885	2.77	.96	.13127	436.
%RSD	248.07	19.000	1157.9	.79920	.39272	473.61	.43065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2927	-.31846	.50087	.54691	11.570	8609.6	23.228
Stddev	.0733	.22134	.39909	.13770	.549	14.8	.187
%RSD	25.04	69.503	79.680	25.178	4.7440	.17220	.80382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24440.	10.653	1.8979	48299.	2.0545	-.08330	2.847
Stddev	161.	.103	.2944	507.	.3313	.83231	.935
%RSD	.66058	.96275	15.509	1.0497	16.126	999.20	32.82
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85982-c-3-a Acquired: 10/10/2017 5:01:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.8991	-.50988	-.24276	1.3358	2.7549	.80819	4862.5
Stddev	.4240	.28560	.05874	3.1099	1.3113	.11649	42.6
%RSD	14.626	56.014	24.198	232.82	47.600	14.413	.87624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	364.36
Stddev	4.22
%RSD	1.1574
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5698.3	3416.6	35908.	5688.9
Stddev	4.4	2.3	59.	28.5
%RSD	.07771	.06719	.16500	.50185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.115%	100.71%	100.16%	106.63%
Range				

Sample Name: 240-85972-v-2-a Acquired: 10/10/2017 5:06:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15694	147.34	-2.4430	156.89	80.697	.03862	109410.
Stddev	.26270	4.12	1.7725	2.17	.204	.11421	378.
%RSD	167.39	2.7935	72.553	1.3831	.25236	295.70	.34538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3567	-.00804	.76536	.52259	386.68	3542.4	17.814
Stddev	.1116	.08736	.46812	.07006	.49	6.2	.813
%RSD	31.29	1086.3	61.163	13.406	.12619	.17547	4.5632
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	35455.	163.01	7.1478	68352.	3.7298	.07863	2.472
Stddev	104.	.34	.1838	65.	.4843	.64792	1.483
%RSD	.29282	.20871	2.5714	.09465	12.985	824.01	60.00
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-v-2-a Acquired: 10/10/2017 5:06:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5519	-.60472	3.2498	.65800	.47520	1.6129	6587.8
Stddev	1.5018	.23831	.0830	.19071	2.7648	.1473	17.1
%RSD	96.774	39.408	2.5535	28.984	581.83	9.1300	.25931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	258.41
Stddev	4.42
%RSD	1.7094
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5613.7	3387.5	35810.	5690.9
Stddev	6.3	4.6	68.	9.2
%RSD	.11245	.13538	.18900	.16124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.747%	99.854%	99.882%	106.67%
Range				

Sample Name: SD 240-85972-v-2-a@5 Acquired: 10/10/2017 5:10:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14581	36.888	-1.1719	32.957	16.302	-.13087	22372.	.1651
Stddev	.20028	13.085	1.0083	.542	.075	.10029	37.	.0906
%RSD	137.36	35.473	86.045	1.6438	.46229	76.634	.16446	54.87
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20371	.43538	.33763	80.460	939.85	7.1047	7309.5	34.562
Stddev	.13603	.19561	.75564	.528	30.60	1.0365	70.5	.142
%RSD	66.774	44.929	223.80	.65671	3.2555	14.589	.96511	.41111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.6971	15376.	.79491	-.00824	1.659	.24181	-.22911	.71934
Stddev	.1382	20.	.32222	.58778	1.164	1.9533	.50011	.19078
%RSD	8.1422	.12870	40.535	7136.4	70.18	807.79	218.28	26.522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-85972-v-2-a@5 Acquired: 10/10/2017 5:10:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.19228	1.6928	.08007	1344.8	55.266
Stddev	.83717	3.8035	.05933	17.4	1.297
%RSD	435.40	224.69	74.098	1.2936	2.3466
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6159.5	3528.0	37548.	5745.2
Stddev	5.1	3.3	93.	11.0
%RSD	.08210	.09319	.24901	.19137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.570%	104.00%	104.73%	107.69%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 5:15:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	951.65	22869.	503.55	4926.6	1908.8	1829.0	45930.
Stddev	1.56	23.	1.76	9.6	1.7	3.1	13.
%RSD	.16346	.10013	.34958	.19544	.09166	.16939	.02853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	481.5	1976.8	1836.2	1864.3	F 21448.	47052.	4556.8
Stddev	.4	2.9	4.9	2.8	24.	27.	3.5
%RSD	.0807	.14709	.26889	.15155	.11406	.05805	.07725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 44346.	1856.8	1981.6	F 41600.	2011.3	484.77	483.7
Stddev	110.	4.0	1.5	28.	2.9	1.74	.4
%RSD	.24835	.21361	.07620	.06682	.14622	.35847	.0840
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	50000.			50000.			
Range	-10.500%			-10.500%			

Sample Name: CCV-3260525 Acquired: 10/10/2017 5:15:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	501.77	4972.1	4846.9	993.52	1846.7	2024.6	4613.3
Stddev	1.54	7.0	6.3	3.35	4.7	4.4	101.9
%RSD	.30732	.14098	.12967	.33729	.25637	.21636	2.2080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4657.7
Stddev	8.2
%RSD	.17583
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5563.3	3422.4	36125.	5676.8
Stddev	8.1	2.2	42.	7.9
%RSD	.14562	.06557	.11541	.13901

Sample Name: CCB Acquired: 10/10/2017 5:19:51 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09706	-34.601	-1.2219	5.6973	-.32617	.00515	-12.614	.0181
Stddev	.04724	17.544	1.3434	1.0363	.12654	.09631	1.562	.0380
%RSD	48.674	50.703	109.94	18.190	38.795	1870.7	12.381	209.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.31893	.09842	.33378	.03593	231.81	3.0865	4.7547	.02649
Stddev	.06744	.10014	.16046	.77275	7.53	.9759	15.826	.04606
%RSD	21.146	101.74	48.075	2150.9	3.2501	31.620	332.86	173.86
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.41511	653.06	-.18698	-.36458	1.072	-1.2420	.11506	2.1764
Stddev	.08602	3.03	.34793	.95201	.634	2.7216	.31645	.1964
%RSD	20.721	.46359	186.08	261.13	59.18	219.13	275.04	9.0260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 5:19:51 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.0677	3.2668	1.1130	2.7106	-1.9595
Stddev	1.8430	3.2686	.0870	5.5385	2.5518
%RSD	89.130	100.05	7.8185	204.33	130.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6503.3	3605.0	38479.	5735.7
Stddev	4.6	3.1	27.	5.6
%RSD	.07077	.08499	.07048	.09699

Sample Name: 240-85972-v-2-b ms Acquired: 10/10/2017 5:24:35 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.086	2078.6	2151.6	1206.9	2017.9	46.548	154080.
Stddev	.068	26.4	1.6	2.8	.4	.277	849.
%RSD	.13392	1.2679	.07667	.22793	.02064	.59550	.55077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.68	500.56	186.32	243.43	1264.0	51809.	955.52
Stddev	.24	1.71	.31	.38	14.9	36.	4.37
%RSD	.4538	.34155	.16474	.15764	1.1822	.07026	.45752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	79664.	636.81	997.75	117740.	520.47	490.30	508.9
Stddev	537.	1.03	2.00	169.	.59	.97	3.1
%RSD	.67442	.16190	.20036	.14364	.11417	.19739	.6120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-v-2-b ms Acquired: 10/10/2017 5:24:35 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2138.2	2060.8	982.31	2017.6	476.92	523.49	7622.0
Stddev	10.3	16.1	.95	17.3	2.02	1.31	48.5
%RSD	.47976	.78293	.09654	.85772	.42361	.24928	.63674
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1199.1
Stddev	11.9
%RSD	.99447
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5321.1	3307.6	34967.	5671.4
Stddev	2.2	1.6	52.	12.1
%RSD	.04170	.04811	.14890	.21305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.018%	97.497%	97.531%	106.30%
Range				

Sample Name: 240-85972-v-2-c msd Acquired: 10/10/2017 5:28:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.560	2052.0	2125.8	1196.8	1998.8	46.101	153720.
Stddev	.231	41.8	6.3	1.7	6.2	.261	649.
%RSD	.45636	2.0378	.29845	.14325	.31162	.56526	.42194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.62	496.47	185.41	242.61	1253.5	51245.	947.18
Stddev	.15	.45	.86	.36	2.0	96.	4.11
%RSD	.2745	.08987	.46519	.14770	.15833	.18649	.43400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	79095.	637.36	989.74	118260.	516.23	487.45	502.8
Stddev	378.	1.30	2.64	304.	1.06	.22	1.4
%RSD	.47764	.20386	.26668	.25668	.20624	.04425	.2704
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-v-2-c msd Acquired: 10/10/2017 5:28:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2114.7	2033.2	977.51	1994.8	468.61	520.19	7594.8
Stddev	1.1	3.3	.51	1.8	4.92	1.60	36.0
%RSD	.05364	.16040	.05203	.09035	1.0506	.30701	.47386
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1186.9
Stddev	3.3
%RSD	.27884
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5322.8	3303.2	34817.	5661.1
Stddev	10.1	5.7	26.	27.4
%RSD	.19044	.17320	.07403	.48450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.045%	97.369%	97.112%	106.11%
Range				

Sample Name: 240-85972-h-1-a Acquired: 10/10/2017 5:33:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.58298	1700.4	36.679	258.13	229.42	.07388	170590.
Stddev	.17614	7.6	1.822	.91	.25	.02679	131.
%RSD	30.214	.44711	4.9672	.35236	.10995	36.260	.07686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.6263	4.1224	6.3501	4.9932	12053.	3101.8	16.075
Stddev	.0637	.1194	.0322	.2578	22.	6.5	.404
%RSD	10.17	2.8959	.50724	5.1626	.18464	.21049	2.5105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58714.	1063.2	9.1984	65418.	14.752	3.8740	5.003
Stddev	74.	2.0	.2744	171.	.163	.9977	.955
%RSD	.12580	.18754	2.9832	.26200	1.1062	25.754	19.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-h-1-a Acquired: 10/10/2017 5:33:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13865	.37859	47.146	1.9737	7.1194	24.745	7374.1
Stddev	4.7650	.90214	.319	.4538	2.0684	.173	26.9
%RSD	3436.7	238.29	.67640	22.993	29.053	.69812	.36504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	400.70
Stddev	2.73
%RSD	.68099
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5500.7	3370.3	35597.	5709.5
Stddev	10.1	3.7	40.	12.8
%RSD	.18327	.10865	.11235	.22342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.921%	99.347%	99.288%	107.02%
Range				

Sample Name: 240-85972-h-3-a Acquired: 10/10/2017 5:37:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.25159	636.52	-.21067	255.81	63.410	.06234	123900.
Stddev	.36667	11.82	1.2713	.75	.234	.05418	463.
%RSD	145.74	1.8576	603.44	.29248	.36865	86.916	.37374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3059	.86684	2.6166	1.5253	1884.4	2839.5	12.798
Stddev	.1885	.26303	.2993	.2779	2.3	22.8	.940
%RSD	61.63	30.344	11.437	18.218	.12101	.80422	7.3473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	40268.	365.99	4.2646	67866.	9.7172	.06069	1.415
Stddev	153.	.57	.0699	143.	.2829	.63494	2.044
%RSD	.37962	.15582	1.6388	.21017	2.9112	1046.2	144.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-h-3-a Acquired: 10/10/2017 5:37:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.2078	-.62797	14.621	1.0766	3.0337	5.5942	4416.1
Stddev	3.7378	.31572	.385	.2796	1.8820	.0893	171.6
%RSD	309.48	50.276	2.6330	25.971	62.037	1.5968	3.8851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	384.69
Stddev	2.40
%RSD	.62470
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5651.8	3399.3	35781.	5711.5
Stddev	8.2	7.8	87.	11.5
%RSD	.14554	.22918	.24268	.20199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.364%	100.20%	99.803%	107.06%
Range				

Sample Name: 240-85972-h-4-a Acquired: 10/10/2017 5:42:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.57730	1786.9	-.12687	174.78	94.457	.02620	114740.
Stddev	.06525	13.5	1.3291	1.07	.305	.06561	515.
%RSD	11.303	.75570	1047.6	.60970	.32245	250.44	.44914
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3239	1.1434	4.0449	3.8510	2711.1	4157.4	14.921
Stddev	.0879	.1203	.1824	.2548	12.4	15.4	.666
%RSD	27.15	10.521	4.5092	6.6168	.45816	.37020	4.4629
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	37781.	264.42	7.1683	74613.	8.4799	1.8322	1.936
Stddev	254.	.89	.3902	60.	.7697	1.4537	.224
%RSD	.67236	.33500	5.4427	.07988	9.0773	79.338	11.55
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-h-4-a Acquired: 10/10/2017 5:42:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.1512	-.11181	36.107	.86902	3.4674	14.135	6329.1
Stddev	3.7002	.54927	1.332	.05324	1.7504	.087	259.7
%RSD	321.43	491.27	3.6879	6.1262	50.482	.61640	4.1029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	299.57
Stddev	3.61
%RSD	1.2047
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5602.9	3391.8	35825.	5687.9
Stddev	6.1	3.6	58.	10.2
%RSD	.10830	.10692	.16191	.18010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.573%	99.980%	99.926%	106.61%
Range				

Sample Name: 240-85972-h-5-a Acquired: 10/10/2017 5:47:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.28762	66.222	-1.1789	249.09	45.241	-.03316	118050.
Stddev	.38264	12.975	1.5954	1.59	.181	.08081	564.
%RSD	133.04	19.593	135.33	.63972	.40084	243.68	.47802
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4727	.37809	.65981	.54473	165.08	2545.2	12.108
Stddev	.0546	.06022	.53473	.35401	1.26	10.6	1.802
%RSD	11.55	15.926	81.042	64.988	.76291	.41537	14.885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	38432.	154.43	3.8748	68644.	6.6361	.69140	1.909
Stddev	244.	.32	.0671	164.	.3007	.80447	.799
%RSD	.63505	.21006	1.7323	.23926	4.5317	116.35	41.87
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-h-5-a Acquired: 10/10/2017 5:47:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.10912	-.26161	1.5348	1.6483	5.1594	1.6978	5122.5
Stddev	.82030	.16549	.1671	.6947	2.7175	.0975	18.3
%RSD	751.72	63.258	10.885	42.147	52.672	5.7435	.35724
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	439.01
Stddev	.81
%RSD	.18393
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5625.4	3382.2	35649.	5698.5
Stddev	7.1	6.9	42.	31.6
%RSD	.12565	.20334	.11673	.55494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.936%	99.698%	99.433%	106.81%
Range				

Sample Name: 240-85972-h-6-a Acquired: 10/10/2017 5:51:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.37346	622.91	2.7026	251.78	61.533	.04168	121900.
Stddev	.22916	15.76	.4781	.61	.243	.05420	225.
%RSD	61.360	2.5302	17.691	.24183	.39538	130.06	.18474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3990	.51615	2.5686	1.4700	1637.7	2845.9	12.386
Stddev	.0285	.10069	.3504	.4355	14.0	22.5	.177
%RSD	7.132	19.508	13.644	29.626	.85267	.79124	1.4286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	39418.	359.04	4.2323	67643.	9.1624	.94420	2.386
Stddev	179.	.75	.0514	86.	.1347	2.1255	.533
%RSD	.45374	.20889	1.2139	.12708	1.4704	225.11	22.32
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-h-6-a Acquired: 10/10/2017 5:51:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.64030	-.32346	13.014	.53196	1.7738	12.912	5823.7
Stddev	1.7424	.58103	.098	2.4311	3.0673	.244	39.2
%RSD	272.12	179.63	.75503	457.00	172.92	1.8863	.67355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	378.65
Stddev	2.48
%RSD	.65616
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5595.6	3374.5	35635.	5705.3
Stddev	11.6	6.8	80.	13.7
%RSD	.20714	.20298	.22501	.24086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.455%	99.471%	99.394%	106.94%
Range				

Sample Name: 240-85972-h-7-a Acquired: 10/10/2017 5:56:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.53233	1904.9	.42945	522.21	84.327	.03046	105650.
Stddev	.23858	20.4	1.7271	2.10	.244	.05089	360.
%RSD	44.818	1.0722	402.16	.40182	.28902	167.11	.34060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3390	1.6188	5.4502	10.304	3396.4	3202.9	11.972
Stddev	.1169	.1859	.7843	.563	14.2	39.7	1.011
%RSD	34.49	11.481	14.389	5.4601	.41953	1.2409	8.4472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	33067.	190.68	6.1145	60843.	10.853	3.0382	.7994
Stddev	162.	.11	.2470	114.	.288	.4339	1.077
%RSD	.48875	.05876	4.0402	.18813	2.6529	14.281	134.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85972-h-7-a Acquired: 10/10/2017 5:56:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.4333	-.15145	34.170	.67395	5.4326	22.665	7715.9
Stddev	2.2260	.45788	.306	1.0115	2.8742	.050	26.6
%RSD	155.31	302.33	.89599	150.09	52.907	.21945	.34522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	204.77
Stddev	4.98
%RSD	2.4301
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5663.3	3422.7	35994.	5707.0
Stddev	3.2	4.6	27.	16.6
%RSD	.05604	.13407	.07616	.29028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.549%	100.89%	100.40%	106.97%
Range				

Sample Name: 190-14582-c-1-a Acquired: 10/10/2017 6:00:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12466	57.811	-2.0728	19.327	11.842	-.04749	14724.	.2655
Stddev	.21521	21.798	1.8157	.303	.081	.09977	21.	.0758
%RSD	172.64	37.705	87.595	1.5670	.68201	210.07	.14123	28.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10370	2.5900	30.596	3167.0	3968.1	2.6519	4082.9	24.969
Stddev	.00941	.1278	.342	6.6	16.2	.1623	12.2	.122
%RSD	9.0708	4.9345	1.1172	.20745	.40874	6.1202	.29813	.48663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11.337	19198.	2.7582	18.736	1.954	-.95823	.74641	2.0322
Stddev	.267	20.	.7596	1.345	.460	2.1389	.25253	.0337
%RSD	2.3532	.10408	27.539	7.1780	23.56	223.21	33.833	1.6596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14582-c-1-a Acquired: 10/10/2017 6:00:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.89605	4.3375	173.93	890.59	55.081
Stddev	.54906	2.3995	1.20	4.33	1.659
%RSD	61.276	55.319	.68713	.48568	3.0127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6187.6	3547.1	37298.	5743.1
Stddev	6.2	2.9	61.	16.1
%RSD	.09960	.08064	.16294	.28090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.02%	104.56%	104.03%	107.65%
Range				

Sample Name: 240-85979-f-1-a Acquired: 10/10/2017 6:05:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.53229	-15.045	-1.6337	347.42	83.102	.05488	121580.
Stddev	.55215	6.972	1.2732	1.91	.349	.03705	312.
%RSD	103.73	46.345	77.936	.55035	.42036	67.506	.25639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4598	-.21609	.25551	1.3246	57.308	11021.	15.734
Stddev	.1708	.19370	.15598	.3771	.956	2.	1.015
%RSD	37.15	89.636	61.048	28.472	1.6688	.02071	6.4521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	39396.	235.74	1.5011	240860.	2.9456	-.95181	1.515
Stddev	9.	1.28	.1884	1653.	.3134	.45994	.806
%RSD	.02228	.54253	12.553	.68612	10.639	48.323	53.19
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85979-f-1-a Acquired: 10/10/2017 6:05:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.39908	-.27438	-.27082	1.5573	2.7922	37.726	4543.4
Stddev	.29500	.79836	.05157	1.9143	2.7047	.105	6.4
%RSD	73.921	290.97	19.042	122.93	96.864	.27825	.14048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	476.14
Stddev	3.96
%RSD	.83269
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5389.9	3339.3	34876.	5625.8
Stddev	4.8	5.8	98.	16.2
%RSD	.08965	.17384	.28197	.28734
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.129%	98.433%	97.278%	105.45%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 6:10:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	966.01	22980.	502.74	4934.1	1930.5	1834.7	46420.
Stddev	3.86	49.	1.77	7.8	1.6	1.7	120.
%RSD	.39985	.21183	.35188	.15854	.08188	.09283	.25758
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	482.9	1992.4	1840.2	1885.8	F 21502.	47517.	4590.6
Stddev	.9	1.2	2.5	5.4	76.	56.	8.5
%RSD	.1846	.06258	.13361	.28527	.35351	.11845	.18500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44888.	1874.0	1997.2	F 44693.	2031.9	489.61	485.3
Stddev	174.	5.4	.9	87.	.7	1.96	.6
%RSD	.38820	.28680	.04627	.19501	.03432	.40118	.1262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				50000.			
Range				-10.500%			

Sample Name: CCV-3260525 Acquired: 10/10/2017 6:10:27 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	506.20	5003.3	4897.2	1000.9	1863.8	2043.3	4649.2
Stddev	2.63	8.5	6.6	4.2	1.8	.5	96.3
%RSD	.51874	.17081	.13557	.41639	.09408	.02690	2.0721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4700.7
Stddev	8.9
%RSD	.19027
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5528.9	3405.7	35803.	5617.1
Stddev	5.9	2.4	73.	17.0
%RSD	.10696	.06963	.20489	.30348

Sample Name: CCB Acquired: 10/10/2017 6:14:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10245	-14.780	-1.3194	3.7233	-.36634	-.02285	-13.733	.0312
Stddev	.25041	3.981	.7500	.0946	.11926	.09754	2.180	.0574
%RSD	244.41	26.932	56.840	2.5404	32.554	426.80	15.874	183.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02753	.02076	-.12784	-.95245	121.48	2.5631	-10.861	.01514
Stddev	.10459	.18153	.23889	2.9071	3.08	.4108	21.709	.03070
%RSD	379.93	874.59	186.87	305.22	2.5371	16.026	199.89	202.76
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.51195	271.49	.25594	-.12989	1.549	-.90610	-.25553	2.4284
Stddev	.27000	5.38	.40349	1.0277	.952	2.2149	.37029	.1828
%RSD	52.740	1.9801	157.65	791.21	61.44	244.44	144.91	7.5280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 6:14:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.42092	1.3081	1.0970	6.8019	1.2823
Stddev	.80571	2.6343	.1079	8.2332	4.4716
%RSD	191.42	201.38	9.8332	121.04	348.72
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6474.1	3589.8	38288.	5706.8
Stddev	12.3	3.5	79.	36.2
%RSD	.18925	.09820	.20610	.63481

Sample Name: 240-85992-a-1-a Acquired: 10/10/2017 6:19:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07320	14.537	-.76168	169.36	7.3428	-.07513
Stddev	.38861	4.665	.32775	.41	.1038	.14023
%RSD	530.90	32.091	43.030	.24390	1.4140	186.64
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48951.	.3681	-.59340	.90592	4.7801	50.407
Stddev	232.	.0526	.16263	.19847	.3524	2.225
%RSD	.47307	14.28	27.406	21.908	7.3727	4.4151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	140170.	15.607	30813.	97.140	18.113	F 806950.
Stddev	370.	2.009	164.	.414	.111	11232.
%RSD	.26409	12.871	.53137	.42650	.61026	1.3919
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85992-a-1-a Acquired: 10/10/2017 6:19:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	344.24	.56521	2.289	-.30234	1.9103	.69041
Stddev	.32	1.1703	1.313	1.0233	.5789	.07964
%RSD	.09362	207.06	57.36	338.46	30.303	11.535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.5703	7.2150	40.651	6316.8	162.83
Stddev	2.0941	3.2107	.133	7.6	4.13
%RSD	133.36	44.500	.32609	.12013	2.5383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4934.9	3176.5	32499.	5620.3
Stddev	7.5	3.6	82.	41.4
%RSD	.15284	.11252	.25326	.73670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.773%	93.633%	90.646%	105.35%
Range				

Sample Name: 240-86006-a-1-a Acquired: 10/10/2017 6:24:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.90668	-7.6210	-1.0768	103.18	119.06	-.03826	69218.	.3266
Stddev	.33047	13.183	.7298	.24	.51	.06128	377.	.0418
%RSD	36.448	172.98	67.773	.23349	.42850	160.16	.54449	12.81
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.58194	1.0853	226.44	21.860	3934.0	7.0172	25705.	1.2247
Stddev	.18097	.4151	.39	.428	51.2	.8507	144.	.0097
%RSD	31.098	38.246	.17277	1.9595	1.3019	12.123	.55984	.78752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1740	24104.	58.579	3.1018	.4161	1.2371	5.3703	.01134
Stddev	.1045	92.	.265	.6409	3.361	4.0522	.6592	.06202
%RSD	4.8086	.38270	.45300	20.663	807.8	327.55	12.274	546.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86006-a-1-a Acquired: 10/10/2017 6:24:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.5691	-.02738	23.935	4416.0	311.89
Stddev	.1966	2.1525	.058	15.4	4.35
%RSD	12.530	7860.8	.24078	.34941	1.3950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5855.4	3448.7	36389.	5700.0
Stddev	5.4	6.7	20.	21.0
%RSD	.09164	.19503	.05597	.36923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.654%	101.66%	101.50%	106.84%
Range				

Sample Name: 190-14588-a-1-a Acquired: 10/10/2017 6:28:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06851	3287.5	-3.3916	3620.5	8.2930	.02467
Stddev	.32542	24.4	1.5910	35.9	.1563	.08442
%RSD	474.97	.74071	46.909	.99281	1.8845	342.19
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23406.	.0943	-.50739	.73454	23.130	75.715
Stddev	46.	.1204	.09352	.31509	.626	2.164
%RSD	.19719	127.7	18.431	42.897	2.7060	2.8584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6244.3	10.848	2731.0	6.3841	4.3927	F 772960.
Stddev	21.0	1.769	12.5	.0504	.1849	4858.
%RSD	.33594	16.309	.45657	.78878	4.2087	.62855
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14588-a-1-a Acquired: 10/10/2017 6:28:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.7863	.74600	1.396	1.3686	.13500	.36278
Stddev	.1643	.35186	2.420	2.9822	.43843	.16414
%RSD	2.1100	47.167	173.3	217.90	324.76	45.244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.61331	3.3707	9.5140	56.803	299.20
Stddev	1.2955	3.3289	.2324	10.085	2.13
%RSD	211.23	98.761	2.4425	17.754	.71348
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5031.4	3258.2	33466.	5760.9
Stddev	8.8	6.2	71.	17.4
%RSD	.17569	.18936	.21160	.30283
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.334%	96.042%	93.345%	107.98%
Range				

Sample Name: CCV-3260525 Acquired: 10/10/2017 6:33:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	951.75	22692.	499.57	4895.2	1907.1	1813.9	46019.
Stddev	2.17	107.	.98	11.4	4.8	4.6	124.
%RSD	.22820	.47070	.19654	.23354	.24996	.25112	.26902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	478.4	1968.8	1821.2	1861.8	F 21328.	46875.	4559.8
Stddev	.9	3.8	1.1	8.1	67.	110.	10.9
%RSD	.1932	.19177	.06130	.43575	.31604	.23420	.23930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					25000.		
Range					-10.500%		

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 44404.	1850.8	1972.0	F 43907.	2007.5	481.76	480.5
Stddev	54.	3.0	2.1	106.	4.4	2.96	3.1
%RSD	.12081	.16036	.10667	.24168	.21899	.61406	.6523
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	50000.			50000.			
Range	-10.500%			-10.500%			

Sample Name: CCV-3260525 Acquired: 10/10/2017 6:33:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	496.73	4961.8	4831.2	996.54	1843.2	2025.5	4582.7
Stddev	5.51	2.2	8.4	2.47	8.3	2.0	118.7
%RSD	1.1086	.04368	.17474	.24767	.45173	.09964	2.5911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4652.2
Stddev	21.1
%RSD	.45420
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5557.2	3421.3	36026.	5676.5
Stddev	5.9	4.6	32.	11.0
%RSD	.10584	.13358	.08835	.19454

Sample Name: CCB Acquired: 10/10/2017 6:38:04 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15818	-24.475	-3.3568	6.3047	-.12944	.08125	-14.478	.0596
Stddev	.17905	14.862	.4639	.3389	.05582	.09285	1.477	.0244
%RSD	113.20	60.723	13.821	5.3752	43.124	114.28	10.199	40.96
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11843	.41351	.00371	-.35340	131.62	2.4500	.31826	.03086
Stddev	.02001	.35081	.05336	2.2553	37.31	1.0739	14.396	.04635
%RSD	16.895	84.839	1438.6	638.19	28.352	43.832	4523.3	150.18
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18432	283.33	-.22440	-.95060	2.363	-.32619	.16487	2.2371
Stddev	.32808	7.04	.40203	.07102	1.853	3.8888	.51776	.1068
%RSD	177.99	2.4843	179.16	7.4706	78.43	1192.2	314.05	4.7735
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/10/2017 6:38:04 Type: QC
Method: ICP I12 6010 200.7 Methods(v297) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.68539	1.9708	.95715	-.27483	-.36986
Stddev	1.7670	1.6828	.12320	4.3963	6.8902
%RSD	257.80	85.386	12.872	1599.6	1862.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6520.1	3617.6	38396.	5699.9
Stddev	7.7	4.3	87.	10.2
%RSD	.11807	.11899	.22721	.17813

MT6500BLKH20 00259

Test America Canton ICP Data Review Checklist

Analysis Date: 10/09/17 **Analyst:** AS **Instrument:** I12

Review Items

A. Calibration/Instrument Run QC
1. Instrument calibrated per method.
2. ICV/CCV analyzed at appropriate frequency and within acceptance criteria. (*ICV (2nd source)*:200.7=95 – 105%, 6010B 90-110%) *(CCV: 90 – 110%)*
3. ICB/CCB analyzed at appropriate frequency and within acceptance criteria.
4. CRI analyzed at SOP or project-specific frequency and within acceptance criteria. (project specific limits may vary)
5. ICSA/ICSAB analyzed at required frequency and within acceptance criteria.
B. Sample Results
1. Samples with concentrations > the linear range for any parameter diluted and reanalyzed.
2. Internal standard(s) within acceptance criteria.
3. Sample analyses done within holding time.
C. Preparation/Matrix QC
1. LCS performed per prep batch and within acceptance criteria.
2. Method blank performed per prep batch and within acceptance criteria.
3. MS performed at required frequency and evaluated.
4. MSD or DU performed at required frequency and evaluated.
5. Serial dilution performed per prep batch.
6. Post digest spike performed at required frequency and evaluated.
D. Other
1. Are all nonconformances documented appropriately in lims system.
2. Calculations checked for error.
3. All client/project specific requirements met.
4. Date/time of analysis verified as correct.

Level I Analyst: Anjali Sharma **Date:** 10/09/17 **Time:** 10:22-14:08

Level I Analyst: Anjali Sharma **Date:** 10/10/17 **Time:** 10:22-06:38

Level I Analyst: _____ **Date:** _____ **Time:** _____

Level II Reviewer: Roger K. Toth **Date:** 10-9-17 **Time:** 10:22-14:08

Level II Reviewer: Kathryn A Court **Date:** 10-10-17 **Time:** 10:22-06:38

Level II Reviewer: _____ **Date:** _____ **Time:** _____

Comments: _____

Sample Name: Blank Acquired: 10/16/2017 8:48:30 Type: Cal
Method: ICP I9 6010 200.7 Methods(v308) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00034	.00385	.00068	.00317	.02201	.00210	.05416
Stddev	.00011	.00038	.00007	.00005	.00134	.00016	.00010
%RSD	32.151	9.9069	10.107	1.6626	6.0916	7.5290	.17929

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0010	.00064	-.00025	-.00099	.00020	-.00834	-.00875
Stddev	.0001	.00017	.00009	.00003	.00017	.00072	.00118
%RSD	11.84	26.065	33.991	2.8743	85.576	8.5940	13.489

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00023	.00366	.00069	.01323	.00066	-.00032	-.0000
Stddev	.00017	.00003	.00009	.00071	.00016	.00027	.0003
%RSD	72.976	.72607	12.541	5.3796	24.820	85.988	697.6

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00048	.00084	.00075	-.00034	.00076	.00867	.00199
Stddev	.00024	.00007	.00026	.00004	.00033	.00039	.00029
%RSD	51.127	8.0980	34.247	12.032	43.925	4.5470	14.804

Elem	Sr3464
IS Ref	(Y_3710)
Units	Cts/S
Avg	-.00264
Stddev	.00039
%RSD	14.719

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5027.0	3102.8	33450.	6754.5
Stddev	6.2	2.4	46.	38.7
%RSD	.12327	.07675	.13646	.57244

Sample Name: SCAL1-3053251 Acquired: 10/16/2017 8:52:51 Type: Cal
Method: ICP I9 6010 200.7 Methods(v308) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	As1890	B_1826	Ba4554	Be3130	Cd2288	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.73045	.10138	5.1929	28.740	13.722	2.791	3.5023	.96077
Stddev	.00203	.00200	.0747	.060	.018	.053	.0710	.00315
%RSD	.27848	1.9701	1.4380	.20872	.13309	1.896	2.0281	.32793

Elem	Cu3273	Li6707	Mn2576	Mo2020	Ni2316	Pb2203	Sb2175	Se1960
IS Ref	(Y_3600)	(Y_3710)	(Y_3600)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.2507	9.8319	8.5576	4.3327	1.9149	.33050	.1832	.10876
Stddev	.0006	.0160	.0498	.1013	.0383	.00597	.0035	.00174
%RSD	.05153	.16325	.58181	2.3386	1.9978	1.8064	1.916	1.6026

Elem	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Sr3464
IS Ref	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.2458	9.7598	.24221	.41428	3.7050	1.3090
Stddev	.0507	.0396	.00524	.00084	.0689	.0023
%RSD	2.2554	.40614	2.1639	.20194	1.8607	.17726

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4791.5	3047.7	33009.	6787.9
Stddev	3.0	4.4	55.	27.4
%RSD	.06246	.14584	.16517	.40340

Sample Name: SCAL2-3272878 Acquired: 10/16/2017 8:57:22 Type: Cal
Method: ICP I9 6010 200.7 Methods(v308) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Al3082	Ca3179	Fe2599	K_7664	Mg2790	Na5895	Si2516
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.0816	15.752	7.0715	3.9661	1.3600	18.143	.57835
Stddev	.0021	.020	.0086	.0072	.0020	.012	.00329
%RSD	.19111	.12780	.12165	.18208	.14500	.06498	.56900

Int. Std.	Y_3710
Units	Cts/S
Avg	6653.9
Stddev	26.4
%RSD	.39699

Sample Name: ICV-3210720 Acquired: 10/16/2017 9:01:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	750.12	12483.	W 398.49	1577.8	1494.2	1503.1	24108.
Stddev	1.38	5.	6.47	6.0	1.7	3.9	33.
%RSD	.18447	.03763	1.6232	.37785	.11257	.25842	.13627
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			375.00				
Range			5.5000%				

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	388.3	1498.2	1489.1	1506.9	12576.	24255.	1016.2
Stddev	1.8	13.1	3.6	4.1	48.	77.	4.2
%RSD	.4592	.87639	.24403	.27455	.37903	.31798	.41821
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25027.	1525.5	1517.2	24533.	1518.1	382.87	384.5
Stddev	109.	2.5	13.1	43.	12.2	1.07	5.1
%RSD	.43509	.16588	.86336	.17569	.80404	.27923	1.322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICV-3210720 Acquired: 10/16/2017 9:01:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	390.56	1428.0	1485.3	773.85	1513.2	1528.8	5252.2
Stddev	1.38	16.1	1.3	8.90	8.3	10.4	23.6
%RSD	.35424	1.1309	.08751	1.1504	.54583	.67954	.45016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4515.5
Stddev	6.1
%RSD	.13404
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4710.9	3031.9	32544.	6767.5
Stddev	6.3	7.1	55.	9.3
%RSD	.13299	.23332	.16911	.13791

Sample Name: ICB Acquired: 10/16/2017 9:05:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.44520	-18.706	.96311	7.9781	-.09921	.13759	-.86268	.0371
Stddev	.20264	21.114	.91400	.6520	.07465	.09932	2.9779	.1532
%RSD	45.517	112.87	94.901	8.1726	75.239	72.183	345.19	412.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22361	-.01578	-.26553	3.3479	46.195	.54277	-7.5592	-.00304
Stddev	.15926	.47037	.39557	1.4553	9.966	1.2631	12.072	.04163
%RSD	71.222	2981.3	148.97	43.469	21.574	232.71	159.70	1368.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3845	17.920	.21552	.32925	.1488	1.9266	-.23494	.85465
Stddev	.3005	6.428	.08557	1.8604	1.643	2.4942	.51069	.04006
%RSD	8.8787	35.869	39.702	565.04	1104.	129.47	217.37	4.6876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 10/16/2017 9:05:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.79157	1.0486	.14734	-1.2261	-1.2805
Stddev	.80378	2.4559	.10341	6.7588	6.0048
%RSD	101.54	234.21	70.189	551.25	468.94
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5002.5	3089.4	33424.	6783.3
Stddev	7.6	3.8	55.	5.9
%RSD	.15264	.12258	.16514	.08688

Sample Name: ICVL-3260526 Acquired: 10/16/2017 9:10:05 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.6932	182.31	16.322	107.44	196.94	5.0711	4785.6	5.080
Stddev	.3075	11.05	2.022	1.45	.13	.0177	6.7	.147
%RSD	3.1726	6.0602	12.391	1.3493	.06421	.34932	.14057	2.893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.9610	9.6946	20.361	204.87	4780.1	49.014	5100.8	14.103
Stddev	.2409	.3328	.195	1.05	34.9	.648	26.4	.137
%RSD	2.4188	3.4332	.95881	.51425	.72946	1.3219	.51707	.97075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41.961	4870.1	39.354	10.245	21.22	19.657	97.093	50.481
Stddev	.892	26.0	.693	1.082	1.10	1.306	2.406	.349
%RSD	2.1254	.53331	1.7615	10.564	5.184	6.6446	2.4777	.69078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: ICVL-3260526 Acquired: 10/16/2017 9:10:05 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	19.434	7.9809	43.378	507.09	49.346
Stddev	1.418	2.5219	1.115	9.60	2.724
%RSD	7.2964	31.598	2.5702	1.8937	5.5195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4984.0	3085.8	33716.	6829.1
Stddev	2.0	5.5	77.	7.7
%RSD	.04068	.17946	.22743	.11337

Sample Name: CRILL-3123691 Acquired: 10/16/2017 9:14:23 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.3574	186.42	14.020	212.28	203.10	5.2017	4902.7	2.040
Stddev	.4018	17.72	1.740	4.40	.57	.0755	13.4	.052
%RSD	7.5001	9.5030	12.412	2.0748	.27861	1.4518	.27280	2.554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.1732	5.1401	25.611	107.43	4981.0	49.133	5276.6	14.228
Stddev	.2599	.4560	.341	3.57	46.7	.804	27.8	.029
%RSD	3.6230	8.8716	1.3298	3.3273	.93823	1.6364	.52635	.20157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.716	5015.7	40.399	2.2776	9.273	3.9646	100.78	52.092
Stddev	.472	23.2	.700	1.2424	.664	.5392	2.24	.024
%RSD	4.4064	.46217	1.7332	54.550	7.156	13.601	2.2211	.04623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CRILL-3123691 Acquired: 10/16/2017 9:14:23 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	9.9378	7.6954	10.957	506.64	54.057
Stddev	1.6439	3.2004	.477	5.57	3.159
%RSD	16.542	41.588	4.3558	1.0993	5.8445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4968.2	3082.6	33733.	6871.0
Stddev	5.8	2.8	63.	10.0
%RSD	.11632	.09068	.18769	.14539

Sample Name: ICSA-3123693 Acquired: 10/16/2017 9:18:41 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.05765	517830.	1.1553	-.70116	-.15640	.26073	479710.
Stddev	.10802	618.	5.7530	.26774	.11251	.04169	450.
%RSD	187.37	.11926	497.98	38.185	71.939	15.991	.09379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.095	.32853	4.0005	-2.2447	193110.	11.359	6.2879
Stddev	.090	.11490	.3293	.5397	332.	18.444	1.1302
%RSD	8.252	34.973	8.2320	24.044	.17201	162.37	17.974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	510310.	.20926	-.53295	93.082	1.2398	-4.3748	-6.331
Stddev	1227.	.05224	.11183	12.226	.9607	.3376	5.322
%RSD	.24042	24.963	20.984	13.135	77.491	7.7165	84.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA-3123693 Acquired: 10/16/2017 9:18:41 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0320	7.5952	-.28060	5.1841	-5.7780	-9.1413	9.1641
Stddev	.3530	1.1277	.28914	3.0789	2.3367	.3029	3.4166
%RSD	34.208	14.848	103.04	59.392	40.441	3.3136	37.282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	8.1319
Stddev	2.1548
%RSD	26.498
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3991.2	2733.3	29144.	6542.3
Stddev	10.2	4.5	40.	7.0
%RSD	.25541	.16334	.13819	.10623

Sample Name: ICSAB-3123692 Acquired: 10/16/2017 9:23:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1085.1	518290.	1044.3	523.70	500.26	482.05	483120.
Stddev	1.2	232.	11.3	4.74	.24	1.17	7051.
%RSD	.10935	.04477	1.0827	.90426	.04774	.24172	1.4594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1058.	507.13	482.89	534.57	192820.	10352.	551.64
Stddev	12.	4.44	1.45	1.47	458.	33.	2.06
%RSD	1.166	.87580	.30032	.27495	.23748	.32290	.37312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	511750.	493.98	1001.5	10482.	1000.3	934.54	1030.
Stddev	1041.	.86	13.4	13.	9.5	6.64	11.
%RSD	.20332	.17383	1.3358	.12018	.95127	.71016	1.053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICSAB-3123692 Acquired: 10/16/2017 9:23:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1026.4	521.63	504.80	993.70	494.15	1006.8	9891.4
Stddev	8.1	5.74	.86	7.62	2.45	9.9	22.2
%RSD	.78802	1.0997	.16958	.76638	.49645	.98445	.22493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1449.0
Stddev	11.0
%RSD	.75912
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3935.0	2713.7	29076.	6509.8
Stddev	6.7	6.3	80.	31.1
%RSD	.17125	.23277	.27468	.47713

Sample Name: CCV-3283852 Acquired: 10/16/2017 9:27:07 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1019.2	25611.	524.94	5241.3	2020.7	2011.3	50606.	519.7
Stddev	.6	112.	9.01	45.2	3.2	.9	162.	5.6
%RSD	.05799	.43884	1.7156	.86248	.15699	.04228	.32027	1.076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2050.3	2006.2	2018.2	25693.	50161.	5190.7	50849.	2033.3
Stddev	23.8	5.6	4.6	33.	116.	6.4	187.	1.7
%RSD	1.1588	.28037	.22974	.12933	.23137	.12393	.36818	.08123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2084.1	50510.	2054.5	506.10	528.0	526.09	5252.8	5121.2
Stddev	29.5	15.	22.1	4.88	4.0	5.04	67.8	11.1
%RSD	1.4173	.02895	1.0770	.96437	.7551	.95892	1.2907	.21698
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 9:27:07 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1036.7	2049.7	2068.0	5400.0	5014.8
Stddev	15.1	16.9	22.7	93.0	16.2
%RSD	1.4586	.82501	1.0998	1.7225	.32206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4512.6	2961.4	31856.	6724.6
Stddev	7.7	3.6	41.	14.4
%RSD	.17012	.12107	.12783	.21454

Sample Name: CCB Acquired: 10/16/2017 9:31:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19165	2.3068	2.2415	8.5282	-.19461	.16255	-241.86	.0030
Stddev	.40712	17.573	.9753	.8574	.14205	.14123	2.53	.0793
%RSD	212.43	761.80	43.512	10.054	72.991	86.882	1.0470	2617.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23860	-.15021	.41268	4.8853	19.602	.24215	-4.1448	-.08023
Stddev	.16027	.29271	.50286	2.4955	22.143	1.8774	19.892	.01825
%RSD	67.171	194.87	121.85	51.081	112.96	775.27	479.92	22.753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6243	43.021	.01480	.56010	2.817	2.0412	.05113	2.1502
Stddev	.5552	4.147	.65689	.49707	2.503	3.5474	.72113	.2943
%RSD	15.320	9.6397	4437.0	88.747	88.86	173.79	1410.3	13.688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 9:31:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.94107	1.2772	-8.3388	-2.2592	.25257
Stddev	.74971	.5192	.0938	2.5047	5.5315
%RSD	79.666	40.653	1.1252	110.86	2190.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4993.3	3083.3	33800.	6811.4
Stddev	5.2	3.0	71.	22.1
%RSD	.10475	.09634	.21043	.32514

Sample Name: IEC Check As Acquired: 10/16/2017 9:35:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17996	-16.670	5211.8	3.1735	-.24680	.13908	-292.00	1.719
Stddev	.22548	14.232	164.6	.3747	.05773	.11323	3.16	.291
%RSD	125.29	85.376	3.1573	11.807	23.390	81.409	1.0821	16.91
Check ?	None	None	None	None	None	None	None	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23013	.11459	.21379	.89323	47.094	-4.8760	-1.0872	-1.5709
Stddev	.16001	.41225	.23766	1.5066	15.453	2.3189	20.922	.0363
%RSD	69.534	359.77	111.17	168.67	32.812	47.557	1924.5	2.3102
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.44236	13.689	-.15452	-1.3844	-.0807	1.8839	-.89603	.14342
Stddev	.20948	4.264	.17555	.5450	.2632	1.8360	.14535	.06038
%RSD	47.354	31.151	113.61	39.369	326.2	97.461	16.221	42.104
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: IEC Check As Acquired: 10/16/2017 9:35:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.16534	-2.9718	-8.8705	-9.6246	-6.7292
Stddev	1.5667	4.0209	.0532	3.3383	6.1245
%RSD	947.55	135.30	.59948	34.685	91.014
Check ?	None	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5137.4	3140.9	34675.	6917.6
Stddev	6.6	1.3	55.	10.3
%RSD	.12773	.04038	.15906	.14958

Sample Name: IEC Check Ti Acquired: 10/16/2017 9:39:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17001	6.2575	6.9853	5.4243	-.37262	-.21044	-288.28	.0913
Stddev	.49761	18.576	1.5069	.3007	.18018	.01861	.39	.1580
%RSD	292.69	296.86	21.573	5.5429	48.355	8.8420	.13462	173.0
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.05900	.49575	7.2793	-1.5075	11.624	-2.5299	-40.508	-1.4955
Stddev	1.5054	.31358	.6129	.2728	41.142	2.0583	23.450	.0256
%RSD	2551.5	63.253	8.4203	18.097	353.95	81.360	57.889	1.7140
Check ?	Chk Pass	None	None	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07944	4.3199	-1.8054	-.79875	-3.394	2.2529	1.8282	30020.
Stddev	.09980	5.4824	.6342	.90474	.668	1.4572	.4908	110.
%RSD	125.64	126.91	35.130	113.27	19.67	64.679	26.847	.36668
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: IEC Check Ti Acquired: 10/16/2017 9:39:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.6500	-3.4150	-8.6227	10332.	-1.4316
Stddev	.0836	1.2834	.0851	1720.	3.2065
%RSD	2.2896	37.582	.98694	16.649	223.98
Check ?	Chk Pass	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5114.6	3142.2	34383.	6899.8
Stddev	9.2	7.5	112.	30.6
%RSD	.17944	.24014	.32451	.44351

Sample Name: IEC Check Co Acquired: 10/16/2017 9:44:18 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.33792	-27.126	2.0927	-.35654	-.18076	.05517	-296.99	.0078
Stddev	.50993	3.146	2.4066	.75014	.09662	.13462	2.40	.1149
%RSD	150.90	11.599	115.00	210.40	53.454	244.00	.80767	1472.
Check ?	None	None	Chk Pass	None	None	None	None	None
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10151.	-.10120	-1.0013	-.63187	-14.883	-3.8937	-13.185	-1.5734
Stddev	142.	.07681	.3351	.54740	29.219	2.6280	.312	.0486
%RSD	1.4007	75.903	33.467	86.632	196.32	67.493	2.3666	3.0888
Check ?	None	None	Chk Pass	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.36472	-20.047	-2.4769	1.5824	1.936	1.1013	-1.2077	8.1970
Stddev	.39564	7.469	.6479	.5739	.969	2.7400	.4799	.4222
%RSD	108.48	37.254	26.156	36.268	50.04	248.80	39.737	5.1511
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	None
Value								
Range								

Sample Name: IEC Check Co Acquired: 10/16/2017 9:44:18 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-5.1238	-2.0156	-9.4458	25.806	2.4213
Stddev	1.5651	3.2836	.1770	3.796	1.0209
%RSD	30.546	162.91	1.8735	14.711	42.164
Check ?	Chk Pass	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5081.0	3121.0	34230.	6911.7
Stddev	9.8	5.4	154.	10.6
%RSD	.19267	.17280	.45044	.15398

Sample Name: IEC Check Al Acquired: 10/16/2017 9:48:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31784	511820.	4.1815	-3.0580	-.22752	-.04303	-264.25
Stddev	.66633	803.	.9698	.3669	.07425	.12736	3.62
%RSD	209.65	.15697	23.194	11.998	32.634	296.01	1.3700
Check ?	None	None	Chk Pass	None	None	None	None
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.0283	.27617	-.33195	.25446	1.4313	27.818	-2.9472
Stddev	.0581	.29788	.37545	.71256	1.1125	9.535	1.0556
%RSD	205.2	107.86	113.10	280.03	77.728	34.276	35.819
Check ?	None	None	None	None	None	None	None
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-21.171	-.92025	-.79843	-.54870	.28797	-3.1500	.2709
Stddev	35.167	.04833	.48037	8.6502	.18366	.5635	1.950
%RSD	166.11	5.2521	60.165	1576.5	63.776	17.889	719.9
Check ?	None	None	None	None	None	Chk Pass	Chk Pass
Value							
Range							

Sample Name: IEC Check Al Acquired: 10/16/2017 9:48:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.62869	3.9921	2.6100	5.9658	-1.5028	-8.8939	-1.8941
Stddev	4.3128	1.1890	.2962	1.2805	1.1623	.3495	3.8863
%RSD	686.00	29.784	11.349	21.464	77.343	3.9294	205.18
Check ?	Chk Pass	None	None	Chk Pass	None	None	None
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	-.09570
Stddev	5.0398
%RSD	5266.1
Check ?	None
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4673.6	3063.6	31606.	6939.7
Stddev	.7	4.9	75.	4.0
%RSD	.01522	.16140	.23602	.05755

Sample Name: IEC Check Fe Acquired: 10/16/2017 9:52:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.40041	-13.830	1.1635	-2.1510	-.11279	.16261	-285.35
Stddev	.49989	10.377	2.8716	.2923	.16669	.00824	1.06
%RSD	124.85	75.035	246.81	13.591	147.78	5.0667	.36981
Check ?	None	None	None	None	None	None	None
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.082	1.2325	1.5199	.31029	505120.	-105.00	-2.4491
Stddev	.054	.0943	.5426	.16967	5472.	15.76	.8717
%RSD	4.997	7.6523	35.698	54.680	1.0834	15.012	35.594
Check ?	Chk Pass	None	None	Chk Pass	None	None	None
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-59.443	5.9299	-.29025	-25.295	-5.0382	-2.9675	-1.753
Stddev	8.608	.0758	.24503	10.116	.7199	1.3420	.991
%RSD	14.480	1.2776	84.419	39.993	14.289	45.223	56.56
Check ?	None	None	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: IEC Check Fe Acquired: 10/16/2017 9:52:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10749	3.0096	2.3561	.69440	-.10758	-9.2575	-11.536
Stddev	3.6486	.6551	.2749	.80388	.92016	.1335	10.131
%RSD	3394.4	21.766	11.667	115.77	855.36	1.4420	87.817
Check ?	None	None	None	Chk Pass	Chk Pass	None	None
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	9.6707
Stddev	2.2454
%RSD	23.218
Check ?	None
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4869.5	3004.3	32912.	6754.7
Stddev	8.9	3.6	132.	21.3
%RSD	.18284	.11883	.40191	.31532

Sample Name: IEC Check V Acquired: 10/16/2017 9:57:20 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.39282	.82628	3.1507	-1.9411	-.22734	.99477	-293.74	.1534
Stddev	.17146	16.132	2.6689	.4001	.26668	.09272	1.72	.1055
%RSD	43.649	1952.3	84.708	20.613	117.31	9.3208	.58676	68.74
Check ?	None	Chk Pass	None	None	None	Chk Pass	None	None
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.30460	-.36152	-.30315	23.718	-13.661	-2.8813	-23.582	-1.0484
Stddev	.36828	.22445	.82322	.736	46.235	1.2706	18.745	.0365
%RSD	120.91	62.086	271.56	3.1027	338.44	44.099	79.486	3.4830
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.3513	-31.906	-.29450	.66484	-1.975	-.85035	-1.3204	.73546
Stddev	.1849	2.223	.36387	2.0312	2.273	1.9142	.4501	.02819
%RSD	7.8621	6.9676	123.55	305.52	115.1	225.10	34.085	3.8329
Check ?	None	None	None	None	Chk Pass	None	None	None
Value								
Range								

Sample Name: IEC Check V Acquired: 10/16/2017 9:57:20 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	7.5176	5180.6	-9.2201	-10.015	-2.7763
Stddev	.3149	12.0	.1307	7.702	3.2784
%RSD	4.1884	.23120	1.4175	76.909	118.08
Check ?	Chk Pass	None	None	None	None
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5075.3	3122.6	34304.	6884.5
Stddev	7.8	4.5	125.	6.6
%RSD	.15362	.14505	.36427	.09648

Sample Name: CCV-3283852 Acquired: 10/16/2017 10:01:41 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1029.3	25365.	528.31	5261.6	2024.8	2018.9	50186.	520.8
Stddev	1.7	28.	4.76	61.9	3.4	2.9	100.	6.8
%RSD	.16386	.11194	.90039	1.1771	.16607	.14122	.20021	1.303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2051.8	2034.9	1987.6	25898.	50752.	5201.5	51157.	2013.2
Stddev	26.7	5.2	8.2	27.	100.	7.1	131.	6.2
%RSD	1.2990	.25785	.41227	.10482	.19652	.13732	.25591	.30613
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2093.8	50814.	2052.9	509.09	528.0	525.87	5289.3	5113.4
Stddev	34.8	37.	24.9	8.91	9.9	8.62	75.3	4.9
%RSD	1.6635	.07323	1.2115	1.7507	1.882	1.6388	1.4245	.09493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 10:01:41 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1043.4	2090.6	2085.7	5282.0	5084.5
Stddev	14.1	3.3	23.9	58.6	4.6
%RSD	1.3559	.15581	1.1474	1.1089	.08998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4471.7	2932.7	32025.	6732.4
Stddev	.5	3.7	98.	8.6
%RSD	.01030	.12742	.30677	.12778

Sample Name: CCB Acquired: 10/16/2017 10:05:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.18249	-6.6052	3.2191	7.8976	-.06126	.32973	-243.94	-.0156
Stddev	.16654	22.771	1.8510	1.1542	.05522	.04005	.66	.1404
%RSD	91.262	344.74	57.502	14.615	90.150	12.148	.27014	900.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16814	.43308	.02293	2.0151	21.283	1.5363	-6.0745	-.04307
Stddev	.30910	.42627	.33102	1.2630	6.565	2.0398	15.535	.01607
%RSD	183.83	98.428	1443.6	62.674	30.844	132.77	255.75	37.317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3477	-3.7014	.25468	-.28097	.5977	.12530	.46870	3.7217
Stddev	.4787	5.1591	.30937	1.3218	1.935	1.1756	.17024	.1546
%RSD	14.299	139.38	121.48	470.43	323.8	938.30	36.321	4.1550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 10:05:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.67534	-.79900	-8.4068	4.0330	-.05167
Stddev	1.1119	2.2074	.1387	7.5994	3.8851
%RSD	164.65	276.28	1.6494	188.43	7519.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4930.0	3053.7	33576.	6720.9
Stddev	7.1	2.6	136.	21.0
%RSD	.14464	.08369	.40626	.31233

Sample Name: DNUMB 240-298908/1-A Acquired: 10/16/2017 10:10:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.09610	-19.692	3.5412	3.8848	-.03580	.14785	-177.76	-.1410
Stddev	.16234	9.409	3.1111	.4006	.10241	.20694	2.47	.2057
%RSD	168.92	47.779	87.853	10.311	286.10	139.96	1.3894	145.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.38208	-.35578	.53546	3.9172	39.038	-.46642	3.8223	-1.3130
Stddev	.33003	.32421	.45357	1.9906	37.742	.74300	10.702	.0377
%RSD	86.377	91.127	84.707	50.817	96.681	159.30	279.98	2.8690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16845	40.947	-.20113	-.08942	-1.684	.80845	-.89773	.85826
Stddev	.09978	11.340	.40489	.82018	.907	2.1014	.43187	.25093
%RSD	59.235	27.695	201.31	917.28	53.88	259.93	48.107	29.237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: DNUMB 240-298908/1-A Acquired: 10/16/2017 10:10:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.4905	-.83029	-4.9843	-1.3398	-3.9864
Stddev	1.2059	4.6199	.0420	2.7215	2.8327
%RSD	80.903	556.42	.84319	203.12	71.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4986.2	3089.6	33735.	6831.5
Stddev	9.4	10.5	143.	19.4
%RSD	.18932	.33915	.42455	.28349

Sample Name: DNULCS240-298908/2-A Acquired: 10/16/2017 10:14:54 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	49.460	1966.6	2087.6	1044.4	1912.0	47.310	48283.	52.17
Stddev	.200	14.8	19.5	3.9	2.2	.265	29.	.56
%RSD	.40344	.75479	.93284	.37161	.11551	.55984	.05951	1.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	491.14	192.25	241.90	1003.1	47794.	983.77	48435.	486.62
Stddev	2.94	.91	.31	2.1	59.	2.63	138.	1.74
%RSD	.59882	.47175	.12944	.20576	.12376	.26691	.28574	.35764
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	976.97	47732.	501.05	496.07	506.3	2104.9	2007.1	971.50
Stddev	8.79	60.	1.78	4.38	4.8	19.6	14.5	3.39
%RSD	.89978	.12555	.35573	.88222	.9538	.93220	.72040	.34919
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: DNULCS240-298908/2-A Acquired: 10/16/2017 10:14:54 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2019.8	506.11	503.80	1065.9	977.79
Stddev	21.4	5.06	2.42	19.8	.34
%RSD	1.0584	.99951	.48089	1.8549	.03469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4577.9	2962.0	32206.	6724.9
Stddev	6.3	2.6	141.	17.0
%RSD	.13666	.08892	.43924	.25218

Sample Name: 240-86385-U-1-A Acquired: 10/16/2017 10:18:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.53729	-20.146	3.6758	5.2127	.99922	.05291	760.10	-.0557
Stddev	.20983	26.531	1.1800	.1388	.09435	.05816	2.79	.0893
%RSD	39.054	131.70	32.103	2.6626	9.4423	109.94	.36680	160.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.3112	.60888	2.0645	90.286	88.642	1.9297	26.137	19.036
Stddev	.4749	.13097	.1919	1.788	66.491	1.4806	7.934	.037
%RSD	6.4951	21.511	9.2943	1.9808	75.011	76.726	30.354	.19451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.9905	8068.6	5.9036	-.20023	1.805	2.8405	-.49793	1.0699
Stddev	.4144	30.5	.7546	2.4509	1.219	2.0792	.08737	.0645
%RSD	13.857	.37815	12.782	1224.1	67.57	73.197	17.546	6.0320
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86385-U-1-A Acquired: 10/16/2017 10:18:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.2316	1.8794	29.065	34.603	73.667
Stddev	.9160	3.3478	.834	.904	.719
%RSD	74.372	178.13	2.8685	2.6135	.97552
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4978.6	3064.1	33590.	6854.6
Stddev	7.6	6.4	35.	31.6
%RSD	.15364	.20726	.10509	.46165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.036%	98.754%	100.42%	101.48%
Range				

Sample Name: 240-86385-U-1-A@10 Acquired: 10/16/2017 10:23:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17100	4.4484	4.7296	.71840	-.12889	.16093	-153.66	.0086
Stddev	.24196	11.926	2.5077	.53603	.06125	.14701	1.74	.1141
%RSD	141.50	268.09	53.020	74.614	47.518	91.349	1.1310	1322.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.81528	-.08048	.39214	10.003	5.5814	-1.0960	-26.999	1.1846
Stddev	.14578	.26504	.28868	1.203	11.697	.7302	5.591	.0469
%RSD	17.880	329.31	73.617	12.025	209.56	66.622	20.708	3.9591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.33169	821.04	.49444	-1.4026	-3.110	-2.0924	-.79271	.62217
Stddev	.21932	6.78	.54903	1.7836	.469	4.8997	1.0714	.08296
%RSD	66.123	.82526	111.04	127.16	15.09	234.17	135.16	13.334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86385-U-1-A@10 Acquired: 10/16/2017 10:23:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.64481	-1.6546	-5.1242	2.0560	10.218
Stddev	1.4491	1.0990	.1698	2.9465	3.895
%RSD	224.73	66.421	3.3139	143.31	38.115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4928.6	3051.5	33212.	6718.8
Stddev	.8	2.5	18.	8.6
%RSD	.01596	.08188	.05278	.12738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.043%	98.346%	99.288%	99.472%
Range				

Sample Name: 240-86385-AD-1-B Acquired: 10/16/2017 10:27:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17962	-5.1132	1.7973	3.2123	-.09779	.08810	337.41	-.1703
Stddev	.62537	19.772	.1310	.1745	.07447	.11750	6.03	.1958
%RSD	348.16	386.69	7.2909	5.4320	76.156	133.36	1.7865	115.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.0569	.08313	.82560	.97463	22.617	2.7335	2.7098	-1.0608
Stddev	.0446	.33307	.48815	1.9260	9.906	1.0078	26.814	.0509
%RSD	4.2174	400.65	59.127	197.61	43.798	36.869	989.49	4.7964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08918	9032.5	1.2122	-1.4705	.2388	.09864	-1.2724	.23235
Stddev	.22562	8.4	.1757	1.1896	1.231	3.0724	.3311	.13810
%RSD	253.00	.09296	14.496	80.901	515.4	3114.7	26.020	59.434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86385-AD-1-B Acquired: 10/16/2017 10:27:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.21009	-2.8337	-8.9661	36.717	51.607
Stddev	.80361	.6793	.0698	3.130	6.569
%RSD	382.51	23.973	.77857	8.5237	12.728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4977.7	3069.2	33516.	6801.7
Stddev	8.9	5.9	63.	33.4
%RSD	.17862	.19383	.18857	.49176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.020%	98.917%	100.20%	100.70%
Range				

Sample Name: 240-86385-AD-1-B@10 Acquired: 10/16/2017 10:31:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22917	8.9464	2.0425	-1.6417	-.14276	.03881	-210.03	-.0579
Stddev	.19446	9.5835	.6901	.2701	.22618	.06027	.99	.0551
%RSD	84.856	107.12	33.785	16.449	158.43	155.27	.47146	95.13
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.41020	.12898	-.04002	.55515	12.601	-1.6407	-3.5157	-.92861
Stddev	.44323	.29722	.23560	1.3671	5.853	.2983	4.6906	.04663
%RSD	108.05	230.44	588.72	246.25	46.448	18.183	133.42	5.0214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.10511	915.78	-.02144	1.0249	.2029	-.25527	-1.1315	.33714
Stddev	.12619	5.11	.35534	.1855	3.045	1.9275	.3062	.15299
%RSD	120.05	.55770	1657.1	18.100	1500.	755.07	27.059	45.379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86385-AD-1-B@10 Acquired: 10/16/2017 10:31:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.72231	-2.4463	-8.8457	-2.3997	7.6025
Stddev	.96912	2.9349	.1033	1.6426	2.3629
%RSD	134.17	119.98	1.1681	68.450	31.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4927.1	3043.3	33370.	6714.2
Stddev	7.1	4.3	107.	28.0
%RSD	.14361	.14203	.31979	.41636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.013%	98.083%	99.761%	99.404%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 10:36:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1006.4	25058.	517.56	5137.7	1980.0	1966.4	49315.	509.0
Stddev	1.8	83.	10.64	66.6	1.2	3.5	56.	8.5
%RSD	.17537	.33300	2.0563	1.2959	.06065	.17826	.11298	1.679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2007.1	1999.3	1947.6	25466.	49689.	5110.3	50407.	1974.7
Stddev	30.9	3.3	4.5	51.	89.	8.1	91.	5.1
%RSD	1.5403	.16536	.23333	.20136	.17895	.15915	.18100	.25575
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2050.1	49767.	2011.4	499.81	511.5	515.38	5177.4	5011.0
Stddev	38.0	94.	28.6	5.08	8.9	4.02	85.8	26.1
%RSD	1.8537	.18893	1.4209	1.0166	1.742	.78016	1.6568	.52107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 10:36:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1029.1	2053.0	2044.1	5143.4	5004.5
Stddev	14.1	12.1	29.9	52.3	12.0
%RSD	1.3720	.58939	1.4642	1.0176	.23957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4454.6	2924.3	31807.	6627.9
Stddev	4.6	3.5	138.	14.7
%RSD	.10325	.12099	.43499	.22136

Sample Name: CCB Acquired: 10/16/2017 10:40:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32027	20.838	2.6365	7.2156	.74324	.28968	F 6353.9
Stddev	.17506	25.376	1.6249	1.0595	.17640	.07847	16.0
%RSD	54.661	121.78	61.633	14.683	23.735	27.089	.25224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit							1000.0
Low Limit							-1000.0

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0380	.14530	1.6863	7.4845	27.364	128.59	-1.1078
Stddev	.2769	.21034	.2048	.2672	1.899	8.69	2.5487
%RSD	728.9	144.76	12.143	3.5700	6.9395	6.7554	230.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25.943	7.2058	3.8429	89.651	.89889	.04221	-1.915
Stddev	14.996	.0724	.5059	7.175	.56856	.93575	.321
%RSD	57.805	1.0045	13.163	8.0036	63.251	2217.0	16.76
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: CCB Acquired: 10/16/2017 10:40:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.8743	18.105	4.9682	.31729	.92096	F 107.09	10.636
Stddev	3.8728	.624	.1169	1.4153	.41408	3.15	3.395
%RSD	206.62	3.4469	2.3521	446.06	44.962	2.9451	31.918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit						20.000	
Low Limit						-20.000	

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	-.70174
Stddev	3.6431
%RSD	519.16
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4940.7	3056.8	33768.	6752.7
Stddev	7.2	4.4	56.	6.6
%RSD	.14601	.14387	.16609	.09846

Sample Name: 240-86353-b-1-a Acquired: 10/16/2017 10:44:34 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.52934	20.382	.75362	3615.6	9.2158	.21167	177380.
Stddev	.32304	18.753	1.6366	47.1	.1139	.06306	192.
%RSD	61.027	92.008	217.17	1.3030	1.2362	29.791	.10809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0296	.07618	49.376	-1.0196	14.845	10037.	8.8142
Stddev	.1660	.23028	.527	.1059	.720	40.	1.2024
%RSD	561.1	302.26	1.0675	10.386	4.8482	.39984	13.641
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25480.	24.057	5.4395	260130.	85.123	-.06812	.1234
Stddev	82.	.101	.0538	1510.	2.009	.82976	2.675
%RSD	.32333	.41864	.98839	.58064	2.3601	1218.1	2167.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86353-b-1-a Acquired: 10/16/2017 10:44:34 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.2987	-.31268	1.5626	1.7101	-2.4875	-8.3590	9499.4
Stddev	1.7555	.50725	.1107	1.1909	1.0427	.1077	41.0
%RSD	76.370	162.23	7.0847	69.641	41.918	1.2889	.43160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	293.26
Stddev	5.65
%RSD	1.9264
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4396.1	2907.7	31424.	6691.4
Stddev	5.8	7.0	51.	23.8
%RSD	.13084	.23993	.16166	.35547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.449%	93.712%	93.942%	99.066%
Range				

Sample Name: SD 240-86353-b-1-a@5 Acquired: 10/16/2017 10:48:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04745	6.7731	3.0423	723.48	1.5967	.02765	35833.	-.0026
Stddev	.38978	11.679	1.2765	11.07	.1857	.09055	20.	.1115
%RSD	821.48	172.44	41.958	1.5296	11.629	327.46	.05550	4281.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.29252	10.584	-.15653	3.3291	1974.0	1.7303	5140.1	3.3994
Stddev	.12009	.067	.39658	1.3008	37.3	1.9193	79.6	.0219
%RSD	41.054	.63301	253.37	39.073	1.8905	110.92	1.5477	.64530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.81845	52352.	16.497	-.72017	-2.610	-1.1921	-1.4294	.79271
Stddev	.14267	39.	.250	.63804	1.264	1.5520	.3859	.05501
%RSD	17.431	.07399	1.5185	88.596	48.44	130.20	26.998	6.9390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86353-b-1-a@5 Acquired: 10/16/2017 10:48:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.32222	1.1835	-8.9298	1884.1	55.778
Stddev	.51523	4.0876	.2163	18.8	2.981
%RSD	159.90	345.39	2.4216	.99710	5.3450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4771.8	3008.6	32870.	6811.3
Stddev	9.2	1.3	29.	29.3
%RSD	.19344	.04270	.08766	.43049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.924%	96.965%	98.266%	100.84%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 10:53:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1035.5	25968.	536.11	5336.9	2044.3	2007.0	50722.	525.7
Stddev	1.3	92.	4.77	29.0	.6	3.6	31.	3.8
%RSD	.12137	.35495	.88930	.54432	.02797	.17963	.06065	.7175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2085.2	2070.1	2003.6	26308.	51003.	5289.6	51475.	2016.5
Stddev	19.4	1.2	3.9	13.	97.	11.5	101.	2.4
%RSD	.92966	.05951	.19617	.04803	.19080	.21723	.19620	.12120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2138.8	51057.	2085.2	518.65	534.4	537.10	5382.8	5140.1
Stddev	26.2	42.	22.7	4.32	5.2	4.68	61.8	47.4
%RSD	1.2272	.08295	1.0908	.83278	.9786	.87219	1.1472	.92234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 10:53:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1074.7	2122.1	2106.9	5295.4	5113.2
Stddev	14.4	4.9	21.9	59.1	8.3
%RSD	1.3396	.22884	1.0386	1.1151	.16162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4489.2	2951.7	32218.	6756.4
Stddev	5.9	3.4	50.	18.1
%RSD	.13103	.11474	.15671	.26786

Sample Name: CCB Acquired: 10/16/2017 10:57:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.26572	2.6640	1.9528	11.815	-.19129	.18725	-238.77	-.0051
Stddev	.28277	20.701	2.1400	1.211	.08724	.10177	.94	.0278
%RSD	106.42	777.05	109.58	10.249	45.607	54.350	.39204	539.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.64549	.10169	.22732	3.8657	29.599	3.0279	-11.802	-.07344
Stddev	.30900	.24247	.37585	2.4868	33.275	1.2675	18.719	.05131
%RSD	47.870	238.43	165.34	64.329	112.42	41.863	158.61	69.866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6603	13.050	-.49328	.00901	-.6987	1.3780	-.16851	3.0257
Stddev	.3796	9.056	.30633	1.4348	1.792	4.9482	.10707	.1466
%RSD	10.370	69.393	62.101	15922.	256.5	359.09	63.539	4.8451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 10:57:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.08664	-5.0507	-8.4629	2.6095	-.43482
Stddev	.58981	3.1906	.0573	2.1517	4.2364
%RSD	680.76	63.171	.67698	82.457	974.28
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4951.8	3061.8	33661.	6775.3
Stddev	4.1	4.8	101.	33.3
%RSD	.08181	.15632	.29890	.49106

Sample Name: mb 240-298908/1-a Acquired: 10/16/2017 11:01:42 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25975	-24.650	4.1202	6.9166	-.08965	.08226	-160.28	-.0741
Stddev	.48126	1.866	2.5603	.3138	.17172	.11396	2.83	.1018
%RSD	185.28	7.5709	62.139	4.5371	191.55	138.53	1.7666	137.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.24977	-.45511	.83124	3.7524	30.110	-1.3727	-8.8995	-1.2632
Stddev	.09523	.11612	.50868	1.7224	7.024	2.0630	18.622	.0643
%RSD	38.127	25.514	61.195	45.901	23.326	150.29	209.25	5.0922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28214	48.551	-.20150	-1.0084	-.1160	1.0691	-.74187	.50334
Stddev	.26656	3.544	.37204	2.3834	.7446	2.4234	.25314	.14508
%RSD	94.477	7.2987	184.63	236.35	641.8	226.68	34.122	28.824
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298908/1-a Acquired: 10/16/2017 11:01:42 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.44466	-3.3511	-4.8971	-4.4341	-.09513
Stddev	.83119	3.8804	.1621	2.2273	1.0340
%RSD	186.93	115.80	3.3091	50.231	1087.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5015.5	3099.0	34162.	6945.6
Stddev	2.9	2.7	21.	16.0
%RSD	.05700	.08763	.06223	.22966

Sample Name: lcs 240-298908/2-a Acquired: 10/16/2017 11:06:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	49.326	1985.5	2114.9	1061.8	1934.4	48.116	48525.	52.83
Stddev	.593	12.3	7.3	3.9	.5	.189	28.	.44
%RSD	1.2022	.61824	.34662	.36531	.02719	.39300	.05697	.8234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	492.79	192.09	243.91	1007.4	48255.	996.18	48778.	487.67
Stddev	2.52	.82	.18	2.9	30.	4.20	107.	1.09
%RSD	.51142	.42440	.07345	.28476	.06172	.42161	.21986	.22269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	989.61	48163.	502.84	498.86	512.7	2130.3	2011.7	976.77
Stddev	7.96	24.	2.87	2.43	7.1	11.9	13.4	.56
%RSD	.80485	.04988	.57146	.48796	1.376	.55814	.66746	.05724
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298908/2-a Acquired: 10/16/2017 11:06:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2035.0	506.47	503.84	1066.2	990.07
Stddev	24.9	1.46	1.77	13.8	3.57
%RSD	1.2244	.28867	.35187	1.2935	.36029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4603.2	2968.4	32526.	6832.3
Stddev	4.7	3.9	91.	22.3
%RSD	.10181	.13015	.28068	.32602

Sample Name: TEST Acquired: 10/16/2017 11:09:59 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04434	-16.072	3.0811	4.1650	-.09267	.10030	833.97	-.0937
Stddev	.30759	24.876	.9068	.4968	.17205	.05310	4.05	.0713
%RSD	693.65	154.78	29.431	11.929	185.65	52.939	.48521	76.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25211	-.07090	.12707	4.2718	38.738	.64074	13.314	.48789
Stddev	.11206	.53634	.13031	.0635	6.658	1.1515	6.455	.03419
%RSD	44.449	756.47	102.55	1.4875	17.186	179.72	48.480	7.0077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.9632	33.704	.19279	.31448	.9016	3.9768	2.4840	1.9718
Stddev	.2547	3.742	.32483	.77972	2.830	3.0688	.2324	.3780
%RSD	8.5952	11.103	168.49	247.94	313.9	77.169	9.3549	19.171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: TEST Acquired: 10/16/2017 11:09:59 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.22000	-2.5636	15.267	-1.0465	-.98584
Stddev	.28740	1.7682	.665	2.7250	7.0453
%RSD	130.63	68.972	4.3564	260.39	714.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4954.8	3057.2	33583.	6840.2
Stddev	3.2	2.9	51.	11.9
%RSD	.06515	.09367	.15196	.17358

Sample Name: PDS 240-86353-b-1-a Acquired: 10/16/2017 11:14:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	56.609	2200.4	2416.0	4824.0	2177.0	53.774	227190.
Stddev	.253	11.1	13.6	20.0	.5	.106	1027.
%RSD	.44655	.50658	.56332	.41555	.02453	.19676	.45205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58.89	560.78	258.28	272.67	1130.7	65775.	1158.5
Stddev	.45	3.26	1.08	.62	5.1	152.	2.7
%RSD	.7708	.58112	.41751	.22763	.44778	.23036	.23364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	78798.	547.67	1118.8	310470.	642.77	532.11	552.1
Stddev	215.	2.09	9.8	3379.	4.80	3.04	10.1
%RSD	.27316	.38142	.87716	1.0882	.74685	.57084	1.827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 240-86353-b-1-a Acquired: 10/16/2017 11:14:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2412.3	2293.5	1088.0	2196.7	562.68	557.54	10536.
Stddev	15.6	16.9	1.5	7.4	3.51	3.88	37.
%RSD	.64740	.73874	.13891	.33896	.62393	.69647	.35267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1372.1
Stddev	10.1
%RSD	.73409
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4293.6	2864.6	31330.	6758.1
Stddev	11.0	9.1	89.	6.8
%RSD	.25606	.31707	.28557	.10056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.411%	92.324%	93.661%	100.05%
Range				

Sample Name: 240-86353-b-1-b ms Acquired: 10/16/2017 11:18:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.637	2063.1	2258.1	4775.5	2032.3	49.932	223250.
Stddev	.697	19.4	40.2	63.4	4.8	.085	2305.
%RSD	1.2986	.93979	1.7821	1.3268	.23834	.16934	1.0322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.96	515.32	247.25	252.55	1057.1	62661.	1086.5
Stddev	.92	9.72	.54	1.07	.7	208.	4.5
%RSD	1.681	1.8872	.21881	.42497	.06638	.33154	.41473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	75402.	516.60	1026.9	305930.	604.80	500.38	544.0
Stddev	144.	.98	22.6	2483.	9.06	7.89	8.8
%RSD	.19147	.18925	2.2014	.81176	1.4982	1.5759	1.619
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86353-b-1-b ms Acquired: 10/16/2017 11:18:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2250.2	2125.0	1012.4	2036.6	535.23	519.19	10529.
Stddev	34.2	48.0	.5	51.9	4.73	9.23	35.
%RSD	1.5180	2.2604	.05186	2.5490	.88346	1.7783	.33412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1304.2
Stddev	3.5
%RSD	.26590
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4272.6	2850.0	31576.	6867.2
Stddev	6.0	5.1	114.	8.2
%RSD	.14096	.17744	.36220	.11955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.993%	91.855%	94.396%	101.67%
Range				

Sample Name: 240-86353-b-1-c msd Acquired: 10/16/2017 11:22:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.960	2069.3	2235.5	4684.5	2032.8	49.565	220410.
Stddev	.191	27.6	47.3	91.6	8.0	.359	1754.
%RSD	.36102	1.3314	2.1147	1.9558	.39538	.72448	.79594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.43	512.52	247.20	254.90	1053.5	62208.	1085.6
Stddev	1.20	10.42	.60	.28	1.6	44.	1.5
%RSD	2.212	2.0332	.24140	.10994	.15321	.07127	.13648
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	74889.	519.25	1023.9	300070.	602.51	496.13	538.1
Stddev	12.	.26	25.6	1065.	12.54	8.06	11.2
%RSD	.01666	.05012	2.5034	.35482	2.0813	1.6244	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86353-b-1-c msd Acquired: 10/16/2017 11:22:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2234.4	2116.4	1019.1	2013.5	531.70	517.98	10391.
Stddev	59.4	52.6	.4	60.1	3.21	10.59	104.
%RSD	2.6588	2.4845	.03969	2.9830	.60400	2.0444	.99767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1303.8
Stddev	9.9
%RSD	.75644
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4259.3	2840.1	31433.	6857.1
Stddev	10.4	9.0	93.	39.5
%RSD	.24313	.31554	.29450	.57570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.729%	91.535%	93.969%	101.52%
Range				

Sample Name: 240-86392-l-1-a@20 Acquired: 10/16/2017 11:26:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.9304	2064.4	10.073	53.939	15.237	2.8020	2057.4
Stddev	.3137	25.2	3.595	1.856	.052	.0439	6.9
%RSD	10.705	1.2228	35.685	3.4402	.34098	1.5653	.33432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	71.92	34.867	F 66417.	1053.7	24650.	426.86	2.0571
Stddev	2.11	3.428	353.	1.0	63.	3.93	1.3021
%RSD	2.928	9.8324	.53162	.09396	.25355	.92051	63.297
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20000.				
Low Limit			-500000.				

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	690.90	265.58	400.36	5083.9	2350.2	71.756	40.25
Stddev	20.18	.46	12.54	5.9	67.8	1.803	1.85
%RSD	2.9216	.17247	3.1323	.11681	2.8843	2.5131	4.588
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86392-l-1-a@20 Acquired: 10/16/2017 11:26:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19.927	349.09	F 54240.	13.874	2211.8	884.60	6309.5
Stddev	.908	10.44	296.	.687	11.7	24.27	735.1
%RSD	4.5580	2.9898	.54622	4.9486	.52981	2.7433	11.651
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			30000.				
Low Limit			-500000.				

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	8.7843
Stddev	3.7983
%RSD	43.239
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4887.9	3066.1	33397.	6761.4
Stddev	4.8	1.6	19.	5.3
%RSD	.09849	.05230	.05802	.07869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.232%	98.818%	99.840%	100.10%
Range				

Sample Name: 240-86403-h-1-a Acquired: 10/16/2017 11:31:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.58764	7072.0	14.507	4739.7	115.17	.50484	506060.
Stddev	.30306	15.1	1.003	141.2	.60	.07112	6784.
%RSD	51.572	.21394	6.9122	2.9781	.52064	14.087	1.3406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.7649	8.9925	17.445	42.380	11285.	74059.	160.07
Stddev	.1688	.3318	.288	.349	20.	157.	3.98
%RSD	22.07	3.6897	1.6482	.82270	.17705	.21196	2.4877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	284880.	542.32	114.66	239980.	42.349	47.792	4.745
Stddev	1094.	1.06	4.59	408.	2.014	2.500	.700
%RSD	.38388	.19508	4.0061	.17016	4.7560	5.2313	14.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86403-h-1-a Acquired: 10/16/2017 11:31:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.8420	.66863	133.03	2.6458	11.348	92.844	23765.
Stddev	1.3299	.30985	.18	.5387	.850	3.818	54.
%RSD	34.615	46.341	.13395	20.360	7.4860	4.1127	.22633
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2606.5
Stddev	10.2
%RSD	.39186
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4058.8	2732.9	30159.	6604.8
Stddev	10.1	4.2	105.	19.3
%RSD	.25002	.15287	.34709	.29293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.739%	88.080%	90.162%	97.784%
Range				

Sample Name: mb 240-298939/1-a Acquired: 10/16/2017 11:35:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.29912	-15.295	1.0297	14.396	-.28028	.06390	-251.23	-.1992
Stddev	.36709	32.708	1.1793	1.187	.06494	.01507	6.81	.0532
%RSD	122.72	213.85	114.53	8.2482	23.168	23.576	2.7110	26.72
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50509	.15261	.35809	1.6688	114.55	.09039	2.5621	-1.1910
Stddev	.46320	.21146	.44665	1.7184	36.95	.81842	24.457	.0417
%RSD	91.705	138.57	124.73	102.97	32.260	905.42	954.56	3.5009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.63176	103.46	-.44009	.29065	.3389	-.32584	-.65984	4.3681
Stddev	.15226	10.46	.47612	1.1960	2.857	2.1798	.61698	.4110
%RSD	24.102	10.111	108.19	411.47	843.0	668.97	93.505	9.4091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298939/1-a Acquired: 10/16/2017 11:35:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.10543	-1.9087	-8.3439	9.9548	-4.8233
Stddev	.10459	.8237	.1409	3.1694	3.6971
%RSD	99.203	43.155	1.6885	31.838	76.652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4960.7	3050.0	33840.	6826.0
Stddev	11.3	9.9	72.	27.6
%RSD	.22874	.32348	.21228	.40484

Sample Name: lcs 240-298939/2-a Acquired: 10/16/2017 11:40:07 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.433	2073.2	2221.9	1127.2	2037.8	51.111	51008.	55.41
Stddev	.191	5.8	19.1	7.8	1.8	.373	61.	.61
%RSD	.35675	.28116	.85829	.68967	.08760	.72933	.11932	1.094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	514.98	202.51	255.42	1055.1	51446.	1056.7	51605.	511.66
Stddev	5.11	1.49	1.27	3.2	90.	3.6	120.	1.14
%RSD	.99263	.73477	.49699	.30347	.17458	.33618	.23326	.22277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1044.7	51210.	525.06	523.31	542.1	2223.3	2108.0	1033.1
Stddev	10.3	33.	6.81	3.98	7.3	19.5	16.9	1.5
%RSD	.98194	.06421	1.2973	.76114	1.344	.87764	.80215	.14410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298939/2-a Acquired: 10/16/2017 11:40:07 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2125.3	534.53	523.69	1154.6	1040.9
Stddev	28.1	6.31	5.13	25.8	4.1
%RSD	1.3200	1.1804	.97892	2.2374	.38924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4561.9	2938.9	32486.	6735.6
Stddev	9.1	7.8	108.	20.9
%RSD	.19883	.26393	.33306	.31083

Sample Name: CCV-3283852 Acquired: 10/16/2017 11:44:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1029.3	25745.	536.05	5305.9	2032.7	2024.0	50501.	524.4
Stddev	2.0	115.	2.31	22.3	4.0	6.4	106.	3.6
%RSD	.19729	.44668	.43020	.41996	.19485	.31715	.20897	.6873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2066.0	2045.6	1983.6	26115.	51021.	5271.7	51624.	2011.1
Stddev	18.1	6.1	6.7	60.	34.	10.0	53.	5.0
%RSD	.87461	.30025	.33561	.22866	.06568	.18975	.10182	.24849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2127.0	51086.	2068.3	515.24	533.9	534.75	5335.6	5119.5
Stddev	21.7	72.	19.0	3.98	4.5	4.02	50.6	27.4
%RSD	1.0185	.14064	.91840	.77214	.8402	.75153	.94805	.53494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 11:44:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1066.7	2112.2	2099.1	5272.1	5130.2
Stddev	14.0	13.2	18.0	69.3	16.5
%RSD	1.3142	.62283	.85850	1.3149	.32121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4463.9	2928.3	31979.	6639.4
Stddev	6.3	2.4	105.	6.9
%RSD	.14149	.08127	.32680	.10362

Sample Name: CCB Acquired: 10/16/2017 11:48:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04642	-27.789	1.9342	15.160	-.03735	.17519	-242.98	.0052
Stddev	.17531	24.953	2.1435	1.102	.18629	.05654	5.46	.0834
%RSD	377.68	89.795	110.82	7.2688	498.71	32.273	2.2452	1594.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22830	.07003	.21444	3.3693	47.051	.86353	-6.4300	-.07691
Stddev	.07889	.08878	.28243	.2698	39.537	.62810	10.594	.01120
%RSD	34.558	126.77	131.70	8.0075	84.030	72.736	164.76	14.556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.0379	51.189	-.05325	-1.1214	-.7491	.55339	-.14468	3.6957
Stddev	.4027	3.761	.43498	.7845	1.110	1.6398	.36590	.4324
%RSD	9.9726	7.3467	816.82	69.956	148.2	296.31	252.90	11.701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 11:48:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.78827	-1.8724	-8.4582	7.7483	-2.0549
Stddev	.75544	1.9752	.0783	.3690	4.4987
%RSD	95.835	105.49	.92616	4.7619	218.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4935.2	3055.8	33567.	6706.9
Stddev	5.2	2.5	127.	18.1
%RSD	.10637	.08068	.37845	.27051

Sample Name: 240-86376-h-1-a Acquired: 10/16/2017 11:52:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.79176	-3.9730	7.6032	195.62	404.54	.17079
Stddev	.36724	26.735	1.5255	4.42	1.02	.07342
%RSD	46.383	672.91	20.064	2.2576	.25131	42.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	366880.	.3899	.70453	4.8181	-2.5144	21.487
Stddev	3796.	.0982	.10163	.5326	.0544	1.212
%RSD	1.0347	25.18	14.426	11.055	2.1632	5.6396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9146.7	88.717	252570.	517.55	.89669	F 512920.
Stddev	45.9	1.574	240.	1.27	.44130	9691.
%RSD	.50223	1.7739	.09504	.24634	49.215	1.8894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86376-h-1-a Acquired: 10/16/2017 11:52:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.3765	-.53276	-.4429	-2.9166	-.27821	1.3481
Stddev	.4142	.39016	2.934	2.8045	.78651	.1686
%RSD	7.7039	73.233	662.4	96.157	282.70	12.508
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.78428	-.82900	-8.1016	8381.5	4531.0
Stddev	1.2311	3.2254	.1298	38.3	15.3
%RSD	156.97	389.07	1.6016	.45639	.33872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4003.4	2720.4	29696.	6564.1
Stddev	10.5	.9	47.	26.8
%RSD	.26342	.03242	.15817	.40899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.638%	87.676%	88.776%	97.182%
Range				

Sample Name: SD 240-86376-h-1-a@5 Acquired: 10/16/2017 11:57:05 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08500	-13.137	5.4338	43.543	81.121	.23144	75068.
Stddev	.24813	14.313	2.4823	.848	.571	.02485	264.
%RSD	291.90	108.96	45.682	1.9465	.70391	10.737	.35109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0846	.50218	1.2296	.06192	4.0975	1900.7	18.213
Stddev	.0224	.22013	.1915	.89165	1.6498	13.1	1.726
%RSD	26.42	43.835	15.575	1439.9	40.263	.68755	9.4777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50779.	104.80	.10877	104960.	.37817	-.23902	-2.432
Stddev	99.	.07	.22059	385.	.16915	1.3011	.618
%RSD	.19469	.06753	202.81	.36715	44.729	544.35	25.41
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 240-86376-h-1-a@5 Acquired: 10/16/2017 11:57:05 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04345	-.41342	1.3109	1.3845	1.3017	-8.6926	1662.7
Stddev	2.1972	.40133	.1456	1.0381	2.0232	.1979	19.9
%RSD	5056.9	97.076	11.106	74.982	155.42	2.2773	1.1958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	945.16
Stddev	6.91
%RSD	.73109
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4567.4	2945.4	32541.	6820.3
Stddev	2.2	3.9	51.	7.3
%RSD	.04910	.13306	.15575	.10703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.857%	94.929%	97.283%	100.98%
Range				

Sample Name: PDS 240-86376-h-1-a Acquired: 10/16/2017 12:01:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	57.468	2200.2	2424.6	1369.6	2556.8	52.238
Stddev	.551	20.7	41.3	21.3	1.1	.257
%RSD	.95899	.94120	1.7045	1.5544	.04447	.49205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	412930.	59.33	558.79	214.99	271.26	1120.4
Stddev	3030.	.85	9.30	.42	1.38	3.3
%RSD	.73372	1.425	1.6646	.19391	.51027	.29488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	66479.	1267.2	305240.	1025.2	1106.8	F 549170.
Stddev	62.	1.2	280.	1.4	23.6	3113.
%RSD	.09303	.09177	.09186	.13918	2.1283	.56676
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: PDS 240-86376-h-1-a Acquired: 10/16/2017 12:01:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	556.28	520.95	571.1	2403.2	2293.6	1085.6
Stddev	8.69	8.47	13.5	44.2	43.1	.5
%RSD	1.5629	1.6259	2.355	1.8388	1.8808	.04922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2164.7	565.93	555.38	9322.3	5456.2
Stddev	24.2	4.77	8.44	40.6	12.0
%RSD	1.1176	.84369	1.5202	.43576	.21941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3948.4	2712.9	29822.	6639.7
Stddev	15.6	11.5	64.	13.6
%RSD	.39525	.42531	.21380	.20445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.544%	87.434%	89.154%	98.301%
Range				

Sample Name: 240-86376-h-1-b ms Acquired: 10/16/2017 12:05:34 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.934	2052.3	2245.1	1281.3	2395.6	48.051
Stddev	.495	11.7	32.3	16.1	2.9	.313
%RSD	.91777	.57108	1.4371	1.2582	.11962	.65134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	404490.	55.08	511.28	197.70	253.93	1034.0
Stddev	3572.	.71	7.29	.12	1.45	11.8
%RSD	.88306	1.284	1.4253	.06103	.57216	1.1430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61718.	1172.0	297810.	989.27	1004.8	F 534270.
Stddev	150.	5.8	844.	1.80	18.8	5763.
%RSD	.24302	.49315	.28331	.18219	1.8732	1.0787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86376-h-1-b ms Acquired: 10/16/2017 12:05:34 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	516.82	483.89	538.2	1483.2	2102.6	998.66
Stddev	6.21	6.50	5.0	21.0	34.6	1.75
%RSD	1.2011	1.3431	.9350	1.4142	1.6467	.17545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1992.4	512.60	514.06	9247.9	5316.8
Stddev	46.3	.54	7.48	40.8	13.5
%RSD	2.3229	.10562	1.4548	.44107	.25322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3944.2	2705.9	29666.	6598.1
Stddev	12.6	5.7	36.	22.8
%RSD	.31832	.20955	.12213	.34517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.459%	87.208%	88.688%	97.685%
Range				

Sample Name: 240-86376-h-1-c msd Acquired: 10/16/2017 12:09:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.040	2056.8	2269.7	1297.5	2421.3	48.311
Stddev	.304	19.0	45.4	18.1	3.0	.165
%RSD	.55252	.92612	2.0020	1.3912	.12590	.34097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	409700.	55.95	515.92	198.80	255.94	1039.3
Stddev	4224.	1.06	9.18	.26	.86	1.6
%RSD	1.0309	1.901	1.7786	.13217	.33585	.15461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	62346.	1180.8	300510.	1001.0	1016.7	F 533220.
Stddev	133.	2.1	149.	2.7	22.1	6417.
%RSD	.21296	.18029	.04960	.27127	2.1698	1.2034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86376-h-1-c msd Acquired: 10/16/2017 12:09:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	522.14	488.90	543.2	1487.7	2122.1	1007.7
Stddev	8.05	7.40	11.3	26.4	41.9	1.0
%RSD	1.5415	1.5128	2.082	1.7752	1.9732	.09659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2010.8	520.49	517.20	9390.4	5363.3
Stddev	45.1	3.10	8.22	54.1	8.8
%RSD	2.2415	.59512	1.5898	.57640	.16398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3958.3	2716.3	29724.	6698.3
Stddev	8.4	10.0	30.	49.2
%RSD	.21222	.36718	.10043	.73393
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.741%	87.544%	88.859%	99.168%
Range				

Sample Name: 240-86376-n-3-a Acquired: 10/16/2017 12:13:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.54489	7.9372	7.5052	248.76	496.30	.12303
Stddev	.62279	19.318	1.6519	6.69	.92	.11656
%RSD	114.30	243.38	22.010	2.6880	.18508	94.740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	175190.	-.1134	.46879	1.9145	-1.2665	1020.7
Stddev	281.	.0503	.53578	.6201	.3459	7.9
%RSD	.16030	44.40	114.29	32.391	27.311	.77776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11656.	23.829	25649.	486.73	3.4025	F 719380.
Stddev	44.	1.839	57.	1.27	.8090	5899.
%RSD	.37402	7.7185	.22167	.26169	23.777	.81996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86376-n-3-a Acquired: 10/16/2017 12:13:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1635	.13060	-.7347	2.1542	.03596	3.7327
Stddev	.5280	1.0089	3.100	.4933	.12396	.2632
%RSD	45.385	772.55	421.9	22.898	344.74	7.0522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.0171	-.35013	-7.3497	8835.8	1385.6
Stddev	2.0536	2.1614	.2480	53.5	9.4
%RSD	101.81	617.31	3.3742	.60569	.68031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4144.0	2822.9	30281.	6732.0
Stddev	20.9	14.4	44.	31.0
%RSD	.50535	.51172	.14401	.46095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.434%	90.980%	90.525%	99.667%
Range				

Sample Name: 240-86376-h-4-a Acquired: 10/16/2017 12:18:22 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19379	38.253	8.8697	316.94	236.96	.07274	487060.
Stddev	.43841	6.693	1.1902	7.68	.38	.06772	694.
%RSD	226.23	17.496	13.419	2.4244	.16198	93.089	.14244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4061	4.7473	2.4904	-1.9161	14568.	21206.	16.280
Stddev	.1429	.1535	.1311	.8306	40.	64.	.746
%RSD	35.18	3.2331	5.2654	43.349	.27516	.29993	4.5830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	208360.	2903.6	.97451	202220.	2.6845	.49353	-.1098
Stddev	486.	1.3	.16997	1171.	.1639	2.5957	1.837
%RSD	.23303	.04461	17.441	.57886	6.1058	525.94	1673.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86376-h-4-a Acquired: 10/16/2017 12:18:22 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.34327	4.6740	.87901	.65777	-3.2123	-7.8930	13100.
Stddev	3.1252	.7342	.09833	.93723	4.4037	.1455	547.
%RSD	910.42	15.708	11.186	142.49	137.09	1.8433	4.1733
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	3527.5
Stddev	12.3
%RSD	.34999
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4121.5	2788.2	30907.	6834.5
Stddev	9.3	3.6	36.	29.9
%RSD	.22481	.12857	.11722	.43751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.986%	89.860%	92.399%	101.18%
Range				

Sample Name: 240-86376-h-5-a Acquired: 10/16/2017 12:22:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17274	16.954	6.6699	270.20	283.67	.11644	359080.
Stddev	.74567	13.342	2.7258	6.61	.16	.07126	2446.
%RSD	431.66	78.695	40.867	2.4463	.05509	61.194	.68107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2631	1.4615	2.0985	-1.4952	3966.3	11088.	40.608
Stddev	.1451	.5535	.1526	.5176	29.2	90.	1.566
%RSD	55.14	37.870	7.2736	34.621	.73694	.80939	3.8563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	187980.	1048.1	.40385	355460.	2.3724	.00209	-2.539
Stddev	441.	3.0	.29734	2557.	.4454	.55993	3.701
%RSD	.23472	.28378	73.627	.71920	18.774	26728.	145.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86376-h-5-a Acquired: 10/16/2017 12:22:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.02279	-.03263	4.0835	-.64807	.91176	-7.2742	12664.
Stddev	3.3800	.01400	.1979	.49916	.59454	.2067	79.
%RSD	14834.	42.898	4.8468	77.023	65.208	2.8411	.62624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	3716.9
Stddev	15.7
%RSD	.42228
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4138.6	2786.2	30566.	6818.4
Stddev	21.4	8.5	89.	26.3
%RSD	.51756	.30415	.29253	.38510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.326%	89.797%	91.377%	100.95%
Range				

Sample Name: 240-86376-h-6-a Acquired: 10/16/2017 12:27:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07834	-27.728	1.9885	349.80	6.4142	.08418
Stddev	.19794	9.543	1.9236	10.75	.0825	.10005
%RSD	252.66	34.415	96.732	3.0733	1.2859	118.85
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	375970.	.3198	.57438	1.4670	-2.6203	264.63
Stddev	3196.	.1816	.17103	.0985	.4213	1.92
%RSD	.85008	56.77	29.776	6.7139	16.078	.72386
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6697.1	193.19	F 623340.	555.81	.22497	261290.
Stddev	19.1	1.08	926.	.66	.41410	1333.
%RSD	.28473	.56156	.14852	.11930	184.07	.51020
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit			500000.			
Low Limit			-500000.			

Sample Name: 240-86376-h-6-a Acquired: 10/16/2017 12:27:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9748	-1.3560	-2.881	-2.3144	-.15792	-1.4163
Stddev	.3922	.7133	.795	1.4240	.83522	.0699
%RSD	19.862	52.600	27.59	61.529	528.88	4.9341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.6512	-1.2007	-8.1324	9683.9	6382.6
Stddev	.4390	.2304	.0775	22.3	11.6
%RSD	26.585	19.184	.95324	.23070	.18190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4083.2	2739.4	30443.	6873.0
Stddev	35.0	16.2	45.	6.3
%RSD	.85616	.59083	.14872	.09200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.226%	88.289%	91.009%	101.75%
Range				

Sample Name: 240-86376-h-7-a Acquired: 10/16/2017 12:32:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03894	-18.111	3.2360	64.293	43.967	.05962	205580.
Stddev	.29948	9.687	1.3035	1.293	.111	.08707	617.
%RSD	769.03	53.484	40.282	2.0119	.25172	146.05	.30009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0398	.00424	1.0733	-.12421	126.06	3048.1	16.933
Stddev	.0977	.19873	.4839	.24922	1.53	33.3	.224
%RSD	245.4	4683.4	45.090	200.65	1.2141	1.0917	1.3217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	62974.	143.68	.37181	72093.	1.4792	-1.0337	-1.256
Stddev	182.	.33	.27689	99.	.1253	.2681	1.165
%RSD	.28865	.23132	74.471	.13690	8.4742	25.936	92.74
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86376-h-7-a Acquired: 10/16/2017 12:32:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.67669	-1.0052	.17612	2.2940	-.01120	-7.6942	4654.7
Stddev	3.2218	.5326	.20687	.9410	1.9042	.0959	27.1
%RSD	476.11	52.983	117.46	41.019	17003.	1.2470	.58275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1299.5
Stddev	8.5
%RSD	.65080
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4614.2	2969.4	33476.	7279.2
Stddev	13.4	9.3	50.	51.4
%RSD	.29119	.31357	.14808	.70584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.789%	95.702%	100.08%	107.77%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 12:36:27 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1038.7	25679.	531.09	5313.1	2057.0	2031.9	50231.	522.0
Stddev	.5	91.	16.45	114.5	1.2	1.4	61.	14.0
%RSD	.04780	.35286	3.0972	2.1554	.05700	.06905	.12166	2.675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2041.8	2029.8	2035.7	26097.	50938.	5269.9	51055.	2009.7
Stddev	56.0	6.0	5.5	8.	83.	7.6	64.	2.4
%RSD	2.7405	.29736	.27110	.03092	.16255	.14345	.12621	.11892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2107.0	50672.	2041.1	508.38	533.9	533.56	5241.1	5169.8
Stddev	69.0	114.	56.3	12.35	12.2	17.87	154.3	28.0
%RSD	3.2765	.22560	2.7563	2.4295	2.293	3.3489	2.9450	.54211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 12:36:27 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1049.1	2109.9	2036.4	5322.0	5109.4
Stddev	28.2	3.4	54.5	87.8	5.7
%RSD	2.6850	.16021	2.6782	1.6491	.11137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4608.6	3011.5	33220.	7101.0
Stddev	5.0	4.4	36.	20.8
%RSD	.10930	.14770	.10790	.29249

Sample Name: CCB Acquired: 10/16/2017 12:40:32 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.34748	-35.582	1.8213	7.2712	-.54799	.19223	-242.13	-.0248
Stddev	.45590	14.776	1.5647	.8136	.15231	.06419	1.89	.1168
%RSD	131.20	41.527	85.911	11.189	27.794	33.394	.78000	471.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18003	.27887	.56826	1.6513	64.502	.27425	-16.402	-.03734
Stddev	.22127	.40297	.53723	1.1217	10.861	.72728	35.378	.04119
%RSD	122.91	144.50	94.540	67.926	16.838	265.19	215.69	110.30
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3453	137.20	-.06294	-1.2582	-1.489	1.9980	-.56720	3.0000
Stddev	.4659	3.82	.08530	.2999	.997	.7753	.26638	.2407
%RSD	13.926	2.7812	135.51	23.835	66.95	38.805	46.964	8.0240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 12:40:32 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.06227	-2.3967	-8.3597	9.1078	-.47556
Stddev	.37218	2.4220	.1134	4.2517	2.1162
%RSD	597.65	101.06	1.3562	46.682	445.00
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5125.8	3146.1	35140.	7223.2
Stddev	5.8	2.5	32.	23.3
%RSD	.11392	.07839	.08994	.32211

Sample Name: 240-86376-h-8-a Acquired: 10/16/2017 12:44:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20167	-19.747	-.48286	326.54	41.712	.06524	193080.
Stddev	.47016	16.163	1.8965	5.53	.229	.11672	203.
%RSD	233.13	81.851	392.77	1.6923	.54853	178.92	.10506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.0046	.37349	1.3290	-.18047	5.5175	7749.5	20.309
Stddev	.1370	.18660	.4608	.51125	1.0159	30.0	.525
%RSD	2987.	49.962	34.675	283.29	18.412	.38700	2.5852
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58445.	124.94	.55520	108270.	1.0849	-1.1431	-1.107
Stddev	181.	.24	.33095	243.	.3065	.7541	2.416
%RSD	.31034	.19174	59.610	.22416	28.249	65.972	218.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86376-h-8-a Acquired: 10/16/2017 12:44:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.94154	-1.5647	.90727	1.6310	-1.8284	-6.5226	7132.5
Stddev	1.4206	.2869	.14275	1.4682	1.9966	.0577	23.5
%RSD	150.88	18.338	15.734	90.019	109.20	.88450	.32943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1088.5
Stddev	4.6
%RSD	.42646
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4574.7	2956.1	33077.	7204.2
Stddev	5.7	1.5	24.	20.7
%RSD	.12521	.05175	.07278	.28693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.003%	95.273%	98.884%	106.66%
Range				

Sample Name: 240-86376-h-9-a Acquired: 10/16/2017 12:49:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20374	-13.158	1.6331	23.870	4.9836	.05606	23793.	.0127
Stddev	.49229	1.557	.2688	1.108	.1065	.09535	68.	.0523
%RSD	241.63	11.830	16.458	4.6424	2.1375	170.08	.28768	412.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09599	.59483	.56737	1095.9	1757.3	6.4959	5060.9	166.49
Stddev	.14725	.57736	.55798	4.0	11.3	1.2953	23.3	.39
%RSD	153.40	97.064	98.344	.36374	.64056	19.940	.46037	.23481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.68925	29234.	.20483	.35229	-1.492	.16830	-1.7634	.50899
Stddev	.32049	106.	.42869	.07439	1.034	.25939	.2626	.08253
%RSD	46.498	.36141	209.29	21.117	69.31	154.12	14.890	16.215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86376-h-9-a Acquired: 10/16/2017 12:49:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.14256	-4.1124	-8.2269	1475.7	166.98
Stddev	.68080	3.3207	.0731	2.8	1.68
%RSD	477.55	80.749	.88816	.19126	1.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5037.9	3125.3	35192.	7468.7
Stddev	4.2	2.8	126.	35.5
%RSD	.08344	.09015	.35759	.47486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.22%	100.73%	105.21%	110.57%
Range				

Sample Name: 240-86388-h-2-a Acquired: 10/16/2017 12:53:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.39523	-12.687	5.9960	298.46	31.254	.13126
Stddev	.27756	4.059	1.5726	9.41	.136	.10529
%RSD	70.227	31.991	26.227	3.1535	.43627	80.214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	500570.	.4549	.39721	1.8896	-1.4227	2051.8
Stddev	1584.	.1102	.06765	.4147	.5753	8.7
%RSD	.31641	24.23	17.031	21.945	40.436	.42511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5212.4	155.40	F 623930.	109.21	.54280	137560.
Stddev	25.2	1.35	2238.	.33	.30142	95.
%RSD	.48420	.86754	.35863	.30136	55.529	.06886
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit			500000.			
Low Limit			-500000.			

Sample Name: 240-86388-h-2-a Acquired: 10/16/2017 12:53:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6970	1.6916	-1.050	-.59482	.29652	-1.3790
Stddev	.1987	2.5204	1.779	2.7922	.21746	.1099
%RSD	5.3757	148.99	169.5	469.42	73.336	7.9688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.8229	-3.5132	51.768	10829.	7214.4
Stddev	2.3830	2.4319	2.152	50.	14.9
%RSD	130.72	69.222	4.1569	.46435	.20596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4099.3	2731.5	30882.	7000.7
Stddev	30.0	16.7	81.	100.2
%RSD	.73111	.61005	.26279	1.4319
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.545%	88.033%	92.322%	103.65%
Range				

Sample Name: 240-86388-h-3-a Acquired: 10/16/2017 12:57:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.38089	-30.979	2.8197	149.44	37.275	.12928	230830.
Stddev	.41576	25.019	.9663	3.11	.137	.08619	855.
%RSD	109.15	80.760	34.269	2.0828	.36884	66.669	.37051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1809	.27008	.83438	-.90942	253.79	4411.4	33.886
Stddev	.0836	.34205	.41848	.69486	1.37	17.0	.371
%RSD	46.20	126.65	50.154	76.407	.54016	.38524	1.0937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	111520.	106.67	.35032	136380.	.94144	-1.2396	-.7150
Stddev	130.	.40	.12028	134.	.02234	1.5290	1.100
%RSD	.11619	.37673	34.335	.09810	2.3732	123.34	153.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86388-h-3-a Acquired: 10/16/2017 12:57:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.22107	-.61242	-.02868	.40440	-3.3123	-7.8948	7984.3
Stddev	1.9260	.61027	.12056	.97734	1.3103	.2306	24.9
%RSD	871.25	99.648	420.42	241.68	39.557	2.9204	.31160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2167.1
Stddev	4.8
%RSD	.22254
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4468.5	2902.3	32515.	7155.9
Stddev	4.8	7.0	96.	14.0
%RSD	.10756	.24084	.29561	.19580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.890%	93.539%	97.205%	105.94%
Range				

Sample Name: 240-86388-h-5-a Acquired: 10/16/2017 13:02:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.06018	-10.614	1.1592	61.264	40.155	.08118	198830.
Stddev	.16100	12.629	2.7333	1.717	.169	.04131	1046.
%RSD	267.54	118.99	235.80	2.8025	.42088	50.886	.52611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1225	.32758	1.1945	-.79231	165.99	3080.4	16.068
Stddev	.0711	.26156	.1881	.32453	1.76	8.7	.917
%RSD	58.03	79.848	15.748	40.961	1.0608	.28095	5.7056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	62311.	134.94	.28227	71002.	1.2644	-.68377	-1.978
Stddev	129.	.26	.45432	134.	.3038	1.6566	3.137
%RSD	.20758	.19308	160.95	.18905	24.027	242.28	158.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86388-h-5-a Acquired: 10/16/2017 13:02:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.8413	-1.4220	.29132	1.3381	-4.1066	-7.7817	4635.8
Stddev	1.1178	.3422	.20689	1.5663	3.5549	.0580	19.4
%RSD	60.710	24.066	71.017	117.05	86.565	.74491	.41767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1244.5
Stddev	7.1
%RSD	.57070
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4605.8	2956.1	33152.	7186.9
Stddev	20.9	10.6	89.	8.6
%RSD	.45435	.36014	.26839	.11980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.622%	95.273%	99.107%	106.40%
Range				

Sample Name: 240-86388-h-7-a Acquired: 10/16/2017 13:06:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.19116	-.49415	12.362	354.60	187.42	.15605
Stddev	.46942	21.244	1.712	9.52	.25	.03333
%RSD	245.56	4299.0	13.846	2.6853	.13370	21.356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	413880.	.2327	4.2247	2.4921	-1.6503	212.09
Stddev	2899.	.1394	.2072	.2876	.4931	3.23
%RSD	.70033	59.93	4.9049	11.539	29.881	1.5232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19012.	16.088	111930.	1636.4	.10349	F 650350.
Stddev	83.	1.673	132.	3.8	.22737	5478.
%RSD	.43487	10.400	.11795	.23075	219.69	.84228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86388-h-7-a Acquired: 10/16/2017 13:06:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0824	.32161	-3.278	-2.0609	-.24886	1.7191
Stddev	.1278	.71994	2.633	.9027	.11972	.1148
%RSD	4.1449	223.86	80.31	43.802	48.108	6.6760
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.6634	-.59961	-8.1062	15113.	3391.1
Stddev	1.1396	2.2351	.0760	20.	11.2
%RSD	68.513	372.76	.93720	.13392	.33058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4065.3	2758.5	30856.	7042.7
Stddev	9.1	6.3	49.	10.5
%RSD	.22404	.22750	.15978	.14921
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.869%	88.904%	92.245%	104.27%
Range				

Sample Name: 240-86388-h-8-a Acquired: 10/16/2017 13:11:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.40633	-23.713	.58356	11.245	44.424	.10136	99021.	-.0075
Stddev	.17606	22.983	3.4025	.584	.179	.08261	110.	.1081
%RSD	43.330	96.922	583.06	5.1967	.40325	81.504	.11060	1450.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.3053	1.4473	.31596	1522.3	1325.7	4.6639	32987.	248.79
Stddev	.2248	.2741	.53091	3.7	32.1	1.8193	342.	.08
%RSD	17.223	18.937	168.03	.24227	2.4194	39.008	1.0371	.03295
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.06005	24086.	8.2625	.67402	-1.381	.30203	-1.2882	.40604
Stddev	.26839	43.	.5212	.33117	3.213	1.9979	.2155	.23355
%RSD	446.97	.17857	6.3084	49.133	232.7	661.48	16.725	57.519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86388-h-8-a Acquired: 10/16/2017 13:11:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.66843	-3.7097	-8.1787	2426.3	310.52
Stddev	.95974	.3298	.0891	9.9	3.32
%RSD	143.58	8.8899	1.0890	.40773	1.0695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4799.5	3049.9	34136.	7195.9
Stddev	8.2	5.4	20.	27.6
%RSD	.17009	.17853	.05788	.38337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.475%	98.297%	102.05%	106.54%
Range				

Sample Name: 240-86388-h-9-a Acquired: 10/16/2017 13:15:38 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.09409	-21.239	4.5224	112.79	92.010	.05160	195560.
Stddev	.20429	9.385	.4601	2.60	.153	.03327	968.
%RSD	217.13	44.185	10.174	2.3023	.16599	64.476	.49477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0760	1.0619	2.4642	-.31176	444.86	4491.5	11.301
Stddev	.1872	.2988	.7574	.20455	2.50	7.3	1.600
%RSD	246.2	28.144	30.737	65.613	.56102	.16277	14.160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	109470.	357.27	-.37889	269870.	8.9090	-.08935	1.136
Stddev	427.	.63	.59717	2750.	.3866	1.0716	1.218
%RSD	.38973	.17738	157.61	1.0189	4.3396	1199.3	107.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86388-h-9-a Acquired: 10/16/2017 13:15:38 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.6575	-.82991	1.2998	.66675	-1.9122	-7.8400	6919.6
Stddev	1.9182	1.2946	.0724	.42070	1.9453	.2264	18.0
%RSD	115.73	155.99	5.5707	63.098	101.73	2.8871	.26070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1388.2
Stddev	11.0
%RSD	.79189
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4377.0	2900.1	32041.	7091.3
Stddev	11.7	5.8	88.	37.9
%RSD	.26826	.19858	.27334	.53433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.069%	93.468%	95.786%	104.99%
Range				

Sample Name: 240-86388-h-10-a Acquired: 10/16/2017 13:20:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.48128	-30.480	1.4829	20.319	20.310	.02670	72995.	.0193
Stddev	.35599	12.794	2.7146	.359	.109	.02059	43.	.1141
%RSD	73.967	41.976	183.06	1.7662	.53455	77.100	.05884	592.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.35590	.84110	.15451	1333.4	1610.5	6.8897	21410.	198.14
Stddev	.48057	.13868	.66841	9.5	16.9	1.4671	160.	.69
%RSD	135.03	16.488	432.59	.70908	1.0494	21.294	.74586	.34575
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.61315	52529.	1.3553	-.20199	-1.542	-.71072	-1.0796	.26277
Stddev	.03421	105.	.4072	1.9128	.918	2.2563	.3871	.07601
%RSD	5.5800	.19906	30.046	946.93	59.54	317.47	35.854	28.926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86388-h-10-a Acquired: 10/16/2017 13:20:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.9382	-3.6197	-7.6819	1947.9	651.54
Stddev	.9587	1.5646	.0267	16.7	14.49
%RSD	49.466	43.225	.34805	.85906	2.2246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4873.5	3073.2	34629.	7328.3
Stddev	2.5	6.8	63.	14.0
%RSD	.05192	.22037	.18071	.19103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.945%	99.046%	103.52%	108.50%
Range				

Sample Name: mb 240-298750/1-a Acquired: 10/16/2017 13:24:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05275	-31.990	-.33547	-1.7753	-.55836	.02960	-284.68	-.0907
Stddev	.14650	17.534	1.2118	.3352	.10011	.09727	2.05	.0866
%RSD	277.69	54.810	361.23	18.880	17.928	328.59	.71862	95.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18113	-.07764	-.03910	-.35937	28.764	-.48256	-5.8034	-1.3624
Stddev	.14137	.13106	.21234	.88059	18.014	1.4621	2.7371	.0413
%RSD	78.052	168.80	543.09	245.04	62.626	302.98	47.163	3.0321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.48516	133.66	-.39172	-.06821	-.4121	.89162	-1.0995	-.07834
Stddev	.40904	2.65	.19865	.39435	1.027	2.6116	.2990	.16335
%RSD	84.309	1.9843	50.713	578.14	249.1	292.91	27.190	208.51
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298750/1-a Acquired: 10/16/2017 13:24:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.65997	-.24546	-9.0923	-7.9698	-3.2204
Stddev	1.4952	2.3426	.1343	2.5054	2.9053
%RSD	226.56	954.36	1.4774	31.436	90.217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5204.7	3190.8	35955.	7416.9
Stddev	4.1	2.6	46.	10.8
%RSD	.07799	.08295	.12733	.14551

Sample Name: CCV-3283852 Acquired: 10/16/2017 13:28:50 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1030.1	25537.	535.78	5356.4	2039.6	2006.8	49701.	526.8
Stddev	1.2	61.	3.54	30.8	2.6	1.2	77.	3.9
%RSD	.11786	.24034	.66156	.57521	.12869	.06209	.15569	.7312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2061.0	2019.5	2029.2	25847.	50349.	5234.0	50443.	1991.2
Stddev	16.1	2.6	2.4	55.	70.	4.5	131.	2.1
%RSD	.78141	.13038	.11903	.21231	.13811	.08539	.26009	.10630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2133.5	50360.	2057.6	510.85	541.1	541.13	5289.7	5111.0
Stddev	23.4	32.	16.7	4.18	4.4	6.36	48.5	25.0
%RSD	1.0972	.06299	.80999	.81739	.8175	1.1756	.91656	.48994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 13:28:50 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1060.8	2095.9	2050.6	5232.3	5054.8
Stddev	8.4	10.8	17.0	67.8	2.4
%RSD	.78838	.51435	.82960	1.2960	.04816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4655.8	3042.2	33506.	7188.5
Stddev	1.9	5.2	61.	23.3
%RSD	.04095	.16946	.18105	.32384

Sample Name: CCB Acquired: 10/16/2017 13:32:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.46612	-35.126	1.8064	5.0049	-.52675	.07471	-245.10	-.0078
Stddev	.35233	17.081	1.6137	.9146	.10818	.07564	1.92	.2564
%RSD	75.588	48.627	89.330	18.274	20.538	101.25	.78234	3296.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10789	.31213	.47578	2.7621	49.629	-1.1074	8.9938	-.06482
Stddev	.15094	.15357	.33317	.5262	22.635	.7974	15.396	.01349
%RSD	139.90	49.201	70.026	19.050	45.608	72.008	171.18	20.815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6472	85.956	-.10961	-.57627	.2555	1.2467	-.96704	2.7010
Stddev	.5994	3.466	.21724	.37764	2.182	1.7698	.56348	.2927
%RSD	16.435	4.0320	198.20	65.533	854.0	141.96	58.268	10.837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 13:32:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.64881	-3.7964	-8.3699	1.3187	-1.7896
Stddev	.76193	1.9673	.1108	1.2225	3.3233
%RSD	117.43	51.820	1.3240	92.703	185.70
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5186.7	3182.3	35521.	7313.8
Stddev	1.5	1.2	102.	4.5
%RSD	.02841	.03759	.28793	.06092

Sample Name: lcs 240-298750/2-a Acquired: 10/16/2017 13:37:17 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.657	2032.6	2231.6	1126.6	2049.3	50.871	50616.	55.22
Stddev	.316	12.7	17.0	4.8	3.1	.202	54.	.48
%RSD	.60005	.62361	.76211	.42638	.15207	.39688	.10606	.8710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	514.20	199.03	261.37	1043.9	50683.	1047.1	50346.	509.51
Stddev	5.14	1.19	.11	2.9	88.	5.9	119.	.96
%RSD	.99881	.59542	.04190	.27646	.17400	.56387	.23733	.18781
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1048.4	50517.	523.90	520.46	549.5	2252.7	2088.7	1029.7
Stddev	13.3	79.	4.42	4.37	5.4	14.9	23.1	2.1
%RSD	1.2723	.15544	.84378	.83920	.9808	.66295	1.1074	.20338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298750/2-a Acquired: 10/16/2017 13:37:17 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2125.3	527.58	509.30	1125.7	1029.3
Stddev	30.8	4.62	5.09	22.0	8.9
%RSD	1.4475	.87551	1.0003	1.9573	.86275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4773.3	3068.8	34115.	7360.8
Stddev	3.5	6.7	61.	14.5
%RSD	.07255	.21928	.18004	.19745

Sample Name: 240-86282-a-1-a Acquired: 10/16/2017 13:41:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	40.406	812.85	4.4408	53.331	127.74	-.18955	20949.	.1224
Stddev	.278	10.46	.0874	.259	.38	.08195	28.	.1262
%RSD	.68722	1.2872	1.9689	.48561	.30032	43.232	.13431	103.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50640	3.5670	10.966	1894.1	38360.	4.6462	19693.	29.858
Stddev	.02977	.5464	.256	4.9	91.	2.4851	138.	.054
%RSD	5.8778	15.317	2.3307	.25929	.23608	53.486	.70026	.18206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.8376	29469.	2.5141	-2.4322	5.954	3.1405	7.2046	301.30
Stddev	.1732	70.	.6225	.3391	1.179	1.3791	.3311	.37
%RSD	2.2099	.23819	24.759	13.943	19.81	43.913	4.5951	.12384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86282-a-1-a Acquired: 10/16/2017 13:41:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.0606	-1.5043	10.119	7072.0	476.80
Stddev	.8939	.7424	.258	38.3	4.67
%RSD	84.287	49.348	2.5458	.54190	.97977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4977.3	3137.4	34315.	7578.8
Stddev	5.2	6.8	6.	5.8
%RSD	.10446	.21567	.01671	.07704
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.011%	101.11%	102.59%	112.20%
Range				

Sample Name: SD 240-86282-a-1-a@5 Acquired: 10/16/2017 13:45:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.6316	118.72	1.0226	9.5300	25.648	.15476	4054.7	-.1073
Stddev	.4176	27.98	1.3577	.3221	.099	.11680	14.9	.1129
%RSD	5.4714	23.565	132.78	3.3796	.38709	75.472	.36643	105.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03832	.65963	2.8893	385.19	7692.7	2.7146	3992.9	5.0636
Stddev	.29871	.43542	.0983	1.66	33.4	.8897	8.3	.0977
%RSD	779.52	66.009	3.4021	.43038	.43423	32.774	.20713	1.9285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.3515	5920.2	.37409	-.38588	1.454	.48237	.50524	60.412
Stddev	.1823	12.7	.08549	1.2096	1.612	4.2235	.40388	.272
%RSD	13.486	.21375	22.854	313.45	110.9	875.56	79.938	.45035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86282-a-1-a@5 Acquired: 10/16/2017 13:45:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.96780	-.70747	-5.1657	1425.7	101.19
Stddev	1.0301	.27795	.0950	9.7	5.53
%RSD	106.44	39.288	1.8386	.67700	5.4627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5170.3	3174.0	35429.	7460.9
Stddev	9.7	4.3	106.	15.1
%RSD	.18775	.13525	.30037	.20218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.85%	102.30%	105.92%	110.46%
Range				

Sample Name: PDS 240-86282-a-1-a Acquired: 10/16/2017 13:49:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	95.628	2838.3	2348.3	1224.7	2227.2	51.847	71808.	57.43
Stddev	.518	25.3	6.9	5.2	2.2	.289	191.	.11
%RSD	.54187	.89139	.29406	.42436	.10100	.55770	.26650	.1867
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	541.68	210.63	284.31	2886.4	90924.	1083.8	70522.	549.16
Stddev	.72	.93	.89	29.8	196.	2.4	267.	.55
%RSD	.13357	.44276	.31364	1.0329	.21522	.22343	.37894	.09961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1111.9	81127.	543.87	526.92	561.3	2347.3	2223.9	1384.6
Stddev	7.6	264.	2.21	5.87	8.1	15.4	12.4	.6
%RSD	.68772	.32598	.40683	1.1141	1.436	.65567	.55646	.04616
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: PDS 240-86282-a-1-a Acquired: 10/16/2017 13:49:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2203.1	541.63	547.25	8048.4	1509.0
Stddev	4.0	7.02	2.16	64.7	20.0
%RSD	.18048	1.2964	.39506	.80342	1.3260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4648.7	3036.1	33435.	7497.8
Stddev	9.4	4.3	69.	20.6
%RSD	.20319	.14110	.20730	.27431
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.474%	97.850%	99.955%	111.01%
Range				

Sample Name: 240-86282-a-1-b ms Acquired: 10/16/2017 13:53:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	94.253	2759.3	2245.2	1171.2	2120.6	49.227	68941.	54.82
Stddev	.827	17.9	14.3	3.7	10.5	.263	307.	.34
%RSD	.87727	.64731	.63514	.31313	.49353	.53383	.44549	.6120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	506.85	201.36	270.78	2922.6	88923.	1032.6	67738.	530.65
Stddev	3.80	.28	.72	15.1	414.	5.3	245.	.61
%RSD	.75016	.13839	.26729	.51698	.46575	.51149	.36139	.11455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1040.8	78446.	516.03	508.29	560.4	2249.0	2095.4	1321.6
Stddev	6.1	447.	3.46	5.15	3.1	5.1	15.1	1.0
%RSD	.58267	.56967	.67032	1.0136	.5608	.22800	.72223	.07543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86282-a-1-b ms Acquired: 10/16/2017 13:53:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2111.5	524.05	520.75	8048.7	1457.1
Stddev	22.7	8.73	3.80	73.4	4.7
%RSD	1.0767	1.6661	.72930	.91158	.32029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4664.2	3044.8	33538.	7511.5
Stddev	4.9	7.3	49.	25.0
%RSD	.10512	.23891	.14701	.33330
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.782%	98.131%	100.26%	111.21%
Range				

Sample Name: 240-86282-a-1-c msd Acquired: 10/16/2017 13:57:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	97.375	2863.1	2306.0	1199.3	2184.5	50.329	70919.	56.41
Stddev	.359	33.7	17.8	6.4	2.7	.196	117.	.40
%RSD	.36909	1.1754	.77310	.53144	.12296	.38931	.16453	.7024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	520.96	208.59	277.61	3098.4	90918.	1066.2	69427.	544.77
Stddev	3.52	.46	.86	6.2	317.	.7	162.	.41
%RSD	.67522	.22129	.31015	.19869	.34918	.06760	.23301	.07611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1069.0	80343.	533.09	521.63	574.1	2322.4	2147.2	1365.6
Stddev	8.7	212.	2.67	4.21	7.7	18.6	17.0	1.2
%RSD	.81394	.26325	.50103	.80632	1.344	.79932	.79122	.08781
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86282-a-1-c msd Acquired: 10/16/2017 13:57:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2164.1	531.55	534.34	8246.7	1502.7
Stddev	27.8	4.63	3.21	64.8	7.6
%RSD	1.2847	.87132	.60025	.78594	.50801
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4633.9	3023.8	33350.	7487.3
Stddev	12.8	9.1	58.	21.6
%RSD	.27526	.30017	.17429	.28902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.180%	97.457%	99.701%	110.85%
Range				

Sample Name: 240-86300-h-3-a Acquired: 10/16/2017 14:01:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16309	-27.309	5.1577	234.43	24.885	.08009	604810.
Stddev	.14167	3.992	1.7187	9.24	.172	.15478	3928.
%RSD	86.864	14.619	33.324	3.9436	.69274	193.26	.64944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1955	.99058	1.5166	-2.4717	2.7372	6597.2	68.196
Stddev	.1373	.18552	.1531	.3871	2.8576	4.3	1.151
%RSD	70.22	18.729	10.097	15.661	104.40	.06569	1.6874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	183110.	18.526	4.5667	314720.	3.5239	.10849	-.9033
Stddev	418.	.018	.6038	2215.	.5385	2.5895	.5441
%RSD	.22846	.09659	13.221	.70371	15.283	2386.9	60.23
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86300-h-3-a Acquired: 10/16/2017 14:01:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1544	-.93363	-.62733	1.6793	-1.7995	-8.2631	7477.9
Stddev	2.9228	.36602	.13741	1.9501	1.9784	.2689	33.3
%RSD	135.67	39.204	21.904	116.12	109.94	3.2543	.44562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4748.2
Stddev	6.5
%RSD	.13759
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4183.6	2789.8	31187.	7120.3
Stddev	3.6	8.5	100.	48.9
%RSD	.08585	.30438	.31939	.68730
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.222%	89.914%	93.233%	105.42%
Range				

Sample Name: 240-86300-h-6-a Acquired: 10/16/2017 14:06:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10852	-25.705	3.7502	134.45	173.54	.11236	214070.
Stddev	.82255	16.848	3.1064	5.96	.12	.10471	1141.
%RSD	757.99	65.544	82.835	4.4353	.06795	93.199	.53281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2091	.47611	1.4701	-1.2915	999.99	11119.	50.686
Stddev	.1207	.20103	.7658	.6441	4.99	33.	1.481
%RSD	57.71	42.224	52.092	49.875	.49923	.30024	2.9211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	123660.	285.30	.89513	433200.	1.0836	-.28722	-1.453
Stddev	435.	.80	.07832	3480.	.1448	1.8214	1.168
%RSD	.35157	.27868	8.7496	.80329	13.362	634.14	80.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86300-h-6-a Acquired: 10/16/2017 14:06:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.84443	8.0438	.50859	1.1545	.22768	-7.6464	7164.6
Stddev	.25904	1.1035	.02486	2.1680	2.5964	.0964	21.0
%RSD	30.677	13.719	4.8885	187.79	1140.4	1.2614	.29300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2021.5
Stddev	7.4
%RSD	.36483
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4307.5	2855.6	31642.	7120.4
Stddev	13.9	10.2	48.	4.2
%RSD	.32207	.35819	.15080	.05829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.688%	92.033%	94.596%	105.42%
Range				

Sample Name: 240-86300-h-7-a Acquired: 10/16/2017 14:10:37 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.54337	-19.407	4.7504	89.189	103.88	.08717	174500.
Stddev	.22370	14.076	1.1888	2.131	.54	.10842	633.
%RSD	41.168	72.530	25.025	2.3897	.51593	124.38	.36275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0557	.09234	1.6321	-.24404	7069.7	6460.0	27.518
Stddev	.1747	.41936	.1910	.55962	29.8	39.1	1.159
%RSD	313.7	454.13	11.702	229.31	.42205	.60499	4.2119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	34163.	234.64	.90816	54893.	1.1901	-1.0545	-1.869
Stddev	489.	.32	.29182	152.	.6003	2.5275	2.068
%RSD	1.4300	.13576	32.133	.27705	50.443	239.68	110.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86300-h-7-a Acquired: 10/16/2017 14:10:37 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.2548	-1.3918	.39532	.60451	-1.2023	-8.4131	7656.8
Stddev	2.1361	.4787	.18710	1.2814	3.1924	.0987	71.0
%RSD	170.23	34.395	47.329	211.97	265.52	1.1737	.92756
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1426.9
Stddev	7.6
%RSD	.53557
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4685.3	2996.9	33729.	7272.4
Stddev	7.8	16.5	71.	11.5
%RSD	.16636	.55029	.21185	.15818
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.202%	96.589%	100.83%	107.67%
Range				

Sample Name: 240-86300-h-8-a Acquired: 10/16/2017 14:14:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07652	-2.2947	1.9487	221.82	23.811	.10876	575010.
Stddev	.36580	15.205	1.5114	10.41	.193	.04624	8008.
%RSD	478.06	662.63	77.557	4.6909	.80861	42.520	1.3927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.3077	.63632	1.0401	-2.0142	-.42536	6312.8	66.286
Stddev	.1164	.09048	.7471	.7916	3.0803	18.0	1.236
%RSD	37.82	14.219	71.829	39.304	724.17	.28584	1.8650
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	175080.	17.600	.34514	299980.	3.3543	-.64330	-2.046
Stddev	370.	.018	.23355	2583.	.5372	1.3495	1.053
%RSD	.21153	.10030	67.668	.86117	16.016	209.77	51.46
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86300-h-8-a Acquired: 10/16/2017 14:14:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.89448	-.19103	-1.3129	1.3323	-.63918	-8.5245	7216.5
Stddev	2.3338	.61505	.0732	1.2583	4.7270	.1636	43.8
%RSD	260.91	321.96	5.5720	94.452	739.54	1.9192	.60724
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	4550.1
Stddev	9.1
%RSD	.20102
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4204.0	2794.3	31396.	7050.3
Stddev	29.2	23.0	25.	37.6
%RSD	.69362	.82151	.07900	.53281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.629%	90.058%	93.859%	104.38%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 14:19:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1038.6	25515.	540.69	5368.7	2042.7	2022.8	49800.	528.0
Stddev	2.2	65.	6.96	41.1	3.7	7.7	141.	5.5
%RSD	.21071	.25534	1.2880	.76591	.18006	.38225	.28342	1.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2055.1	2016.7	2027.8	25809.	50587.	5251.1	50518.	1994.6
Stddev	23.5	5.1	6.1	56.	97.	10.2	109.	6.3
%RSD	1.1447	.25528	.29927	.21773	.19109	.19375	.21569	.31708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2133.3	50405.	2054.8	510.08	544.4	542.23	5283.6	5148.6
Stddev	29.0	149.	22.9	2.65	7.5	1.89	74.3	25.6
%RSD	1.3571	.29512	1.1166	.51886	1.378	.34920	1.4069	.49776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 14:19:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1059.6	2104.5	2049.6	5226.5	5071.2
Stddev	10.1	10.5	25.2	71.2	13.8
%RSD	.95219	.49968	1.2313	1.3629	.27290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4657.6	3036.4	33712.	7203.7
Stddev	8.7	3.8	84.	30.4
%RSD	.18578	.12507	.24851	.42150

Sample Name: CCB Acquired: 10/16/2017 14:23:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17673	-36.557	-.13590	5.9363	-.42624	.06804	-239.01	-.0390
Stddev	.13902	16.050	.57142	1.2195	.10080	.07586	3.12	.2515
%RSD	78.665	43.903	420.49	20.544	23.649	111.49	1.3048	644.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.33774	.02486	.36182	2.4994	76.765	.21390	-10.007	-.06323
Stddev	.18077	.34659	.68458	.2976	24.950	.83200	4.890	.00861
%RSD	53.523	1394.2	189.21	11.906	32.502	388.96	48.862	13.619
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6576	110.38	-.00168	.33347	-.8107	1.3434	-.94700	2.4192
Stddev	.8084	11.73	.44228	.06445	1.866	.9153	.21597	.1984
%RSD	22.103	10.629	26334.	19.327	230.2	68.131	22.806	8.2025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 14:23:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.06426	-.66256	-8.2585	1.6481	-1.6642
Stddev	.67839	2.6320	.1050	4.6560	3.0982
%RSD	1055.7	397.25	1.2718	282.50	186.16
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5193.6	3187.4	35608.	7307.0
Stddev	2.6	2.8	42.	35.7
%RSD	.05043	.08789	.11834	.48852

Sample Name: CCV-3283852 Acquired: 10/16/2017 14:27:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1011.2	25079.	526.58	5255.0	2001.1	1968.9	48756.	516.8
Stddev	2.4	45.	2.05	16.7	1.3	6.0	64.	2.0
%RSD	.23847	.18003	.38999	.31735	.06382	.30714	.13027	.3917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2017.1	1976.8	1991.6	25368.	49463.	5150.3	49420.	1948.0
Stddev	8.1	3.2	6.7	37.	131.	4.6	17.	2.5
%RSD	.40214	.16037	.33471	.14688	.26489	.08937	.03470	.12881
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2095.0	49383.	2017.2	504.40	532.9	534.20	5183.6	5007.9
Stddev	17.4	77.	8.4	.44	1.5	3.94	28.0	14.8
%RSD	.82989	.15683	.41854	.08822	.2790	.73822	.54036	.29477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 14:27:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1045.9	2060.7	2005.9	5067.0	4966.8
Stddev	8.9	.6	6.9	57.0	13.4
%RSD	.85458	.03017	.34408	1.1244	.27072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4692.0	3060.8	33764.	7240.9
Stddev	12.0	8.3	32.	17.1
%RSD	.25518	.27280	.09595	.23577

Sample Name: CCB Acquired: 10/16/2017 14:32:02 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.26283	-19.216	3.6032	8.8589	-.28157	.08004	F 2867.2
Stddev	.43649	25.712	.9585	.9080	.08865	.14524	27.8
%RSD	166.07	133.81	26.602	10.250	31.484	181.45	.96835
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit							1000.0
Low Limit							-1000.0

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0078	.18153	.72688	1.5845	11.887	106.29	.48117
Stddev	.2537	.22285	.22717	.4483	.784	28.37	1.3832
%RSD	3253.	122.76	31.253	28.293	6.5935	26.691	287.46
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.7453	1.4683	3.7196	108.35	.11034	.46841	1.098
Stddev	17.579	.0877	.4700	5.81	.56011	1.6170	1.022
%RSD	226.96	5.9746	12.635	5.3587	507.64	345.21	93.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: CCB Acquired: 10/16/2017 14:32:02 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04368	4.8642	3.5902	.37625	-1.2738	F 40.777	5.0090
Stddev	1.9199	.5181	.2344	.27389	.4909	1.121	5.2506
%RSD	4395.0	10.652	6.5278	72.795	38.538	2.7493	104.82
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit						20.000	
Low Limit						-20.000	

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	.40010
Stddev	2.0807
%RSD	520.04
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5200.9	3191.9	35675.	7364.6
Stddev	10.7	.7	112.	20.2
%RSD	.20520	.02336	.31254	.27468

Sample Name: CCVL-3260526 Acquired: 10/16/2017 14:36:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.470	190.49	16.952	109.35	199.07	4.9715	4720.9	5.205
Stddev	.896	17.63	1.258	2.10	.12	.0901	.6	.164
%RSD	8.5561	9.2546	7.4185	1.9240	.06145	1.8114	.01332	3.153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.8697	10.114	20.951	209.24	4858.9	52.235	5091.3	13.855
Stddev	.2673	.075	.319	2.49	11.4	2.005	43.3	.061
%RSD	2.7081	.74056	1.5216	1.1884	.23367	3.8376	.85006	.44028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44.004	4903.2	39.879	9.7997	21.08	20.908	99.097	51.088
Stddev	.631	2.1	.549	1.1468	.55	1.900	1.489	.023
%RSD	1.4344	.04313	1.3772	11.703	2.617	9.0875	1.5023	.04594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCVL-3260526 Acquired: 10/16/2017 14:36:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	19.369	8.1396	44.011	500.42	54.080
Stddev	.585	.3846	.771	5.15	2.360
%RSD	3.0180	4.7256	1.7520	1.0283	4.3643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5163.5	3177.2	35612.	7389.0
Stddev	2.2	5.2	116.	23.7
%RSD	.04220	.16398	.32688	.32126

Sample Name: ICSA-3123693 Acquired: 10/16/2017 14:40:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.35962	517790.	-.85501	-.68297	-.56355	.20404	474990.
Stddev	.76605	1817.	2.8366	.90152	.06398	.07711	4208.
%RSD	213.02	.35089	331.76	132.00	11.354	37.790	.88594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.000	.42588	3.7547	-1.8884	192460.	66.591	7.3918
Stddev	.188	.14772	.2374	.4518	580.	44.785	.9801
%RSD	18.84	34.686	6.3227	23.925	.30145	67.254	13.260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	505560.	.49829	.40785	204.20	.86522	-4.0247	-3.870
Stddev	1336.	.04912	.25239	11.06	.55705	3.0275	4.423
%RSD	.26423	9.8576	61.883	5.4177	64.383	75.225	114.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA-3123693 Acquired: 10/16/2017 14:40:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.8433	7.0097	-.39540	5.0592	-4.4429	-6.6765	11.270
Stddev	3.8507	.9116	.18711	1.5184	2.1184	.3608	4.907
%RSD	100.19	13.004	47.322	30.013	47.680	5.4045	43.536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	7.2725
Stddev	3.6885
%RSD	50.718
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4117.2	2805.2	30633.	7066.7
Stddev	16.0	6.9	90.	14.5
%RSD	.38882	.24701	.29252	.20574

Sample Name: ICSAB-3123692 Acquired: 10/16/2017 14:44:58 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1097.3	514060.	1065.0	535.69	502.14	480.03	472700.
Stddev	2.3	881.	16.2	4.70	.25	.84	2634.
%RSD	.20898	.17134	1.5199	.87793	.05073	.17564	.55721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1073.	503.43	480.19	536.70	191450.	10416.	554.62
Stddev	12.	6.02	1.12	1.24	270.	42.	2.48
%RSD	1.088	1.1964	.23322	.23175	.14126	.40668	.44714
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	506360.	483.30	1020.9	10479.	994.38	939.90	1060.
Stddev	399.	.47	13.1	11.	8.24	6.01	8.
%RSD	.07871	.09806	1.2869	.10833	.82820	.63993	.7871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICSAB-3123692 Acquired: 10/16/2017 14:44:58 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1059.2	523.43	503.12	999.12	498.25	993.13	9659.8
Stddev	11.9	6.43	1.55	10.35	3.56	9.10	22.1
%RSD	1.1245	1.2281	.30829	1.0355	.71422	.91620	.22899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1449.5
Stddev	5.1
%RSD	.35066
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4073.0	2786.4	30657.	6979.0
Stddev	8.5	5.3	54.	12.4
%RSD	.20898	.19031	.17723	.17838

Sample Name: 240-86392-l-1-a@100 Acquired: 10/16/2017 14:48:59 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.42344	398.56	3.0860	8.0733	2.5866	.52659	210.74	14.63
Stddev	.22449	8.82	1.3090	.4232	.0780	.05172	4.55	.27
%RSD	53.016	2.2122	42.419	5.2413	3.0154	9.8216	2.1603	1.835
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.9836	13587.	212.75	4817.7	148.92	-1.1006	134.82	52.829
Stddev	.4050	5.	.59	12.9	18.42	.8549	10.16	.074
%RSD	6.7684	.03536	.27519	.26728	12.369	77.671	7.5362	.13926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	81.938	1050.6	482.61	13.719	12.29	5.8485	68.105	11446.
Stddev	1.450	8.7	10.46	.607	2.70	1.2651	1.302	39.
%RSD	1.7694	.82440	2.1679	4.4256	21.94	21.631	1.9112	.34313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86392-l-1-a@100 Acquired: 10/16/2017 14:48:59 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.5408	426.09	171.91	811.59	.60989
Stddev	1.4602	3.66	3.73	59.07	.78342
%RSD	57.471	.85998	2.1699	7.2787	128.45
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5174.8	3178.9	35093.	7177.7
Stddev	6.4	3.9	110.	37.4
%RSD	.12366	.12419	.31347	.52140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.94%	102.45%	104.91%	106.27%
Range				

Sample Name: 480-125513-b-21-a Acquired: 10/16/2017 14:53:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03996	77.163	2.0052	1851.9	60.795	.11157	367900.
Stddev	.27480	14.567	1.7684	47.3	.111	.06906	683.
%RSD	687.69	18.878	88.190	2.5568	.18204	61.894	.18559
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1400	.48404	2.1752	.75610	210.11	3819.7	3.2858
Stddev	.2697	.37209	.3722	.31997	4.36	83.3	1.9609
%RSD	192.7	76.871	17.112	42.319	2.0763	2.1801	59.678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24306.	6.2551	103.11	28983.	2.7571	1.3591	.5551
Stddev	170.	.0552	3.89	31.	.6965	1.2915	.7373
%RSD	.70144	.88246	3.7756	.10787	25.261	95.025	132.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125513-b-21-a Acquired: 10/16/2017 14:53:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20.269	-1.1527	6.6136	1.2914	-2.4063	-6.3332	3954.2
Stddev	1.704	.7662	.4890	.7255	.5920	.1511	24.4
%RSD	8.4049	66.471	7.3946	56.177	24.602	2.3855	.61678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1507.7
Stddev	9.2
%RSD	.61152
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4625.5	2969.6	33208.	7172.3
Stddev	2.4	3.9	73.	15.7
%RSD	.05251	.13268	.21859	.21884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.013%	95.709%	99.275%	106.19%
Range				

Sample Name: 480-125513-b-22-a Acquired: 10/16/2017 14:57:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32221	-14.829	3.5932	712.85	58.841	-.03306	211600.
Stddev	.50836	17.772	.8348	7.63	.060	.04117	1232.
%RSD	157.77	119.84	23.233	1.0697	.10203	124.52	.58236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2415	5.9979	1.4128	1.1930	6.2720	4353.8	6.0823
Stddev	.1622	.1662	.1891	.7777	.4937	58.9	.5797
%RSD	67.15	2.7703	13.386	65.190	7.8712	1.3529	9.5300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41802.	659.03	9.0228	6570.4	19.607	-.41122	-.8317
Stddev	89.	1.42	.1726	24.6	.118	.93871	.4289
%RSD	.21206	.21623	1.9128	.37517	.60199	228.27	51.57
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125513-b-22-a Acquired: 10/16/2017 14:57:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.1574	-1.2720	1.0729	1.6215	2.3282	-1.5535	8631.4
Stddev	1.1989	.6522	.2445	.9770	2.9127	.2499	86.7
%RSD	28.838	51.269	22.784	60.251	125.10	16.086	1.0050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	885.03
Stddev	9.84
%RSD	1.1119
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4727.1	3004.2	33825.	7186.1
Stddev	6.2	5.5	62.	33.3
%RSD	.13186	.18163	.18466	.46397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.033%	96.822%	101.12%	106.39%
Range				

Sample Name: 480-125513-b-23-a Acquired: 10/16/2017 15:02:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20002	-14.342	2.4291	2.8173	-.63244	.04205	-270.90	-.1071
Stddev	.34260	.511	3.5134	.3579	.13683	.14584	3.74	.1561
%RSD	171.29	3.5599	144.64	12.705	21.635	346.86	1.3816	145.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08290	-.22932	.28208	1.6812	67.822	-1.8269	-11.919	-1.2689
Stddev	.09472	.10147	.45347	1.9650	14.960	1.7124	13.613	.0039
%RSD	114.26	44.250	160.76	116.88	22.057	93.729	114.22	.30523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.27295	37.378	-.19085	-1.4560	.1511	.76245	-1.2415	.50952
Stddev	.22851	1.561	.50996	1.0162	1.832	1.3270	.6737	.36123
%RSD	83.719	4.1769	267.21	69.798	1213.	174.05	54.266	70.897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125513-b-23-a Acquired: 10/16/2017 15:02:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.38981	1.3987	-8.8961	-7.2546	-1.1763
Stddev	1.1263	2.3444	.0787	1.9174	2.5689
%RSD	288.93	167.61	.88514	26.430	218.38
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5189.1	3193.7	35812.	7345.5
Stddev	3.0	1.7	73.	48.7
%RSD	.05864	.05340	.20316	.66337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.22%	102.93%	107.06%	108.75%
Range				

Sample Name: 480-125513-b-24-a Acquired: 10/16/2017 15:06:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23062	-21.483	-.79245	1.0147	-.58726	.00261	-285.72	-.0670
Stddev	.20544	18.897	1.2285	.4704	.13658	.07620	1.56	.0911
%RSD	89.082	87.960	155.02	46.365	23.258	2915.4	.54593	136.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.09370	.05666	.97790	2.2242	54.071	-.17390	-18.945	-1.2180
Stddev	.03423	.06416	.89834	1.5031	23.956	3.5185	20.470	.0658
%RSD	36.531	113.25	91.864	67.581	44.306	2023.3	108.05	5.3994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.57427	29.420	-.14600	.57154	-.0834	1.3570	-1.1818	.31461
Stddev	.21702	4.305	.30656	.81292	.9907	1.5158	.4505	.17439
%RSD	37.791	14.633	209.97	142.23	1187.	111.71	38.121	55.430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125513-b-24-a Acquired: 10/16/2017 15:06:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.00027	-.71147	-8.6603	-11.752	-2.1904
Stddev	1.0812	3.5233	.1004	7.978	.2060
%RSD	402560.	495.21	1.1597	67.885	9.4040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5181.2	3186.3	35668.	7335.8
Stddev	5.1	1.2	47.	22.0
%RSD	.09781	.03721	.13281	.29939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.07%	102.69%	106.63%	108.61%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 15:10:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1017.4	25101.	527.18	5263.7	2009.0	1994.6	49191.	519.5
Stddev	2.7	90.	2.26	22.6	2.7	4.5	27.	3.2
%RSD	.26387	.36013	.42852	.43020	.13522	.22739	.05388	.6222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2025.0	1984.0	1999.5	25385.	49740.	5154.3	49897.	1969.1
Stddev	16.6	.9	3.0	45.	68.	14.1	145.	1.4
%RSD	.81882	.04594	.14981	.17922	.13652	.27410	.28965	.06967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2094.3	49895.	2024.5	505.99	532.6	531.18	5211.4	5056.8
Stddev	22.9	48.	17.9	6.58	4.9	3.74	51.2	4.8
%RSD	1.0956	.09564	.88277	1.3007	.9272	.70353	.98298	.09572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 15:10:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1044.6	2066.3	2025.4	5103.6	4993.7
Stddev	12.8	12.0	17.0	59.6	13.3
%RSD	1.2245	.58045	.83803	1.1685	.26688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4647.5	3032.2	33336.	7098.6
Stddev	2.2	3.0	60.	3.8
%RSD	.04737	.09872	.17856	.05395

Sample Name: CCB Acquired: 10/16/2017 15:14:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.10665	-29.837	2.0668	7.7227	-.48974	.12846	-68.246	-.0896
Stddev	.08090	6.074	1.1032	.7944	.10291	.03811	1.794	.0656
%RSD	75.860	20.357	53.377	10.286	21.013	29.667	2.6283	73.23
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07452	.32179	.24377	3.1260	53.681	-.45021	3.0356	-.02161
Stddev	.02249	.27160	.35840	1.3647	26.768	1.1307	5.2579	.04696
%RSD	30.180	84.402	147.02	43.658	49.864	251.15	173.21	217.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.2468	46.676	-.27550	-.20619	1.905	-.29632	-.08110	2.7348
Stddev	.9081	4.000	.39403	.96831	.581	1.2430	.38452	.3077
%RSD	27.969	8.5705	143.02	469.61	30.49	419.48	474.15	11.250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 15:14:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.82129	.13010	-5.0460	-2.4646	1.2212
Stddev	.62230	1.4204	.0816	2.9364	1.8183
%RSD	75.771	1091.8	1.6173	119.15	148.89
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5159.1	3166.6	35304.	7185.5
Stddev	12.1	7.0	124.	19.9
%RSD	.23497	.21981	.35225	.27680

Sample Name: 480-125514-b-21-a Acquired: 10/16/2017 15:19:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23848	-19.673	1.1464	4.6694	-.64550	.05094	-282.56	-.0890
Stddev	.19861	1.926	1.0323	.5021	.09054	.01356	2.93	.1416
%RSD	83.279	9.7916	90.048	10.754	14.027	26.622	1.0355	159.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05195	.14536	.40376	.38035	76.723	-1.7023	4.7090	-1.1297
Stddev	.14890	.23267	.12803	1.0025	34.886	1.7482	8.5256	.0378
%RSD	286.59	160.07	31.709	263.57	45.470	102.70	181.05	3.3429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.38481	26.434	-.22199	1.1821	-2.436	2.1671	-1.0406	.42386
Stddev	.23612	11.013	.23568	.6187	.970	1.3771	.1366	.32325
%RSD	61.359	41.663	106.17	52.336	39.83	63.546	13.125	76.263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125514-b-21-a Acquired: 10/16/2017 15:19:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.06167	-.29463	-8.6620	-5.1669	2.9888
Stddev	.38942	2.9299	.0711	4.1621	.2155
%RSD	631.50	994.44	.82048	80.553	7.2089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5216.4	3208.1	35844.	7443.5
Stddev	12.6	6.1	42.	5.1
%RSD	.24081	.18860	.11587	.06843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.77%	103.39%	107.16%	110.20%
Range				

Sample Name: 480-125514-b-22-a Acquired: 10/16/2017 15:23:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.24010	-39.686	-.65761	2.8413	-.72591	.03431	-285.16	-.0138
Stddev	.25252	4.198	1.6299	.4858	.06291	.04479	1.16	.1001
%RSD	105.17	10.577	247.85	17.096	8.6664	130.53	.40584	728.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06754	.58199	.35155	1.7619	63.241	-.33970	-3.6908	-.66414
Stddev	.26095	.63795	.21670	2.4622	21.198	.89989	3.5555	.03547
%RSD	386.36	109.61	61.641	139.75	33.519	264.90	96.334	5.3414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17800	18.119	-.02189	-.23029	-1.712	-1.0555	.08855	.32604
Stddev	.15896	5.559	.15193	1.3097	.761	1.8667	.69658	.12525
%RSD	89.304	30.682	694.20	568.71	44.46	176.86	786.69	38.415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125514-b-22-a Acquired: 10/16/2017 15:23:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.87035	-.71184	-8.7029	-12.258	-.70720
Stddev	.52492	2.6209	.0628	6.612	2.3859
%RSD	60.311	368.19	.72109	53.942	337.38
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5173.7	3182.8	35682.	7358.3
Stddev	8.2	9.1	105.	6.1
%RSD	.15939	.28634	.29451	.08290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.92%	102.58%	106.67%	108.94%
Range				

Sample Name: 480-125515-b-21-a Acquired: 10/16/2017 15:28:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.10123	-44.645	2.6950	1.4658	-.61970	.06479	-287.68	-.0532
Stddev	.69339	15.402	1.3905	.2528	.13936	.09074	2.30	.1054
%RSD	685.00	34.499	51.595	17.245	22.488	140.07	.79823	198.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.30822	-.12497	.32504	-.17208	41.348	-1.8645	-8.8834	-1.2316
Stddev	.12403	.14861	.24123	.47224	27.848	.6366	9.0262	.0371
%RSD	40.241	118.92	74.216	274.43	67.351	34.141	101.61	3.0126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.36690	15.149	.08652	-1.3914	.9277	.59615	-1.1954	.15546
Stddev	.19813	13.138	.23809	.1836	1.458	3.0927	.4662	.09743
%RSD	54.000	86.728	275.18	13.198	157.1	518.78	38.999	62.676
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-21-a Acquired: 10/16/2017 15:28:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.94310	-3.3156	-8.6350	-8.7855	.14783
Stddev	1.5501	1.9414	.0297	.7438	6.2089
%RSD	164.36	58.554	.34347	8.4665	4200.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5188.1	3188.9	35913.	7373.8
Stddev	6.2	1.4	136.	18.9
%RSD	.11873	.04272	.37817	.25660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.21%	102.78%	107.36%	109.17%
Range				

Sample Name: lb 240-298849/1-b Acquired: 10/16/2017 16:50:54 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.09002	-10.246	4.7107	38.033	2.2930	.13121
Stddev	.23259	12.141	.2716	.124	.2094	.09020
%RSD	258.38	118.50	5.7652	.32622	9.1315	68.747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-169.58	-.1509	.11510	.69132	-.03778	5.1269
Stddev	3.19	.0945	.12724	.47213	.47299	1.0517
%RSD	1.8823	62.64	110.55	68.295	1251.8	20.513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	553.55	8.2025	29.526	-.85035	.38324	F 1255400.
Stddev	86.20	2.2640	16.640	.02283	.46577	27069.
%RSD	15.572	27.601	56.358	2.6847	121.54	2.1563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						1000.0
Low Limit						-1000.0

Sample Name: lb 240-298849/1-b Acquired: 10/16/2017 16:50:54 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.2975	.09641	-3.072	F 8.3430	1.1324	.73501
Stddev	.0477	1.3063	.815	2.9052	.2737	.10870
%RSD	2.0760	1354.9	26.54	34.822	24.173	14.789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				5.0000		
Low Limit				-1000.0		

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-6.9510	-1.5362	-2.2386	347.09	-.25910
Stddev	.7523	4.1824	.2207	10.55	4.4832
%RSD	10.823	272.26	9.8581	3.0383	1730.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4172.4	2849.4	30489.	7046.8
Stddev	1.9	2.0	67.	7.0
%RSD	.04469	.07118	.21818	.09956

Sample Name: mb 240-298960/2-a Acquired: 10/16/2017 16:55:25 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20012	-28.454	.22371	-3.9606	-.24832	.00708	-280.50	-.0028
Stddev	.42102	35.582	1.7864	.2703	.08354	.13398	1.76	.1469
%RSD	210.38	125.05	798.53	6.8255	33.640	1893.1	.62750	5239.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.18131	.37698	.30569	-.10214	81.998	1.5613	-9.8044	-1.4581
Stddev	.18252	.15924	.59011	2.0653	22.072	1.0791	5.2543	.0166
%RSD	100.67	42.240	193.04	2022.1	26.918	69.117	53.591	1.1384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.25110	414.51	-.19280	-.34639	1.294	1.7496	-1.2995	.09011
Stddev	.26982	26.74	.10099	1.1255	.844	3.1150	.4716	.17705
%RSD	107.46	6.4505	52.382	324.92	65.23	178.04	36.289	196.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298960/2-a Acquired: 10/16/2017 16:55:25 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.00741	-.97428	-8.7854	8.7135	-.24220
Stddev	1.5056	2.9783	.0263	7.4359	4.6090
%RSD	20309.	305.70	.29914	85.337	1903.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5160.5	3178.0	35362.	7196.2
Stddev	2.5	5.5	98.	9.6
%RSD	.04754	.17151	.27792	.13371

Sample Name: lcs 240-298960/3-a Acquired: 10/16/2017 16:59:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.701	2015.4	2263.4	1081.7	1981.8	47.666
Stddev	.210	18.2	40.0	16.1	2.5	.160
%RSD	.38342	.90403	1.7684	1.4872	.12485	.33630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48879.	54.51	514.52	198.43	257.54	1015.9
Stddev	185.	.68	10.74	.26	.68	1.7
%RSD	.37895	1.242	2.0871	.13136	.26508	.16943
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53054.	1090.4	48010.	490.70	1019.1	1246200.
Stddev	108.	6.7	194.	1.05	21.2	12178.
%RSD	.20346	.61609	.40508	.21371	2.0801	.97722
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None
Value						
Range						

Sample Name: lcs 240-298960/3-a Acquired: 10/16/2017 16:59:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	521.11	479.27	529.4	2315.3	2108.9	1005.2
Stddev	10.84	7.60	7.7	41.2	46.0	2.3
%RSD	2.0797	1.5848	1.455	1.7774	2.1800	.23108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1973.3	523.38	540.65	F 1514.7	993.17
Stddev	42.4	4.31	11.62	37.0	5.71
%RSD	2.1466	.82433	2.1494	2.4401	.57509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				1000.0	
Range				20.500%	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4053.4	2798.6	29885.	6887.4
Stddev	19.2	10.4	48.	24.3
%RSD	.47315	.37225	.16224	.35272

Sample Name: 240-86307-e-1-b Acquired: 10/16/2017 17:03:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08238	-9.3456	7.0859	97.832	215.41	.18369
Stddev	.36629	14.007	2.4196	3.478	.34	.03478
%RSD	444.65	149.88	34.146	3.5552	.15879	18.934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	665030.	.8675	29.141	1.5465	1.5103	7.0482
Stddev	2745.	.1146	1.223	.3913	.7344	2.1854
%RSD	.41270	13.22	4.1968	25.306	48.625	31.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7571.7	29.273	16623.	3041.6	5.9022	F 1206500.
Stddev	10.0	1.569	92.	7.8	.5153	4971.
%RSD	.13219	5.3587	.55620	.25593	8.7303	.41200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86307-e-1-b Acquired: 10/16/2017 17:03:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	40.378	1.4300	-2.609	7.5149	1.8036	-.06219
Stddev	1.180	.6380	1.685	2.1393	.6692	.05704
%RSD	2.9219	44.614	64.57	28.468	37.103	91.723
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.5697	-3.0350	20.815	2276.6	1333.3
Stddev	3.2660	1.8915	1.285	2.2	7.7
%RSD	127.10	62.322	6.1755	.09750	.57541
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3855.9	2711.6	29507.	6898.1
Stddev	11.1	7.5	81.	3.6
%RSD	.28759	.27800	.27603	.05153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.703%	87.392%	88.213%	102.13%
Range				

Sample Name: SD 240-86307-e-1-b@5 Acquired: 10/16/2017 17:08:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07993	-31.838	.50358	16.461	43.077	.16482	139340.
Stddev	.32159	5.543	.56889	.255	.243	.04377	349.
%RSD	402.32	17.410	112.97	1.5503	.56406	26.554	.25062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1718	5.7893	1.1981	.17210	2.0096	1452.9	7.0645
Stddev	.0300	.1321	.3995	.44163	1.3673	14.9	2.4629
%RSD	17.44	2.2826	33.347	256.61	68.040	1.0243	34.862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3452.8	623.06	.60052	282540.	8.1691	.39737	-1.517
Stddev	22.7	1.98	.21413	2119.	.3258	3.1169	2.438
%RSD	.65842	.31790	35.657	.75010	3.9878	784.38	160.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 240-86307-e-1-b@5 Acquired: 10/16/2017 17:08:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.80302	-.31254	.42370	.78408	-.76365	-3.0378	452.59
Stddev	1.6203	.27172	.16341	2.0162	.72266	.2126	8.36
%RSD	201.78	86.939	38.567	257.14	94.632	6.9989	1.8481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	273.55
Stddev	5.67
%RSD	2.0736
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4445.6	2941.0	31765.	6875.4
Stddev	10.7	5.2	81.	10.0
%RSD	.24133	.17702	.25447	.14491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.434%	94.787%	94.963%	101.79%
Range				

Sample Name: PDS 240-86307-e-1-b Acquired: 10/16/2017 17:12:52 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58.706	2188.1	2409.4	1223.7	2322.7	49.710
Stddev	.258	14.3	59.1	23.7	2.9	.300
%RSD	.44007	.65432	2.4533	1.9329	.12369	.60433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	700410.	59.30	581.99	204.83	278.19	1063.9
Stddev	1845.	1.29	14.32	.92	1.54	4.7
%RSD	.26335	2.180	2.4613	.45026	.55187	.44400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	63955.	1201.4	66110.	3451.4	1078.8	F 1218600.
Stddev	88.	2.7	146.	15.3	30.1	5759.
%RSD	.13836	.22130	.22085	.44198	2.7938	.47256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: PDS 240-86307-e-1-b Acquired: 10/16/2017 17:12:52 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	589.09	495.43	551.8	2435.3	2243.4	1069.8
Stddev	13.27	11.37	21.0	65.2	59.1	2.4
%RSD	2.2533	2.2943	3.805	2.6764	2.6333	.22202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2089.2	533.45	582.05	3392.3	2307.1
Stddev	35.6	3.30	14.26	37.3	8.0
%RSD	1.7058	.61871	2.4502	1.0995	.34754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3792.9	2683.4	28998.	6755.6
Stddev	13.7	11.0	35.	16.6
%RSD	.35995	.40944	.12107	.24546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.451%	86.485%	86.690%	100.02%
Range				

Sample Name: 240-86307-e-1-cms@5 Acquired: 10/16/2017 17:17:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 204.54	392.30	1080.3	226.70	9903.0	9.7593	150130.
Stddev	.23	18.57	21.9	4.19	93.1	.0980	177.
%RSD	.11341	4.7334	2.0293	1.8489	.94056	1.0044	.11776
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	209.0	107.27	975.36	50.436	202.63	11667.	213.65
Stddev	4.9	2.02	3.08	.837	.25	38.	2.67
%RSD	2.332	1.8861	.31535	1.6594	.12320	.32597	1.2499
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13494.	726.03	208.97	292740.	108.49	985.20	102.8
Stddev	94.	.17	5.71	2297.	2.66	18.27	2.6
%RSD	.69875	.02351	2.7300	.78458	2.4519	1.8548	2.542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86307-e-1-cms@5 Acquired: 10/16/2017 17:17:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	225.55	424.71	202.39	399.18	100.55	102.31	699.07
Stddev	5.92	10.03	.12	12.55	3.50	1.93	8.63
%RSD	2.6228	2.3620	.05838	3.1427	3.4844	1.8821	1.2348
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	478.66
Stddev	3.79
%RSD	.79232
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4449.7	2947.9	32125.	6967.7
Stddev	9.7	4.4	63.	9.8
%RSD	.21819	.14821	.19755	.14031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.516%	95.009%	96.038%	103.16%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 17:21:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1029.6	25528.	533.97	5296.2	2024.6	1979.0	49718.	522.0
Stddev	2.8	68.	5.49	43.8	3.9	2.3	65.	6.3
%RSD	.27572	.26526	1.0277	.82744	.19337	.11699	.13123	1.202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2053.2	2034.0	2016.8	25759.	50063.	5189.7	50167.	1989.8
Stddev	24.9	6.1	2.2	60.	112.	8.1	138.	3.2
%RSD	1.2111	.29834	.11146	.23350	.22323	.15591	.27455	.15935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2124.2	49277.	2053.0	509.66	535.0	540.21	5301.8	5100.3
Stddev	29.4	98.	24.3	4.67	5.5	1.16	69.0	5.8
%RSD	1.3852	.19788	1.1828	.91682	1.031	.21436	1.3018	.11445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 17:21:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1064.0	2082.7	2064.5	5156.3	5032.5
Stddev	3.8	7.3	23.4	46.5	12.6
%RSD	.35855	.35264	1.1346	.90128	.25037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4621.6	3026.7	33025.	6996.8
Stddev	3.9	4.0	50.	17.1
%RSD	.08499	.13153	.15094	.24420

Sample Name: CCB Acquired: 10/16/2017 17:25:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07420	-30.246	2.4576	5.1191	-.38075	.05772	-66.210	-.0544
Stddev	.27957	11.397	1.0663	1.1182	.14881	.03257	3.466	.1598
%RSD	376.78	37.681	43.388	21.843	39.083	56.429	5.2348	293.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02037	.05965	.34423	3.2038	88.032	.65370	7.7905	-.00116
Stddev	.15542	.29698	.44692	1.2871	29.873	1.7071	11.425	.08985
%RSD	763.05	497.88	129.83	40.174	33.934	261.14	146.65	7738.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6359	277.87	-.10754	-.22966	.1406	1.3965	.56870	2.2698
Stddev	.2989	17.64	.25185	.30257	1.651	1.9811	.27256	.3769
%RSD	8.2205	6.3494	234.20	131.75	1174.	141.86	47.926	16.606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 17:25:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.08716	-3.0969	-5.0187	-7.2040	2.3357
Stddev	1.0414	1.7840	.0607	4.9560	1.4119
%RSD	1194.8	57.606	1.2100	68.795	60.448
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5130.3	3153.2	34749.	7089.4
Stddev	9.5	6.3	104.	12.7
%RSD	.18574	.20031	.29794	.17906

Sample Name: 240-86307-e-1-dmsd@5 Acquired: 10/16/2017 17:29:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 204.26	328.49	1062.2	196.67	9773.1	8.2759	146270.
Stddev	.96	8.76	28.0	3.52	49.3	.0220	69.
%RSD	.47066	2.6663	2.6370	1.7877	.50475	.26634	.04716
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	208.6	91.730	967.65	42.800	173.48	11325.	179.77
Stddev	3.9	1.351	2.61	.972	2.68	26.	.64
%RSD	1.864	1.4733	.26971	2.2721	1.5436	.22783	.35566
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13322.	694.81	173.19	293320.	92.682	984.43	85.80
Stddev	24.	2.10	3.64	2507.	1.040	13.56	1.81
%RSD	.18054	.30201	2.0998	.85483	1.1216	1.3774	2.109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86307-e-1-dmsd@5 Acquired: 10/16/2017 17:29:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	222.14	352.08	169.30	340.12	86.836	85.706	648.45
Stddev	4.18	5.14	.80	7.67	.184	1.598	7.01
%RSD	1.8816	1.4592	.47149	2.2557	.21226	1.8642	1.0817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	440.74
Stddev	6.42
%RSD	1.4558
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4446.9	2937.9	31950.	6927.5
Stddev	2.5	6.0	56.	10.3
%RSD	.05624	.20297	.17437	.14853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.461%	94.687%	95.517%	102.56%
Range				

Sample Name: 240-86266-g-1-c Acquired: 10/16/2017 17:34:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11075	-16.322	3.3855	151.31	33.286	.08697	8596.1	.1350
Stddev	.25988	5.765	1.6734	3.59	.135	.09879	26.8	.1850
%RSD	234.66	35.323	49.429	2.3730	.40692	113.59	.31149	137.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.77216	2.3282	11.406	23.971	5639.3	.99869	3709.3	348.69
Stddev	.36120	.3590	.743	1.904	40.0	1.1069	22.1	.70
%RSD	46.778	15.420	6.5157	7.9413	.70860	110.84	.59597	.20047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.0012	86549.	12.364	6.5126	-.6751	1.9430	.27768	.46909
Stddev	.2695	316.	.591	.4378	.3668	2.4767	.11657	.17035
%RSD	26.914	.36531	4.7773	6.7223	54.34	127.47	41.980	36.315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86266-g-1-c Acquired: 10/16/2017 17:34:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.18966	.41529	31.180	469.42	25.733
Stddev	1.4521	.87042	.997	13.72	2.877
%RSD	765.67	209.60	3.1966	2.9218	11.179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4848.3	3060.4	33816.	7132.8
Stddev	3.6	1.7	103.	25.7
%RSD	.07458	.05506	.30483	.36068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.445%	98.636%	101.09%	105.60%
Range				

Sample Name: 240-86315-c-1-d@10 Acquired: 10/16/2017 17:38:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9779	-29.405	3.1548	5.6683	.68262	.05952	-226.63
Stddev	.5658	18.529	1.5129	.1918	.09700	.10045	1.23
%RSD	28.605	63.014	47.955	3.3843	14.209	168.77	.54304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.738	302.74	.28421	20245.	19.099	65.487	-.00181
Stddev	.056	9.31	.18412	17.	.466	15.714	.75352
%RSD	2.027	3.0766	64.782	.08492	2.4415	23.995	41661.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-9.0777	41.409	14.683	147510.	24.181	-1.5782	-1.070
Stddev	12.955	.051	.460	337.	.774	2.6572	1.951
%RSD	142.71	.12398	3.1349	.22823	3.2008	168.37	182.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86315-c-1-d@10 Acquired: 10/16/2017 17:38:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.7400	-.19477	.12194	-.51149	-.65357	F 49609.	103.53
Stddev	1.2327	.74346	.20861	1.2560	4.0274	910.	7.84
%RSD	70.843	381.71	171.07	245.57	616.22	1.8345	7.5770
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit						10000.	
Low Limit						-500000.	

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	-4.1060
Stddev	2.7173
%RSD	66.179
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4742.2	3001.1	33008.	6911.3
Stddev	6.4	5.1	32.	11.0
%RSD	.13453	.16871	.09608	.15925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.335%	96.723%	98.678%	102.32%
Range				

Sample Name: mb 240-298741/1-a Acquired: 10/16/2017 17:42:59 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16633	-34.520	-.17402	-1.2162	-.47265	.13120	-283.19	-.1474
Stddev	.40181	24.281	1.4526	.4472	.31632	.08626	1.69	.1232
%RSD	241.57	70.340	834.71	36.769	66.926	65.751	.59632	83.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20795	-.08720	1.1522	1.2462	33.828	-1.3748	-6.6521	-1.4227
Stddev	.14691	.14839	.5511	1.6067	23.454	.7231	5.3171	.0438
%RSD	70.649	170.18	47.832	128.93	69.333	52.595	79.931	3.0780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.18137	167.83	-.41656	-.19979	.4824	2.0847	-1.6438	.12826
Stddev	.12707	8.23	.22552	1.4365	1.099	.5729	.5324	.21624
%RSD	70.059	4.9053	54.139	718.99	227.8	27.481	32.388	168.59
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298741/1-a Acquired: 10/16/2017 17:42:59 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.97037	-1.6735	-7.4612	-10.627	1.3382
Stddev	.86427	.8325	.1731	2.702	2.7501
%RSD	89.066	49.746	2.3202	25.427	205.50
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5149.2	3162.9	35105.	7094.5
Stddev	4.8	.7	68.	24.0
%RSD	.09370	.02271	.19299	.33881

Sample Name: lcs 240-298741/2-a Acquired: 10/16/2017 17:47:20 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.081	2081.6	2225.8	1112.0	2050.8	50.548	51097.	55.48
Stddev	.726	21.4	18.8	9.3	3.1	.290	94.	.56
%RSD	1.3670	1.0287	.84642	.83654	.14883	.57374	.18324	1.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	516.83	202.75	261.47	1056.6	50924.	1060.3	51095.	512.69
Stddev	5.48	1.48	.89	4.7	100.	1.9	72.	.49
%RSD	1.0611	.72885	.34035	.44572	.19610	.17540	.14093	.09652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1049.4	50665.	526.75	525.20	543.5	2234.8	2108.0	1034.0
Stddev	14.3	36.	5.39	4.36	5.4	22.8	22.4	.0
%RSD	1.3612	.07121	1.0242	.83099	1.001	1.0183	1.0650	.00259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298741/2-a Acquired: 10/16/2017 17:47:20 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2141.5	532.20	517.85	1115.8	1047.5
Stddev	31.8	5.02	5.50	9.1	5.4
%RSD	1.4830	.94310	1.0629	.81795	.51175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4701.7	3034.4	33196.	6990.0
Stddev	9.8	7.0	34.	12.7
%RSD	.20851	.23068	.10281	.18137

Sample Name: 480-125515-b-15-a Acquired: 10/16/2017 17:51:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08422	64.647	30.328	4861.4	263.90	.16755	202900.
Stddev	.27328	2.777	2.099	98.1	.70	.02305	671.
%RSD	324.48	4.2949	6.9223	2.0184	.26714	13.756	.33089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0611	.64888	1.6367	.26194	4849.7	19410.	5.9562
Stddev	.1929	.15202	.0911	.87051	10.2	70.	.3240
%RSD	315.8	23.428	5.5635	332.33	.21117	.35915	5.4390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24888.	300.37	1158.4	163720.	.97137	-.32044	1.197
Stddev	167.	.87	35.9	1496.	.25043	1.9337	1.105
%RSD	.66902	.28878	3.0952	.91372	25.781	603.46	92.32
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-15-a Acquired: 10/16/2017 17:51:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1333	.35638	2.7710	1.2987	-.07395	-7.4804	4518.6
Stddev	2.0269	.59511	.1031	1.2336	3.3655	.1000	59.3
%RSD	95.013	166.99	3.7196	94.989	4551.4	1.3371	1.3119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	957.74
Stddev	14.85
%RSD	1.5507
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4559.4	2982.8	32642.	7035.8
Stddev	8.9	.3	19.	39.4
%RSD	.19628	.01165	.05734	.55954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.697%	96.134%	97.584%	104.17%
Range				

Sample Name: SD 480-125515-b15a@5 Acquired: 10/16/2017 17:55:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01115	-3.9217	5.6447	959.23	53.279	-.02889	40881.	-.0800
Stddev	.07444	25.068	2.5561	16.10	.191	.06809	46.	.0803
%RSD	667.47	639.23	45.284	1.6782	.35807	235.67	.11181	100.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.32849	1.0488	-.00872	1001.4	3816.5	2.8154	5021.1	60.443
Stddev	.47385	.2567	.43080	3.9	15.5	.4905	25.4	.265
%RSD	144.25	24.474	4942.8	.38483	.40651	17.424	.50572	.43848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	239.35	32825.	-.14904	-.43554	-1.528	-1.4087	-1.2364	.89302
Stddev	6.02	108.	.11742	.83533	1.350	2.1409	.7744	.13732
%RSD	2.5141	.32950	78.784	191.79	88.36	151.98	62.635	15.377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 480-125515-b15a@5 Acquired: 10/16/2017 17:55:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.41031	.03077	-8.5741	879.50	192.03
Stddev	.19311	3.3764	.0648	5.65	2.11
%RSD	47.063	10975.	.75622	.64211	1.1006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4990.4	3120.7	34232.	7098.5
Stddev	9.2	1.5	46.	3.5
%RSD	.18502	.04735	.13353	.04967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.272%	100.58%	102.34%	105.09%
Range				

Sample Name: PDS 480-125515-b-15A Acquired: 10/16/2017 17:59:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.934	2099.1	2253.2	5938.1	2262.1	48.524	247000.
Stddev	1.122	32.2	45.3	91.0	2.7	.159	308.
%RSD	2.2023	1.5334	2.0096	1.5318	.11753	.32859	.12463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.12	513.79	195.26	257.29	5745.6	69939.	1064.4
Stddev	.72	8.85	1.08	.84	4.9	167.	1.6
%RSD	1.327	1.7230	.55242	.32534	.08570	.23873	.15261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	72956.	783.83	2214.4	207710.	513.96	493.36	536.5
Stddev	169.	1.19	49.4	2306.	9.66	9.37	16.4
%RSD	.23140	.15186	2.2305	1.1100	1.8791	1.8997	3.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 480-125515-b-15A Acquired: 10/16/2017 17:59:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2228.7	2193.4	1057.7	2037.4	518.80	503.40	5526.0
Stddev	42.5	40.8	.4	26.5	2.05	8.29	19.2
%RSD	1.9057	1.8581	.03859	1.2994	.39525	1.6462	.34749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1926.6
Stddev	9.9
%RSD	.51421
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4387.1	2912.2	31956.	7004.9
Stddev	10.4	5.8	107.	25.4
%RSD	.23785	.19757	.33488	.36306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.271%	93.858%	95.532%	103.71%
Range				

Sample Name: 480-125515-b-15-b ms Acquired: 10/16/2017 18:04:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.079	2121.8	2291.4	5844.3	2270.9	48.976	243150.
Stddev	.169	17.6	44.7	83.0	.7	.334	1453.
%RSD	.31849	.83177	1.9507	1.4205	.03282	.68118	.59753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.91	510.23	194.67	258.43	5559.8	70090.	1063.9
Stddev	1.06	9.52	.34	.21	13.4	161.	4.1
%RSD	1.937	1.8655	.17586	.08081	.24175	.22981	.38583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	72229.	783.04	2134.0	204000.	517.67	499.48	545.7
Stddev	279.	.33	44.4	884.	9.35	9.14	10.4
%RSD	.38613	.04263	2.0787	.43351	1.8058	1.8291	1.909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-15-b ms Acquired: 10/16/2017 18:04:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2264.7	2090.9	1011.2	2035.0	516.75	503.66	5415.7
Stddev	38.1	36.4	1.7	51.2	3.59	9.29	44.5
%RSD	1.6842	1.7417	.16684	2.5152	.69442	1.8442	.82196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1892.7
Stddev	7.9
%RSD	.41975
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4431.7	2933.9	32163.	7013.8
Stddev	1.0	3.6	132.	12.9
%RSD	.02219	.12431	.40934	.18419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.158%	94.556%	96.151%	103.84%
Range				

Sample Name: 480-125515-b-15-cmsD Acquired: 10/16/2017 18:08:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.504	2151.1	2334.2	6025.5	2324.6	49.952	249830.
Stddev	.165	13.9	54.2	116.2	4.9	.025	722.
%RSD	.30345	.64623	2.3227	1.9281	.21250	.05009	.28920
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.59	518.76	199.55	265.42	5774.8	71727.	1091.7
Stddev	1.15	11.85	1.05	.65	24.7	183.	2.1
%RSD	2.071	2.2845	.52554	.24566	.42693	.25549	.19082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	73682.	805.64	2184.7	210860.	525.57	507.14	554.7
Stddev	276.	1.12	57.0	490.	10.61	11.43	12.6
%RSD	.37448	.13844	2.6075	.23224	2.0179	2.2530	2.269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-15-cmsD Acquired: 10/16/2017 18:08:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2301.4	2123.9	1036.8	2064.4	530.93	512.02	5554.7
Stddev	50.9	53.3	.6	60.0	1.65	11.73	4.7
%RSD	2.2096	2.5093	.05876	2.9055	.31009	2.2904	.08419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1953.2
Stddev	6.9
%RSD	.35090
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4431.5	2937.5	32512.	7135.2
Stddev	8.5	2.8	37.	8.1
%RSD	.19226	.09405	.11253	.11286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.154%	94.674%	97.194%	105.64%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 18:12:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1037.3	25568.	543.98	5390.3	2050.9	2018.8	49971.	526.7
Stddev	.6	80.	2.33	29.8	2.3	5.1	104.	2.9
%RSD	.06065	.31247	.42856	.55204	.11189	.25412	.20803	.5556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2073.7	2031.4	2030.3	25931.	50819.	5265.9	50661.	1994.4
Stddev	16.1	2.7	3.8	23.	52.	4.9	193.	3.5
%RSD	.77518	.13498	.18904	.08780	.10148	.09360	.38049	.17579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2151.6	50537.	2071.3	512.61	544.6	547.32	5342.7	5125.8
Stddev	19.6	67.	17.4	4.87	4.9	7.04	42.1	12.8
%RSD	.91193	.13340	.83864	.94953	.8929	1.2870	.78772	.24939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 18:12:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1073.2	2126.9	2063.4	5183.1	5104.6
Stddev	16.6	5.5	14.2	46.2	1.6
%RSD	1.5439	.25967	.68874	.89182	.03064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4691.9	3080.5	33841.	7194.1
Stddev	13.1	8.6	114.	26.2
%RSD	.27949	.28027	.33676	.36391

Sample Name: CCB Acquired: 10/16/2017 18:16:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.39335	-18.929	1.8547	21.263	-.53121	.11903	-65.363	.0607
Stddev	.15941	3.306	1.0990	1.310	.06854	.04873	1.480	.1290
%RSD	40.527	17.465	59.255	6.1613	12.903	40.939	2.2645	212.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13320	-.09181	.53692	3.5310	69.830	1.6142	-25.463	-.01336
Stddev	.07395	.54139	.42053	1.3485	39.353	2.7827	8.971	.05701
%RSD	55.518	589.71	78.323	38.190	56.355	172.40	35.232	426.82
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.0682	112.28	.06758	.41639	-.7758	1.8856	.51784	2.5720
Stddev	.4444	6.19	.31826	2.0977	2.767	.4243	.29108	.0582
%RSD	8.7680	5.5143	470.96	503.79	356.7	22.503	56.211	2.2612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 18:16:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.19634	-2.1644	-4.9873	-.39611	4.7807
Stddev	.55058	1.4981	.2348	1.5129	4.0460
%RSD	280.42	69.215	4.7082	381.94	84.631
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5204.2	3199.7	35634.	7308.9
Stddev	4.4	3.8	76.	10.1
%RSD	.08494	.11738	.21382	.13822

Sample Name: 480-125515-b-1-a Acquired: 10/16/2017 18:20:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.50175	-14.487	11.261	2136.6	70.547	-.01898	98523.
Stddev	.44495	7.118	1.101	33.8	.143	.06627	178.
%RSD	88.679	49.133	9.7788	1.5799	.20210	349.17	.18072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0309	1.0048	1.4775	.64615	8674.9	4052.9	7.9545
Stddev	.2022	.1977	.0633	.55811	10.5	32.8	2.6462
%RSD	654.2	19.678	4.2857	86.374	.12068	.80920	33.267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18467.	457.92	197.53	127580.	1.1512	-.34412	.0880
Stddev	78.	.72	4.83	238.	.4247	1.7736	1.376
%RSD	.42504	.15693	2.4446	.18639	36.890	515.41	1565.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-1-a Acquired: 10/16/2017 18:20:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9103	-.78230	.98928	1.0036	-1.2525	-6.6662	7194.9
Stddev	1.5689	.82177	.12187	.3833	3.0363	.0234	56.9
%RSD	82.125	105.04	12.319	38.192	242.42	.35069	.79135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	137.26
Stddev	1.15
%RSD	.83900
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4741.4	3049.6	33686.	7217.2
Stddev	3.3	2.9	70.	36.6
%RSD	.07019	.09398	.20673	.50764
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.318%	98.286%	100.70%	106.85%
Range				

Sample Name: 480-125515-b-2-a Acquired: 10/16/2017 18:25:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20302	-24.745	2.8970	7254.8	77.377	.18421
Stddev	.25384	17.068	1.7140	231.4	.310	.02505
%RSD	125.03	68.977	59.164	3.1891	.40030	13.598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	427310.	.0692	.15702	1.4915	-.31568	10935.
Stddev	5055.	.0575	.41142	.1501	.44429	23.
%RSD	1.1829	83.05	262.02	10.062	140.74	.20672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10134.	30.323	86034.	1191.9	2102.6	F 802340.
Stddev	77.	3.087	242.	2.2	83.4	7000.
%RSD	.75763	10.180	.28095	.18558	3.9646	.87248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 480-125515-b-2-a Acquired: 10/16/2017 18:25:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5913	.14200	-3.509	-1.0943	-.67800	.42787
Stddev	.9694	2.2971	1.273	1.3449	.53111	.31107
%RSD	60.919	1617.7	36.29	122.90	78.335	72.701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.3060	-3.9047	-5.1531	7761.7	1177.1
Stddev	.5957	.3304	.0488	38.9	4.3
%RSD	45.613	8.4613	.94712	.50149	.36622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4057.0	2796.9	30593.	7070.5
Stddev	14.5	8.6	140.	35.3
%RSD	.35761	.30661	.45714	.49875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.705%	90.141%	91.459%	104.68%
Range				

Sample Name: 480-125515-b-3-a Acquired: 10/16/2017 18:29:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08486	-12.861	9.4181	1106.3	47.631	.09322	49519.	.0899
Stddev	.45041	29.520	.8656	10.4	.144	.05961	43.	.0906
%RSD	530.80	229.54	9.1902	.94192	.30188	63.938	.08627	100.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1489	1.2433	1.5718	2159.8	1271.8	5.3234	17275.	484.22
Stddev	.0911	.3445	.6681	17.7	35.2	.5528	152.	.31
%RSD	4.2418	27.712	42.503	.81935	2.7673	10.384	.88065	.06385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11.511	12481.	2.1535	-1.6960	-.0272	-.57866	-1.1905	1.3163
Stddev	.612	14.	.5606	1.0014	1.144	.99416	.6475	.0929
%RSD	5.3197	.11426	26.033	59.043	4206.	171.80	54.391	7.0574
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-3-a Acquired: 10/16/2017 18:29:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.0215	3.5410	-.89342	4112.9	71.769
Stddev	1.3638	3.0958	.07638	23.2	.757
%RSD	133.51	87.427	8.5491	.56355	1.0548
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4993.3	3131.7	34901.	7316.5
Stddev	6.5	6.3	88.	13.9
%RSD	.13066	.19973	.25078	.18956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.330%	100.93%	104.34%	108.32%
Range				

Sample Name: 480-125515-b-4-a Acquired: 10/16/2017 18:33:58 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.36981	-21.582	3.1398	4049.5	82.041	.06463	157890.
Stddev	.49584	23.700	.3650	112.4	.267	.13362	615.
%RSD	134.08	109.81	11.626	2.7752	.32507	206.75	.38948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1839	.14061	1.2538	1.4236	5187.4	3025.0	4.5803
Stddev	.1102	.23508	.3196	.5956	28.0	20.8	2.0677
%RSD	59.92	167.19	25.494	41.836	.54015	.68820	45.143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43982.	1027.1	668.21	167260.	.75335	-.19323	-1.183
Stddev	284.	2.6	24.32	2358.	.17954	1.0118	1.575
%RSD	.64596	.25476	3.6389	1.4100	23.832	523.62	133.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-4-a Acquired: 10/16/2017 18:33:58 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.64781	-1.2567	.83361	.95290	-.09349	-6.2844	3875.6
Stddev	2.2920	.2197	.04042	.37163	2.1408	.0589	27.1
%RSD	353.80	17.479	4.8491	39.000	2289.9	.93748	.69813
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	275.44
Stddev	6.09
%RSD	2.2104
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4640.8	3006.7	33165.	7156.2
Stddev	18.2	9.4	80.	43.9
%RSD	.39242	.31351	.23979	.61302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.317%	96.905%	99.147%	105.95%
Range				

Sample Name: 480-125515-b-5-a Acquired: 10/16/2017 18:38:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12994	-11.433	6.1282	1731.4	107.35	.12788	121510.
Stddev	.17608	2.578	1.2447	29.9	.38	.03437	284.
%RSD	135.51	22.552	20.312	1.7271	.35552	26.879	.23376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1264	1.9692	1.2696	1.9471	3618.4	1983.6	5.6687
Stddev	.2124	.2120	.3756	.2962	22.7	24.0	2.2603
%RSD	168.0	10.765	29.584	15.214	.62601	1.2101	39.873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	32214.	1415.8	9.0830	21181.	3.1691	-.04274	-.8338
Stddev	160.	.1	.3100	47.	.4331	1.9906	3.559
%RSD	.49563	.00986	3.4131	.21955	13.665	4657.4	426.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-5-a Acquired: 10/16/2017 18:38:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5106	-1.0768	.50618	1.9639	-.86777	-1.9007	4944.3
Stddev	2.0837	.8335	.09672	1.7774	1.7128	.2452	31.2
%RSD	137.94	77.403	19.107	90.501	197.38	12.899	.63081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	153.34
Stddev	4.91
%RSD	3.2033
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4815.6	3057.4	34299.	7242.0
Stddev	4.7	3.9	87.	8.4
%RSD	.09851	.12855	.25396	.11643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.794%	98.539%	102.54%	107.22%
Range				

Sample Name: 480-125515-b-6-a Acquired: 10/16/2017 18:42:37 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02451	-7.0027	2.0534	W 18335.	72.709	.14164
Stddev	.26660	10.103	1.9168	574.	.146	.16117
%RSD	1087.5	144.28	93.348	3.1332	.20024	113.79
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit				18000.		
Low Limit				-500000.		

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	359900.	-.1431	.70886	2.7284	-1.3966	9354.7
Stddev	1056.	.1529	.27164	.5232	.4900	36.7
%RSD	.29336	106.9	38.321	19.175	35.084	.39228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	153110.	393.35	31881.	1221.7	2388.0	F 2211600.
Stddev	242.	5.23	171.	1.0	90.2	61017.
%RSD	.15774	1.3293	.53626	.08422	3.7753	2.7589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 480-125515-b-6-a Acquired: 10/16/2017 18:42:37 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1216	.30696	-1.758	-.85740	.40673	1.8505
Stddev	.6228	1.1061	2.452	2.5626	.88635	.2674
%RSD	29.356	360.36	139.5	298.88	217.92	14.451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.89481	15.631	-4.7906	4744.1	2842.4
Stddev	1.7959	3.469	.1407	36.5	14.1
%RSD	200.70	22.196	2.9367	.76870	.49607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3581.1	2588.1	27668.	6698.2
Stddev	15.4	12.5	31.	35.9
%RSD	.42922	.48341	.11228	.53662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.237%	83.413%	82.714%	99.167%
Range				

Sample Name: 480-125515-b-7-a Acquired: 10/16/2017 18:47:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00912	5.3388	127.70	F 25861.	29.547	.09758	460180.
Stddev	.23614	14.484	8.78	955.	.049	.15322	3833.
%RSD	2590.0	271.31	6.8760	3.6927	.16612	157.02	.83299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				20000.			
Low Limit				-500000.			

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0316	.21402	1.4708	-1.4392	161.60	34669.	41.928
Stddev	.0471	.42919	.1300	.2060	.89	127.	1.711
%RSD	149.3	200.54	8.8384	14.311	.55379	.36638	4.0811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	38318.	482.48	18.579	187030.	2.5349	.77104	-.3717
Stddev	34.	1.00	.235	2163.	.2114	1.9119	2.320
%RSD	.08961	.20677	1.2675	1.1562	8.3396	247.96	624.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-7-a Acquired: 10/16/2017 18:47:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.3879	-.25810	-.01603	1.1171	-2.7552	-6.7410	3464.7
Stddev	.3965	.40000	.12087	.7275	1.7854	.1582	21.5
%RSD	28.571	154.98	754.00	65.122	64.801	2.3465	.62074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2366.1
Stddev	10.0
%RSD	.42383
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4404.6	2920.4	32225.	7199.7
Stddev	18.7	11.1	40.	70.0
%RSD	.42413	.37940	.12492	.97227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.618%	94.124%	96.339%	106.59%
Range				

Sample Name: 480-125515-b-8-a Acquired: 10/16/2017 18:51:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.50632	22.641	5.9510	13502.	42.121	.14406
Stddev	.54109	11.658	2.2692	416.	.149	.05200
%RSD	106.87	51.491	38.132	3.0815	.35452	36.099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	242950.	-.2257	.82228	3.9117	-.74287	609.78
Stddev	1842.	.1169	.60847	.5783	.55320	4.28
%RSD	.75834	51.77	73.998	14.784	74.468	.70169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	156550.	97.479	15232.	265.12	44.183	F 1882100.
Stddev	230.	1.503	69.	.02	1.714	31996.
%RSD	.14693	1.5415	.45059	.00713	3.8793	1.7000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 480-125515-b-8-a Acquired: 10/16/2017 18:51:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1411	-1.0323	-2.459	.38367	.33731	4.1720
Stddev	.5473	.2033	1.605	.72044	1.5632	.3468
%RSD	25.562	19.693	65.28	187.77	463.42	8.3115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.11994	45.326	-5.8250	3337.7	2063.7
Stddev	2.2400	3.355	.2258	23.4	14.5
%RSD	1867.7	7.4025	3.8762	.70002	.70414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3749.4	2681.7	28575.	6899.3
Stddev	4.8	6.6	44.	26.8
%RSD	.12833	.24787	.15246	.38816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.586%	86.430%	85.424%	102.14%
Range				

Sample Name: 480-125515-b-9-a Acquired: 10/16/2017 18:56:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31694	41.628	2.5802	147.25	46.603	.15347	85328.	.1930
Stddev	.31143	5.728	2.7321	4.90	.216	.18587	218.	.0878
%RSD	98.260	13.761	105.89	3.3285	.46408	121.11	.25520	45.49
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28123	1.3415	1.9223	1580.5	2905.4	8.5845	18218.	807.72
Stddev	.36769	.1926	.7407	9.8	32.2	.9135	87.	1.04
%RSD	130.74	14.357	38.532	.62294	1.1068	10.641	.47528	.12867
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.8997	22059.	1.0977	.14011	-.1834	.07483	1.0929	.58253
Stddev	.2946	97.	.0709	.66813	1.126	1.8676	.9924	.19540
%RSD	15.510	.43777	6.4575	476.85	614.1	2495.9	90.808	33.543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-9-a Acquired: 10/16/2017 18:56:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.3378	-3.7219	10.438	5853.4	192.11
Stddev	1.1579	1.6368	.491	27.5	4.94
%RSD	86.555	43.978	4.7057	.47055	2.5694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4927.4	3106.6	34674.	7387.4
Stddev	1.1	5.8	34.	21.4
%RSD	.02153	.18624	.09916	.28985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.019%	100.13%	103.66%	109.37%
Range				

Sample Name: 480-125515-b-10-a Acquired: 10/16/2017 19:00:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.48829	60.585	.97411	114.74	22.183	.08553	56658.	.0705
Stddev	.13417	18.105	1.3584	3.19	.269	.08451	82.	.0748
%RSD	27.478	29.883	139.45	2.7763	1.2124	98.807	.14505	106.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03274	.89287	1.6445	1916.8	1379.6	5.1487	15690.	322.28
Stddev	.09406	.52362	.3237	3.5	15.9	1.0412	25.	.48
%RSD	287.34	58.644	19.685	.18123	1.1529	20.223	.15737	.14829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.7978	4293.4	.08299	.47979	-1.373	-1.3275	-.28693	1.0404
Stddev	.4774	11.2	.65327	1.3230	.789	2.7084	.46503	.0626
%RSD	26.554	.26164	787.20	275.74	57.49	204.02	162.07	6.0156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-10-a Acquired: 10/16/2017 19:00:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.36548	-5.2371	-5.4755	8400.1	135.37
Stddev	.01372	6.5413	.1105	32.9	2.33
%RSD	3.7545	124.90	2.0189	.39167	1.7233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5045.4	3149.2	35140.	7397.3
Stddev	2.2	3.6	14.	4.2
%RSD	.04306	.11333	.04074	.05666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.37%	101.50%	105.05%	109.52%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 19:04:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1041.9	26033.	542.93	5431.8	2061.2	1992.0	50123.	527.0
Stddev	.6	93.	5.19	56.4	6.1	7.5	80.	6.9
%RSD	.06197	.35743	.95581	1.0386	.29492	.37766	.16007	1.317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2078.0	2059.8	2047.8	26141.	50698.	5313.4	50364.	1993.9
Stddev	30.8	3.9	.7	97.	194.	17.7	177.	2.6
%RSD	1.4819	.18834	.03636	.37137	.38275	.33291	.35131	.13126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2158.3	50130.	2076.1	517.49	542.0	551.11	5359.4	5185.1
Stddev	37.0	152.	28.5	5.09	7.6	8.08	85.0	26.2
%RSD	1.7130	.30292	1.3713	.98455	1.397	1.4668	1.5869	.50577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 19:04:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1083.2	2121.5	2064.9	5163.2	5097.5
Stddev	13.3	9.9	29.6	67.2	18.8
%RSD	1.2280	.46704	1.4324	1.3016	.36834
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4675.0	3063.9	33692.	7207.1
Stddev	8.4	4.7	44.	14.5
%RSD	.17923	.15441	.13075	.20086

Sample Name: CCB Acquired: 10/16/2017 19:08:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08194	-29.659	1.4634	36.066	-.66046	.16113	-63.955	.0337
Stddev	.35255	36.254	.6463	1.442	.11308	.12822	1.318	.1059
%RSD	430.27	122.24	44.164	3.9971	17.121	79.579	2.0607	313.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01257	.16210	.48279	3.1155	110.12	2.4795	-4.1843	.00081
Stddev	.14495	.30546	.24267	.8838	29.10	.5504	9.8069	.06920
%RSD	1153.4	188.44	50.264	28.367	26.424	22.199	234.37	8514.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.1372	287.11	-.09247	-.04497	-.6138	2.0677	-.08002	2.4573
Stddev	.4910	2.05	.09949	1.4947	1.078	1.0158	.36723	.1980
%RSD	11.868	.71421	107.59	3323.9	175.7	49.125	458.91	8.0560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 19:08:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.78572	-.05091	-4.9255	1.4960	1.9483
Stddev	1.4556	2.9238	.0549	7.8435	4.5583
%RSD	185.26	5742.7	1.1147	524.30	233.96
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5201.9	3201.2	35632.	7314.3
Stddev	3.1	2.7	85.	16.0
%RSD	.05899	.08514	.23806	.21933

Sample Name: 480-125515-b-11-a Acquired: 10/16/2017 19:13:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.52023	-25.753	2.6553	189.55	34.937	.09140	83400.	.2270
Stddev	.02360	11.049	1.6148	2.99	.200	.03377	308.	.0575
%RSD	4.5357	42.905	60.813	1.5789	.57107	36.945	.36883	25.33
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5430	1.1784	5.5871	69.414	3070.2	4.7831	20405.	333.81
Stddev	.1947	.0435	.4183	1.038	7.6	1.7298	65.	.27
%RSD	12.618	3.6886	7.4871	1.4950	.24651	36.164	.31969	.08188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.0588	3236.2	12.982	-1.3045	-.3020	2.8591	1.2556	.72982
Stddev	.2059	21.7	.556	1.4062	.5761	.8314	.6750	.12290
%RSD	3.3989	.67126	4.2837	107.80	190.8	29.078	53.756	16.840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-11-a Acquired: 10/16/2017 19:13:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.4896	.97450	1.8273	6994.4	189.29
Stddev	1.6217	.97748	.1622	18.9	2.58
%RSD	108.87	100.31	8.8762	.27088	1.3639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4986.7	3126.0	34688.	7412.6
Stddev	2.0	1.8	28.	19.0
%RSD	.04065	.05785	.08154	.25606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.199%	100.75%	103.70%	109.74%
Range				

Sample Name: 480-125515-b-12-a Acquired: 10/16/2017 19:17:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14662	-39.892	.28175	171.83	62.961	-.00265	79123.	.0665
Stddev	.48414	8.505	2.5724	2.75	.168	.12642	69.	.1098
%RSD	330.21	21.320	912.99	1.5982	.26656	4772.7	.08769	165.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16177	.97841	.88363	8108.0	1332.1	2.3524	19475.	296.05
Stddev	.06826	.21740	.60603	22.2	4.1	1.3594	112.	.78
%RSD	42.193	22.220	68.585	.27402	.30645	57.786	.57420	.26344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.66930	5472.1	-.25459	-.81356	-.5634	.14169	-.74386	.34322
Stddev	.31013	7.3	.21506	1.5503	1.438	1.1191	.25174	.17322
%RSD	46.336	.13364	84.473	190.55	255.2	789.82	33.843	50.470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-12-a Acquired: 10/16/2017 19:17:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.54511	.56689	-7.4816	9808.6	194.68
Stddev	.29248	1.0284	.0464	61.8	3.24
%RSD	53.655	181.42	.62036	.63041	1.6655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4987.1	3128.0	34791.	7449.4
Stddev	4.5	7.3	99.	25.9
%RSD	.09019	.23323	.28351	.34807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.206%	100.81%	104.01%	110.29%
Range				

Sample Name: 480-125515-b-13-a Acquired: 10/16/2017 19:21:52 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.36318	-31.513	4.0512	258.28	33.097	.00572	95367.	.1344
Stddev	.30733	17.571	1.7442	5.36	.234	.10532	67.	.1163
%RSD	84.622	55.757	43.053	2.0766	.70719	1840.7	.07028	86.55
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.80933	1.3335	3.4542	582.86	2606.0	3.5453	30633.	377.85
Stddev	.32630	.1286	.3838	1.84	16.7	2.0407	7.	1.28
%RSD	40.318	9.6405	11.111	.31619	.64129	57.560	.02349	.33758
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.9591	8337.7	3.3460	-.03123	-1.168	.38454	-1.2345	.83847
Stddev	.2765	32.4	.3564	1.4137	.490	2.6803	.9161	.26291
%RSD	3.9737	.38904	10.650	4526.7	41.94	697.01	74.205	31.356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-13-a Acquired: 10/16/2017 19:21:52 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.80149	-.83633	-1.7844	13037.	172.32
Stddev	1.1552	.35885	.1051	22.	1.70
%RSD	144.13	42.908	5.8931	.17061	.98754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4923.0	3104.2	34440.	7406.8
Stddev	8.2	2.9	39.	13.0
%RSD	.16566	.09328	.11427	.17499
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.931%	100.05%	102.96%	109.66%
Range				

Sample Name: 480-125515-b-14-a Acquired: 10/16/2017 19:26:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.38978	-23.636	.92184	399.65	77.940	.04634	134020.
Stddev	.10125	4.028	1.9811	5.08	.623	.12042	228.
%RSD	25.976	17.042	214.91	1.2719	.79977	259.86	.17031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0482	.07430	1.0270	.03577	1014.7	1885.2	8.4254
Stddev	.0330	.09503	.2825	.39523	3.5	43.8	.6134
%RSD	68.42	127.89	27.503	1105.0	.34232	2.3248	7.2803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	33164.	371.12	.91048	128610.	.87503	-.62191	.0921
Stddev	52.	.22	.20173	170.	.05413	.81235	1.993
%RSD	.15576	.05873	22.156	.13196	6.1865	130.62	2164.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-14-a Acquired: 10/16/2017 19:26:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.13360	-.64134	.48806	1.3458	-.43686	-7.1544	8214.0
Stddev	.20919	.31086	.19764	1.1573	3.2605	.0799	36.3
%RSD	156.58	48.470	40.495	85.993	746.35	1.1164	.44251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	288.76
Stddev	4.20
%RSD	1.4562
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4726.4	3041.0	33564.	7291.3
Stddev	12.2	4.2	68.	48.5
%RSD	.25770	.13968	.20308	.66480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.020%	98.009%	100.34%	107.95%
Range				

Sample Name: 480-125515-b-16-a Acquired: 10/16/2017 19:30:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.43996	-48.551	3.3997	11817.	38.689	.24764
Stddev	.24040	21.483	1.1237	476.	.140	.05280
%RSD	54.641	44.248	33.052	4.0289	.36194	21.322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	341590.	.1405	.57574	1.9351	-.62236	10196.
Stddev	3271.	.2015	.50095	.2661	.50679	46.
%RSD	.95746	143.4	87.010	13.750	81.430	.45363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18078.	54.503	54721.	1600.2	3368.1	F 1981000.
Stddev	105.	.793	158.	3.9	158.1	31945.
%RSD	.57979	1.4551	.28819	.24658	4.6945	1.6126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 480-125515-b-16-a Acquired: 10/16/2017 19:30:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1680	-2.1791	-2.397	-1.9607	.01560	1.4336
Stddev	.2949	1.2770	1.178	1.4366	.70420	.3011
%RSD	25.251	58.599	49.13	73.270	4513.7	21.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.8817	6.8576	-6.2151	5587.6	1042.3
Stddev	.7357	5.5094	.0987	58.4	11.8
%RSD	39.097	80.340	1.5875	1.0460	1.1293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3653.3	2621.8	28328.	6987.0
Stddev	5.7	4.6	133.	63.4
%RSD	.15499	.17701	.46935	.90797
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.673%	84.500%	84.687%	103.44%
Range				

Sample Name: 480-125515-b-17-a Acquired: 10/16/2017 19:34:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.13405	-30.151	5.6813	3314.0	194.43	.14926	217580.
Stddev	.62195	14.032	.9944	43.7	.78	.04969	1599.
%RSD	463.98	46.541	17.502	1.3200	.40210	33.292	.73478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0397	.06678	1.4961	.60417	2103.6	8950.2	18.388
Stddev	.0550	.08793	.6185	1.0748	28.8	47.4	1.474
%RSD	138.5	131.67	41.340	177.89	1.3686	.52906	8.0147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	35503.	751.14	256.30	95420.	.94683	-1.3343	-3.074
Stddev	83.	.91	4.62	411.	.11051	1.1325	2.070
%RSD	.23471	.12093	1.8044	.43093	11.671	84.876	67.33
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125515-b-17-a Acquired: 10/16/2017 19:34:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.4448	-1.0098	.20962	1.3491	-2.1254	-8.3132	3634.6
Stddev	1.0205	.4626	.04904	.4916	1.9192	.0607	24.4
%RSD	70.636	45.810	23.395	36.441	90.300	.73033	.67201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	560.42
Stddev	7.53
%RSD	1.3437
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4676.2	3018.0	33075.	7121.2
Stddev	29.0	14.3	29.	32.6
%RSD	.61949	.47332	.08633	.45823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.023%	97.268%	98.878%	105.43%
Range				

Sample Name: 480-125515-b-18-a Acquired: 10/16/2017 19:39:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.40389	-39.356	1.2852	7229.4	74.743	.05648
Stddev	.26443	25.564	1.8118	163.6	.173	.08259
%RSD	65.470	64.955	140.97	2.2637	.23202	146.23
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	301490.	-.0025	.06303	1.4050	-.86008	13225.
Stddev	890.	.1425	.22762	.5860	.44027	38.
%RSD	.29508	5687.	361.12	41.707	51.189	.28543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7803.2	22.748	75045.	1491.2	1449.8	F 813060.
Stddev	49.7	1.436	203.	1.2	46.9	4524.
%RSD	.63646	6.3120	.27062	.08076	3.2360	.55646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 480-125515-b-18-a Acquired: 10/16/2017 19:39:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.99192	-1.9170	-2.158	1.9947	.20593	-.03727
Stddev	.72948	.5724	1.060	2.0127	.44026	.26542
%RSD	73.542	29.859	49.13	100.90	213.79	712.12
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.9103	-1.3913	-7.8574	5483.9	585.43
Stddev	.8327	.6563	.0554	39.5	7.73
%RSD	43.592	47.169	.70444	.72006	1.3207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4153.4	2857.0	31208.	7087.4
Stddev	16.1	9.0	96.	41.7
%RSD	.38831	.31531	.30874	.58779
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.622%	92.080%	93.297%	104.93%
Range				

Sample Name: 480-125515-b-19-a Acquired: 10/16/2017 19:43:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.43354	-3.0914	1.8576	107.81	44.028	-.06128	81244.	.0417
Stddev	.42178	6.6798	1.7136	2.94	.082	.02011	110.	.2819
%RSD	97.287	216.08	92.251	2.7277	.18672	32.822	.13531	675.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16243	1.0340	.34045	1540.5	2495.1	5.0737	17543.	758.05
Stddev	.04291	.2309	.47789	2.2	31.8	2.6870	26.	.87
%RSD	26.417	22.326	140.37	.14070	1.2758	52.959	.14557	.11493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.3262	20747.	.60186	-.21499	.4040	.27257	-.67197	.69180
Stddev	.4769	72.	.21455	.67668	.8786	3.3927	.96257	.11602
%RSD	8.9537	.34790	35.648	314.75	217.5	1244.7	143.25	16.771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-19-a Acquired: 10/16/2017 19:43:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.59518	.24732	-8.0046	5666.5	183.44
Stddev	.61761	2.3111	.2231	24.2	8.10
%RSD	103.77	934.48	2.7868	.42697	4.4146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5010.6	3161.2	35215.	7509.7
Stddev	8.7	4.0	44.	7.2
%RSD	.17330	.12667	.12462	.09536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.674%	101.88%	105.28%	111.18%
Range				

Sample Name: 480-125515-b-20-a Acquired: 10/16/2017 19:48:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13615	-29.674	10.120	1106.5	46.371	.12982	48856.	.1463
Stddev	.72888	11.486	.391	15.2	.043	.14709	111.	.0928
%RSD	535.35	38.706	3.8598	1.3748	.09289	113.30	.22721	63.44
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9634	1.7330	1.0061	2171.7	1182.1	2.3407	17108.	475.13
Stddev	.1587	.5732	.2984	3.3	11.6	.3700	45.	.82
%RSD	8.0802	33.073	29.662	.15236	.98428	15.809	.26101	.17306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.9868	12284.	2.2811	.09552	-.6499	2.6503	-1.0165	.88862
Stddev	.3715	28.	.1988	.86258	.8988	1.3654	.6403	.24353
%RSD	5.3170	.23149	8.7152	903.00	138.3	51.520	62.989	27.405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125515-b-20-a Acquired: 10/16/2017 19:48:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.3192	4.8699	-6.7368	4069.8	65.506
Stddev	.6646	.8484	.1307	31.9	2.355
%RSD	50.383	17.421	1.9398	.78306	3.5957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5061.6	3176.0	35321.	7476.9
Stddev	9.4	4.2	15.	31.3
%RSD	.18644	.13270	.04288	.41829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.69%	102.36%	105.59%	110.70%
Range				

Sample Name: DNUCCV-3283852 Acquired: 10/16/2017 19:52:24 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1000.9	25036.	521.69	5213.6	1978.8	1912.5	48170.	511.2
Stddev	.4	35.	4.55	35.9	4.2	5.3	120.	4.5
%RSD	.03511	.13838	.87287	.68815	.21434	.27680	.24981	.8816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1999.0	1974.7	1973.3	25140.	48884.	5139.3	48713.	1914.0
Stddev	19.4	1.2	1.4	28.	34.	7.7	122.	3.3
%RSD	.97052	.05869	.06948	.11110	.06947	.15079	.25009	.17228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2090.4	48485.	1995.7	500.32	524.6	525.98	5144.4	4975.7
Stddev	27.9	101.	20.0	2.12	8.5	6.33	56.5	8.5
%RSD	1.3363	.20897	1.0014	.42441	1.615	1.2036	1.0987	.17048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: DNUCCV-3283852 Acquired: 10/16/2017 19:52:24 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1039.7	2038.5	1985.8	4950.4	4908.3
Stddev	11.2	10.2	19.8	56.7	12.0
%RSD	1.0738	.50175	.99483	1.1456	.24469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4729.2	3084.0	33994.	7206.7
Stddev	.9	3.5	28.	8.6
%RSD	.01855	.11400	.08265	.11984

Sample Name: CCV-3283852 Acquired: 10/16/2017 19:56:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1019.5	25497.	527.90	5283.0	2013.4	1950.3	49057.	517.8
Stddev	.6	50.	6.50	54.1	1.6	5.9	79.	5.9
%RSD	.06284	.19746	1.2320	1.0234	.08191	.30082	.16143	1.142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2030.2	2008.6	2009.1	25575.	49748.	5239.3	49511.	1954.8
Stddev	21.9	4.5	2.6	20.	87.	7.1	136.	3.7
%RSD	1.0811	.22341	.13055	.07652	.17440	.13619	.27414	.18719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2116.8	49496.	2028.0	508.14	530.9	531.82	5223.8	5046.5
Stddev	28.1	91.	24.7	5.68	6.8	5.95	66.6	6.0
%RSD	1.3298	.18294	1.2200	1.1183	1.280	1.1188	1.2748	.11796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 19:56:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1062.4	2076.1	2016.5	5057.2	5004.6
Stddev	11.1	6.7	22.9	53.3	13.5
%RSD	1.0441	.32157	1.1380	1.0547	.27034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4723.5	3088.4	33917.	7206.7
Stddev	7.2	2.2	87.	9.3
%RSD	.15305	.06996	.25681	.12860

Sample Name: CCB Acquired: 10/16/2017 20:00:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25540	-15.637	-.26293	23.471	-.55055	.22075	-70.520	.0250
Stddev	.27196	6.372	3.3836	1.228	.09528	.10577	4.985	.1153
%RSD	106.48	40.751	1286.8	5.2336	17.306	47.913	7.0687	461.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.07847	-.10658	1.0857	3.1201	57.085	1.3331	-4.9236	-.04707
Stddev	.31760	.14191	.4118	1.6151	27.843	1.5276	10.941	.00871
%RSD	404.74	133.15	37.935	51.766	48.774	114.59	222.22	18.496
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.3676	170.31	-.40061	-.53962	-.5908	.26000	.12396	2.5360
Stddev	.5018	10.39	.20773	.28647	1.743	.79521	.72174	.1653
%RSD	11.488	6.0994	51.854	53.088	295.0	305.85	582.23	6.5175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 20:00:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.11849	.47273	-5.0895	1.8348	-3.1739
Stddev	.28016	1.6857	.1109	1.3113	3.4144
%RSD	236.45	356.59	2.1790	71.468	107.58
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5271.5	3238.6	36175.	7310.4
Stddev	8.9	2.0	71.	23.6
%RSD	.16933	.06267	.19701	.32274

Sample Name: DNUCCB Acquired: 10/16/2017 20:04:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32852	-38.343	1.2431	15.762	-.66736	.03542	-201.16	.0039
Stddev	.20895	16.031	.6189	.541	.22371	.15083	1.51	.1131
%RSD	63.603	41.811	49.784	3.4310	33.522	425.77	.74845	2884.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04107	-.02561	.55657	1.3418	44.340	.95657	-1.9546	-.13626
Stddev	.15720	.04728	.44979	1.4597	22.081	1.1237	6.5349	.04088
%RSD	382.75	184.58	80.815	108.79	49.799	117.47	334.33	30.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.72411	137.58	.00542	-.05944	-.7797	-.07104	-.64573	.33041
Stddev	.53293	2.77	.22838	.33024	.3039	2.7533	.17599	.21054
%RSD	73.598	2.0133	4210.5	555.59	38.98	3875.7	27.254	63.719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: DNUCCB Acquired: 10/16/2017 20:04:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.22569	-.33792	-7.1525	-13.214	-2.8145
Stddev	.62135	2.0858	.0269	3.153	1.4273
%RSD	275.31	617.24	.37644	23.861	50.711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5282.5	3249.7	36166.	7313.1
Stddev	2.0	4.8	66.	4.6
%RSD	.03772	.14687	.18146	.06233

Sample Name: CCVL-3260526 Acquired: 10/16/2017 20:09:17 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.7604	155.66	16.728	116.06	197.39	4.8820	4729.5	5.131
Stddev	.7299	11.50	.531	2.33	.17	.1760	11.6	.182
%RSD	7.4785	7.3906	3.1738	2.0056	.08723	3.6043	.24423	3.545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.257	10.232	20.880	209.92	4815.5	53.241	5046.7	13.711
Stddev	.103	.127	.330	2.53	38.8	.622	50.2	.044
%RSD	1.0081	1.2401	1.5823	1.2059	.80656	1.1682	.99386	.32251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43.492	4918.1	40.055	8.4867	20.25	20.476	99.612	50.390
Stddev	.891	20.1	.596	1.6201	.86	1.642	2.146	.228
%RSD	2.0497	.40836	1.4876	19.090	4.256	8.0187	2.1543	.45257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCVL-3260526 Acquired: 10/16/2017 20:09:17 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	19.654	11.461	45.156	484.74	53.464
Stddev	.355	1.972	1.003	5.53	1.578
%RSD	1.8044	17.205	2.2222	1.1415	2.9513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5240.2	3240.0	35826.	7343.4
Stddev	9.1	3.4	41.	10.2
%RSD	.17338	.10519	.11487	.13953

Sample Name: mb 240-298968/1-a Acquired: 10/16/2017 20:13:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20480	-29.070	.67480	12.458	-.60597	-.06371	-285.27	-.0372
Stddev	.28298	21.874	1.6549	.511	.18274	.15376	2.44	.1624
%RSD	138.17	75.246	245.25	4.1022	30.156	241.36	.85514	436.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11697	.05349	.78016	.60000	39.430	.45909	-16.610	-1.0430
Stddev	.23186	.16028	.12108	1.3908	17.389	.80552	11.331	.0198
%RSD	198.22	299.64	15.520	231.80	44.100	175.46	68.220	1.8954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04943	101.43	.04189	.10258	.5003	.02878	-1.2860	.07911
Stddev	.16302	6.63	.33590	.74158	.9612	3.6429	.4519	.25718
%RSD	329.77	6.5392	801.92	722.90	192.1	12657.	35.139	325.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298968/1-a Acquired: 10/16/2017 20:13:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.64206	-3.2544	-9.0732	-10.639	3.7210
Stddev	.81488	1.9501	.0844	5.048	2.2695
%RSD	126.92	59.921	.93062	47.444	60.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5330.1	3293.4	36515.	7469.0
Stddev	3.5	3.5	91.	32.4
%RSD	.06608	.10775	.24839	.43391

Sample Name: lcs 240-298968/2-a Acquired: 10/16/2017 20:17:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.431	2038.6	2230.1	1123.4	2028.5	49.352	49889.	54.97
Stddev	.459	8.2	23.5	8.4	2.8	.204	17.	.72
%RSD	.87495	.40281	1.0526	.75166	.13685	.41303	.03354	1.310
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	512.53	201.40	255.77	1045.8	50586.	1045.4	50157.	498.74
Stddev	4.50	.93	.39	4.3	99.	2.6	140.	.60
%RSD	.87837	.45994	.15327	.41175	.19503	.24579	.27870	.11990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1046.7	49852.	522.69	523.27	545.0	2255.5	2101.1	1017.6
Stddev	13.9	112.	4.94	1.71	3.5	22.2	23.8	1.5
%RSD	1.3322	.22404	.94570	.32672	.6490	.98399	1.1350	.14342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298968/2-a Acquired: 10/16/2017 20:17:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2141.6	532.74	512.31	1055.3	1033.5
Stddev	28.6	1.86	4.12	9.0	11.8
%RSD	1.3334	.34986	.80376	.85443	1.1384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4857.3	3135.0	34778.	7383.9
Stddev	10.3	4.9	40.	1.9
%RSD	.21226	.15662	.11381	.02576

Sample Name: 240-86379-b-4-a Acquired: 10/16/2017 20:21:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.00871	-15.446	3.7775	25.100	313.40	.04728	43105.	-.0587
Stddev	.30355	18.077	1.2397	.894	.46	.04854	32.	.0394
%RSD	3485.7	117.03	32.819	3.5634	.14692	102.67	.07474	67.12
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.8046	1.0961	1.2490	14318.	3145.0	15.807	17428.	6084.8
Stddev	.0309	.2290	.0793	41.	60.7	1.589	85.	42.2
%RSD	1.1022	20.892	6.3487	.28468	1.9310	10.051	.48951	.69305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.2672	2100.1	1.6129	-.53213	.8741	1.9524	-.80695	.77437
Stddev	.2410	4.0	.7041	1.5066	1.557	.7288	.53909	.20479
%RSD	7.3764	.19133	43.652	283.13	178.2	37.328	66.806	26.446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-4-a Acquired: 10/16/2017 20:21:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.3423	-.35029	-6.6281	4154.9	94.150
Stddev	1.6758	4.1654	.0806	12.4	2.412
%RSD	71.546	1189.2	1.2164	.29729	2.5623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5126.3	3221.1	35638.	7482.9
Stddev	7.4	8.3	45.	23.3
%RSD	.14525	.25769	.12643	.31162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.98%	103.81%	106.54%	110.79%
Range				

Sample Name: SD 240-86379-b-4-a@5 Acquired: 10/16/2017 20:26:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.9692	-62.599	21.505	41.429	63.483	-.04273	8501.5	.6790
Stddev	1.5334	24.770	32.960	51.343	.193	.14556	29.1	1.068
%RSD	51.644	39.569	153.27	123.93	.30374	340.65	.34221	157.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.0264	-6.5009	-7.4434	2971.2	688.59	2.7422	3460.5	1277.5
Stddev	1.9741	3.6566	2.8623	28.8	42.39	.6310	46.7	2.4
%RSD	97.421	56.248	38.454	.96825	6.1555	23.009	1.3499	.18779
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.3330	500.78	-.89727	-.26439	12.65	8.9887	11.151	.76963
Stddev	3.7299	4.58	1.3802	1.5247	24.15	14.890	20.151	.17809
%RSD	159.87	.91439	153.82	576.69	190.9	165.65	180.71	23.140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86379-b-4-a@5 Acquired: 10/16/2017 20:26:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	7.3175	-4.5185	-5.9380	814.09	25.940
Stddev	10.798	2.7280	3.9056	10.74	1.708
%RSD	147.57	60.373	65.773	1.3196	6.5831
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5133.6	3177.3	32737.	7078.7
Stddev	147.7	87.5	263.	139.9
%RSD	2.8778	2.7544	.80452	1.9766
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.12%	102.40%	97.868%	104.80%
Range				

Sample Name: PDS 240-86379-b-4-a Acquired: 10/16/2017 20:30:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	49.957	2022.8	2184.6	1116.4	2305.1	48.327	91595.	54.07
Stddev	.766	16.7	32.8	12.8	1.7	.114	59.	.64
%RSD	1.5338	.82490	1.5028	1.1431	.07343	.23652	.06477	1.181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	512.80	198.95	254.81	15014.	52871.	1062.6	65832.	6304.2
Stddev	5.99	.73	1.13	27.	99.	1.9	121.	8.5
%RSD	1.1682	.36479	.44505	.18167	.18740	.17758	.18361	.13546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1090.9	51487.	514.00	508.51	553.1	2207.4	2192.6	1053.2
Stddev	19.8	10.	8.58	7.34	7.2	30.4	38.2	.9
%RSD	1.8173	.02038	1.6694	1.4433	1.298	1.3779	1.7403	.08356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: PDS 240-86379-b-4-a Acquired: 10/16/2017 20:30:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2100.1	529.20	502.94	5180.4	1103.1
Stddev	29.5	4.67	7.99	35.5	3.9
%RSD	1.4040	.88236	1.5887	.68610	.35608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4752.8	3108.3	34152.	7315.0
Stddev	4.9	3.8	151.	6.4
%RSD	.10259	.12203	.44330	.08771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.546%	100.18%	102.10%	108.30%
Range				

Sample Name: 240-86379-b-4-b ms Acquired: 10/16/2017 20:34:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.425	1975.9	2163.8	1102.6	2253.1	47.110	89685.	53.48
Stddev	.609	19.9	22.6	8.0	1.9	.294	60.	.36
%RSD	1.1852	1.0063	1.0430	.72633	.08325	.62426	.06658	.6728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	499.40	194.39	249.57	14747.	51433.	1031.9	63999.	6184.2
Stddev	3.77	.30	.03	10.	68.	2.5	39.	14.1
%RSD	.75421	.15589	.01019	.06884	.13125	.24629	.06050	.22719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1017.9	49850.	506.45	504.25	523.0	2181.7	2058.1	984.34
Stddev	9.8	55.	4.15	1.01	7.1	12.2	18.0	1.40
%RSD	.96624	.11095	.81970	.19963	1.353	.56027	.87653	.14256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-4-b ms Acquired: 10/16/2017 20:34:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2091.4	508.63	495.90	5056.2	1068.7
Stddev	28.8	.91	3.07	19.5	1.6
%RSD	1.3771	.17864	.61915	.38618	.15143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4757.2	3108.7	34172.	7320.3
Stddev	5.2	8.7	75.	8.0
%RSD	.10841	.27850	.21993	.10914
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.634%	100.19%	102.16%	108.38%
Range				

Sample Name: 240-86379-b-4-c msd Acquired: 10/16/2017 20:38:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.400	2012.8	2191.1	1114.0	2289.4	47.627	86517.	53.92
Stddev	.372	17.3	15.9	6.1	3.7	.336	206.	.48
%RSD	.70933	.86191	.72560	.54459	.15996	.70446	.23852	.8898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	505.30	197.21	254.74	14789.	47528.	1043.5	60218.	6333.1
Stddev	5.46	.62	.86	19.	60.	2.4	54.	3.6
%RSD	1.0813	.31559	.33777	.13102	.12612	.23046	.08917	.05694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1028.8	46101.	513.84	512.35	528.1	2211.4	2073.9	1000.8
Stddev	11.9	50.	5.14	6.49	2.9	12.3	26.9	1.6
%RSD	1.1600	.10767	1.0003	1.2666	.5398	.55526	1.2984	.15628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-4-c msd Acquired: 10/16/2017 20:38:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2106.6	512.87	501.29	5120.4	1086.3
Stddev	30.1	4.10	5.73	28.3	9.4
%RSD	1.4309	.79908	1.1431	.55354	.86803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4762.9	3106.6	33978.	7308.5
Stddev	5.0	2.7	108.	9.7
%RSD	.10588	.08773	.31689	.13271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.746%	100.12%	101.58%	108.20%
Range				

Sample Name: 480-125650-b-5-a Acquired: 10/16/2017 20:42:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.35975	-30.786	20.851	996.55	82.602	.08705	162700.
Stddev	.57094	9.507	2.099	20.11	.341	.07849	283.
%RSD	158.70	30.881	10.067	2.0176	.41286	90.164	.17388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0936	.76714	1.0797	-.19925	1242.3	10703.	51.122
Stddev	.0927	.20203	.0934	.68704	16.5	13.	.821
%RSD	99.06	26.335	8.6530	344.82	1.3308	.12101	1.6051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44491.	132.63	52.860	44112.	1.1909	-.16440	.3818
Stddev	79.	.22	.922	117.	.4356	1.9575	1.778
%RSD	.17766	.16228	1.7442	.26529	36.575	1190.7	465.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-5-a Acquired: 10/16/2017 20:42:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9519	.02311	.17383	1.2384	-2.5131	-5.6808	8020.7
Stddev	3.5578	.29040	.06662	.3855	1.5113	.1614	96.4
%RSD	182.27	1256.6	38.328	31.133	60.138	2.8405	1.2013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2283.4
Stddev	33.0
%RSD	1.4445
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4835.6	3096.6	34139.	7330.0
Stddev	6.7	3.1	114.	13.0
%RSD	.13788	.09964	.33406	.17785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.192%	99.800%	102.06%	108.52%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 20:46:52 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1020.5	25700.	533.31	5286.2	2021.9	1946.8	49481.	516.2
Stddev	1.5	23.	9.88	53.4	.7	1.4	92.	7.0
%RSD	.14640	.08855	1.8517	1.0105	.03454	.06997	.18496	1.347
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2047.2	2024.7	2022.1	25758.	49735.	5236.7	49596.	1968.0
Stddev	24.3	3.2	3.8	21.	18.	2.5	120.	2.0
%RSD	1.1855	.15873	.18781	.08012	.03667	.04758	.24137	.09949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2124.2	49621.	2049.5	511.57	533.7	541.06	5278.9	5063.1
Stddev	37.5	53.	21.6	9.33	5.7	5.53	68.6	17.6
%RSD	1.7635	.10761	1.0562	1.8235	1.064	1.0215	1.2991	.34715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 20:46:52 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1070.2	2077.6	2040.2	5069.0	5019.0
Stddev	17.1	3.0	24.6	71.4	6.7
%RSD	1.5990	.14591	1.2038	1.4085	.13344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4736.3	3108.3	33761.	7207.4
Stddev	5.7	8.1	25.	17.0
%RSD	.12109	.26199	.07481	.23542

Sample Name: CCB Acquired: 10/16/2017 20:50:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.52717	-47.059	2.7460	13.591	-.47349	.03813	-66.112	-.0612
Stddev	.15490	25.515	1.2569	1.426	.06763	.03345	3.507	.0424
%RSD	29.383	54.220	45.773	10.488	14.284	87.721	5.3042	69.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10567	-.05217	1.0737	2.6494	42.174	1.7478	-15.774	.00312
Stddev	.31288	.28655	.3238	1.6781	21.448	.2768	7.385	.04408
%RSD	296.08	549.23	30.162	63.340	50.857	15.839	46.813	1413.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.0699	85.550	-.23724	.34054	1.203	.45959	.11672	2.4768
Stddev	.7244	.537	.30578	.38781	.729	.76102	.57625	.0913
%RSD	17.799	.62728	128.89	113.88	60.60	165.59	493.71	3.6854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 20:50:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.90508	-2.6122	-4.9838	-5.2927	3.2733
Stddev	.65033	2.8374	.1507	7.7938	1.7847
%RSD	71.853	108.62	3.0237	147.26	54.523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5277.6	3257.0	35976.	7318.0
Stddev	7.5	4.4	18.	6.2
%RSD	.14215	.13425	.05093	.08421

Sample Name: PDS 480-125650-b-5-a Acquired: 10/16/2017 20:55:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.835	2150.9	2371.6	2158.6	2201.9	50.234	209630.
Stddev	.112	25.6	40.0	28.1	5.1	.397	511.
%RSD	.20511	1.1903	1.6883	1.3038	.23158	.79076	.24357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	57.66	539.34	207.77	269.51	2294.6	63893.	1159.1
Stddev	1.15	8.78	.20	.93	5.4	265.	3.0
%RSD	1.989	1.6276	.09745	.34384	.23506	.41451	.25760
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	95308.	638.31	1154.1	95749.	540.49	528.88	541.4
Stddev	390.	1.96	20.4	306.	9.21	7.28	18.7
%RSD	.40927	.30709	1.7688	.31912	1.7049	1.3761	3.453
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: PDS 480-125650-b-5-a Acquired: 10/16/2017 20:55:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2378.7	2241.8	1065.5	2213.2	548.65	532.17	8964.1
Stddev	36.6	37.7	2.0	18.1	7.53	7.53	66.4
%RSD	1.5402	1.6825	.18818	.81953	1.3732	1.4147	.74109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	3264.6
Stddev	24.4
%RSD	.74610
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4574.7	3018.1	33320.	7280.9
Stddev	13.6	8.0	50.	2.7
%RSD	.29678	.26584	.14970	.03736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.003%	97.271%	99.611%	107.79%
Range				

Sample Name: 480-125650-b-5-b ms Acquired: 10/16/2017 20:59:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.898	2040.6	2296.0	2113.8	2098.2	47.386	206990.
Stddev	.486	30.0	16.7	11.4	1.7	.358	2722.
%RSD	.91842	1.4694	.72885	.53761	.08158	.75475	1.3150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.57	512.67	197.92	255.18	2232.6	61291.	1105.2
Stddev	.37	3.14	.57	.51	5.6	105.	3.7
%RSD	.6691	.61281	.28676	.20019	.25221	.17050	.33040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	92486.	621.02	1100.3	92625.	520.59	513.62	550.7
Stddev	178.	1.95	11.6	46.	3.66	6.12	7.4
%RSD	.19219	.31329	1.0542	.04956	.70332	1.1915	1.346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-5-b ms Acquired: 10/16/2017 20:59:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2284.4	2135.5	1007.7	2123.6	522.93	511.64	8873.5
Stddev	19.0	18.6	.9	28.2	2.07	4.32	17.8
%RSD	.83339	.87079	.08678	1.3299	.39606	.84465	.20005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	3203.5
Stddev	14.3
%RSD	.44504
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4558.6	3006.3	33259.	7232.8
Stddev	2.9	1.1	112.	14.4
%RSD	.06418	.03723	.33572	.19872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.683%	96.889%	99.429%	107.08%
Range				

Sample Name: 480-125650-b-5-c msd Acquired: 10/16/2017 21:03:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.096	2073.7	2309.7	2126.2	2120.0	47.824	208960.
Stddev	.576	32.3	28.0	20.8	2.7	.293	328.
%RSD	1.0843	1.5588	1.2135	.98000	.12729	.61326	.15678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.90	515.56	201.18	260.49	2264.6	61813.	1121.1
Stddev	.73	5.98	.32	.25	10.4	33.	2.8
%RSD	1.303	1.1592	.15720	.09710	.46069	.05331	.24642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	93739.	628.30	1103.7	93526.	524.24	517.83	552.3
Stddev	197.	1.36	19.5	141.	6.40	6.38	6.5
%RSD	.20986	.21586	1.7673	.15057	1.2205	1.2319	1.180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-5-c msd Acquired: 10/16/2017 21:03:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2298.9	2149.5	1021.2	2127.9	525.92	514.09	8998.0
Stddev	36.6	32.5	2.8	44.9	4.93	6.35	51.2
%RSD	1.5934	1.5126	.27409	2.1081	.93747	1.2354	.56877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	3242.8
Stddev	13.5
%RSD	.41630
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4550.3	3003.7	33117.	7170.1
Stddev	3.8	1.3	63.	4.2
%RSD	.08336	.04394	.19169	.05817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.518%	96.806%	99.005%	106.15%
Range				

Sample Name: 480-125650-b-1-a Acquired: 10/16/2017 21:07:25 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.10729	-15.317	19.379	692.53	113.44	.12482	103700.
Stddev	.26621	8.766	.930	12.96	.21	.10390	113.
%RSD	248.13	57.232	4.8015	1.8708	.18438	83.243	.10892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.449	.28316	1.3156	.43783	3.0798	6756.1	23.557
Stddev	.121	.41810	.0619	.68386	2.1665	52.5	1.090
%RSD	8.369	147.66	4.7060	156.19	70.343	.77747	4.6268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22729.	3.3354	31.785	48382.	.92822	-.61940	.7896
Stddev	76.	.0486	.670	62.	.29131	.57968	1.380
%RSD	.33601	1.4567	2.1070	.12793	31.383	93.588	174.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-1-a Acquired: 10/16/2017 21:07:25 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.8036	-.44653	.84435	4.2248	24.312	-6.9160	4300.9
Stddev	4.2606	.47365	.32141	.8592	4.118	.1006	11.9
%RSD	88.695	106.07	38.066	20.336	16.938	1.4543	.27670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	993.69
Stddev	4.08
%RSD	.41062
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4903.8	3123.5	34361.	7303.7
Stddev	6.5	1.8	82.	27.4
%RSD	.13200	.05690	.23777	.37475
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.548%	100.67%	102.72%	108.13%
Range				

Sample Name: 480-125650-b-2-a Acquired: 10/16/2017 21:11:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32087	-33.774	3.3949	800.15	37.956	.18627	294290.
Stddev	.40762	4.568	1.7958	37.40	.185	.11901	1324.
%RSD	127.03	13.526	52.898	4.6745	.48633	63.893	.45000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1905	-.03889	1.7497	-1.1997	72429.	11136.	43.747
Stddev	.1693	.09177	.0428	.4822	147.	47.	.552
%RSD	88.88	235.95	2.4493	40.195	.20275	.42454	1.2623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45874.	421.83	1.6129	390070.	1.5332	.05645	-3.379
Stddev	69.	.56	.3057	2920.	.5773	1.0123	.730
%RSD	.15147	.13222	18.954	.74864	37.651	1793.3	21.60
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-2-a Acquired: 10/16/2017 21:11:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1357	.14385	.05511	.88891	-4.4819	-7.5864	10505.
Stddev	1.4773	.32037	.18981	1.5897	2.1795	.1146	38.
%RSD	130.08	222.71	344.40	178.83	48.629	1.5100	.36031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1071.9
Stddev	1.2
%RSD	.10764
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4374.5	2923.6	31879.	7037.8
Stddev	8.9	3.1	41.	36.9
%RSD	.20310	.10689	.12719	.52457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.021%	94.225%	95.302%	104.19%
Range				

Sample Name: 480-125650-b-3-a Acquired: 10/16/2017 21:16:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.00902	-5.3858	19.956	1169.4	61.321	.17027	125390.
Stddev	.27693	12.840	1.901	21.6	.257	.11069	204.
%RSD	3070.8	238.40	9.5235	1.8437	.41959	65.012	.16275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1131	.01467	1.1489	.12165	787.01	7232.7	43.617
Stddev	.1511	.04212	.2543	.34862	6.39	33.1	1.166
%RSD	133.6	287.10	22.134	286.57	.81218	.45790	2.6738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25876.	177.79	70.253	49387.	.79843	-.15213	-.9948
Stddev	228.	.28	1.491	43.	.16712	1.1613	1.108
%RSD	.88043	.15623	2.1226	.08746	20.931	763.38	111.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-3-a Acquired: 10/16/2017 21:16:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.47571	-.70500	.00360	.96994	-2.2924	-8.6907	8909.6
Stddev	2.2057	.44536	.15846	1.1009	3.6922	.0828	79.1
%RSD	463.65	63.172	4407.0	113.50	161.06	.95263	.88758
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1147.0
Stddev	13.9
%RSD	1.2147
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4872.5	3112.9	34276.	7332.9
Stddev	13.7	9.0	58.	27.0
%RSD	.28133	.28892	.17008	.36809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.926%	100.33%	102.47%	108.56%
Range				

Sample Name: 480-125650-b-4-a Acquired: 10/16/2017 21:20:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.38951	-2.7250	13.480	673.14	42.651	.19424	220890.
Stddev	.32011	9.1344	.681	12.27	.141	.07171	1445.
%RSD	82.183	335.21	5.0530	1.8229	.33130	36.919	.65422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0266	.58607	.91644	-.19131	15363.	8525.3	54.646
Stddev	.2215	.11036	.33135	.46491	5.	32.0	1.003
%RSD	833.2	18.830	36.156	243.01	.03363	.37561	1.8354
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41838.	191.12	3.5707	139400.	3.0149	-.72348	-1.445
Stddev	84.	.14	.0187	231.	.3899	2.0188	1.995
%RSD	.19994	.07122	.52303	.16552	12.934	279.04	138.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-4-a Acquired: 10/16/2017 21:20:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.7005	-.84360	.27954	1.0946	-1.0012	38.423	10906.
Stddev	1.6995	1.0224	.08820	1.1441	2.4940	1.053	188.
%RSD	99.937	121.19	31.551	104.52	249.10	2.7402	1.7201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	499.26
Stddev	7.37
%RSD	1.4761
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4660.2	3044.9	33398.	7239.0
Stddev	5.2	.4	115.	22.6
%RSD	.11263	.01195	.34566	.31190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.702%	98.134%	99.844%	107.17%
Range				

Sample Name: 480-125650-b-6-a Acquired: 10/16/2017 21:24:53 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.85800	-33.398	4.3815	1234.9	105.12	.17339	176230.
Stddev	.66788	8.247	1.2233	3.5	.20	.14369	363.
%RSD	77.841	24.692	27.920	.28093	.18875	82.874	.20594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1097	.99690	1.3306	.08568	25.810	13615.	96.742
Stddev	.1536	.05044	.1786	.38561	.588	42.	1.662
%RSD	140.0	5.0601	13.422	450.08	2.2772	.31162	1.7175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	38747.	175.76	103.40	120150.	1.9080	-.00476	.2238
Stddev	85.	.25	1.29	325.	.2850	.72444	.2548
%RSD	.21819	.14232	1.2445	.27058	14.939	15227.	113.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-6-a Acquired: 10/16/2017 21:24:53 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11.863	-.90003	-.16568	1.8823	-1.8492	-7.6072	8517.6
Stddev	1.820	.35947	.06699	1.2339	2.0055	.1010	70.6
%RSD	15.342	39.940	40.433	65.550	108.45	1.3278	.82933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1462.1
Stddev	14.2
%RSD	.97228
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4686.8	3046.4	33526.	7249.0
Stddev	1.8	2.2	37.	9.3
%RSD	.03764	.07341	.11028	.12772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.232%	98.183%	100.23%	107.32%
Range				

Sample Name: 480-125650-b-8-a Acquired: 10/16/2017 21:29:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.49590	-25.012	19.733	1152.2	60.348	-.00277	123600.
Stddev	.21249	10.451	1.729	23.1	.056	.01982	203.
%RSD	42.850	41.785	8.7611	2.0010	.09350	716.38	.16388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0061	.13409	.84659	.29218	778.05	7126.1	41.906
Stddev	.1335	.15142	.51977	.21456	10.88	24.0	1.902
%RSD	2197.	112.92	61.396	73.432	1.3977	.33646	4.5385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25362.	177.83	69.390	48496.	.52386	-.77277	-.7682
Stddev	217.	.46	2.182	67.	.44879	.99742	.8146
%RSD	.85666	.26089	3.1443	.13770	85.670	129.07	106.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 480-125650-b-8-a Acquired: 10/16/2017 21:29:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.43131	-.41342	-.12369	1.9713	-2.3897	-8.5307	8737.2
Stddev	1.9778	.03660	.11247	.6740	1.3348	.2402	61.6
%RSD	458.54	8.8525	90.929	34.192	55.857	2.8156	.70489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1121.8
Stddev	13.6
%RSD	1.2160
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4855.3	3101.8	34025.	7283.3
Stddev	8.8	.7	23.	45.4
%RSD	.18102	.02276	.06654	.62355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.585%	99.968%	101.72%	107.83%
Range				

Sample Name: 480-125650-b-9-a Acquired: 10/16/2017 21:33:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12319	-26.170	.52419	6.7789	-.64756	.13530	-276.87	-.1384
Stddev	.54107	11.922	1.2749	.4293	.03912	.05262	1.86	.0255
%RSD	439.21	45.554	243.21	6.3334	6.0408	38.892	.67327	18.39
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15841	.07429	1.1135	-.15838	60.337	-.37574	-7.8367	-1.2812
Stddev	.07061	.28012	.4683	1.7314	32.762	.53678	14.915	.0135
%RSD	44.577	377.09	42.055	1093.2	54.299	142.86	190.32	1.0553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06704	100.52	-.63176	-.66504	-1.158	.36280	-1.6015	-.05795
Stddev	.11284	6.49	.10753	.30235	.708	1.2485	.6688	.05301
%RSD	168.31	6.4531	17.021	45.463	61.19	344.13	41.761	91.473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 480-125650-b-9-a Acquired: 10/16/2017 21:33:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.27777	-1.0798	-8.8786	-9.2175	2.0859
Stddev	.40760	1.4422	.2568	6.7305	1.5406
%RSD	146.74	133.56	2.8928	73.018	73.857
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5295.4	3264.7	36002.	7380.9
Stddev	5.9	4.7	85.	38.9
%RSD	.11047	.14465	.23728	.52708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	105.34%	105.22%	107.63%	109.27%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 21:37:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1027.6	26049.	535.24	5273.4	2032.5	1931.5	49582.	514.3
Stddev	.4	43.	10.51	88.0	5.4	5.3	129.	10.8
%RSD	.03771	.16573	1.9644	1.6687	.26791	.27657	.26114	2.089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2046.5	2055.4	2027.6	26016.	50063.	5294.9	49781.	1960.7
Stddev	42.0	.8	4.7	44.	25.	3.6	218.	2.1
%RSD	2.0530	.03985	.23190	.16961	.05066	.06760	.43795	.10894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2127.4	49832.	2044.7	513.03	528.2	543.69	5282.1	5100.1
Stddev	52.9	70.	41.0	11.47	7.8	13.98	124.4	12.4
%RSD	2.4878	.14079	2.0077	2.2350	1.472	2.5713	2.3552	.24376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 21:37:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1080.7	2112.7	2033.7	5062.8	5058.7
Stddev	21.9	3.4	42.2	69.6	1.4
%RSD	2.0297	.15859	2.0734	1.3743	.02695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4721.6	3100.9	33713.	7129.7
Stddev	12.1	8.6	33.	2.2
%RSD	.25537	.27761	.09647	.03028

Sample Name: CCB Acquired: 10/16/2017 21:41:50 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14741	-19.228	2.0808	10.705	-.62748	.17348	-62.476	-.0295
Stddev	.32103	7.282	.7856	.866	.20049	.10896	3.735	.1012
%RSD	217.78	37.870	37.754	8.0930	31.951	62.805	5.9789	342.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08439	.20984	.74641	4.0294	32.404	1.9543	-21.254	-.02817
Stddev	.08274	.22777	.33362	1.7596	30.048	1.0811	8.005	.03234
%RSD	98.041	108.54	44.697	43.669	92.729	55.321	37.664	114.80
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6201	72.017	-.09941	-2.0138	.5819	1.2828	-.06862	2.3899
Stddev	.6284	10.383	.29019	.9516	.5197	.6779	.48225	.2383
%RSD	17.360	14.417	291.91	47.253	89.31	52.844	702.83	9.9725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 21:41:50 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.72464	-1.3227	-5.0272	-.79896	2.3591
Stddev	.41760	2.3389	.1462	5.9250	.7756
%RSD	57.629	176.83	2.9085	741.59	32.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5246.6	3227.9	35481.	7210.5
Stddev	5.0	.9	64.	25.7
%RSD	.09474	.02804	.18104	.35664

Sample Name: 240-86379-b-1-a Acquired: 10/16/2017 21:46:12 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.6383	707.41	10.747	6.1321	269.79	.11768	18083.
Stddev	.3002	28.79	2.363	.8224	.83	.09663	30.
%RSD	5.3237	4.0695	21.984	13.411	.30840	82.114	.16799
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.8590	70.278	10.592	2.6867	301880.	1868.1	3.1524
Stddev	.1416	2.159	.394	.3531	1835.	27.3	2.4692
%RSD	16.48	3.0722	3.7175	13.141	.60799	1.4605	78.327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3152.8	F 44367.	.63307	3622.4	-1.4252	4.3140	-3.228
Stddev	17.2	148.	.32751	11.9	.6391	.4340	1.023
%RSD	.54498	.33329	51.734	.32856	44.846	10.061	31.70
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10000.					
Low Limit		-500000.					

Sample Name: 240-86379-b-1-a Acquired: 10/16/2017 21:46:12 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.5996	2.3867	12.395	16.270	11.830	-1.0702	3157.4
Stddev	1.9034	.5892	.030	3.146	.872	.2091	14.1
%RSD	52.879	24.687	.24514	19.338	7.3688	19.536	.44707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	223.53
Stddev	2.86
%RSD	1.2793
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5092.8	3206.5	35441.	7531.2
Stddev	6.1	3.2	88.	29.0
%RSD	.11922	.09849	.24800	.38455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.31%	103.34%	105.95%	111.50%
Range				

Sample Name: 240-86379-b-2-a Acquired: 10/16/2017 21:50:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22958	-20.596	4.6389	69.926	181.57	.06546	35048.	-.0452
Stddev	.59634	20.910	.9372	.955	.30	.11167	113.	.0773
%RSD	259.76	101.52	20.204	1.3653	.16297	170.58	.32254	170.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.85519	.99679	.51235	17506.	2358.6	4.5809	6237.2	1993.0
Stddev	.28326	.07428	.16690	45.	13.6	1.0478	38.6	.9
%RSD	33.123	7.4519	32.576	.25553	.57538	22.874	.61949	.04318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.95625	13564.	-.56220	-1.6671	.6152	-1.5680	-1.2953	.72018
Stddev	.14432	52.	.48987	.2743	1.922	2.0793	.1969	.16512
%RSD	15.092	.38361	87.135	16.457	312.4	132.61	15.205	22.927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-2-a Acquired: 10/16/2017 21:50:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.5761	.28621	-5.6200	2603.4	182.05
Stddev	.4980	3.4594	.1273	35.4	6.14
%RSD	31.597	1208.7	2.2661	1.3616	3.3743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5116.2	3214.9	35521.	7387.8
Stddev	5.1	3.1	54.	22.9
%RSD	.10065	.09743	.15323	.30956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.77%	103.61%	106.19%	109.38%
Range				

Sample Name: 240-86379-b-3-a Acquired: 10/16/2017 21:55:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.25763	11.440	4.0019	223.76	304.47	.08937	52817.	-.0337
Stddev	.32496	8.691	.5668	2.36	.54	.09920	91.	.1517
%RSD	126.13	75.964	14.163	1.0537	.17626	111.00	.17178	449.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01411	1.0757	.39849	23067.	7994.1	26.287	7387.1	980.41
Stddev	.06900	.3726	.34757	59.	34.6	.853	69.3	.78
%RSD	488.87	34.635	87.220	.25394	.43272	3.2436	.93850	.07980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1981	6680.7	.20486	1.0183	.6308	-1.1293	-1.2862	1.0525
Stddev	.1757	15.0	.72986	.5229	1.932	1.2610	.1712	.0320
%RSD	7.9955	.22459	356.27	51.349	306.4	111.66	13.310	3.0409
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-3-a Acquired: 10/16/2017 21:55:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.43089	-1.9686	-8.2308	4779.4	426.34
Stddev	.30321	1.6030	.2678	28.1	4.10
%RSD	70.369	81.431	3.2540	.58871	.96068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5084.0	3204.2	35456.	7427.0
Stddev	10.7	3.2	57.	26.6
%RSD	.21067	.09894	.16169	.35798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.13%	103.27%	106.00%	109.96%
Range				

Sample Name: 240-86379-b-5-a Acquired: 10/16/2017 21:59:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17690	295.74	3.9527	165.05	206.58	.11010	56584.	.2267
Stddev	.52182	15.97	.9826	4.21	.59	.08603	165.	.1123
%RSD	294.98	5.3989	24.859	2.5511	.28321	78.136	.29111	49.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.8669	1.5817	.86342	14296.	8324.2	46.055	13002.	2572.2
Stddev	.2932	.2190	.19022	36.	39.5	1.831	39.	6.3
%RSD	4.2694	13.849	22.031	.25148	.47507	3.9759	.30363	.24465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.0790	11349.	1.3485	.18829	.3506	.27420	-.75694	3.9172
Stddev	.2993	39.	.1667	1.3719	.3155	1.6063	.57572	.3317
%RSD	4.2286	.34441	12.364	728.58	89.99	585.80	76.058	8.4688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-5-a Acquired: 10/16/2017 21:59:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.8345	-.57467	-5.4804	3651.6	407.71
Stddev	.3049	2.6947	.1349	9.4	1.06
%RSD	16.618	468.91	2.4623	.25765	.25930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5048.1	3181.0	34970.	7370.4
Stddev	4.7	6.1	86.	33.4
%RSD	.09364	.19220	.24484	.45287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.42%	102.52%	104.54%	109.12%
Range				

Sample Name: 240-86379-b-6-a Acquired: 10/16/2017 22:03:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20832	-36.634	-1.0121	22.827	24.203	.07826	139780.
Stddev	.30663	17.883	.9559	.332	.094	.05977	126.
%RSD	147.19	48.817	94.449	1.4536	.39025	76.365	.08986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1079	10.101	1.3238	-.15038	21338.	3055.5	10.789
Stddev	.0956	.108	.3438	.65441	58.	17.7	.511
%RSD	88.59	1.0681	25.969	435.16	.27231	.58034	4.7329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26932.	776.90	-.41057	4433.8	11.099	-1.6115	.5454
Stddev	252.	1.41	.04888	1.9	.159	.8624	1.224
%RSD	.93506	.18211	11.905	.04183	1.4366	53.516	224.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86379-b-6-a Acquired: 10/16/2017 22:03:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27236	-1.2222	.16852	1.7731	-3.4972	-6.2591	4177.7
Stddev	3.0085	.3897	.33002	1.5085	4.6504	.0715	50.4
%RSD	1104.6	31.889	195.84	85.078	132.97	1.1415	1.2066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	107.49
Stddev	3.25
%RSD	3.0203
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4941.2	3124.4	34642.	7307.7
Stddev	2.3	2.0	45.	17.2
%RSD	.04588	.06448	.13062	.23579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.293%	100.70%	103.56%	108.19%
Range				

Sample Name: 240-86379-b-7-a Acquired: 10/16/2017 22:07:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11527	6.7746	2.1848	217.66	304.63	.09297	53209.	.0749
Stddev	.10473	3.6338	.7768	5.35	.39	.05625	99.	.0833
%RSD	90.853	53.638	35.554	2.4579	.12947	60.505	.18569	111.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25749	1.1743	.63211	23028.	7933.4	24.620	7382.0	978.41
Stddev	.23560	.2409	.52900	37.	51.1	.404	95.8	.92
%RSD	91.496	20.509	83.688	.16007	.64464	1.6393	1.2973	.09437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.0236	6663.4	-.37912	-.70436	-.8776	.14752	-.93910	.90342
Stddev	.2082	8.1	.42523	.67483	1.921	2.2130	.32008	.20354
%RSD	10.286	.12109	112.16	95.809	218.9	1500.2	34.084	22.530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86379-b-7-a Acquired: 10/16/2017 22:07:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.63921	-1.6879	-6.9490	4761.4	421.68
Stddev	1.3213	1.7081	.1540	41.9	3.89
%RSD	206.70	101.20	2.2165	.87954	.92163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5101.0	3207.6	35278.	7396.3
Stddev	4.9	3.3	36.	15.1
%RSD	.09525	.10205	.10118	.20437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.47%	103.38%	105.46%	109.50%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 22:12:06 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1007.0	25289.	527.97	5228.6	1994.4	1917.1	48656.	512.1
Stddev	1.3	82.	3.79	35.9	1.5	.6	11.	4.3
%RSD	.13329	.32276	.71807	.68729	.07676	.03121	.02207	.8339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2025.8	1999.8	1992.3	25325.	49154.	5160.0	48952.	1933.9
Stddev	22.2	2.3	1.3	92.	131.	6.7	112.	1.2
%RSD	1.0979	.11464	.06774	.36384	.26728	.13053	.22951	.06064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2098.8	49152.	2027.2	504.13	521.3	534.34	5236.3	5012.7
Stddev	25.3	92.	21.3	5.79	6.5	5.07	54.6	35.9
%RSD	1.2059	.18720	1.0485	1.1492	1.240	.94961	1.0427	.71660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 22:12:06 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1068.3	2053.4	2019.4	4980.2	4937.3
Stddev	9.5	7.9	19.2	69.3	16.4
%RSD	.89052	.38439	.95268	1.3907	.33306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4732.6	3108.7	33894.	7198.9
Stddev	3.6	2.4	119.	9.3
%RSD	.07661	.07605	.35232	.12909

Sample Name: CCB Acquired: 10/16/2017 22:16:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31134	-24.846	2.0577	7.4839	-.47432	.06313	-216.88	.0050
Stddev	.62365	23.165	1.9188	.7926	.05678	.02613	2.03	.0740
%RSD	200.31	93.236	93.252	10.591	11.972	41.395	.93457	1476.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.38489	.29921	.67333	3.3192	33.615	1.6513	-12.809	-.47902
Stddev	.12407	.21330	.28206	.3436	44.481	.5461	3.878	.01785
%RSD	32.234	71.288	41.891	10.352	132.32	33.069	30.276	3.7254
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.4281	35.013	-.09037	-.74254	.0616	1.2655	-.54545	2.3032
Stddev	.1766	5.279	.04921	.59583	2.365	1.7289	.68224	.1455
%RSD	5.1505	15.078	54.451	80.243	3837.	136.62	125.08	6.3174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 22:16:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.54969	-3.8301	-7.7685	-7.0074	2.3816
Stddev	1.2769	4.4230	.0649	3.8169	2.4550
%RSD	232.29	115.48	.83523	54.469	103.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5263.0	3238.6	36057.	7272.6
Stddev	6.9	2.3	82.	36.0
%RSD	.13038	.07183	.22674	.49524

Sample Name: CCVL-3260526 Acquired: 10/16/2017 22:20:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.7761	163.00	15.651	107.69	199.46	4.9939	4754.4	5.169
Stddev	.4002	2.93	.622	3.79	.54	.0875	7.1	.171
%RSD	4.0931	1.7972	3.9756	3.5187	.27107	1.7514	.14853	3.312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.118	10.457	20.301	211.92	4882.9	55.301	5068.0	13.979
Stddev	.498	.273	.336	3.97	10.5	.978	30.0	.040
%RSD	4.9197	2.6114	1.6556	1.8716	.21455	1.7688	.59214	.28305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44.284	4881.7	39.583	10.592	19.66	22.325	99.674	51.361
Stddev	1.651	13.1	1.384	1.856	1.28	1.728	3.493	.286
%RSD	3.7270	.26742	3.4975	17.525	6.516	7.7399	3.5044	.55630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCVL-3260526 Acquired: 10/16/2017 22:20:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	20.657	9.7518	44.962	493.57	53.613
Stddev	.326	1.9439	2.055	2.81	5.460
%RSD	1.5778	19.934	4.5694	.56857	10.184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5214.3	3226.1	35727.	7306.6
Stddev	6.7	7.0	16.	13.2
%RSD	.12941	.21829	.04559	.18123

Sample Name: 240-86419-b-1-a Acquired: 10/16/2017 22:24:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.47189	4.7251	-.00800	59.357	33.186	.15511	117300.
Stddev	.10160	14.738	1.4257	.962	.021	.01627	139.
%RSD	21.531	311.92	17822.	1.6214	.06299	10.491	.11837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1104	.34240	1.3937	1.0352	81.196	3401.1	8.1466
Stddev	.0277	.13034	.1861	.2778	.204	97.6	2.5373
%RSD	25.11	38.066	13.352	26.836	.25114	2.8694	31.145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21784.	25.633	.67104	8433.7	.72059	-1.3066	-1.114
Stddev	124.	.088	.13468	1.3	.57374	1.2000	1.086
%RSD	.57102	.34270	20.071	.01554	79.621	91.842	97.46
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86419-b-1-a Acquired: 10/16/2017 22:24:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27638	-1.8303	1.0173	1.8409	.64174	-6.7120	2251.5
Stddev	2.0402	1.0551	.2637	.7509	1.3277	.1908	12.7
%RSD	738.21	57.646	25.919	40.790	206.88	2.8433	.56512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	305.56
Stddev	3.07
%RSD	1.0036
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5049.8	3160.7	34797.	7336.1
Stddev	5.5	4.1	157.	12.2
%RSD	.10801	.12914	.45084	.16673
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.45%	101.87%	104.03%	108.61%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 22:29:09 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1031.1	25807.	535.30	5308.7	2030.5	1952.6	49777.	521.1
Stddev	1.7	18.	4.27	46.3	3.5	1.7	53.	5.9
%RSD	.16841	.06988	.79779	.87196	.17072	.08532	.10569	1.133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2064.8	2048.5	2030.3	25876.	50113.	5274.2	49977.	1980.6
Stddev	19.3	5.2	1.5	75.	96.	1.1	175.	4.0
%RSD	.93615	.25611	.07379	.29013	.19090	.02103	.34968	.20332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2134.9	50165.	2066.2	516.75	532.3	542.33	5324.8	5110.8
Stddev	28.2	96.	17.5	4.85	7.1	5.38	57.2	18.4
%RSD	1.3216	.19089	.84515	.93886	1.336	.99185	1.0738	.35942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 22:29:09 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1076.0	2088.0	2057.3	5074.9	5070.2
Stddev	14.9	1.9	17.9	55.0	12.4
%RSD	1.3810	.08956	.86812	1.0830	.24504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4715.1	3099.1	33679.	7116.5
Stddev	7.2	8.1	65.	21.4
%RSD	.15226	.26083	.19408	.30044

Sample Name: CCB Acquired: 10/16/2017 22:33:13 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07654	-24.659	.61747	7.7563	-.32935	.19324	-219.97	.0175
Stddev	.11944	10.923	1.2084	1.2291	.02880	.13189	1.04	.1352
%RSD	156.05	44.296	195.70	15.846	8.7456	68.251	.47308	771.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08893	-.03692	1.0080	2.2004	11.647	1.8526	-10.610	-.71733
Stddev	.19474	.28748	.6428	.2774	14.449	1.3757	20.316	.00972
%RSD	218.97	778.69	63.766	12.606	124.06	74.256	191.48	1.3554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.8907	20.520	.01806	-1.3708	.2259	1.3492	-.28960	2.6199
Stddev	.3564	3.182	.21089	.3384	1.730	1.6668	.45643	.2138
%RSD	9.1606	15.509	1168.0	24.687	765.8	123.54	157.61	8.1609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 22:33:13 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.1698	-3.5728	-7.7624	-6.0802	.19600
Stddev	.6946	.3728	.1003	6.6598	1.8525
%RSD	59.379	10.433	1.2923	109.53	945.17
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5262.0	3242.7	35588.	7219.0
Stddev	6.1	1.9	88.	10.5
%RSD	.11603	.05848	.24704	.14477

Sample Name: 240-86323-p-1-a Acquired: 10/16/2017 22:37:36 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.56730	-36.730	2.9098	237.61	219.22	.12626	28033.	-.0544
Stddev	.45410	8.871	1.3827	4.61	.81	.06128	68.	.1194
%RSD	80.045	24.153	47.519	1.9392	.37047	48.535	.24332	219.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18597	.65365	26.578	7.7877	672.19	17.103	12549.	-.37410
Stddev	.16419	.22213	.809	2.1400	35.82	.854	198.	.02283
%RSD	88.288	33.982	3.0440	27.479	5.3280	4.9957	1.5787	6.1020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9633	82580.	.11363	.77208	-.7392	-1.8969	-.78245	.41358
Stddev	.1767	173.	.20024	.14722	.5672	1.9206	.47710	.11019
%RSD	9.0009	.20906	176.22	19.068	76.73	101.25	60.975	26.642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86323-p-1-a Acquired: 10/16/2017 22:37:36 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.6760	-2.1400	17.834	4235.3	759.99
Stddev	.2729	3.1957	.667	59.6	10.61
%RSD	16.283	149.33	3.7402	1.4068	1.3958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4987.5	3165.8	34822.	7327.1
Stddev	11.6	3.9	10.	33.0
%RSD	.23190	.12357	.02935	.44974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.214%	102.03%	104.10%	108.48%
Range				

Sample Name: 240-86323-q-1-a Acquired: 10/16/2017 22:41:53 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.41017	-27.271	2.6065	241.99	221.62	.06737	28347.	.0231
Stddev	.19065	20.958	1.4333	4.76	.36	.10049	38.	.0391
%RSD	46.480	76.849	54.989	1.9650	.16360	149.17	.13361	169.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.24614	.32521	3.5923	6.6323	736.67	18.946	12681.	-.37721
Stddev	.22084	.27217	.3178	1.4096	4.63	1.688	42.	.02017
%RSD	89.720	83.692	8.8479	21.253	.62798	8.9091	.33046	5.3468
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.3351	84339.	.06838	.73466	-1.745	-.10029	-1.6536	.28668
Stddev	.3483	88.	.23947	.44130	1.847	4.7063	.4332	.21153
%RSD	26.090	.10470	350.23	60.069	105.9	4692.5	26.196	73.785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86323-q-1-a Acquired: 10/16/2017 22:41:53 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.3782	.39714	37.986	4249.1	767.82
Stddev	.4852	3.9660	1.536	25.7	1.78
%RSD	35.203	998.65	4.0429	.60542	.23205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4986.4	3169.5	34909.	7329.9
Stddev	3.6	5.1	18.	7.5
%RSD	.07315	.16067	.05168	.10275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.192%	102.15%	104.36%	108.52%
Range				

Sample Name: 240-86324-p-1-a Acquired: 10/16/2017 22:46:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.33605	15.299	1.3939	56.527	92.872	.09364	89310.	.2237
Stddev	.24937	10.344	2.4277	.821	.263	.10666	90.	.0896
%RSD	74.206	67.615	174.16	1.4528	.28359	113.91	.10123	40.05
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.56272	.94291	2.6578	554.72	2730.9	8.7275	41654.	525.09
Stddev	.11878	.18897	.3289	4.83	26.7	.1819	94.	.75
%RSD	21.109	20.041	12.374	.87094	.97683	2.0837	.22624	.14192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04468	13300.	.49177	.09769	-.2945	.49841	-1.6477	.71774
Stddev	.20434	24.	.34751	1.1753	1.566	.51618	1.0773	.13746
%RSD	457.29	.17790	70.665	1203.0	531.9	103.57	65.382	19.151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86324-p-1-a Acquired: 10/16/2017 22:46:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.36744	-3.2300	22.466	5739.0	311.21
Stddev	1.2285	2.6550	.344	59.5	4.17
%RSD	334.34	82.197	1.5304	1.0368	1.3387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4924.6	3131.6	34607.	7310.7
Stddev	5.1	2.1	108.	17.0
%RSD	.10341	.06659	.31213	.23313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.963%	100.93%	103.46%	108.24%
Range				

Sample Name: 240-86324-q-1-a Acquired: 10/16/2017 22:50:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.45055	-46.787	2.1377	54.210	91.615	-.00163	88572.	.0036
Stddev	.01849	12.716	1.6479	1.248	.150	.11403	113.	.3027
%RSD	4.1043	27.178	77.089	2.3019	.16368	6985.4	.12711	8375.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.67119	.65067	1.6962	492.64	2693.6	8.9211	41098.	501.24
Stddev	.22350	.10022	.2936	5.99	6.3	1.3230	81.	1.56
%RSD	33.299	15.403	17.308	1.2162	.23308	14.830	.19678	.31155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14234	13192.	.55134	.41516	-1.350	-2.1399	-1.3045	.11221
Stddev	.05662	28.	.20393	1.6258	1.888	3.3392	.3995	.10462
%RSD	39.778	.20933	36.988	391.62	139.9	156.04	30.622	93.232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86324-q-1-a Acquired: 10/16/2017 22:50:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.1920	-1.6508	10.629	5681.6	312.67
Stddev	.8399	4.0757	.334	72.3	4.49
%RSD	70.458	246.90	3.1383	1.2718	1.4373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4913.6	3128.7	34509.	7278.1
Stddev	3.4	4.8	52.	16.3
%RSD	.06986	.15244	.14938	.22452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.744%	100.84%	103.17%	107.75%
Range				

Sample Name: 190-14631-d-1-a Acquired: 10/16/2017 22:54:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19.911	17131.	17.048	133.71	487.50	.30610
Stddev	.322	29.	4.020	3.43	.16	.06860
%RSD	1.6194	.17038	23.580	2.5681	.03256	22.411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	269770.	12.91	7.9590	66.712	3985.0	22622.
Stddev	2557.	.27	.3473	.440	11.5	43.
%RSD	.94790	2.083	4.3633	.65999	.28902	.18869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22244.	19.553	36138.	367.25	87.447	F 701410.
Stddev	96.	.851	76.	1.68	2.374	3404.
%RSD	.43080	4.3517	.21115	.45872	2.7152	.48527
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14631-d-1-a Acquired: 10/16/2017 22:54:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	98.209	103.80	9.962	11.478	164.53	152.17
Stddev	1.748	4.34	.571	3.109	3.32	.19
%RSD	1.7799	4.1824	5.736	27.089	2.0170	.12174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.2930	20.717	7869.6	11654.	842.37
Stddev	1.5496	2.660	202.1	49.	6.92
%RSD	67.578	12.841	2.5680	.41875	.82113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4221.1	2916.3	31775.	7168.2
Stddev	7.4	1.4	319.	13.3
%RSD	.17431	.04777	1.0031	.18487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.969%	93.991%	94.992%	106.13%
Range				

Sample Name: 240-86336-a-1-a Acquired: 10/16/2017 22:59:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	32.818	129.87	2.1263	136.49	51.325	.01717	35494.
Stddev	.193	10.04	2.5298	2.07	.154	.08557	57.
%RSD	.58776	7.7290	118.97	1.5162	.29977	498.29	.16177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.0460	48.567	162.83	14.003	7326.7	4824.1	10.826
Stddev	.1748	.789	.17	.744	14.2	8.6	1.958
%RSD	379.7	1.6252	.10630	5.3144	.19353	.17755	18.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	12371.	88.031	36.884	130870.	680.91	.81104	.9336
Stddev	79.	.149	.555	332.	9.43	2.7365	1.098
%RSD	.63692	.16876	1.5054	.25377	1.3849	337.41	117.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86336-a-1-a Acquired: 10/16/2017 22:59:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.2109	.51900	428.51	2.1131	15.967	5.8095	2177.4
Stddev	4.4825	1.0815	.89	1.1508	1.423	.3121	19.8
%RSD	370.17	208.39	.20789	54.459	8.9099	5.3730	.91135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	285.37
Stddev	2.17
%RSD	.75988
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4878.8	3128.6	34741.	7477.0
Stddev	5.1	3.1	86.	14.5
%RSD	.10445	.09958	.24631	.19392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.051%	100.83%	103.86%	110.70%
Range				

Sample Name: 190-14628-c-1-a Acquired: 10/16/2017 23:03:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31086	114.19	.86474	198.39	24.585	.04579	42990.
Stddev	.45618	21.14	2.1650	3.57	.130	.05579	34.
%RSD	146.75	18.509	250.36	1.7991	.52998	121.84	.07832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2467	.35661	2.1123	32.589	703.76	10293.	72.448
Stddev	.0591	.33535	.5280	.476	2.40	13.	.883
%RSD	23.96	94.037	24.995	1.4613	.34093	.12554	1.2190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13561.	11.472	2.9919	114460.	9.4552	4.2142	1.156
Stddev	93.	.069	.5399	151.	.0900	.3246	.505
%RSD	.68526	.59825	18.045	.13233	.95148	7.7024	43.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 190-14628-c-1-a Acquired: 10/16/2017 23:03:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.6663	-.82978	1.0944	.38662	-3.1785	154.12	2907.6
Stddev	4.6630	.62039	.0674	.96749	2.3043	1.62	14.5
%RSD	279.84	74.766	6.1577	250.24	72.494	1.0499	.49946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	195.52
Stddev	1.46
%RSD	.74649
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4883.9	3128.9	34634.	7403.9
Stddev	8.0	7.1	72.	15.8
%RSD	.16448	.22734	.20670	.21313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.153%	100.84%	103.54%	109.62%
Range				

Sample Name: 240-86366-c-1-a Acquired: 10/16/2017 23:07:38 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.21388	-3.3473	7.4246	370.12	35.387	.04060	23972.
Stddev	.33887	5.3143	3.3209	10.81	.204	.09780	33.
%RSD	158.44	158.76	44.728	2.9214	.57658	240.89	.13560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.1208	1.1001	2.1755	14.200	138.94	60511.	11.888
Stddev	.1060	.1895	.3607	.168	1.08	146.	1.359
%RSD	87.82	17.224	16.580	1.1826	.77443	.24175	11.434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23007.	167.57	4.2110	298620.	15.587	-.14868	1.025
Stddev	75.	.07	.2760	344.	1.201	.59851	.391
%RSD	.32489	.04394	6.5550	.11511	7.7032	402.54	38.19
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86366-c-1-a Acquired: 10/16/2017 23:07:38 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.2138	-.61773	.96849	.03621	-.32331	15.526	5095.5
Stddev	2.2064	.10115	.09416	2.0527	1.6527	.478	12.3
%RSD	181.78	16.375	9.7226	5668.6	511.17	3.0812	.24220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	195.83
Stddev	1.26
%RSD	.64432
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4634.8	3060.7	33263.	7251.6
Stddev	6.0	.2	33.	30.1
%RSD	.12957	.00606	.10061	.41446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.198%	98.644%	99.439%	107.36%
Range				

Sample Name: 190-14629-c-1-a Acquired: 10/16/2017 23:12:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23550	134.32	1.3759	232.41	20.303	.10516	22015.	.1577
Stddev	.56570	19.29	1.5987	1.31	.040	.09868	32.	.1361
%RSD	240.21	14.363	116.19	.56152	.19867	93.831	.14525	86.29
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.38563	4.3457	31.649	261.58	3664.9	108.21	7269.9	12.162
Stddev	.20870	.2144	.262	.80	74.3	.72	31.8	.067
%RSD	54.120	4.9342	.82673	.30609	2.0279	.66780	.43676	.54726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.37016	99833.	8.2193	4.3730	-1.221	1.1444	.06916	.84295
Stddev	.08663	142.	.2883	.6645	1.716	2.5809	.28188	.15618
%RSD	23.403	.14242	3.5073	15.195	140.5	225.52	407.59	18.528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14629-c-1-a Acquired: 10/16/2017 23:12:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.13985	-2.8020	171.23	2377.5	92.388
Stddev	1.6723	3.1624	4.19	19.1	.914
%RSD	1195.8	112.86	2.4480	.80423	.98890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4951.7	3148.6	34602.	7360.5
Stddev	10.9	6.8	19.	32.3
%RSD	.22051	.21580	.05542	.43907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.502%	101.48%	103.44%	108.97%
Range				

Sample Name: 190-14632-c-1-a Acquired: 10/16/2017 23:16:20 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31672	-15.127	2.7488	55.466	29.980	.00287
Stddev	.68829	6.256	2.3521	1.767	.076	.05857
%RSD	217.32	41.357	85.570	3.1852	.25451	2042.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	42421.	-.0249	.42486	1.7421	16.226	99.919
Stddev	66.	.0468	.07775	.6086	1.470	1.027
%RSD	.15483	187.6	18.301	34.934	9.0583	1.0274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7382.4	13.666	15570.	5.0081	5.3627	F 699990.
Stddev	59.6	1.911	146.	.0736	.3426	5852.
%RSD	.80686	13.982	.93997	1.4707	6.3879	.83605
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14632-c-1-a Acquired: 10/16/2017 23:16:20 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.4025	-1.3396	.3352	-.99010	.63678	.19166
Stddev	.5277	1.3680	1.424	2.4825	.45330	.31731
%RSD	37.624	102.12	424.9	250.74	71.186	165.55
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.56245	1.5247	1.1790	3056.0	247.75
Stddev	.62938	1.9949	.4286	27.7	7.94
%RSD	111.90	130.84	36.353	.90503	3.2045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4406.2	2975.2	31747.	7078.7
Stddev	13.9	9.6	48.	17.3
%RSD	.31451	.32387	.15259	.24434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.650%	95.888%	94.908%	104.80%
Range				

Sample Name: CCV-3283852 Acquired: 10/16/2017 23:20:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1034.0	25614.	535.68	5318.9	2040.1	1989.4	49743.	522.6
Stddev	1.6	126.	8.36	56.3	.2	5.3	80.	6.9
%RSD	.15137	.49366	1.5609	1.0589	.00771	.26630	.16101	1.315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2056.4	2046.9	2011.8	25855.	50679.	5272.8	50436.	1981.0
Stddev	29.0	3.2	6.6	15.	98.	12.5	54.	3.3
%RSD	1.4116	.15395	.32620	.05905	.19322	.23702	.10774	.16423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2128.8	50201.	2054.0	514.12	535.5	539.89	5317.0	5113.2
Stddev	34.6	91.	30.7	6.62	9.5	10.81	83.6	11.5
%RSD	1.6261	.18044	1.4944	1.2875	1.767	2.0029	1.5727	.22434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/16/2017 23:20:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1076.9	2116.2	2055.4	5106.1	5099.5
Stddev	15.7	5.6	30.4	83.2	1.4
%RSD	1.4613	.26420	1.4787	1.6295	.02689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4717.1	3092.9	34010.	7161.7
Stddev	10.8	6.4	77.	14.4
%RSD	.22956	.20719	.22653	.20045

Sample Name: CCB Acquired: 10/16/2017 23:24:53 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.08262	-36.618	1.7684	5.9527	-.56733	.21316	-219.00	-.0541
Stddev	.05717	12.847	.5864	.8517	.19719	.07507	1.58	.0872
%RSD	69.199	35.084	33.159	14.308	34.758	35.217	.72204	161.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05018	.17262	.92650	2.7405	82.791	3.0535	-21.477	-.69692
Stddev	.28207	.49860	.11557	1.0158	32.732	1.4160	10.874	.03156
%RSD	562.16	288.85	12.474	37.065	39.536	46.373	50.633	4.5278
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.7949	147.11	-.34440	-.06940	.2848	1.1932	-.48760	2.3547
Stddev	.4234	7.62	.39700	1.4154	.5669	2.0406	.30823	.2426
%RSD	11.157	5.1832	115.27	2039.6	199.0	171.01	63.215	10.302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/16/2017 23:24:53 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.33128	-1.1490	-7.7867	-3.1428	4.3794
Stddev	1.6575	5.1522	.1698	3.7369	.5058
%RSD	500.34	448.40	2.1811	118.91	11.551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5238.1	3228.3	35639.	7209.3
Stddev	1.0	.9	114.	9.7
%RSD	.01830	.02879	.31914	.13415

Sample Name: 190-14633-c-1-a Acquired: 10/16/2017 23:29:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.37207	-19.198	2.0426	4102.3	40.984	.07192
Stddev	.50157	5.772	1.4548	117.0	.169	.08358
%RSD	134.81	30.067	71.224	2.8518	.41168	116.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52880.	.1145	.56823	31.305	194.25	18.838
Stddev	44.	.1563	.33231	.437	1.27	1.012
%RSD	.08295	136.5	58.482	1.3973	.65577	5.3719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6061.6	92.570	233380.	-.16500	10.586	F 1303200.
Stddev	91.9	3.639	302.	.04841	.573	22510.
%RSD	1.5161	3.9307	.12947	29.342	5.4118	1.7273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14633-c-1-a Acquired: 10/16/2017 23:29:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	22.793	.02083	3.181	-1.1437	-.02636	.30018
Stddev	.828	1.2877	3.223	2.3793	.44643	.19950
%RSD	3.6331	6181.7	101.3	208.03	1693.6	66.461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.02036	.35529	1.8874	1921.5	876.73
Stddev	1.5394	5.1363	.3709	34.0	16.53
%RSD	7559.3	1445.6	19.653	1.7698	1.8854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4074.6	2829.5	30213.	6935.1
Stddev	13.0	1.3	52.	10.7
%RSD	.31924	.04475	.17077	.15451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.054%	91.192%	90.322%	102.67%
Range				

Sample Name: 240-86359-g-1-b Acquired: 10/16/2017 23:33:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.80297	-14.907	5.5359	1512.6	156.78	.00670	128140.
Stddev	.37251	17.212	1.5334	26.7	.65	.10659	504.
%RSD	46.392	115.46	27.700	1.7647	.41657	1591.4	.39354
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0080	1.1374	1.1165	-.11224	15.151	5523.7	11.906
Stddev	.1139	.1444	.1893	.30815	1.866	38.6	.424
%RSD	1416.	12.694	16.959	274.55	12.314	.69835	3.5610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19134.	357.54	12.126	160690.	6.9229	.09533	-1.325
Stddev	77.	1.08	.428	948.	.4322	.71260	2.047
%RSD	.40371	.30247	3.5262	.59016	6.2429	747.50	154.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86359-g-1-b Acquired: 10/16/2017 23:33:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.22699	-.89232	.23466	1.4886	-1.9977	6.3927	6849.5
Stddev	1.0447	.87024	.10810	.7240	3.1907	.1650	14.2
%RSD	460.22	97.526	46.067	48.636	159.72	2.5814	.20688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	928.07
Stddev	6.64
%RSD	.71575
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4715.4	3053.8	33605.	7275.4
Stddev	12.4	5.3	95.	24.3
%RSD	.26403	.17240	.28273	.33359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.801%	98.422%	100.46%	107.71%
Range				

Sample Name: 240-86408-a-1-a Acquired: 10/16/2017 23:38:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.60306	141.96	1.2900	211.09	46.822	-.00753	35221.	-.0321
Stddev	.48546	17.46	1.1067	2.53	.122	.12009	62.	.1935
%RSD	80.499	12.301	85.785	1.2000	.26133	1595.2	.17743	602.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11953	.15102	59.177	23.835	2894.0	8.3482	12211.	.70332
Stddev	.15925	.49831	.474	.220	39.2	1.7293	96.	.01278
%RSD	133.23	329.97	.80113	.92308	1.3561	20.715	.78519	1.8175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.9645	31806.	.97962	.32777	.7748	2.2033	-.71710	.29047
Stddev	.1584	24.	.38490	2.8533	.6936	1.8531	.49627	.31041
%RSD	5.3432	.07403	39.291	870.51	89.52	84.105	69.205	106.86
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86408-a-1-a Acquired: 10/16/2017 23:38:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.3584	-.63940	12.174	2104.4	264.97
Stddev	.5790	2.1608	.309	18.0	3.47
%RSD	42.623	337.94	2.5391	.85377	1.3086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5067.5	3173.6	35215.	7298.9
Stddev	.2	3.7	45.	16.8
%RSD	.00348	.11640	.12715	.23055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.80%	102.28%	105.28%	108.06%
Range				

Sample Name: 240-86412-a-1-a Acquired: 10/16/2017 23:42:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.32372	300.95	2.3923	386.37	16.770	.23337	243800.
Stddev	.60172	23.55	4.1058	7.62	.077	.02933	1075.
%RSD	185.88	7.8239	171.63	1.9717	.45815	12.567	.44079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.4351	13.195	1.4786	2.9403	651.16	16759.	43.612
Stddev	.2610	.292	.5325	.4666	8.91	10.	.747
%RSD	59.99	2.2153	36.017	15.870	1.3690	.06117	1.7118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	138570.	2193.9	.26041	50088.	53.491	-.34575	-1.613
Stddev	325.	2.5	.21620	135.	.707	.31745	.467
%RSD	.23424	.11193	83.023	.26988	1.3222	91.815	28.97
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86412-a-1-a Acquired: 10/16/2017 23:42:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.47261	-1.1811	3.3828	2.3387	-1.6781	18.468	1355.7
Stddev	2.6683	.4930	.1634	1.4436	.7801	.614	14.6
%RSD	564.59	41.741	4.8304	61.723	46.487	3.3227	1.0789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1502.6
Stddev	8.4
%RSD	.56097
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4620.4	2991.0	33379.	7134.3
Stddev	7.6	6.5	7.	34.7
%RSD	.16363	.21848	.02033	.48595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.911%	96.397%	99.789%	105.62%
Range				

Sample Name: 240-86414-d-1-a Acquired: 10/16/2017 23:46:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11891	15.517	3.8356	926.71	73.850	.19719	425500.
Stddev	.21543	17.371	1.3127	41.64	.075	.06157	2327.
%RSD	181.17	111.95	34.224	4.4931	.10175	31.225	.54683
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.2007	3.6142	2.3432	-1.0527	12132.	34742.	88.892
Stddev	.2150	.4009	.2719	.6697	12.	75.	2.688
%RSD	107.1	11.092	11.604	63.621	.10011	.21687	3.0233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	229840.	6298.3	.47003	348820.	20.705	.58505	-1.853
Stddev	194.	37.6	.08698	1994.	1.185	.75577	2.342
%RSD	.08428	.59631	18.506	.57172	5.7235	129.18	126.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86414-d-1-a Acquired: 10/16/2017 23:46:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.6489	-.92951	-.44409	3.3700	-1.4856	-6.9487	13960.
Stddev	.7018	.48493	.10772	.8822	2.4409	.0249	29.
%RSD	26.495	52.171	24.257	26.177	164.30	.35785	.20470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	2700.9
Stddev	37.3
%RSD	1.3818
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4224.0	2852.0	31422.	7007.1
Stddev	8.5	5.2	70.	47.5
%RSD	.20023	.18234	.22327	.67775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.026%	91.919%	93.936%	103.74%
Range				

Sample Name: 240-86414-d-2-a Acquired: 10/16/2017 23:51:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.93224	-28.473	1.7346	1126.1	11.438	.01723
Stddev	.32537	21.424	2.3502	25.4	.065	.07172
%RSD	34.902	75.245	135.49	2.2562	.56491	416.30
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	107580.	.0590	2.3032	1.6305	.45904	12.086
Stddev	271.	.0661	.2206	.7363	.29475	.522
%RSD	.25201	112.0	9.5758	45.162	64.209	4.3193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	46584.	99.908	280700.	1.1456	.54278	F 695250.
Stddev	12.	1.734	438.	.0133	.37906	9210.
%RSD	.02600	1.7360	.15601	1.1577	69.836	1.3247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86414-d-2-a Acquired: 10/16/2017 23:51:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25.160	-.86203	-.0550	-4.0842	-1.1668	-.15339
Stddev	.537	1.2133	1.066	1.8666	.6093	.11763
%RSD	2.1336	140.76	1937.	45.703	52.223	76.684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.0660	3.0429	-5.5639	11322.	679.04
Stddev	.2449	3.2395	.1545	66.	6.17
%RSD	22.971	106.46	2.7777	.58704	.90797
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4207.3	2854.4	30798.	6980.7
Stddev	3.8	3.7	72.	18.0
%RSD	.09092	.12946	.23377	.25816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.693%	91.996%	92.071%	103.35%
Range				

Sample Name: 240-86414-e-3-a Acquired: 10/16/2017 23:55:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.69407	40.929	3.0438	93.503	65.092	.03378	87947.	.0218
Stddev	.33637	8.262	1.2935	1.016	.249	.05980	57.	.0789
%RSD	48.464	20.187	42.494	1.0867	.38232	177.04	.06527	361.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.68093	1.1459	1.2798	651.27	6063.2	20.986	32856.	606.52
Stddev	.25801	.1840	.5340	3.62	12.6	1.752	516.	1.03
%RSD	37.890	16.058	41.726	.55641	.20815	8.3474	1.5696	.16966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16391	28042.	3.8024	-.13522	.0561	-1.5790	-1.1783	.85291
Stddev	.19443	28.	.1974	.83293	1.582	3.1946	.4331	.04560
%RSD	118.62	.10004	5.1928	615.98	2821.	202.32	36.757	5.3460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86414-e-3-a Acquired: 10/16/2017 23:55:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.4225	-.98462	-4.0152	5828.2	330.59
Stddev	.5362	2.6645	.0693	50.5	1.05
%RSD	37.694	270.61	1.7248	.86714	.31836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4960.7	3129.9	34823.	7296.0
Stddev	5.7	5.6	69.	19.9
%RSD	.11501	.17912	.19775	.27342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.682%	100.87%	104.10%	108.02%
Range				

Sample Name: 240-86320-c-2-a Acquired: 10/17/2017 0:00:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.37750	2.5536	3.8163	91.104	29.295	.04442	95159.	-.0674
Stddev	.28221	15.560	2.9991	1.513	.190	.06994	166.	.0742
%RSD	74.757	609.36	78.588	1.6602	.64784	157.45	.17398	110.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17852	2.4755	1.1301	50.926	6076.6	18.503	29991.	38.297
Stddev	.29178	.4583	.4540	1.366	30.9	2.214	348.	.056
%RSD	163.44	18.515	40.173	2.6826	.50799	11.966	1.1594	.14591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61.901	93598.	22.542	34.101	2.324	5.9576	-.81923	.36724
Stddev	1.429	173.	.324	2.632	1.035	1.1553	.16623	.17549
%RSD	2.3088	.18457	1.4384	7.7181	44.54	19.393	20.291	47.786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86320-c-2-a Acquired: 10/17/2017 0:00:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.74494	1.1709	.52506	5966.6	206.73
Stddev	.91126	1.6634	.22824	63.5	5.46
%RSD	122.33	142.06	43.468	1.0646	2.6404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4838.3	3100.6	34517.	7264.2
Stddev	6.8	3.7	41.	22.2
%RSD	.14107	.11973	.12002	.30560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.247%	99.930%	103.19%	107.55%
Range				

Sample Name: 240-86320-b-4-a Acquired: 10/17/2017 0:04:25 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.05102	-10.390	4.5872	95.674	31.093	.02276	102940.
Stddev	.21972	16.976	.2450	1.747	.080	.07793	76.
%RSD	430.65	163.38	5.3419	1.8264	.25725	342.40	.07386
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1138	.41180	.87812	1.4556	23.629	6416.8	22.030
Stddev	.0490	.20466	.17418	.6188	3.032	17.6	.473
%RSD	43.10	49.700	19.836	42.508	12.830	.27394	2.1490
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	31010.	28.006	80.140	95549.	26.875	58.835	1.436
Stddev	404.	.195	2.387	96.	.756	3.825	.705
%RSD	1.3027	.69509	2.9789	.10034	2.8144	6.5004	49.09
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86320-b-4-a Acquired: 10/17/2017 0:04:25 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.2156	-.62864	-.04048	1.5643	-1.6565	-5.2205	6413.7
Stddev	2.4130	.40560	.04115	1.0769	.9249	.0524	82.6
%RSD	38.821	64.520	101.66	68.843	55.832	1.0036	1.2872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	222.96
Stddev	4.86
%RSD	2.1796
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4814.1	3090.2	33992.	7246.9
Stddev	10.7	6.2	116.	12.2
%RSD	.22161	.20211	.34115	.16809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.765%	99.596%	101.62%	107.29%
Range				

Sample Name: 240-86188-a-1-d Acquired: 10/17/2017 0:08:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17512	38.275	5.5328	91.248	454.66	.13445
Stddev	.47134	3.917	3.1334	1.128	.94	.02280
%RSD	269.16	10.235	56.633	1.2364	.20590	16.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	370620.	6.220	24.947	1.8647	165.02	426.84
Stddev	1482.	.021	.833	.1938	.65	5.10
%RSD	.39990	.3443	3.3397	10.395	.39375	1.1955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8903.5	22.146	47291.	2673.2	1.4496	F 1210900.
Stddev	13.6	.661	101.	24.1	.4202	18439.
%RSD	.15250	2.9830	.21345	.90178	28.988	1.5228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-86188-a-1-d Acquired: 10/17/2017 0:08:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61.586	7.7522	.1143	3.5781	.33393	-.14410
Stddev	1.310	1.4503	2.136	2.1013	.49352	.30008
%RSD	2.1266	18.708	1869.	58.727	147.79	208.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.8251	-.96840	1291.3	4167.6	772.38
Stddev	2.0631	2.4158	15.1	35.3	5.26
%RSD	73.029	249.46	1.1680	.84801	.68102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4007.2	2776.5	30132.	7003.0
Stddev	2.8	2.7	61.	25.3
%RSD	.06928	.09893	.20247	.36177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.713%	89.483%	90.080%	103.68%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 0:13:17 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1033.6	25570.	534.61	5340.6	2035.0	1984.4	49655.	523.8
Stddev	1.5	141.	6.95	28.3	7.4	3.8	210.	2.9
%RSD	.14432	.55012	1.3000	.53055	.36548	.19225	.42254	.5541
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2065.7	2039.7	2017.6	25704.	50501.	5246.9	50223.	1981.2
Stddev	15.6	4.3	3.8	80.	189.	21.8	244.	.7
%RSD	.75568	.21323	.18813	.31226	.37343	.41627	.48581	.03747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2139.7	49797.	2066.3	512.68	533.3	539.22	5338.9	5100.4
Stddev	22.7	175.	16.1	7.65	7.8	7.77	39.1	21.1
%RSD	1.0612	.35107	.77882	1.4929	1.460	1.4409	.73179	.41404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 0:13:17 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1072.9	2097.5	2065.6	5080.0	5059.0
Stddev	16.5	13.4	13.8	61.8	26.7
%RSD	1.5405	.63712	.66697	1.2162	.52701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4729.4	3102.4	34033.	7133.5
Stddev	7.3	4.6	22.	36.5
%RSD	.15343	.14961	.06456	.51152

Sample Name: CCB Acquired: 10/17/2017 0:17:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23998	-19.820	1.6514	6.1105	-.45488	.14197	-216.15	-.0014
Stddev	.32035	18.008	1.0771	.7776	.13429	.04118	2.70	.1299
%RSD	133.49	90.854	65.227	12.725	29.522	29.007	1.2511	9011.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00230	.14566	.38278	.97631	81.726	.31699	-5.6477	-.72503
Stddev	.21682	.35434	.28028	.38405	26.687	.92654	15.329	.03679
%RSD	9410.7	243.27	73.220	39.337	32.654	292.29	271.42	5.0738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.6340	257.34	-.35587	-.11430	-.3600	1.9282	-.54393	2.1017
Stddev	.4063	1.41	.51034	.50986	1.443	.8419	.61465	.2132
%RSD	11.182	.54949	143.41	446.06	400.9	43.662	113.00	10.143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 0:17:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.60307	-1.6940	-7.8148	-7.1668	.66216
Stddev	1.5137	2.4504	.1398	5.6828	4.6848
%RSD	251.00	144.65	1.7892	79.293	707.50
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5249.6	3234.9	36024.	7205.9
Stddev	2.0	1.8	95.	23.5
%RSD	.03805	.05605	.26403	.32668

Sample Name: 240-85941-c-2-e Acquired: 10/17/2017 0:21:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12715	84.695	4.8942	994.03	431.68	8.1332
Stddev	.84946	15.286	.5856	26.12	1.58	.1068
%RSD	668.08	18.049	11.966	2.6275	.36700	1.3125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11431.	.1749	87.234	5.4393	6.5751	717.30
Stddev	60.	.0575	2.915	.3170	.6119	5.19
%RSD	.52385	32.85	3.3419	5.8272	9.3071	.72313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4646.9	15.313	9572.7	1258.7	.50232	F 1164300.
Stddev	44.2	1.321	68.1	3.9	.44254	14765.
%RSD	.95214	8.6282	.71134	.30728	88.100	1.2681
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 240-85941-c-2-e Acquired: 10/17/2017 0:21:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	92.871	1.1684	-.0491	2.0984	1.0276	1.7404
Stddev	3.308	1.2753	1.426	1.7022	.2999	.1606
%RSD	3.5619	109.15	2904.	81.117	29.188	9.2244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.7092	1.3650	511.83	1983.7	94.378
Stddev	.6624	2.1553	16.43	17.3	4.603
%RSD	17.859	157.90	3.2098	.87016	4.8771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4214.3	2970.2	31631.	7172.2
Stddev	23.2	12.0	139.	66.7
%RSD	.55138	.40332	.43850	.92965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.833%	95.727%	94.562%	106.19%
Range				

Sample Name: lb 240-298657/1-b Acquired: 10/17/2017 0:26:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.28843	-11.452	1.4372	5.5940	3.0974	.01252	-176.31
Stddev	.26854	17.168	1.1836	.2479	.1797	.08802	4.80
%RSD	93.106	149.92	82.355	4.4322	5.8006	702.98	2.7197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1541	.07383	.58172	.71321	10.934	141.87	2.7107
Stddev	.1209	.09699	.27081	.82484	2.039	27.62	1.2296
%RSD	78.45	131.37	46.553	115.65	18.647	19.466	45.360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	16.068	-.40564	-.01401	F 13576.	.40054	.56987	-2.381
Stddev	10.050	.04877	.24861	30.	.47581	1.0151	1.827
%RSD	62.542	12.024	1774.1	.22155	118.79	178.12	76.72
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				1000.0			
Low Limit				-1000.0			

Sample Name: lb 240-298657/1-b Acquired: 10/17/2017 0:26:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.6275	26.245	.74349	-1.2883	-3.4839	-3.4672	5.2771
Stddev	1.2362	1.775	.18334	1.0436	4.1236	.1987	4.8903
%RSD	75.958	6.7647	24.659	81.009	118.36	5.7303	92.669
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	3.3629
Stddev	2.2011
%RSD	65.453
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5077.1	3140.8	34378.	6992.7
Stddev	13.2	9.6	57.	4.1
%RSD	.25993	.30684	.16608	.05863

Sample Name: mb 240-298940/2-a Acquired: 10/17/2017 0:30:26 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.13391	-26.686	2.5812	.89578	.13387	.05955	-193.96	-.0032
Stddev	.60912	14.785	.9811	.65488	.03389	.06403	2.71	.0926
%RSD	454.86	55.404	38.011	73.108	25.317	107.52	1.3958	2852.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13049	.08309	.72754	8.8707	85.517	.85433	8.7310	-.61166
Stddev	.21282	.20440	.38027	.5977	18.326	1.4081	14.342	.02833
%RSD	163.09	246.00	52.269	6.7375	21.430	164.82	164.27	4.6324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.31153	379.30	-.30149	.47465	-1.804	.75727	23.298	.37250
Stddev	.25317	24.40	.01775	1.1729	.702	2.0742	.210	.13758
%RSD	81.267	6.4341	5.8859	247.10	38.90	273.91	.89930	36.933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298940/2-a Acquired: 10/17/2017 0:30:26 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.12500	-2.9216	-6.8545	-2.6610	.05467
Stddev	1.0577	1.0997	.1399	4.4460	3.9764
%RSD	846.23	37.641	2.0416	167.08	7272.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5173.8	3205.0	35572.	7045.7
Stddev	6.8	7.2	10.	7.8
%RSD	.13227	.22423	.02853	.11085

Sample Name: lcs 240-298940/3-a Acquired: 10/17/2017 0:34:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48.194	1912.3	1986.6	975.46	1953.0	47.432	-171.25	49.73
Stddev	.362	15.5	23.2	9.41	3.9	.139	1.91	.76
%RSD	.75086	.81063	1.1664	.96428	.19870	.29281	1.1178	1.524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	477.78	192.81	242.80	1025.6	73.704	985.63	12.115	485.79
Stddev	5.75	.88	1.41	8.8	15.493	.56	7.302	.47
%RSD	1.2033	.45843	.58068	.86175	21.020	.05713	60.274	.09631
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	976.41	13777.	486.83	493.82	486.7	1932.3	1937.7	961.57
Stddev	16.06	35.	6.60	5.10	5.7	18.5	24.3	1.68
%RSD	1.6444	.25559	1.3547	1.0319	1.173	.95660	1.2540	.17478
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298940/3-a Acquired: 10/17/2017 0:34:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1962.0	508.55	474.67	1007.9	1021.3
Stddev	26.0	7.90	5.57	19.9	20.5
%RSD	1.3269	1.5531	1.1730	1.9765	2.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5067.0	3163.5	35053.	7057.6
Stddev	7.4	1.4	79.	18.0
%RSD	.14605	.04448	.22513	.25461

Sample Name: 240-86047-a-2-g Acquired: 10/17/2017 0:38:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00197	-13.689	4.8052	.57083	-.32144	-.03218	-191.04	-.0601
Stddev	.27603	27.139	.9459	.28092	.29212	.08681	3.93	.0360
%RSD	13991.	198.26	19.685	49.212	90.880	269.78	2.0568	59.91
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.25933	.56531	1.3943	26.838	356.32	3.0436	1.5053	-.02942
Stddev	.17962	.43150	.2755	1.419	53.26	1.4960	8.6579	.02215
%RSD	69.265	76.330	19.760	5.2879	14.946	49.152	575.18	75.304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.6280	239.73	.01744	.67942	1.061	11.966	22.496	.61948
Stddev	.5767	13.33	.16607	.95663	1.261	2.498	.847	.29453
%RSD	35.426	5.5620	952.11	140.80	118.9	20.875	3.7672	47.544
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86047-a-2-g Acquired: 10/17/2017 0:38:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-6.0506	-2.6724	7.5489	-.11978	6.1982
Stddev	.9104	3.1720	.3280	2.1988	.4548
%RSD	15.046	118.70	4.3452	1835.7	7.3374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5391.9	3251.4	36483.	7352.6
Stddev	16.8	8.0	48.	10.0
%RSD	.31211	.24528	.13104	.13644
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	107.26%	104.79%	109.07%	108.86%
Range				

Sample Name: SD 240-86047-a-2-g@5 Acquired: 10/17/2017 0:43:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11527	-17.147	1.2331	-.79880	-.52450	.13563	-256.58	.0817
Stddev	.34770	13.554	1.2457	.28983	.18850	.07216	1.01	.1049
%RSD	301.65	79.044	101.02	36.283	35.938	53.205	.39530	128.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.19853	-.32356	.59298	6.5899	112.33	2.4473	-17.588	-.75706
Stddev	.37610	.14432	.28670	.7345	26.64	1.7643	12.224	.04655
%RSD	189.44	44.604	48.350	11.146	23.715	72.094	69.503	6.1489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.06875	165.62	-.11829	-.02195	-.3985	2.6044	3.2166	.28732
Stddev	.07474	.97	.34703	1.0716	1.364	2.6201	.1939	.03796
%RSD	108.71	.58824	293.38	4882.4	342.3	100.60	6.0271	13.210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86047-a-2-g@5 Acquired: 10/17/2017 0:43:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.37768	-1.7631	-5.7427	-12.581	2.2285
Stddev	.52052	2.1950	.1241	5.386	7.5826
%RSD	137.82	124.50	2.1612	42.812	340.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5269.4	3228.4	35674.	7141.3
Stddev	7.6	9.4	37.	5.0
%RSD	.14389	.29207	.10486	.07071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	104.82%	104.05%	106.65%	105.73%
Range				

Sample Name: PDS 240-86047-a-2-g Acquired: 10/17/2017 0:47:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	52.903	2108.5	2322.2	1131.1	2127.6	52.097	52627.	56.95
Stddev	.291	8.1	22.0	5.5	3.3	.341	80.	.49
%RSD	.54961	.38299	.94733	.48236	.15589	.65433	.15168	.8519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	541.03	213.13	273.12	1115.8	52927.	1106.3	52647.	517.48
Stddev	3.54	.00	1.59	6.0	72.	1.4	115.	1.51
%RSD	.65359	.00072	.58063	.53898	.13558	.13042	.21790	.29125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1137.2	52689.	540.11	538.07	553.4	2428.2	2228.6	1082.2
Stddev	12.1	66.	3.74	4.42	8.6	13.9	21.8	1.5
%RSD	1.0599	.12593	.69252	.82225	1.562	.57274	.97834	.14025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: PDS 240-86047-a-2-g Acquired: 10/17/2017 0:47:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2196.1	555.85	550.76	1074.7	1085.9
Stddev	11.3	5.22	3.13	14.7	1.5
%RSD	.51343	.93899	.56761	1.3647	.14134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4801.8	3079.3	34034.	7151.0
Stddev	6.8	9.2	58.	10.2
%RSD	.14136	.29927	.16900	.14204
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.521%	99.245%	101.74%	105.87%
Range				

Sample Name: 240-86047-a-2-h ms@5 Acquired: 10/17/2017 0:51:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 199.61	389.59	1021.9	200.33	9835.1	9.7587	-193.60
Stddev	.85	36.69	19.8	2.58	264.9	.1434	2.72
%RSD	.42544	9.4164	1.9418	1.2885	2.6932	1.4693	1.4049
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	205.3	99.093	1000.3	51.270	212.08	188.76	205.51
Stddev	2.5	1.503	3.8	.573	1.64	17.92	.42
%RSD	1.233	1.5171	.37718	1.1180	.77135	9.4953	.20375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	62.614	100.25	203.74	208.03	99.048	1044.7	101.2
Stddev	4.430	.23	3.54	6.16	1.491	16.0	.8
%RSD	7.0750	.23263	1.7356	2.9618	1.5053	1.5338	.7495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86047-a-2-h ms@5 Acquired: 10/17/2017 0:51:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	213.89	407.68	196.12	404.03	106.00	94.803	187.51
Stddev	3.58	6.36	.09	8.44	1.54	1.498	3.51
%RSD	1.6747	1.5589	.04468	2.0883	1.4564	1.5797	1.8719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	211.60
Stddev	2.58
%RSD	1.2172
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5213.6	3204.3	35691.	7163.3
Stddev	4.3	1.8	36.	27.1
%RSD	.08304	.05661	.10071	.37869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.71%	103.27%	106.70%	106.05%
Range				

Sample Name: 240-86047-a-2-imsd@5 Acquired: 10/17/2017 0:55:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 195.22	377.92	989.02	192.33	9679.4	9.5460	-249.22
Stddev	.08	14.64	22.73	2.93	42.4	.2453	3.42
%RSD	.04280	3.8743	2.2988	1.5235	.43839	2.5695	1.3727
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	200.5	97.295	984.89	50.291	210.05	79.025	198.31
Stddev	2.7	1.147	.64	.463	.67	37.587	3.88
%RSD	1.369	1.1785	.06515	.92051	.31714	47.564	1.9550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-6.5649	98.214	198.07	132.17	97.359	1025.7	96.66
Stddev	19.367	.262	3.67	3.84	1.722	12.5	2.93
%RSD	295.01	.26627	1.8547	2.9039	1.7685	1.2232	3.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86047-a-2-imsd@5 Acquired: 10/17/2017 0:55:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	202.45	399.13	191.07	400.24	97.788	92.755	166.40
Stddev	5.15	6.78	.44	7.94	1.416	1.571	4.41
%RSD	2.5459	1.6990	.23106	1.9827	1.4480	1.6941	2.6503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	205.25
Stddev	5.92
%RSD	2.8860
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5209.0	3203.6	35417.	7079.3
Stddev	12.4	9.6	69.	7.9
%RSD	.23849	.29947	.19473	.11221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.62%	103.25%	105.88%	104.81%
Range				

Sample Name: mb 240-299001/1-a Acquired: 10/17/2017 0:59:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.02352	-25.003	3.1595	-.31787	.05570	.05403	-160.40	-.1212
Stddev	.07993	7.675	1.6824	.24039	.09745	.12517	4.10	.1712
%RSD	339.83	30.699	53.248	75.626	174.94	231.68	2.5567	141.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13350	-.02484	.86024	3.6064	43.152	1.2728	6.4361	-1.3291
Stddev	.17200	.36538	.15740	.6655	2.646	1.7803	5.6711	.0220
%RSD	128.84	1470.7	18.297	18.454	6.1310	139.88	88.113	1.6558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17880	154.00	-.22521	-.82124	.3017	1.2120	-1.0464	.00118
Stddev	.12891	2.56	.25023	.61052	3.823	5.4275	.7750	.16463
%RSD	72.100	1.6614	111.11	74.341	1267.	447.82	74.061	13915.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-299001/1-a Acquired: 10/17/2017 0:59:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.24234	-2.9432	-3.7061	-3.7143	3.6669
Stddev	1.1279	.9527	.1792	2.7290	2.9130
%RSD	465.40	32.369	4.8347	73.473	79.440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5222.6	3225.8	35468.	7174.0
Stddev	8.3	6.1	32.	25.0
%RSD	.15816	.19023	.09131	.34885

Sample Name: CCV-3283852 Acquired: 10/17/2017 1:04:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1041.1	25845.	538.57	5324.5	2051.6	2012.7	50550.	524.0
Stddev	2.3	76.	5.84	61.3	2.4	2.9	19.	7.0
%RSD	.22362	.29343	1.0839	1.1508	.11620	.14192	.03683	1.337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2073.0	2061.5	2033.7	25960.	50947.	5290.7	51072.	2012.5
Stddev	34.7	7.0	2.6	60.	76.	15.5	72.	4.4
%RSD	1.6723	.34164	.12732	.23086	.14957	.29256	.14018	.21856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2129.6	50934.	2075.7	516.75	533.4	540.71	5355.6	5161.5
Stddev	36.0	85.	31.4	8.75	9.3	11.59	91.4	20.5
%RSD	1.6883	.16784	1.5108	1.6935	1.745	2.1439	1.7060	.39743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 1:04:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1078.6	2109.4	2087.1	5125.4	5141.3
Stddev	22.3	3.8	31.3	36.9	15.5
%RSD	2.0634	.17944	1.5007	.71976	.30160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4657.1	3065.2	33250.	6911.0
Stddev	9.1	4.5	61.	23.2
%RSD	.19646	.14711	.18418	.33583

Sample Name: CCB Acquired: 10/17/2017 1:08:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03561	-19.270	.05285	5.4268	-.36324	.11688	-220.98	-.0078
Stddev	.46931	10.866	.41473	.6944	.14823	.04801	1.85	.1819
%RSD	1317.8	56.388	784.74	12.797	40.807	41.077	.83525	2321.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21349	-.30413	1.0402	2.4760	15.380	1.2338	-8.1530	-.70752
Stddev	.15195	.33362	.2478	2.1230	14.779	1.4254	9.5868	.01731
%RSD	71.178	109.70	23.824	85.744	96.092	115.53	117.59	2.4462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.5560	89.604	-.30254	.16596	-.2211	.51396	.05650	2.3799
Stddev	.2608	7.423	.36484	1.1731	1.019	1.2056	.53284	.0362
%RSD	7.3338	8.2838	120.59	706.89	461.1	234.58	943.05	1.5194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 1:08:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.60164	-.89127	-7.6250	-6.3779	-3.9337
Stddev	.47534	1.8168	.1301	.6471	1.6742
%RSD	79.007	203.85	1.7064	10.145	42.560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5187.9	3202.8	35587.	7042.1
Stddev	12.8	2.2	85.	34.6
%RSD	.24710	.07021	.23987	.49064

Sample Name: lcs 240-299001/2-a Acquired: 10/17/2017 1:12:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.814	2005.9	2153.1	1074.4	1993.6	49.676	50119.	53.34
Stddev	.650	26.9	34.0	15.7	1.4	.255	49.	1.01
%RSD	1.2544	1.3415	1.5802	1.4625	.06953	.51350	.09806	1.900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	501.29	199.22	253.35	1028.0	50162.	1030.7	50170.	499.42
Stddev	9.23	.87	1.00	3.6	56.	2.4	17.	1.01
%RSD	1.8407	.43719	.39594	.35088	.11138	.23525	.03289	.20276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1003.6	49905.	511.86	508.42	516.5	2170.1	2046.7	1006.8
Stddev	19.4	38.	9.08	6.79	8.7	36.2	41.4	1.7
%RSD	1.9304	.07554	1.7733	1.3349	1.687	1.6665	2.0235	.17370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-299001/2-a Acquired: 10/17/2017 1:12:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2058.2	521.50	509.30	1064.1	1028.3
Stddev	55.4	1.39	9.66	8.6	8.1
%RSD	2.6903	.26734	1.8965	.80636	.79175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4774.2	3088.6	33738.	7011.3
Stddev	5.4	5.1	81.	12.6
%RSD	.11293	.16402	.24092	.17909

Sample Name: 240-86416-d-1-a Acquired: 10/17/2017 1:16:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.42129	37.666	6.2829	43.459	24.069	.09530	120930.
Stddev	.12927	20.397	.2505	1.365	.069	.11230	118.
%RSD	30.685	54.153	3.9878	3.1421	.28497	117.84	.09777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1406	.07163	1.3599	.64605	94.824	3339.0	5.0394
Stddev	.0728	.25258	.3638	.52873	1.641	105.4	1.1599
%RSD	51.80	352.65	26.753	81.841	1.7307	3.1578	23.016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	29825.	7.7127	6.5882	6891.0	.91781	-.87627	-.0794
Stddev	299.	.0643	.5901	38.3	.09286	1.6037	1.725
%RSD	1.0016	.83309	8.9564	.55515	10.117	183.01	2174.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86416-d-1-a Acquired: 10/17/2017 1:16:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.4932	-.23377	1.8963	2.6192	-.29408	1.4672	1230.4
Stddev	1.5317	.82168	.1335	.8000	1.4522	.3004	14.9
%RSD	61.435	351.48	7.0392	30.543	493.80	20.472	1.2070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	311.28
Stddev	5.99
%RSD	1.9244
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4938.7	3115.0	34046.	7026.1
Stddev	8.9	9.5	37.	11.9
%RSD	.18012	.30463	.10881	.16886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.242%	100.40%	101.78%	104.02%
Range				

Sample Name: SD 240-86416-d-1-a@5 Acquired: 10/17/2017 1:20:52 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.20523	-9.8010	1.6421	8.0056	4.5866	.05192	23939.	.0104
Stddev	.40520	14.698	1.3018	.5736	.1029	.13205	30.	.0692
%RSD	197.44	149.97	79.278	7.1649	2.2427	254.34	.12548	666.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.31292	.72893	.39618	18.965	696.95	-.12679	5989.9	.86492
Stddev	.30769	.26866	.40709	2.027	46.06	2.4732	11.4	.06350
%RSD	98.329	36.857	102.75	10.690	6.6090	1950.6	.19082	7.3422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.2626	1418.0	.22834	-.33379	-.2236	-1.0027	-1.1715	.35432
Stddev	.4667	13.5	.71213	.56695	2.625	.8590	.3302	.20116
%RSD	36.965	.95430	311.88	169.85	1174.	85.665	28.190	56.775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-86416-d-1-a@5 Acquired: 10/17/2017 1:20:52 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.67062	-1.1814	-6.9234	229.83	57.553
Stddev	1.7319	1.1841	.2210	3.27	2.467
%RSD	258.26	100.23	3.1918	1.4240	4.2866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5168.4	3194.5	35236.	7065.8
Stddev	7.7	7.5	62.	14.6
%RSD	.14811	.23603	.17510	.20615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.81%	102.96%	105.34%	104.61%
Range				

Sample Name: 240-86416-d-1-b ms Acquired: 10/17/2017 1:25:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.081	2121.8	2291.5	1179.6	2076.2	50.651	170070.
Stddev	.494	24.3	20.4	7.3	.9	.114	264.
%RSD	.91338	1.1471	.89030	.61781	.04277	.22467	.15532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.70	518.90	202.44	261.12	1132.9	55301.	1070.9
Stddev	.52	5.59	.96	.43	4.6	49.	4.4
%RSD	.9279	1.0776	.47322	.16523	.40652	.08904	.40862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	79537.	518.16	1050.2	58320.	529.01	522.53	552.7
Stddev	65.	.71	13.8	47.	6.33	3.36	4.5
%RSD	.08184	.13711	1.3096	.08061	1.1964	.64219	.8110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86416-d-1-b ms Acquired: 10/17/2017 1:25:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2272.2	2146.5	1029.8	2140.6	533.13	528.28	2325.7
Stddev	20.2	30.7	1.1	34.0	3.51	5.65	5.5
%RSD	.88963	1.4284	.10493	1.5882	.65827	1.0686	.23616
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1337.6
Stddev	1.1
%RSD	.08014
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4588.6	3004.1	33130.	6985.4
Stddev	8.5	2.8	73.	29.8
%RSD	.18517	.09265	.21889	.42703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.278%	96.820%	99.041%	103.42%
Range				

Sample Name: 240-86416-d-1-c msd Acquired: 10/17/2017 1:29:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.458	2120.4	2268.5	1166.1	2056.9	49.726	168350.
Stddev	.577	8.9	16.1	5.7	3.7	.100	451.
%RSD	1.0802	.41837	.70798	.48911	.17792	.20153	.26786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.36	516.10	200.60	258.38	1116.8	54836.	1063.6
Stddev	.24	2.55	.41	.51	3.7	42.	2.2
%RSD	.4367	.49437	.20424	.19590	.33342	.07695	.20653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	78714.	512.16	1048.1	57846.	526.82	517.08	548.0
Stddev	246.	.61	10.2	30.	3.48	6.51	6.3
%RSD	.31259	.11931	.97753	.05256	.65970	1.2593	1.159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86416-d-1-c msd Acquired: 10/17/2017 1:29:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2252.8	2136.7	1020.2	2135.7	525.06	524.96	2329.9
Stddev	4.6	16.0	.3	22.7	.67	2.94	3.6
%RSD	.20280	.74978	.02737	1.0647	.12743	.56023	.15406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1327.7
Stddev	9.8
%RSD	.73460
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4575.2	3001.0	32996.	6950.8
Stddev	8.9	5.1	75.	12.3
%RSD	.19436	.16988	.22631	.17754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.013%	96.720%	98.642%	102.91%
Range				

Sample Name: 190-14634-c-1-a Acquired: 10/17/2017 1:33:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.49698	-29.231	6.1968	8960.8	19.780	.06730
Stddev	.69545	8.608	.5734	124.6	.097	.09018
%RSD	139.94	29.449	9.2525	1.3903	.48871	133.99
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9736.2	-.1534	.05090	257.91	36.367	9.6677
Stddev	22.4	.0163	.27164	1.92	.560	.4150
%RSD	.23032	10.63	533.65	.74311	1.5409	4.2930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2213.6	67.733	13081.	-1.0354	9.0337	F 1366500.
Stddev	61.5	.468	27.	.0266	.3793	14938.
%RSD	2.7769	.69128	.21015	2.5732	4.1984	1.0931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14634-c-1-a Acquired: 10/17/2017 1:33:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14.480	-.78487	6.505	2.1037	1.4432	.80115
Stddev	.826	.61956	1.246	3.0524	.9041	.24121
%RSD	5.7043	78.939	19.16	145.10	62.643	30.108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.87164	-1.5507	14.288	3370.2	216.36
Stddev	1.8391	.2910	.746	21.2	3.08
%RSD	211.00	18.764	5.2212	.62844	1.4236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4136.5	2889.4	29970.	6809.3
Stddev	8.1	7.7	81.	19.9
%RSD	.19685	.26735	.26935	.29242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.285%	93.125%	89.596%	100.81%
Range				

Sample Name: 190-14634-c-1-b ms Acquired: 10/17/2017 1:37:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.595	2012.3	2350.1	10039.	2029.9	49.072
Stddev	.157	20.6	14.2	60.	6.4	.192
%RSD	.28234	1.0218	.60288	.59570	.31605	.39158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	59273.	55.60	540.23	444.83	294.90	1033.1
Stddev	211.	.41	3.47	.24	1.03	5.5
%RSD	.35561	.7298	.64144	.05414	.35096	.53463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55864.	1160.0	61854.	498.41	1023.7	F 1333900.
Stddev	119.	4.2	239.	1.15	10.0	6611.
%RSD	.21317	.36091	.38645	.23012	.97397	.49558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14634-c-1-b ms Acquired: 10/17/2017 1:37:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	562.23	489.76	554.6	2366.9	2233.7	1016.5
Stddev	2.58	3.03	4.4	15.6	22.3	2.5
%RSD	.45923	.61947	.7995	.65959	.99654	.24262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2034.1	525.95	594.57	4280.3	1208.3
Stddev	21.1	6.25	3.28	36.7	8.5
%RSD	1.0382	1.1885	.55173	.85760	.70472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4052.6	2863.4	30586.	6889.5
Stddev	12.0	11.6	135.	35.1
%RSD	.29542	.40506	.44246	.50896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.617%	92.287%	91.438%	102.00%
Range				

Sample Name: 190-14634-c-1-c msd Acquired: 10/17/2017 1:41:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55.398	2006.1	2326.1	9828.0	2020.0	48.865
Stddev	.151	22.1	11.6	55.9	2.0	.414
%RSD	.27260	1.1040	.50071	.56829	.09904	.84711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	58679.	54.76	532.91	441.34	290.52	1027.6
Stddev	100.	.55	2.85	.68	1.08	1.1
%RSD	.17051	1.002	.53462	.15373	.37083	.10754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	55754.	1156.2	61561.	496.24	1012.1	F 1297600.
Stddev	32.	3.8	166.	1.05	11.0	15346.
%RSD	.05773	.32939	.26990	.21260	1.0881	1.1827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						500000.
Low Limit						-500000.

Sample Name: 190-14634-c-1-c msd Acquired: 10/17/2017 1:41:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	553.16	484.35	553.4	2335.3	2205.0	1010.6
Stddev	4.45	5.33	.3	22.5	15.3	.7
%RSD	.80485	1.1009	.0574	.96241	.69315	.07228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2009.0	521.57	586.14	4245.6	1215.3
Stddev	19.9	.72	2.67	8.4	8.5
%RSD	.99232	.13731	.45549	.19717	.69777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4058.4	2865.5	30566.	6877.3
Stddev	9.7	6.3	37.	31.5
%RSD	.23874	.22000	.12104	.45778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.731%	92.353%	91.379%	101.82%
Range				

Sample Name: 190-14625-a-1-a Acquired: 10/17/2017 1:45:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.45567	-.48221	4.2947	52.103	13.498	.11218	26666.	-.0167
Stddev	.15144	15.667	.8035	2.334	.188	.12917	66.	.1448
%RSD	33.234	3249.1	18.708	4.4795	1.3949	115.15	.24601	868.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.2084	4.8490	6.7716	706.77	3040.5	4.4131	8063.1	8.5562
Stddev	.1141	.2663	.4575	2.25	60.8	.7592	68.2	.0271
%RSD	3.5558	5.4922	6.7563	.31837	1.9990	17.203	.84602	.31695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.9440	33504.	38.537	.13366	.5536	2.5907	-.23370	.75110
Stddev	.4954	88.	.673	1.5268	1.270	3.6365	.27157	.09940
%RSD	8.3349	.26316	1.7472	1142.4	229.4	140.37	116.20	13.234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 190-14625-a-1-a Acquired: 10/17/2017 1:45:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.8677	-3.9682	53.008	2599.8	95.943
Stddev	.7972	.6999	1.279	16.6	2.061
%RSD	42.680	17.639	2.4127	.63725	2.1484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5020.8	3149.3	34493.	7019.0
Stddev	7.0	1.6	80.	5.9
%RSD	.13852	.05037	.23186	.08475
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.876%	101.50%	103.12%	103.92%
Range				

Sample Name: 190-14636-a-1-a Acquired: 10/17/2017 1:49:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.33232	-1.4601	3.9945	96.503	33.821	.12411	67601.
Stddev	.38395	10.642	.7601	1.764	.268	.01076	32.
%RSD	115.54	728.82	19.028	1.8278	.79216	8.6676	.04780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0651	2.4813	1.6303	.77561	38138.	49227.	8.3563
Stddev	.1422	.0016	.2610	.51768	57.	161.	1.6617
%RSD	218.6	.06298	16.010	66.744	.14897	.32772	19.885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4201.6	1793.2	16.540	277600.	266.24	-.44058	.1599
Stddev	59.3	4.3	.350	2350.	6.44	1.1887	.7657
%RSD	1.4115	.23978	2.1172	.84657	2.4173	269.80	478.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 190-14636-a-1-a Acquired: 10/17/2017 1:49:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5573	12.595	1.2541	1.0649	-3.0589	81.558	2361.8
Stddev	2.7277	.846	.0233	2.0310	6.6757	2.450	30.1
%RSD	175.16	6.7132	1.8536	190.72	218.24	3.0033	1.2738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	75.869
Stddev	6.615
%RSD	8.7190
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4627.4	3050.4	33030.	7126.9
Stddev	8.1	6.5	138.	30.1
%RSD	.17471	.21413	.41686	.42174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.051%	98.311%	98.744%	105.51%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 1:54:12 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1045.7	25861.	540.52	5365.8	2063.8	2029.8	50688.	526.2
Stddev	1.5	38.	9.46	53.5	1.1	2.2	58.	7.3
%RSD	.14034	.14592	1.7497	.99655	.05376	.10620	.11434	1.387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2080.1	2071.2	2028.3	26024.	51515.	5317.9	51293.	2025.0
Stddev	30.7	3.3	2.6	78.	92.	2.4	132.	7.1
%RSD	1.4740	.15910	.12739	.30083	.17894	.04490	.25733	.35036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2137.8	50999.	2081.8	518.34	539.3	541.98	5387.5	5175.8
Stddev	35.4	28.	28.5	6.94	3.8	8.38	84.7	14.6
%RSD	1.6542	.05417	1.3712	1.3380	.7089	1.5470	1.5722	.28151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 1:54:12 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1080.8	2126.4	2095.3	5142.7	5165.1
Stddev	29.3	1.3	30.8	54.9	12.7
%RSD	2.7155	.06025	1.4676	1.0675	.24568
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4671.1	3074.2	33460.	6934.7
Stddev	7.0	7.4	34.	21.7
%RSD	.15015	.23912	.10112	.31228

Sample Name: CCB Acquired: 10/17/2017 1:58:20 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.22935	1.3407	3.8627	16.906	-.39798	.21667	-215.08	.0149
Stddev	.47676	7.7230	.8863	.995	.12981	.06138	5.70	.1628
%RSD	207.87	576.05	22.945	5.8854	32.616	28.327	2.6523	1094.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18084	-.12014	.51108	1.5244	70.444	2.1082	-11.499	-.70613
Stddev	.13178	.13766	.23673	1.1367	12.707	1.3936	15.634	.06868
%RSD	72.872	114.59	46.320	74.567	18.039	66.103	135.95	9.7263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.8560	243.02	.01354	-.94762	-1.222	1.9738	-.27732	2.1894
Stddev	.4383	8.69	.08656	.40110	.530	2.8956	.51773	.4290
%RSD	11.366	3.5775	639.14	42.327	43.35	146.71	186.69	19.595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 1:58:20 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.71445	-.14361	-7.6900	-6.2974	1.5414
Stddev	.49381	2.6267	.1060	4.3893	1.6807
%RSD	69.117	1829.1	1.3780	69.699	109.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5179.5	3195.8	35277.	6994.0
Stddev	7.2	6.6	21.	24.6
%RSD	.13805	.20739	.06086	.35154

Sample Name: 190-14637-a-1-a Acquired: 10/17/2017 2:02:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.18337	93.769	1.6308	82.452	36.921	.13530	76514.
Stddev	.35801	8.181	1.2289	1.085	.076	.06473	84.
%RSD	195.24	8.7251	75.354	1.3156	.20675	47.841	.11009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0481	2.0753	1.2983	.15964	23813.	39548.	7.8794
Stddev	.1664	.0881	.5579	.51012	66.	59.	1.3562
%RSD	345.9	4.2429	42.970	319.54	.27663	.14823	17.211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9272.1	1395.0	11.926	269700.	201.30	-.44403	.1970
Stddev	40.4	.9	.289	1609.	4.16	2.0350	1.113
%RSD	.43527	.06484	2.4237	.59641	2.0689	458.30	565.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 190-14637-a-1-a Acquired: 10/17/2017 2:02:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.61247	8.8067	1.5572	2.2425	-.85436	62.916	2526.8
Stddev	1.4949	.3935	.2213	.7405	.36262	1.780	26.0
%RSD	244.08	4.4679	14.210	33.020	42.444	2.8288	1.0292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	160.04
Stddev	3.86
%RSD	2.4136
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4607.7	3043.7	32899.	7064.2
Stddev	4.1	3.5	29.	20.8
%RSD	.08891	.11445	.08787	.29475
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.659%	98.096%	98.353%	104.59%
Range				

Sample Name: 240-86243-p-1-a Acquired: 10/17/2017 2:07:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.39724	-20.363	.68810	42.880	78.228	.10722	112500.
Stddev	.39817	7.996	1.3675	.599	.107	.05945	50.
%RSD	100.23	39.269	198.73	1.3963	.13617	55.444	.04447
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.0234	.02178	1.1265	1.8617	11.631	813.72	9.6012
Stddev	.1554	.03442	.2052	.7396	1.283	14.26	1.9297
%RSD	662.6	158.07	18.219	39.727	11.029	1.7527	20.099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20569.	-.18575	.21859	11478.	.02975	-.69309	-1.810
Stddev	145.	.03253	.23455	12.	.19356	.24754	1.163
%RSD	.70661	17.511	107.30	.10777	650.59	35.715	64.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86243-p-1-a Acquired: 10/17/2017 2:07:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.27030	-.90078	.11236	1.5192	-1.8645	-7.5598	5143.7
Stddev	2.6531	.37136	.24634	.8224	2.3899	.0636	23.5
%RSD	981.52	41.226	219.24	54.130	128.18	.84083	.45639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	597.78
Stddev	4.58
%RSD	.76615
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4929.8	3122.5	34214.	7052.6
Stddev	4.4	1.3	34.	12.0
%RSD	.08895	.04032	.09831	.17054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.066%	100.64%	102.28%	104.41%
Range				

Sample Name: 240-86243-q-1-a Acquired: 10/17/2017 2:11:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.29455	-23.375	3.5153	40.738	77.533	-.04057	111260.
Stddev	.12428	12.089	1.3317	1.016	.117	.13700	148.
%RSD	42.193	51.716	37.883	2.4938	.15083	337.70	.13257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.0246	.15403	.70769	1.8457	2.2843	744.30	10.040
Stddev	.1313	.32364	.52327	.5912	.4650	26.04	1.356
%RSD	533.1	210.12	73.941	32.032	20.355	3.4989	13.504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20473.	-.84414	.14932	11404.	.89327	-.69969	-.6675
Stddev	137.	.03597	.36529	6.	.09625	1.2261	1.527
%RSD	.67011	4.2609	244.64	.05388	10.775	175.24	228.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86243-q-1-a Acquired: 10/17/2017 2:11:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.51727	-1.3361	.13434	1.0645	-4.4429	-5.5003	5086.3
Stddev	1.7920	.5306	.26575	1.2131	.3631	.0686	55.2
%RSD	346.43	39.712	197.82	113.96	8.1726	1.2478	1.0859
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	597.37
Stddev	7.82
%RSD	1.3099
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4937.6	3122.3	34443.	7130.3
Stddev	9.2	2.6	43.	26.4
%RSD	.18596	.08226	.12491	.37042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.222%	100.63%	102.97%	105.56%
Range				

Sample Name: 240-86244-p-1-a Acquired: 10/17/2017 2:15:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07287	54.014	1.5453	11.841	2.1650	.18638	6339.5	-.1657
Stddev	.23837	34.518	1.0315	.400	.1456	.05034	18.3	.1197
%RSD	327.10	63.905	66.748	3.3792	6.7259	27.009	.28921	72.23
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23853	.24343	1.3260	10.212	1485.9	2.0094	188.95	.39769
Stddev	.13256	.38614	.2742	.609	25.1	.3874	10.42	.04361
%RSD	55.576	158.63	20.676	5.9673	1.6906	19.277	5.5137	10.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09441	399.26	.56271	-.71969	-1.748	.56709	-1.4495	.19556
Stddev	.12487	1.31	.27128	.40771	2.001	3.9224	.3659	.17082
%RSD	132.26	.32724	48.209	56.650	114.5	691.68	25.240	87.350
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86244-p-1-a Acquired: 10/17/2017 2:15:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.38964	-2.7530	108.48	1442.3	19.020
Stddev	1.9748	3.0729	2.63	5.2	2.127
%RSD	506.85	111.62	2.4247	.36117	11.185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5257.1	3235.4	35753.	7185.1
Stddev	7.8	9.0	103.	16.2
%RSD	.14878	.27899	.28742	.22580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	104.58%	104.27%	106.88%	106.38%
Range				

Sample Name: 240-86244-q-1-a Acquired: 10/17/2017 2:20:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.26696	61.418	-1.4914	10.600	2.2650	.15560	6508.5	.0126
Stddev	.48525	24.471	1.3805	.238	.0967	.08420	15.6	.0621
%RSD	181.77	39.843	92.569	2.2452	4.2686	54.113	.23997	491.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.35446	.26865	2.5907	8.5502	1534.9	1.9793	199.90	.56387
Stddev	.14387	.28530	.0943	1.3203	7.5	2.5845	11.36	.04049
%RSD	40.588	106.20	3.6414	15.442	.48612	130.58	5.6836	7.1800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02469	396.35	.16289	-.38154	-.4749	.93609	-1.2140	.15747
Stddev	.24842	13.31	.26823	2.1970	.3409	2.6830	.2948	.11603
%RSD	1006.2	3.3581	164.68	575.81	71.79	286.62	24.279	73.685
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86244-q-1-a Acquired: 10/17/2017 2:20:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.1351	-2.9085	108.21	1478.8	19.437
Stddev	1.2771	1.4996	1.31	16.2	3.776
%RSD	112.51	51.559	1.2128	1.0988	19.428
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5255.2	3228.5	35344.	7167.0
Stddev	5.8	.9	62.	23.2
%RSD	.10956	.02731	.17598	.32417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	104.54%	104.05%	105.66%	106.11%
Range				

Sample Name: 240-86247-a-1-a Acquired: 10/17/2017 2:24:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.3329	114.33	.34882	269.70	46.914	.09561	36641.	.0821
Stddev	.1933	9.19	.30223	4.73	.120	.04136	52.	.0214
%RSD	14.505	8.0378	86.644	1.7535	.25659	43.252	.14245	26.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.46631	.99877	93.037	51.835	2980.1	7.5879	12836.	3.2826
Stddev	.12859	.17169	.673	1.653	16.2	.4910	32.	.0324
%RSD	27.576	17.190	.72302	3.1898	.54520	6.4711	.24911	.98608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0279	32737.	1.0219	-.22219	-1.006	.67819	.82432	.11824
Stddev	.1357	81.	.3081	1.3814	2.082	1.1975	.57289	.19169
%RSD	4.4827	.24716	30.149	621.71	206.9	176.58	69.499	162.12
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86247-a-1-a Acquired: 10/17/2017 2:24:21 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.4724	-.65790	24.918	2292.1	285.63
Stddev	.8920	2.6834	.427	7.7	2.13
%RSD	60.579	407.87	1.7132	.33561	.74443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5055.4	3173.6	34926.	7150.7
Stddev	10.9	3.9	88.	30.8
%RSD	.21619	.12167	.25316	.43066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.56%	102.28%	104.41%	105.87%
Range				

Sample Name: 240-86281-a-1-a Acquired: 10/17/2017 2:28:38 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.64632	83.824	1.6956	113.36	32.689	-.04552	36156.	.2215
Stddev	.13222	10.545	1.4898	1.24	.217	.09685	28.	.1892
%RSD	20.458	12.580	87.860	1.0904	.66428	212.75	.07798	85.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.42029	2.8045	167.59	165.47	68457.	16.758	14374.	22.910
Stddev	.20134	.1874	.63	.64	55.	1.278	78.	.022
%RSD	47.903	6.6811	.37416	.38764	.08046	7.6268	.54273	.09598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9761	84630.	3.5975	.51601	-2.048	2.0456	2.5128	4.3253
Stddev	.2974	48.	.1154	.19311	1.806	1.5218	.7266	.0124
%RSD	15.050	.05634	3.2077	37.424	88.16	74.391	28.917	.28580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86281-a-1-a Acquired: 10/17/2017 2:28:38 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.21009	-3.1449	121.78	2601.1	194.05
Stddev	1.5114	2.2735	2.48	14.6	3.46
%RSD	719.39	72.292	2.0384	.55980	1.7851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4854.8	3129.6	34661.	7228.7
Stddev	7.6	6.0	105.	18.0
%RSD	.15734	.19190	.30433	.24941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.575%	100.87%	103.62%	107.02%
Range				

Sample Name: 240-86306-d-1-a Acquired: 10/17/2017 2:32:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21685	559.55	1.3996	30.992	29.699	.13185	8176.9	1.199
Stddev	.52268	13.52	2.0536	.880	.202	.07188	9.6	.100
%RSD	241.03	2.4161	146.73	2.8403	.67923	54.522	.11712	8.354
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5576	44.007	42.014	3736.9	324.92	3.8693	1283.9	245.08
Stddev	.2837	.459	.411	33.4	17.83	2.3342	13.0	.08
%RSD	18.215	1.0426	.97790	.89269	5.4880	60.326	1.0127	.03370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.7215	477.69	13.577	38.872	2.931	-.90461	1.5111	24.521
Stddev	.2993	7.52	.360	1.334	.276	2.4033	.5764	.242
%RSD	8.0429	1.5740	2.6534	3.4328	9.424	265.67	38.146	.98861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86306-d-1-a Acquired: 10/17/2017 2:32:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.19553	2.4951	751.03	1113.6	88.601
Stddev	1.0757	2.9327	17.86	12.1	1.743
%RSD	550.11	117.54	2.3786	1.0884	1.9677
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5226.1	3234.9	35658.	7164.4
Stddev	5.5	2.0	28.	21.7
%RSD	.10442	.06127	.07883	.30346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.96%	104.26%	106.60%	106.07%
Range				

Sample Name: 240-86310-c-1-a Acquired: 10/17/2017 2:37:12 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.25390	-6.3360	1.5220	109.87	10.631	.20087	42870.	.2908
Stddev	.32360	10.930	.4167	1.74	.061	.06432	89.	.0935
%RSD	127.45	172.50	27.381	1.5792	.57379	32.018	.20755	32.15
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.36715	1.1663	1.0530	102.79	4263.0	19.008	4684.7	35.241
Stddev	.15105	.1675	.1565	2.16	17.8	2.809	33.9	.105
%RSD	41.142	14.360	14.860	2.1003	.41819	14.776	.72462	.29892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	12.425	30740.	2.2189	5.6623	.2070	.34994	-1.1070	1.1125
Stddev	.227	63.	.2331	1.1656	2.251	1.9593	.3974	.2248
%RSD	1.8267	.20580	10.505	20.585	1088.	559.89	35.897	20.208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86310-c-1-a Acquired: 10/17/2017 2:37:12 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.5321	.73115	780.85	3671.3	163.96
Stddev	.7525	1.9747	18.85	45.1	3.02
%RSD	49.116	270.09	2.4137	1.2290	1.8418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5037.4	3152.3	34463.	7061.1
Stddev	10.5	3.3	102.	25.6
%RSD	.20772	.10554	.29477	.36299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.21%	101.60%	103.03%	104.54%
Range				

Sample Name: 240-86310-c-2-a Acquired: 10/17/2017 2:41:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.21816	71.671	5.4446	270.60	21.495	.05539	72280.	.1708
Stddev	.50239	9.681	2.8877	5.01	.096	.08609	75.	.1077
%RSD	230.28	13.507	53.037	1.8516	.44843	155.43	.10430	63.09
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.18214	5.6233	2.4957	228.14	12127.	45.997	9653.9	17.753
Stddev	.25982	.3490	.7426	1.68	39.	1.822	81.6	.061
%RSD	142.65	6.2060	29.757	.73788	.32283	3.9600	.84477	.34135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	93.586	82850.	1.8308	.20068	.0218	12.118	-.59266	.79293
Stddev	2.421	248.	.1448	.30808	1.003	2.294	.17358	.18664
%RSD	2.5872	.29967	7.9110	153.51	4598.	18.931	29.289	23.538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86310-c-2-a Acquired: 10/17/2017 2:41:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.1747	9.9020	-.78439	11492.	329.19
Stddev	1.0871	4.5931	.41071	72.	1.91
%RSD	92.542	46.385	52.360	.62455	.58118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4887.8	3122.8	34172.	7079.0
Stddev	14.8	13.8	45.	14.9
%RSD	.30375	.44089	.13226	.21061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.231%	100.65%	102.16%	104.81%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 2:45:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1045.1	25706.	534.57	5324.5	2055.8	2028.9	50560.	523.1
Stddev	2.1	106.	7.54	68.9	1.9	.3	86.	8.3
%RSD	.20117	.41066	1.4112	1.2938	.09327	.01524	.17095	1.579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2069.3	2062.3	2034.7	25858.	51241.	5295.9	51121.	2018.9
Stddev	36.0	7.2	4.4	57.	80.	12.7	69.	2.8
%RSD	1.7393	.34768	.21455	.22217	.15616	.24042	.13403	.13910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2126.5	51122.	2073.5	516.65	533.2	535.58	5351.0	5188.4
Stddev	39.5	89.	37.2	5.36	7.7	10.71	105.1	15.8
%RSD	1.8592	.17493	1.7959	1.0373	1.436	1.9992	1.9639	.30541
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 2:45:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1072.5	2111.5	2084.0	5147.5	5150.2
Stddev	24.2	9.9	37.6	49.8	12.4
%RSD	2.2569	.47109	1.8060	.96765	.24044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4679.3	3078.1	33569.	6975.9
Stddev	5.7	2.1	39.	11.5
%RSD	.12163	.06933	.11724	.16538

Sample Name: CCB Acquired: 10/17/2017 2:49:52 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01154	-27.911	3.6485	7.2358	-.36531	.11446	-218.38	-.0207
Stddev	.44105	4.632	3.3372	.8374	.11674	.06059	1.59	.0666
%RSD	3821.5	16.595	91.468	11.572	31.957	52.935	.72970	322.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.02749	-.11732	-.09348	1.6831	48.297	3.2875	-22.580	-.70667
Stddev	.10122	.28765	.38398	1.9991	15.698	1.1672	6.257	.00792
%RSD	368.23	245.19	410.76	118.77	32.502	35.505	27.712	1.1211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.0155	83.747	-.45921	-1.7549	1.365	.65155	.05186	2.1094
Stddev	.6239	9.486	.29787	1.1967	.941	.29881	.71656	.1190
%RSD	15.538	11.327	64.866	68.189	68.90	45.862	1381.7	5.6430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 2:49:52 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.62581	-1.7652	-7.6481	-7.4894	-1.1084
Stddev	.93780	1.6625	.0336	8.0155	5.7476
%RSD	149.85	94.183	.43993	107.03	518.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5211.4	3214.9	35289.	6989.3
Stddev	7.7	3.3	147.	24.1
%RSD	.14701	.10359	.41572	.34518

Sample Name: 240-86310-c-3-a Acquired: 10/17/2017 2:54:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17282	39.459	8.5230	265.54	28.008	.15240	73373.	.0337
Stddev	.20638	21.157	1.4155	3.26	.069	.12525	194.	.1143
%RSD	119.42	53.618	16.608	1.2270	.24686	82.182	.26452	339.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.30996	4.2222	2.1464	407.15	14033.	31.179	8563.6	167.68
Stddev	.03711	.3519	.4430	7.58	90.	1.576	105.4	.20
%RSD	11.972	8.3342	20.640	1.8618	.64235	5.0539	1.2307	.11799
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43.334	63418.	4.6069	.37287	.7014	5.9037	-.87614	1.0926
Stddev	1.555	178.	.3420	.89348	.7551	1.8298	.57732	.2295
%RSD	3.5883	.28017	7.4235	239.62	107.7	30.995	65.893	21.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86310-c-3-a Acquired: 10/17/2017 2:54:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2.0060	1.4720	8.9564	12862.	293.90
Stddev	.6934	2.5144	.4683	33.	5.47
%RSD	34.568	170.82	5.2289	.25444	1.8597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4901.7	3120.8	34125.	7084.4
Stddev	11.6	4.0	16.	25.3
%RSD	.23569	.12878	.04567	.35703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.507%	100.58%	102.02%	104.88%
Range				

Sample Name: 240-86310-c-4-a Acquired: 10/17/2017 2:58:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04331	14.294	3.6898	382.32	16.453	.14593	80688.	.1372
Stddev	.17105	8.034	1.3644	5.86	.054	.10234	126.	.0082
%RSD	395.00	56.204	36.979	1.5328	.32994	70.130	.15665	5.985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.24382	1.9618	.76678	989.99	28220.	26.716	3406.9	507.60
Stddev	.18474	.2260	.34376	4.62	35.	1.114	32.8	.84
%RSD	75.769	11.519	44.832	.46698	.12500	4.1705	.96305	.16500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	118.64	78677.	2.3148	.69988	-1.384	.87741	-.66176	1.3372
Stddev	3.83	133.	.1029	1.2789	2.912	.75275	.52007	.1270
%RSD	3.2279	.16875	4.4434	182.73	210.5	85.792	78.588	9.4948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86310-c-4-a Acquired: 10/17/2017 2:58:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.2226	4.3685	-4.2389	12740.	303.28
Stddev	.0876	2.9635	.2180	42.	.53
%RSD	7.1643	67.837	5.1417	.32662	.17385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4845.7	3099.6	33996.	7102.0
Stddev	4.4	5.6	43.	15.7
%RSD	.09133	.18133	.12735	.22072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.393%	99.898%	101.63%	105.15%
Range				

Sample Name: 240-86317-a-2-a Acquired: 10/17/2017 3:02:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.77293	1329.3	4.4317	1874.4	37.996	.13828	39746.
Stddev	.18636	6.1	3.0806	43.8	.189	.16047	131.
%RSD	24.111	.45834	69.512	2.3368	.49732	116.05	.32926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1966	2.4033	5.6746	166.35	1703.3	278020.	6.8134
Stddev	.1613	.4808	.3267	.83	7.2	454.	2.4499
%RSD	82.05	20.007	5.7576	.50085	.42039	.16344	35.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7402.6	25.591	27.523	199460.	6.0905	9.6323	-1.734
Stddev	18.6	.018	.760	994.	.2491	.7928	2.077
%RSD	.25185	.07219	2.7625	.49838	4.0900	8.2309	119.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86317-a-2-a Acquired: 10/17/2017 3:02:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.0496	2994.0	1.5259	.70413	-1.8621	215.19	2154.1
Stddev	1.5966	95.4	.2508	.36285	1.5347	5.70	11.9
%RSD	77.901	3.1851	16.438	51.531	82.418	2.6505	.55303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	106.59
Stddev	3.06
%RSD	2.8688
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4573.9	3043.8	33049.	7064.5
Stddev	1.9	6.8	34.	29.8
%RSD	.04166	.22210	.10137	.42133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.987%	98.100%	98.799%	104.59%
Range				

Sample Name: 240-86319-b-2-a Acquired: 10/17/2017 3:07:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.30790	210.88	6.2305	69.802	23.694	.12274	43290.	-.0913
Stddev	.29986	18.84	1.8969	1.472	.117	.05480	93.	.1282
%RSD	97.390	8.9319	30.445	2.1088	.49185	44.649	.21423	140.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.34109	1.0189	7.7573	192.12	45234.	6.6604	10105.	100.92
Stddev	.28053	.2572	.6108	1.20	142.	1.1802	96.	.38
%RSD	82.245	25.242	7.8736	.62418	.31304	17.720	.95325	.37433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.4940	83189.	394.67	.39194	.8354	-.29622	1.0191	.57053
Stddev	.2644	153.	5.15	.73766	.9851	1.9570	.4839	.24860
%RSD	7.5666	.18406	1.3059	188.21	117.9	660.66	47.485	43.573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86319-b-2-a Acquired: 10/17/2017 3:07:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.2164	-.90622	94.190	6022.5	120.77
Stddev	1.5576	1.5832	1.168	53.8	4.83
%RSD	128.05	174.70	1.2395	.89285	3.9988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4878.8	3126.9	34071.	7138.8
Stddev	6.0	6.1	22.	27.9
%RSD	.12373	.19574	.06529	.39040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.052%	100.78%	101.86%	105.69%
Range				

Sample Name: 240-86319-b-4-a Acquired: 10/17/2017 3:11:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01200	-9.8202	2.6662	84.251	3.2224	.04244	6281.8
Stddev	.24625	9.8910	2.1714	1.870	.2348	.03387	6.1
%RSD	2052.1	100.72	81.442	2.2194	7.2856	79.794	.09787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.0464	.17061	1.3562	4.9537	22.714	107040.	2.6595
Stddev	.1066	.21376	.1013	.2848	2.162	277.	.3743
%RSD	229.6	125.29	7.4723	5.7486	9.5197	.25884	14.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3899.2	228.49	3.7968	140410.	1159.8	-1.2016	2.362
Stddev	51.5	.44	.1675	285.	20.5	1.8898	.435
%RSD	1.3207	.19038	4.4116	.20304	1.7633	157.28	18.42
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86319-b-4-a Acquired: 10/17/2017 3:11:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.0842	2.5143	.86740	.06435	-4.4105	191.08	11850.
Stddev	1.4846	.4634	.18260	.90394	.5219	5.87	32.
%RSD	136.93	18.430	21.052	1404.7	11.833	3.0735	.26914
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	9.6070
Stddev	3.5461
%RSD	36.912
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4790.9	3116.6	33893.	7084.9
Stddev	5.7	1.0	83.	46.1
%RSD	.11970	.03107	.24513	.65105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.304%	100.45%	101.32%	104.89%
Range				

Sample Name: 240-86400-d-1-a Acquired: 10/17/2017 3:15:39 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.27238	587.79	3.6002	29.982	19.057	.08881	15440.	.1036
Stddev	.67056	9.81	.5409	.764	.029	.14129	15.	.1957
%RSD	246.19	1.6684	15.025	2.5469	.15257	159.10	.09806	189.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.59290	4.4174	17.057	1935.9	1514.3	6.2759	1684.5	67.819
Stddev	.16527	.2928	.745	17.2	34.6	1.0602	25.9	.127
%RSD	27.875	6.6285	4.3647	.88955	2.2826	16.893	1.5356	.18734
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.0712	4476.2	3.3558	6.5506	-.1794	.28542	.12532	8.8742
Stddev	.1105	7.6	.2967	1.9806	1.003	1.4950	.76223	.1597
%RSD	5.3333	.16956	8.8417	30.236	559.0	523.77	608.23	1.7994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-86400-d-1-a Acquired: 10/17/2017 3:15:39 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.07135	2.5571	85.295	1799.0	39.981
Stddev	1.6269	.7173	3.027	13.7	3.474
%RSD	2280.0	28.051	3.5490	.76242	8.6891
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5225.6	3236.1	35705.	7241.4
Stddev	3.6	3.4	36.	27.2
%RSD	.06814	.10430	.10128	.37562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.95%	104.30%	106.74%	107.21%
Range				

Sample Name: lb 240-298848/1-b Acquired: 10/17/2017 3:19:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.34610	129.48	2.8536	F 599.02	4.4052	.00231	F 2340.1
Stddev	.19451	5.05	.8480	15.90	.0919	.01683	19.7
%RSD	56.201	3.9016	29.718	2.6544	2.0851	729.05	.84277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit				100.00			1000.0
Low Limit				-1000.0			-1000.0

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.0150	-.04869	1.9175	.89470	7.0957	506.61	1.7770
Stddev	.0625	.47325	.1577	.02958	.3650	11.67	2.3366
%RSD	417.4	971.98	8.2217	3.3061	5.1446	2.3041	131.49
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	682.69	2.6473	-.35726	F 14844.	.09208	.55065	-.9245
Stddev	16.84	.0286	.10574	23.	.36159	1.8395	.2565
%RSD	2.4664	1.0822	29.598	.15742	392.70	334.07	27.74
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				1000.0			
Low Limit				-1000.0			

Sample Name: lb 240-298848/1-b Acquired: 10/17/2017 3:19:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 8.6083	.39383	.26850	-6.2004	-.41826	-1.2048	460.63
Stddev	3.2883	.75395	.28406	.7133	.59788	.4738	6.66
%RSD	38.200	191.44	105.79	11.503	142.94	39.323	1.4448
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	5.0000						
Low Limit	-1000.0						

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	10.527
Stddev	1.743
%RSD	16.558
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5270.6	3220.3	35793.	7293.7
Stddev	6.3	10.9	45.	12.2
%RSD	.11890	.33778	.12550	.16775

Sample Name: mb 240-298958/2-a Acquired: 10/17/2017 3:24:15 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14255	-32.264	-.67852	.42254	-.58486	-.00864	-251.04	-.0155
Stddev	.19362	6.130	3.1549	.31978	.04636	.06242	3.66	.0976
%RSD	135.83	19.000	464.96	75.680	7.9260	722.44	1.4577	631.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07321	.16120	.68985	1.7227	87.542	.89484	-2.6969	-1.1198
Stddev	.13487	.30524	.25128	2.2966	4.133	.71103	19.860	.0119
%RSD	184.22	189.36	36.426	133.32	4.7205	79.459	736.40	1.0656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16446	88.806	-.59646	-.55823	-.2573	2.1874	-.64291	.15099
Stddev	.27014	10.342	.35480	1.6300	1.102	1.9466	.30542	.10643
%RSD	164.26	11.645	59.485	292.00	428.2	88.991	47.507	70.491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298958/2-a Acquired: 10/17/2017 3:24:15 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.3207	-.38982	-8.0657	-6.6466	1.0512
Stddev	.5542	1.2242	.1312	4.9491	4.8745
%RSD	41.961	314.04	1.6262	74.461	463.72
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5308.0	3268.7	36467.	7288.1
Stddev	5.3	2.5	184.	44.9
%RSD	.09950	.07622	.50586	.61615

Sample Name: lcs 240-298958/3-a Acquired: 10/17/2017 3:28:36 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51.777	2193.5	2256.7	F 1687.4	2089.4	51.281	53667.
Stddev	.543	3.5	30.6	14.4	1.7	.266	97.
%RSD	1.0482	.15744	1.3570	.85505	.08340	.51876	.18076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None
Value				1000.0			
Range				20.500%			

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.42	513.82	205.16	261.88	1061.4	51811.	1067.9
Stddev	.61	7.08	1.01	1.40	9.7	52.	.4
%RSD	1.117	1.3774	.49146	.53402	.91685	.09962	.03537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51212.	512.98	1077.1	66085.	522.16	517.67	544.4
Stddev	96.	1.68	15.9	113.	7.25	8.98	6.9
%RSD	.18741	.32722	1.4768	.17094	1.3888	1.7345	1.272
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: lcs 240-298958/3-a Acquired: 10/17/2017 3:28:36 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2313.5	2086.8	1045.6	2091.0	533.89	514.60	F 1645.7
Stddev	26.3	29.9	4.5	32.3	6.61	7.33	22.3
%RSD	1.1376	1.4310	.43127	1.5462	1.2372	1.4237	1.3580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							1000.0
Range							20.500%

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	1060.0
Stddev	11.4
%RSD	1.0727
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4849.3	3104.1	34700.	7314.6
Stddev	11.4	2.5	39.	15.2
%RSD	.23492	.08051	.11105	.20761

Sample Name: 240-86321-a-1-b Acquired: 10/17/2017 3:32:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.39218	-37.384	9.1107	87.592	647.74	1.0861
Stddev	.03197	21.829	.9748	1.474	1.39	.2007
%RSD	8.1505	58.390	10.700	1.6823	.21510	18.477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 2822700.	.3116	.55293	876.19	-.92343	738.86
Stddev	22735.	.0833	.56263	2.63	.50368	6.26
%RSD	.80543	26.74	101.75	.30012	54.545	.84780
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	142590.	599.28	325.01	123.20	3997.6	337990.
Stddev	507.	3.04	26.71	.48	87.3	3596.
%RSD	.35529	.50737	8.2177	.38786	2.1828	1.0640
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 240-86321-a-1-b Acquired: 10/17/2017 3:32:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13.445	2867.1	-8.424	130.49	3.3155	-4.5172
Stddev	.362	49.6	.339	5.94	1.0573	.0587
%RSD	2.6912	1.7312	4.022	4.5526	31.890	1.2991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	5.4108	-5.1994	2693.8	403.23	2436.5
Stddev	1.5159	2.3452	52.0	12.61	13.9
%RSD	28.017	45.105	1.9298	3.1267	.56973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3670.3	2568.5	28562.	6590.1
Stddev	7.3	2.9	10.	34.8
%RSD	.19849	.11365	.03453	.52831
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.011%	82.780%	85.388%	97.567%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 3:37:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1047.3	25892.	542.97	5386.6	2069.3	2034.4	50832.	529.0
Stddev	1.9	44.	5.74	29.3	2.0	7.7	72.	4.3
%RSD	.18299	.16929	1.0580	.54441	.09787	.37957	.14243	.8179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2096.1	2065.4	2047.3	25976.	51488.	5347.9	50973.	2017.5
Stddev	16.7	2.1	3.8	33.	187.	8.9	208.	3.3
%RSD	.79557	.10328	.18441	.12797	.36400	.16707	.40850	.16459
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2167.4	51268.	2100.2	520.46	543.2	552.25	5393.6	5207.3
Stddev	25.7	131.	17.3	1.14	5.3	4.21	42.0	23.5
%RSD	1.1880	.25599	.82522	.21880	.9773	.76143	.77927	.45059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 3:37:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1088.4	2104.7	2095.1	5122.9	5160.7
Stddev	8.6	5.7	17.4	44.8	18.8
%RSD	.79452	.27268	.83067	.87529	.36486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4724.3	3108.1	33956.	7082.6
Stddev	1.7	3.1	53.	7.4
%RSD	.03607	.09971	.15573	.10415

Sample Name: CCB Acquired: 10/17/2017 3:41:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16827	-19.045	2.2271	6.2605	-.55341	.18158	-195.88	-.0748
Stddev	.48120	36.812	1.4411	.5367	.04843	.15042	.42	.1499
%RSD	285.97	193.29	64.704	8.5736	8.7517	82.842	.21388	200.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10151	.03240	.51692	3.0376	123.77	2.1598	1.1551	-.68416
Stddev	.07621	.11605	.31783	1.9321	16.90	1.6793	11.562	.01177
%RSD	75.078	358.21	61.485	63.607	13.651	77.755	1001.0	1.7209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.2061	109.42	-.28553	.57000	-.4702	1.8271	-.34056	2.0014
Stddev	.5572	5.93	.59380	1.6666	.9126	1.2955	.12459	.1336
%RSD	10.703	5.4155	207.96	292.39	194.1	70.904	36.584	6.6757
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 3:41:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.56475	-2.5843	-7.5909	-6.8144	1.6814
Stddev	1.5183	1.2303	.0981	6.1498	3.3331
%RSD	268.85	47.606	1.2918	90.248	198.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5276.9	3245.9	35821.	7187.4
Stddev	5.7	4.5	67.	3.6
%RSD	.10708	.13776	.18610	.05075

Sample Name: SD 240-86321-a-1-b@5 Acquired: 10/17/2017 3:45:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.49798	-2.2114	2.6075	18.259	129.81	.25996	649220.
Stddev	.28009	16.892	3.6582	.683	.51	.28853	971.
%RSD	56.244	763.82	140.30	3.7430	.39207	110.99	.14957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.1173	.28751	183.02	-.20877	152.76	27275.	119.53
Stddev	.1698	.20733	.52	.27506	1.12	79.	2.22
%RSD	144.8	72.112	.28146	131.75	.73386	.29109	1.8608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	72.143	25.035	814.36	68437.	3.5830	627.76	-4.282
Stddev	13.823	.124	25.91	109.	.5309	12.79	2.273
%RSD	19.161	.49638	3.1817	.15934	14.818	2.0381	53.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: SD 240-86321-a-1-b@5 Acquired: 10/17/2017 3:45:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24.284	.37800	-.35506	.51633	-2.6320	530.57	72.598
Stddev	.828	.51545	.02235	1.8754	5.1782	15.08	4.721
%RSD	3.4114	136.36	6.2953	363.23	196.74	2.8415	6.5034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	510.85
Stddev	.63
%RSD	.12243
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4439.7	2931.5	32413.	6987.1
Stddev	15.2	10.3	37.	32.0
%RSD	.34205	.35086	.11282	.45825
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.317%	94.481%	96.900%	103.44%
Range				

Sample Name: PDS 240-86321-a-1-b Acquired: 10/17/2017 3:49:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	62.984	2225.0	2640.9	1297.6	2860.1	50.749
Stddev	.757	13.5	37.2	10.8	2.2	.086
%RSD	1.2011	.60645	1.4074	.82904	.07751	.16994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599
IS Ref	(Y_3710)	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 2842100.	62.71	564.98	1080.4	288.01	1774.9
Stddev	18592.	.94	8.64	3.0	1.59	1.1
%RSD	.65418	1.503	1.5299	.27674	.55284	.06348
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	800000.					
Low Limit	-500000.					

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	201380.	1857.6	50194.	634.14	5159.6	389350.
Stddev	340.	1.5	216.	.69	81.2	1038.
%RSD	.16898	.08179	.42969	.10881	1.5731	.26665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: PDS 240-86321-a-1-b Acquired: 10/17/2017 3:49:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	573.74	3372.8	598.7	2829.0	2306.3	1086.3
Stddev	7.45	35.6	9.6	32.5	43.4	.9
%RSD	1.2991	1.0551	1.596	1.1484	1.8837	.08019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	2121.9	539.60	3256.9	1558.0	3414.8
Stddev	22.4	6.50	41.3	28.1	11.2
%RSD	1.0579	1.2039	1.2684	1.8058	.32737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3588.2	2522.5	28243.	6651.9
Stddev	3.6	3.9	19.	42.5
%RSD	.10038	.15510	.06870	.63893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.378%	81.300%	84.432%	98.482%
Range				

Sample Name: 240-86321-a-1-cms@5 Acquired: 10/17/2017 3:54:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 212.61	395.20	1111.0	229.98	3896.0	9.7045	641820.
Stddev	.75	10.55	25.9	3.57	14.0	.1648	2998.
%RSD	.35046	2.6703	2.3321	1.5544	.35850	1.6981	.46715
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	214.1	99.898	1162.6	50.386	344.49	37485.	327.95
Stddev	4.7	2.156	4.7	.635	2.22	126.	2.35
%RSD	2.180	2.1579	.40064	1.2608	.64337	.33619	.71538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10133.	122.10	1015.1	77036.	103.44	1433.6	105.7
Stddev	106.	.42	25.2	306.	2.86	30.2	1.1
%RSD	1.0505	.34491	2.4861	.39768	2.7682	2.1092	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86321-a-1-cms@5 Acquired: 10/17/2017 3:54:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	247.07	422.81	201.79	407.27	100.15	621.99	290.16
Stddev	6.12	6.63	.77	8.64	.81	13.57	3.47
%RSD	2.4754	1.5683	.38140	2.1215	.80525	2.1823	1.1952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	691.15
Stddev	6.29
%RSD	.90976
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4386.7	2905.9	32114.	6975.1
Stddev	16.2	11.1	112.	18.5
%RSD	.36906	.38236	.34844	.26478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.263%	93.656%	96.006%	103.27%
Range				

Sample Name: 240-86321-a-1-dmsd@5 Acquired: 10/17/2017 3:58:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W 211.42	334.65	1118.6	199.62	3171.9	8.5524	630240.
Stddev	.29	11.49	12.7	2.49	5.9	.1544	1870.
%RSD	.13591	3.4342	1.1341	1.2486	.18562	1.8052	.29677
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.00						
Low Limit	-500000.						

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	216.5	86.148	1160.8	42.305	322.17	36908.	292.31
Stddev	4.3	1.417	2.8	.439	2.92	130.	2.80
%RSD	1.983	1.6448	.24238	1.0388	.90484	.35114	.95805
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10149.	108.59	970.92	75918.	90.150	1393.5	86.34
Stddev	81.	.31	19.52	230.	2.286	27.9	4.53
%RSD	.80157	.28603	2.0104	.30247	2.5361	2.0014	5.241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-86321-a-1-dmsd@5 Acquired: 10/17/2017 3:58:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	248.43	363.42	169.92	350.21	84.015	600.52	258.08
Stddev	5.92	7.60	.33	10.58	2.072	8.82	7.98
%RSD	2.3841	2.0907	.19582	3.0222	2.4657	1.4683	3.0902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	656.16
Stddev	7.17
%RSD	1.0924
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4407.9	2916.7	32225.	6893.1
Stddev	5.5	5.3	40.	13.5
%RSD	.12489	.18010	.12494	.19574
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.684%	94.003%	96.337%	102.05%
Range				

Sample Name: mb 240-298981/1-a Acquired: 10/17/2017 4:02:25 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.39900	-21.809	2.2250	.25032	.03229	.07874	-124.53	.0447
Stddev	.19525	30.218	3.5516	.37967	.24931	.11634	2.02	.0600
%RSD	48.934	138.56	159.63	151.68	772.18	147.76	1.6197	134.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.00066	.71075	1.1304	16.370	204.16	3.1697	.41643	-.43303
Stddev	.34360	.41596	.6031	1.811	17.45	.2013	8.8546	.03450
%RSD	52144.	58.523	53.354	11.060	8.5489	6.3514	2126.3	7.9672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.4693	206.20	-.23658	-.43738	.3974	.18896	23.726	.38875
Stddev	.3078	10.96	.39992	1.5399	.9085	.68627	1.063	.09883
%RSD	8.8729	5.3148	169.04	352.07	228.6	363.18	4.4818	25.423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: mb 240-298981/1-a Acquired: 10/17/2017 4:02:25 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.05089	-3.2020	-5.3801	2.9626	-1.5659
Stddev	.30357	5.9369	.0780	3.2723	7.0903
%RSD	596.56	185.42	1.4502	110.45	452.80
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5195.4	3209.7	35826.	7091.1
Stddev	3.9	1.0	28.	11.4
%RSD	.07591	.02960	.07920	.16037

Sample Name: lcs 240-298981/2-a Acquired: 10/17/2017 4:06:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48.708	1946.3	2033.9	999.99	1935.0	47.624	48175.	50.45
Stddev	.068	22.0	24.3	9.22	1.4	.338	60.	.55
%RSD	.13978	1.1281	1.1923	.92175	.07463	.71046	.12520	1.093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	482.93	192.08	242.79	1002.1	48055.	998.18	47927.	482.37
Stddev	6.19	.33	.88	2.6	144.	1.61	44.	.61
%RSD	1.2811	.17334	.36322	.25828	.30031	.16092	.09140	.12642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	992.35	47828.	491.16	482.53	493.7	1998.9	1995.3	977.97
Stddev	14.66	52.	6.24	4.92	5.9	17.5	24.3	1.67
%RSD	1.4768	.10826	1.2714	1.0204	1.203	.87567	1.2162	.17047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: lcs 240-298981/2-a Acquired: 10/17/2017 4:06:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1974.5	502.65	482.65	1025.3	992.02
Stddev	23.2	8.49	5.04	9.1	6.67
%RSD	1.1758	1.6889	1.0447	.88653	.67189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4715.7	3041.3	33302.	6912.3
Stddev	11.8	7.2	66.	30.1
%RSD	.25008	.23524	.19908	.43548

Sample Name: 240-85905-d-7-i@10 Acquired: 10/17/2017 4:10:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04946	8960.3	20.284	25.146	394.43	.70910	42212.
Stddev	.45558	62.3	1.316	.155	1.04	.08488	116.
%RSD	921.16	.69525	6.4861	.61665	.26407	11.970	.27369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	11.01	186.42	775.86	579.15	112210.	1111.2	13.532
Stddev	.19	3.77	.72	.45	125.	14.7	1.490
%RSD	1.705	2.0246	.09331	.07689	.11179	1.3273	11.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8747.2	2187.5	231.40	266.53	1079.3	871.83	6.530
Stddev	26.5	4.2	5.09	5.55	18.7	18.11	.942
%RSD	.30289	.19014	2.1987	2.0832	1.7322	2.0771	14.43
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-d-7-i@10 Acquired: 10/17/2017 4:10:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0005	62.954	252.92	.28665	32.899	4469.6	763.57
Stddev	2.6341	1.075	.71	1.8807	2.344	68.6	17.58
%RSD	87.789	1.7068	.28049	656.10	7.1249	1.5357	2.3019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	94.898
Stddev	1.423
%RSD	1.4993
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5046.4	3200.7	34930.	7126.9
Stddev	6.4	5.3	24.	25.2
%RSD	.12601	.16708	.06806	.35328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.39%	103.16%	104.43%	105.51%
Range				

Sample Name: SD 240-85905-d-7i@50 Acquired: 10/17/2017 4:14:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03540	1845.0	7.3667	4.0290	80.840	.17725	8487.2	2.282
Stddev	.19016	7.5	1.2434	.1014	.598	.02935	19.3	.134
%RSD	537.26	.40393	16.878	2.5165	.73993	16.559	.22759	5.871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	37.194	159.91	118.88	23240.	276.31	2.1015	1822.5	449.96
Stddev	1.077	1.41	.46	54.	8.50	2.2795	38.8	2.06
%RSD	2.8966	.87945	.38862	.23190	3.0768	108.47	2.1270	.45696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	47.040	110.81	224.21	176.66	.7069	1.9797	11.849	52.140
Stddev	.841	2.09	5.34	2.78	2.206	3.3132	.808	.141
%RSD	1.7880	1.8831	2.3830	1.5710	312.0	167.36	6.8173	.27132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SD 240-85905-d-7i@50 Acquired: 10/17/2017 4:14:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.17920	4.9353	899.39	152.52	16.831
Stddev	1.7383	.8560	18.11	7.43	4.512
%RSD	970.01	17.345	2.0134	4.8686	26.809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5197.0	3237.1	35710.	7116.0
Stddev	4.0	3.4	54.	10.9
%RSD	.07711	.10518	.15130	.15272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	103.38%	104.33%	106.76%	105.35%
Range				

Sample Name: 240-85905-d-7-jms@10 Acquired: 10/17/2017 4:19:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.8692	8723.4	221.46	121.55	529.91	5.3425	39381.	14.56
Stddev	.5074	16.3	1.69	.72	.60	.0678	55.	.19
%RSD	10.421	.18636	.76161	.59449	.11316	1.2687	.13934	1.318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	206.09	677.82	496.86	93560.	5806.7	114.71	12304.	1846.9
Stddev	2.15	1.17	1.40	42.	22.7	3.58	40.	9.9
%RSD	1.0454	.17304	.28083	.04451	.39104	3.1241	.32441	.53644
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	293.12	4975.5	958.17	769.85	25.12	208.37	244.71	335.87
Stddev	4.24	10.1	8.92	5.37	1.65	1.10	3.32	.34
%RSD	1.4453	.20380	.93075	.69753	6.578	.52553	1.3577	.10263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-d-7-jms@10 Acquired: 10/17/2017 4:19:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	201.82	77.773	3796.8	1197.9	179.02
Stddev	.29	.559	37.4	18.9	3.58
%RSD	.14595	.71891	.98501	1.5742	2.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4991.4	3184.2	34888.	7130.0
Stddev	7.8	2.2	71.	8.9
%RSD	.15573	.06768	.20395	.12418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.291%	102.63%	104.30%	105.56%
Range				

Sample Name: 240-85905-d-7kmsd@10 Acquired: 10/17/2017 4:23:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.7655	8785.0	216.61	117.71	505.33	5.2441	38824.	14.59
Stddev	.5577	17.8	5.14	.80	.52	.0891	27.	.11
%RSD	11.703	.20304	2.3728	.68152	.10289	1.6980	.06840	.7769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	202.77	670.58	488.92	93067.	5685.3	111.34	12077.	1803.8
Stddev	2.53	1.79	.63	200.	10.9	1.67	34.	3.0
%RSD	1.2499	.26623	.12822	.21446	.19207	1.5006	.27959	.16832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	290.29	4802.8	933.07	794.28	27.09	200.98	239.05	346.46
Stddev	3.75	10.9	7.51	7.83	1.00	1.30	1.34	.05
%RSD	1.2928	.22733	.80481	.98536	3.696	.64605	.56242	.01582
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-d-7kmsd@10 Acquired: 10/17/2017 4:23:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	194.96	79.402	3718.3	1266.9	172.93
Stddev	2.47	2.601	31.9	11.6	4.15
%RSD	1.2655	3.2754	.85774	.91554	2.3970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5015.8	3193.8	35009.	7071.5
Stddev	1.7	1.1	50.	2.8
%RSD	.03334	.03412	.14252	.03962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.777%	102.93%	104.66%	104.69%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 4:27:14 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1049.2	25959.	544.40	5348.9	2067.4	2029.4	50781.	526.7
Stddev	3.0	47.	7.63	52.0	1.0	5.4	28.	6.9
%RSD	.28619	.18271	1.4009	.97274	.04831	.26598	.05487	1.318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2083.9	2081.0	2029.6	26158.	51748.	5354.8	51484.	2016.5
Stddev	28.3	4.6	1.2	27.	54.	5.3	47.	3.8
%RSD	1.3603	.22074	.05767	.10508	.10364	.09884	.09118	.18920
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2141.2	51499.	2083.4	517.43	537.4	543.31	5396.8	5208.7
Stddev	36.1	38.	27.9	5.97	6.1	10.31	83.4	17.6
%RSD	1.6840	.07339	1.3404	1.1528	1.140	1.8981	1.5446	.33721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 4:27:14 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1082.8	2132.2	2099.5	5125.1	5203.1
Stddev	18.1	3.1	28.1	44.3	16.1
%RSD	1.6690	.14760	1.3385	.86412	.30933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4700.4	3096.3	33809.	6948.9
Stddev	.9	5.8	76.	12.3
%RSD	.01870	.18716	.22411	.17710

Sample Name: CCB Acquired: 10/17/2017 4:31:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.21557	-36.591	1.3743	5.2113	-.33592	.12049	-214.56	-.0614
Stddev	.32751	13.640	1.2866	1.1004	.06628	.07288	3.60	.0779
%RSD	151.93	37.277	93.615	21.115	19.731	60.486	1.6777	126.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.10642	.19086	.17315	3.7239	62.703	-.66256	.49826	-.37543
Stddev	.17941	.42224	.71548	.9441	28.167	.12557	7.6739	.03205
%RSD	168.59	221.22	413.21	25.353	44.921	18.953	1540.2	8.5380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.9922	58.775	-.36356	-.69909	1.396	3.1603	-.18305	2.2837
Stddev	.3909	7.070	.28082	.62558	1.362	1.0621	.39192	.3619
%RSD	9.7911	12.029	77.241	89.484	97.60	33.608	214.11	15.845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 4:31:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.2463	-2.9021	-7.8519	-7.0071	3.8373
Stddev	1.3321	1.2250	.1346	8.7337	5.2126
%RSD	106.88	42.210	1.7149	124.64	135.84
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5226.9	3232.8	35687.	7060.5
Stddev	11.3	.8	27.	29.2
%RSD	.21534	.02560	.07702	.41335

Sample Name: 240-85905-d-7-l@10 Acquired: 10/17/2017 4:35:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.38725	10756.	21.783	38.335	289.66	.77708	57742.
Stddev	.32563	41.	2.658	1.021	.69	.12239	115.
%RSD	84.088	.38074	12.204	2.6622	.23729	15.750	.19920
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.151	108.40	616.81	711.44	132160.	1120.5	15.540
Stddev	.103	2.77	2.87	3.40	299.	11.9	1.205
%RSD	1.268	2.5553	.46565	.47800	.22599	1.0589	7.7560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6020.3	5731.6	184.37	364.97	713.14	609.53	3.382
Stddev	35.9	881.0	5.12	7.66	4.48	17.23	2.010
%RSD	.59567	15.371	2.7768	2.0982	.62843	2.8274	59.45
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-d-7-l@10 Acquired: 10/17/2017 4:35:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.56772	47.551	450.77	1.7250	35.616	4047.6	721.32
Stddev	1.3844	.836	2.47	4.1468	1.290	84.8	7.82
%RSD	243.86	1.7575	.54858	240.39	3.6220	2.0939	1.0842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	98.264
Stddev	3.347
%RSD	3.4059
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5006.0	3178.0	34474.	7106.2
Stddev	5.3	1.6	718.	20.1
%RSD	.10511	.05078	2.0822	.28287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.583%	102.42%	103.06%	105.21%
Range				

Sample Name: 240-85905-d-7-mms@10 Acquired: 10/17/2017 4:39:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.2174	11996.	194.78	131.28	469.38	5.0116	60451.
Stddev	.3891	34.	3.54	1.58	.95	.1503	189.
%RSD	7.4577	.28360	1.8192	1.2036	.20279	2.9986	.31332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	12.33	155.27	727.57	436.82	121220.	5308.4	106.73
Stddev	.25	2.48	3.27	5.31	319.	9.9	1.78
%RSD	2.057	1.5955	.44973	1.2152	.26315	.18675	1.6706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10061.	6352.5	304.01	4511.8	797.08	604.89	22.65
Stddev	56.	920.6	6.06	5.3	15.35	5.36	.89
%RSD	.55742	14.492	1.9930	.11769	1.9253	.88586	3.932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-d-7-mms@10 Acquired: 10/17/2017 4:39:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	173.96	228.60	644.86	176.53	83.895	3712.9	1792.2
Stddev	4.60	1.27	1.21	2.26	2.878	66.2	16.9
%RSD	2.6442	.55536	.18763	1.2797	3.4310	1.7818	.94050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	182.55
Stddev	5.57
%RSD	3.0511
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4968.8	3176.9	34366.	7088.3
Stddev	3.7	3.5	602.	29.0
%RSD	.07431	.11083	1.7512	.40973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.841%	102.39%	102.74%	104.94%
Range				

Sample Name: 240-85905-d-7nmsd@10 Acquired: 10/17/2017 4:44:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.4317	11246.	201.57	136.93	460.41	5.1459	62686.
Stddev	.0413	41.	3.83	.33	2.15	.0666	211.
%RSD	.93258	.36086	1.9017	.23735	.46599	1.2945	.33609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14.26	143.94	634.10	3871.4	133880.	5400.6	106.05
Stddev	.18	1.76	6.22	24.3	624.	18.1	2.79
%RSD	1.258	1.2197	.98116	.62663	.46610	.33569	2.6292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10563.	5626.1	286.05	4599.0	693.45	573.48	26.47
Stddev	18.	868.9	4.26	22.2	20.23	6.82	2.80
%RSD	.17281	15.444	1.4888	.48294	2.9166	1.1887	10.57
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-d-7nmsd@10 Acquired: 10/17/2017 4:44:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	186.33	226.10	598.66	180.85	85.206	2971.7	2345.4
Stddev	2.11	3.83	1.39	2.20	4.250	38.8	36.9
%RSD	1.1347	1.6950	.23262	1.2160	4.9879	1.3061	1.5739
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	184.38
Stddev	1.28
%RSD	.69532
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4957.5	3164.1	34442.	7093.7
Stddev	1.9	4.3	644.	26.0
%RSD	.03806	.13455	1.8698	.36696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.618%	101.98%	102.96%	105.02%
Range				

Sample Name: 240-85905-b-1-c@10 Acquired: 10/17/2017 4:48:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.03600	8201.4	25.162	14.182	187.02	.62036	40012.	7.663
Stddev	.15396	30.3	.945	.252	.56	.11404	117.	.293
%RSD	427.64	.36939	3.7575	1.7749	.29710	18.382	.29154	3.818
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	106.33	501.58	303.89	82642.	1083.8	11.554	9201.8	1450.5
Stddev	2.18	2.32	1.65	108.	9.3	1.172	61.1	1.9
%RSD	2.0504	.46291	.54229	.13122	.86218	10.145	.66396	.13225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	136.94	144.69	614.01	480.56	2.125	-.52329	31.061	198.40
Stddev	3.22	4.56	13.42	8.08	2.678	3.5337	1.196	.64
%RSD	2.3495	3.1494	2.1861	1.6804	126.0	675.29	3.8490	.32265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-1-c@10 Acquired: 10/17/2017 4:48:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.44627	27.065	2124.6	322.46	60.930
Stddev	.57482	.512	37.6	6.48	4.309
%RSD	128.81	1.8914	1.7714	2.0106	7.0717
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5058.6	3208.0	35304.	7132.1
Stddev	3.8	2.8	105.	30.3
%RSD	.07506	.08786	.29714	.42519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.63%	103.39%	105.54%	105.59%
Range				

Sample Name: 240-85905-b-1-d@10 Acquired: 10/17/2017 4:52:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14713	8317.6	18.562	17.840	154.31	.58069	45642.	5.413
Stddev	.03874	26.5	2.281	.257	.47	.12264	128.	.126
%RSD	26.329	.31897	12.286	1.4388	.30721	21.120	.28143	2.321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	60.905	372.61	217.98	98217.	893.49	12.118	6534.1	3620.3
Stddev	1.070	.54	.65	64.	38.66	1.255	51.1	15.3
%RSD	1.7569	.14392	.29662	.06493	4.3266	10.354	.78215	.42267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	122.53	196.29	380.34	339.28	.4016	1.6962	18.795	283.63
Stddev	2.31	6.49	7.04	6.02	1.535	3.0791	.604	.30
%RSD	1.8847	3.3077	1.8505	1.7747	382.2	181.53	3.2132	.10660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-1-d@10 Acquired: 10/17/2017 4:52:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.0943	21.066	1839.4	785.93	66.518
Stddev	.3138	3.440	32.3	4.96	5.215
%RSD	28.676	16.328	1.7566	.63140	7.8398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5055.7	3197.3	35030.	7070.0
Stddev	11.7	4.7	92.	23.0
%RSD	.23081	.14772	.26316	.32593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.57%	103.05%	104.72%	104.67%
Range				

Sample Name: 240-85905-b-2-c@10 Acquired: 10/17/2017 4:56:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.0762	8228.5	15.550	20.586	190.74	.53212	36840.
Stddev	.0491	37.4	1.431	.183	.53	.06451	147.
%RSD	1.5960	.45445	9.2008	.88970	.27651	12.122	.39936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.595	149.82	756.93	339.04	100460.	1088.3	12.386
Stddev	.025	4.16	.92	.61	244.	32.3	3.572
%RSD	.4464	2.7764	.12169	.17873	.24331	2.9708	28.838
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9271.8	1948.4	255.61	161.41	868.94	530.97	4.239
Stddev	42.1	4.8	7.25	3.80	16.30	10.46	2.455
%RSD	.45383	.24791	2.8354	2.3549	1.8755	1.9693	57.91
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-b-2-c@10 Acquired: 10/17/2017 4:56:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.8798	34.858	275.85	1.0893	33.729	1543.9	676.78
Stddev	2.0591	1.145	.80	.8385	2.010	31.4	10.74
%RSD	71.500	3.2838	.28848	76.981	5.9588	2.0350	1.5875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	59.536
Stddev	1.282
%RSD	2.1541
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5063.5	3205.3	35164.	7101.3
Stddev	18.6	2.8	37.	19.9
%RSD	.36741	.08860	.10528	.28063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.73%	103.31%	105.12%	105.14%
Range				

Sample Name: 240-85905-b-2-d@10 Acquired: 10/17/2017 5:00:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13836	8522.8	11.911	25.311	149.46	.55674	39982.	3.491
Stddev	.23656	45.4	.209	.841	.20	.01534	4.	.074
%RSD	170.97	.53280	1.7566	3.3219	.13241	2.7548	.00955	2.108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	74.726	521.63	205.85	77898.	1033.1	12.659	6022.9	4118.6
Stddev	2.107	4.42	4.15	239.	34.6	.560	32.1	718.6
%RSD	2.8193	.84715	2.0163	.30725	3.3523	4.4239	.53239	17.448
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	157.72	236.56	524.84	279.08	.7313	.46280	28.068	373.93
Stddev	4.22	7.44	12.36	5.22	.6990	.76296	.392	.64
%RSD	2.6775	3.1454	2.3542	1.8717	95.59	164.86	1.3960	.17109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-2-d@10 Acquired: 10/17/2017 5:00:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.7015	24.740	931.85	782.64	65.988
Stddev	1.0180	5.090	22.84	15.35	3.058
%RSD	59.831	20.575	2.4507	1.9616	4.6343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5077.4	3210.8	35114.	7120.3
Stddev	6.1	4.5	611.	4.1
%RSD	.12012	.13887	1.7399	.05768
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.00%	103.48%	104.98%	105.42%
Range				

Sample Name: 240-85905-b-3-c@10 Acquired: 10/17/2017 5:05:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.45332	7864.9	16.445	23.760	301.08	.66045	34918.	8.848
Stddev	.22530	5.8	.564	.145	.54	.08766	67.	.188
%RSD	49.700	.07316	3.4281	.60938	.17774	13.273	.19308	2.128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	135.18	623.94	511.91	93579.	934.71	12.276	8321.2	1668.0
Stddev	.47	.61	.79	227.	2.56	1.850	21.7	2.2
%RSD	.34865	.09846	.15381	.24279	.27354	15.073	.26125	.13131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	182.11	187.55	800.60	723.11	3.985	1.6214	44.743	240.05
Stddev	.52	11.15	9.08	2.27	1.004	2.5258	1.343	.21
%RSD	.28310	5.9445	1.1346	.31421	25.18	155.78	3.0013	.08830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-3-c@10 Acquired: 10/17/2017 5:05:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.24116	27.095	3815.3	712.80	64.158
Stddev	1.1025	1.486	44.4	8.32	3.211
%RSD	457.18	5.4828	1.1630	1.1672	5.0048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5073.6	3209.1	35186.	7135.6
Stddev	4.1	6.3	51.	31.5
%RSD	.08160	.19747	.14480	.44138
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.93%	103.43%	105.19%	105.64%
Range				

Sample Name: 240-85905-b-3-d@10 Acquired: 10/17/2017 5:09:10 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.17898	7631.4	15.634	31.287	184.48	.67934	39642.	4.818
Stddev	.43580	25.1	1.883	.804	.29	.10286	68.	.090
%RSD	243.49	.32871	12.045	2.5699	.15738	15.142	.17115	1.861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	54.453	455.50	1104.5	92704.	811.01	11.332	4500.1	4700.3
Stddev	1.295	1.83	1.2	169.	7.46	2.100	25.4	9.2
%RSD	2.3788	.40184	.10944	.18193	.91983	18.536	.56347	.19590
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	150.51	320.32	457.22	383.82	2.177	.35033	25.743	350.96
Stddev	4.08	9.58	11.84	7.18	1.948	1.5490	.640	.40
%RSD	2.7082	2.9912	2.5886	1.8703	89.48	442.16	2.4873	.11478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-3-d@10 Acquired: 10/17/2017 5:09:10 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.1490	24.266	1974.8	596.58	60.592
Stddev	.8522	3.562	46.6	6.72	2.898
%RSD	74.164	14.678	2.3590	1.1267	4.7826
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5082.3	3210.3	35052.	7110.5
Stddev	3.0	.8	30.	7.5
%RSD	.05828	.02588	.08428	.10577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.10%	103.47%	104.79%	105.27%
Range				

Sample Name: 240-85905-b-4-c@10 Acquired: 10/17/2017 5:13:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.34657	8119.5	16.028	17.867	397.17	.58898	38753.	9.382
Stddev	.34173	20.2	1.820	.431	1.14	.12410	69.	.086
%RSD	98.605	.24894	11.358	2.4121	.28642	21.070	.17682	.9198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	136.67	672.82	431.95	88973.	1031.5	9.7186	9289.5	1849.0
Stddev	1.79	1.32	1.62	267.	6.9	.9660	58.5	9.6
%RSD	1.3117	.19664	.37394	.29994	.66501	9.9393	.62953	.51908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	206.36	166.36	820.64	753.01	3.622	-.01891	53.373	261.22
Stddev	3.40	6.43	20.45	10.41	2.684	.34776	.966	.37
%RSD	1.6455	3.8657	2.4923	1.3827	74.10	1839.1	1.8095	.14122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-4-c@10 Acquired: 10/17/2017 5:13:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.45214	31.030	2692.5	823.99	62.555
Stddev	.32606	2.829	47.9	7.37	5.985
%RSD	72.116	9.1155	1.7779	.89386	9.5677
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5075.8	3212.4	35498.	7135.5
Stddev	5.1	4.7	90.	13.7
%RSD	.10091	.14768	.25348	.19211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.97%	103.53%	106.12%	105.64%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 5:17:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1043.7	25788.	F 807.80	F 5783.1	2064.8	2036.3	50758.
Stddev	4.9	74.	142.42	137.2	1.8	1.6	33.
%RSD	.46707	.28659	17.631	2.3716	.08888	.07733	.06426
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value			500.00	5000.0			
Range			10.500%	10.500%			

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	530.8	2098.1	2085.2	2051.6	26022.	51854.	5341.7
Stddev	3.6	14.8	9.3	10.8	18.	93.	6.1
%RSD	.6747	.70359	.44567	.52683	.06736	.17910	.11461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	51497.	2041.3	2182.7	51767.	2096.5	499.87	F 664.3
Stddev	62.	11.9	25.4	54.	24.5	8.60	68.6
%RSD	.12044	.58221	1.1655	.10335	1.1664	1.7209	10.33
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							500.0
Range							10.50%

Sample Name: CCV-3283852 Acquired: 10/17/2017 5:17:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 604.55	5496.6	5267.1	F 1107.1	2132.5	2144.9	5117.5
Stddev	41.56	23.9	9.8	20.4	5.2	9.2	31.7
%RSD	6.8737	.43547	.18548	1.8427	.24526	.42766	.61923
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	500.00			1000.0			
Range	10.500%			10.500%			

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	5207.8
Stddev	14.9
%RSD	.28572
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4289.2	2837.3	32139.	6959.2
Stddev	45.6	16.3	782.	5.9
%RSD	1.0622	.57494	2.4320	.08433

Sample Name: CCB Acquired: 10/17/2017 5:21:40 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16687	-29.417	.49951	4.0797	-.36026	.10319	-216.65	-.0860
Stddev	.34003	26.381	2.4797	.9076	.13649	.02643	2.59	.0735
%RSD	203.78	89.681	496.42	22.246	37.887	25.614	1.1963	85.51
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.05971	.35404	.77255	3.3386	79.924	1.4010	-7.2200	-.32976
Stddev	.21112	.27362	.44729	2.1330	6.204	3.6204	12.076	.01191
%RSD	353.60	77.286	57.897	63.889	7.7623	258.41	167.25	3.6129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.5557	19.753	-.06849	-.01912	-.1677	-.53864	.23553	2.1176
Stddev	.0561	6.478	.42481	.13214	.9673	.96877	.49839	.3302
%RSD	1.5774	32.793	620.25	691.19	576.8	179.85	211.61	15.591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 5:21:40 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.19813	1.4681	-7.7286	-7.9497	.63436
Stddev	.58755	2.5513	.2339	4.8367	3.6489
%RSD	296.55	173.79	3.0269	60.841	575.21
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5251.3	3248.6	35670.	7079.6
Stddev	2.3	5.2	42.	8.8
%RSD	.04346	.16031	.11638	.12482

Sample Name: 240-85905-b-4-d@10 Acquired: 10/17/2017 5:26:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.69043	8213.6	13.480	45.295	277.56	.61292	41247.	5.675
Stddev	.64723	40.5	.973	.800	.40	.03166	82.	.106
%RSD	93.743	.49368	7.2203	1.7666	.14583	5.1652	.19858	1.860
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	78.079	478.29	259.87	78528.	966.97	12.271	6352.6	4580.0
Stddev	1.485	1.85	.46	185.	46.18	.787	29.4	12.0
%RSD	1.9017	.38749	.17780	.23498	4.7756	6.4175	.46209	.26150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	158.32	349.28	496.54	517.52	5.196	1.4063	27.505	367.06
Stddev	3.03	3.95	10.33	6.90	1.160	.8131	.732	.27
%RSD	1.9108	1.1303	2.0801	1.3340	22.32	57.819	2.6625	.07260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-4-d@10 Acquired: 10/17/2017 5:26:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.4402	28.336	1605.9	1063.7	61.744
Stddev	.3082	3.573	28.7	21.3	2.090
%RSD	21.398	12.608	1.7886	2.0041	3.3850
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5095.5	3219.1	35448.	7122.5
Stddev	3.6	1.7	28.	27.2
%RSD	.07094	.05298	.07790	.38221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.36%	103.75%	105.97%	105.45%
Range				

Sample Name: 240-85905-b-5-c@10 Acquired: 10/17/2017 5:30:20 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.77532	7758.4	16.824	21.569	311.01	.45651	36129.	9.272
Stddev	.13214	40.9	1.285	.447	.97	.13052	92.	.126
%RSD	17.043	.52718	7.6366	2.0729	.31264	28.591	.25347	1.357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	141.52	565.47	519.34	87587.	1041.7	11.915	7636.1	1717.8
Stddev	2.38	3.36	2.49	259.	27.5	1.599	68.1	2.3
%RSD	1.6818	.59500	.48003	.29582	2.6416	13.421	.89139	.13384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	160.80	137.03	791.85	794.63	4.928	3.8571	50.500	227.06
Stddev	2.97	5.93	13.56	9.45	1.416	2.1364	1.837	.43
%RSD	1.8478	4.3270	1.7128	1.1898	28.74	55.388	3.6383	.18789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-5-c@10 Acquired: 10/17/2017 5:30:20 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.61239	25.533	3903.1	837.22	58.932
Stddev	.76630	6.133	70.4	13.44	1.978
%RSD	125.13	24.020	1.8044	1.6057	3.3571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5094.1	3219.2	35454.	7128.4
Stddev	9.9	4.0	130.	25.0
%RSD	.19521	.12355	.36758	.35119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.33%	103.75%	105.99%	105.54%
Range				

Sample Name: 240-85905-b-5-d@10 Acquired: 10/17/2017 5:34:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.24245	9119.3	13.341	33.537	258.65	.60817	58700.
Stddev	.02467	21.1	1.984	.038	.31	.08253	48.
%RSD	10.174	.23180	14.874	.11312	.11852	13.570	.08095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.242	89.121	518.84	803.58	101490.	977.56	13.330
Stddev	.008	.551	3.71	2.14	55.	28.78	1.694
%RSD	.1066	.61806	.71429	.26669	.05408	2.9437	12.705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5801.7	4813.3	151.94	299.00	547.85	636.25	6.510
Stddev	50.7	785.6	.73	6.40	.91	1.43	2.026
%RSD	.87357	16.321	.47766	2.1404	.16658	.22450	31.12
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-b-5-d@10 Acquired: 10/17/2017 5:34:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.1131	38.481	383.49	1.6219	28.331	2999.4	926.33
Stddev	3.1283	.570	1.49	1.3179	2.651	28.3	7.98
%RSD	281.05	1.4809	.38886	81.255	9.3564	.94313	.86151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	75.269
Stddev	5.244
%RSD	6.9671
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5056.0	3205.8	34583.	7102.8
Stddev	3.5	4.9	695.	13.2
%RSD	.06980	.15137	2.0109	.18588
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.58%	103.32%	103.39%	105.16%
Range				

Sample Name: 240-85905-b-6-c@10 Acquired: 10/17/2017 5:38:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06716	9624.3	14.422	14.844	237.22	.74280	58591.	5.728
Stddev	.26619	10.5	.818	.785	.27	.05906	42.	.061
%RSD	396.33	.10871	5.6708	5.2876	.11450	7.9508	.07180	1.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61.150	294.25	378.38	58816.	1453.2	14.382	6965.8	1339.9
Stddev	1.779	1.03	.72	86.	41.4	.752	22.6	3.4
%RSD	2.9092	.35127	.19154	.14565	2.8512	5.2278	.32410	.25578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	77.329	129.64	369.92	635.18	3.165	.09768	42.408	227.94
Stddev	1.672	2.32	10.35	15.04	.527	3.3947	1.566	.34
%RSD	2.1621	1.7887	2.7982	2.3681	16.66	3475.5	3.6922	.14999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-6-c@10 Acquired: 10/17/2017 5:38:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.21520	25.035	2039.6	399.90	63.567
Stddev	1.2731	.900	38.6	8.64	2.582
%RSD	591.59	3.5957	1.8921	2.1604	4.0619
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5080.5	3228.2	35583.	7156.5
Stddev	2.9	1.0	38.	29.6
%RSD	.05799	.03067	.10558	.41357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.06%	104.04%	106.38%	105.95%
Range				

Sample Name: 240-85905-b-6-d@10 Acquired: 10/17/2017 5:42:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23335	8739.9	12.138	17.925	163.13	.83564	66006.	3.990
Stddev	.02874	24.9	2.221	.543	.18	.12385	88.	.169
%RSD	12.316	.28516	18.302	3.0299	.11120	14.820	.13331	4.233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	32.920	239.04	227.32	63442.	1134.5	15.571	4331.9	3492.5
Stddev	.905	.82	.12	54.	16.3	.777	40.5	23.4
%RSD	2.7485	.34481	.05435	.08563	1.4374	4.9894	.93560	.67003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	61.947	253.86	242.13	446.98	.2576	-.92943	27.668	304.14
Stddev	1.771	5.02	6.28	10.67	.9884	2.6097	.988	.09
%RSD	2.8581	1.9760	2.5941	2.3874	383.6	280.78	3.5697	.02903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-6-d@10 Acquired: 10/17/2017 5:42:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.86065	24.729	1242.1	418.79	75.058
Stddev	.93861	4.667	25.4	1.82	4.704
%RSD	109.06	18.872	2.0425	.43371	6.2667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5069.1	3218.1	35426.	7154.7
Stddev	3.1	1.7	23.	5.6
%RSD	.06079	.05246	.06491	.07874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.84%	103.72%	105.91%	105.93%
Range				

Sample Name: 240-85905-b-8-c@10 Acquired: 10/17/2017 5:47:53 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.31762	7867.0	15.455	15.798	161.96	.57529	33478.	7.193
Stddev	.37270	36.0	.491	.059	.22	.04000	68.	.017
%RSD	117.34	.45772	3.1787	.37531	.13794	6.9528	.20344	.2318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	169.93	655.88	323.38	96504.	1209.7	14.258	10379.	1623.2
Stddev	3.57	3.27	1.00	218.	33.3	.872	7.	4.4
%RSD	2.1025	.49879	.30932	.22630	2.7516	6.1148	.06352	.27264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	175.67	119.99	887.80	482.62	4.329	5.4397	33.090	218.18
Stddev	4.45	5.39	16.64	10.65	1.107	2.0409	1.419	.26
%RSD	2.5327	4.4933	1.8748	2.2076	25.56	37.519	4.2878	.11709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-b-8-c@10 Acquired: 10/17/2017 5:47:53 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.09671	31.535	1872.0	414.83	60.855
Stddev	.94142	3.843	31.6	4.83	4.752
%RSD	973.43	12.186	1.6895	1.1632	7.8086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5091.8	3227.3	35377.	7156.3
Stddev	2.7	5.4	114.	8.2
%RSD	.05385	.16635	.32282	.11506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.29%	104.01%	105.76%	105.95%
Range				

Sample Name: 240-85905-b-8-d@10 Acquired: 10/17/2017 5:52:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15747	6989.0	19.229	34.048	142.20	.54913	36897.
Stddev	.45352	26.4	.354	.665	.44	.06322	86.
%RSD	288.00	.37800	1.8425	1.9539	.30619	11.513	.23407
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.861	88.151	479.21	252.08	116920.	935.10	12.445
Stddev	.159	1.713	.65	.82	165.	41.52	1.049
%RSD	3.266	1.9436	.13501	.32374	.14111	4.4400	8.4311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7195.1	3421.0	140.61	209.93	520.12	517.56	1.817
Stddev	39.8	23.5	3.31	12.22	9.25	8.29	2.937
%RSD	.55264	.68837	2.3539	5.8212	1.7776	1.6010	161.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-b-8-d@10 Acquired: 10/17/2017 5:52:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.4328	21.578	275.70	.91662	24.372	1318.0	909.39
Stddev	1.8376	.929	1.08	.47585	3.064	19.6	9.09
%RSD	53.530	4.3060	.39061	51.913	12.573	1.4846	.99992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	61.593
Stddev	4.256
%RSD	6.9101
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5081.3	3213.5	35408.	7147.0
Stddev	1.9	4.2	88.	22.5
%RSD	.03757	.13164	.24816	.31539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.08%	103.57%	105.85%	105.81%
Range				

Sample Name: 240-85905-b-9-c@10 Acquired: 10/17/2017 5:56:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.4116	13821.	25.195	26.230	605.77	.74817	25523.
Stddev	.2785	16.	1.355	.997	1.09	.03770	41.
%RSD	8.1624	.11655	5.3769	3.8007	.17988	5.0389	.16112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	20.08	139.95	523.53	1426.1	115710.	1024.8	12.641
Stddev	.39	2.66	1.32	1.0	211.	37.4	.918
%RSD	1.944	1.9039	.25219	.07116	.18199	3.6518	7.2589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5676.5	2788.0	150.51	160.44	661.37	1635.4	7.470
Stddev	54.9	17.7	3.09	5.05	14.53	26.2	.702
%RSD	.96700	.63480	2.0557	3.1502	2.1972	1.6014	9.396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-b-9-c@10 Acquired: 10/17/2017 5:56:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.1596	80.205	290.44	1.1393	31.223	W 9203.9	1253.7
Stddev	1.5082	1.369	.49	.7667	2.246	193.8	24.3
%RSD	29.232	1.7065	.16817	67.301	7.1943	2.1053	1.9382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit						9000.0	
Low Limit						-500000.	

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	76.769
Stddev	7.165
%RSD	9.3335
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5093.6	3228.9	35305.	7150.0
Stddev	3.9	8.3	95.	14.1
%RSD	.07576	.25798	.26946	.19686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.32%	104.07%	105.54%	105.86%
Range				

Sample Name: 240-85905-b-9-d@10 Acquired: 10/17/2017 6:00:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3328	18000.	k 17.168	67.111	427.39	1.0381	55419.
Stddev	.2281	5.	.286	.793	.06	.1608	9.
%RSD	6.8452	.02652	1.6646	1.1822	.01346	15.490	.01637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	k 11.92	75.389	440.27	840.72	110840.	1468.5	21.454
Stddev	.25	.837	.63	2.19	91.	24.6	1.197
%RSD	2.056	1.1096	.14306	.26016	.08221	1.6760	5.5807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4919.4	^ *****	91.675	473.05	365.16	954.76	1.781
Stddev	54.9	-----	1.519	7.99	4.01	6.46	.259
%RSD	1.1155	-----	1.6569	1.6887	1.0980	.67680	14.52
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-b-9-d@10 Acquired: 10/17/2017 6:00:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	k 3.0718	70.982	615.19	k 5.3140	35.836	4853.5	959.55
Stddev	1.8275	1.072	1.04	7.5508	2.188	101.1	16.80
%RSD	59.493	1.5098	.16851	142.09	6.1063	2.0823	1.7511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	95.863
Stddev	5.994
%RSD	6.2528
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5047.2	3220.7	35328.	7153.5
Stddev	11.2	3.8	66.	12.9
%RSD	.22222	.11682	.18765	.18000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.40%	103.80%	105.61%	105.91%
Range				

Sample Name: 240-85905-a-12-d@10 Acquired: 10/17/2017 6:04:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.65330	8725.0	16.628	24.861	321.11	.60696	36577.
Stddev	.53298	13.5	.812	.126	.64	.06780	63.
%RSD	81.583	.15434	4.8814	.50495	.19987	11.171	.17340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.03	143.30	652.69	539.20	100430.	1071.1	11.435
Stddev	.23	1.43	1.91	.84	114.	18.9	1.634
%RSD	2.246	.99928	.29308	.15593	.11321	1.7620	14.285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8816.4	1779.7	196.16	183.60	857.63	792.14	4.628
Stddev	12.4	3.9	2.42	3.91	10.99	4.54	.881
%RSD	.14092	.22142	1.2323	2.1293	1.2817	.57269	19.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-85905-a-12-d@10 Acquired: 10/17/2017 6:04:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.1621	48.576	269.67	.46491	25.157	4003.8	717.55
Stddev	1.9586	1.448	.03	1.2896	2.752	50.7	1.13
%RSD	61.940	2.9806	.01147	277.38	10.940	1.2668	.15775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	68.458
Stddev	6.045
%RSD	8.8298
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5086.0	3225.8	35358.	7138.2
Stddev	4.0	3.7	97.	10.1
%RSD	.07841	.11414	.27504	.14157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.17%	103.97%	105.70%	105.68%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 6:08:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1047.0	26027.	540.71	5343.3	2064.9	2014.4	50845.	524.8
Stddev	2.6	43.	6.91	66.2	.8	3.7	66.	8.1
%RSD	.25051	.16710	1.2787	1.2388	.04076	.18124	.12919	1.549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2084.2	2078.6	2044.0	26023.	51487.	5324.1	51250.	2019.9
Stddev	34.5	4.1	4.3	27.	14.	4.3	68.	5.1
%RSD	1.6538	.19490	.20886	.10487	.02733	.07997	.13191	.25189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2141.5	51377.	2088.4	519.21	536.2	541.84	5401.7	5198.9
Stddev	39.9	38.	32.0	8.36	11.1	8.43	100.1	19.8
%RSD	1.8635	.07446	1.5306	1.6102	2.068	1.5561	1.8526	.38130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 6:08:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1084.2	2126.2	2102.9	5115.4	5182.0
Stddev	25.4	11.4	36.5	29.6	15.7
%RSD	2.3459	.53624	1.7374	.57787	.30298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4724.7	3117.5	33744.	6951.6
Stddev	8.8	5.7	65.	5.5
%RSD	.18604	.18388	.19179	.07906

Sample Name: CCB Acquired: 10/17/2017 6:13:02 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.18149	-28.354	.79261	4.3803	-.46535	.17756	-217.90	-.0042
Stddev	.61311	7.711	1.5156	.3033	.30088	.15757	1.93	.0484
%RSD	337.82	27.195	191.21	6.9251	64.656	88.738	.88712	1166.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15460	.20486	.57106	3.9171	78.804	3.6044	-3.9505	-.34987
Stddev	.05941	.16522	.34082	1.0022	28.685	1.8743	18.515	.00669
%RSD	38.429	80.651	59.683	25.585	36.401	52.000	468.68	1.9109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3728	7.4136	-.31152	-.98268	-.2523	.06541	-.16452	2.2134
Stddev	.3508	5.3108	.40205	2.3308	.9773	2.2310	.67733	.2317
%RSD	10.399	71.636	129.06	237.19	387.4	3410.7	411.71	10.467
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 6:13:02 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.51662	-2.9167	-7.7793	-5.2779	3.2688
Stddev	1.0018	1.0044	.0979	9.6950	3.3247
%RSD	193.91	34.435	1.2579	183.69	101.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5259.8	3255.9	35968.	7091.0
Stddev	7.2	3.6	35.	38.6
%RSD	.13742	.11106	.09726	.54408

Sample Name: 240-85905-a-12-e@10 Acquired: 10/17/2017 6:17:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01379	6279.3	10.851	31.871	174.71	.65458	32905.	4.807
Stddev	.22019	21.9	1.940	.664	.30	.04515	16.	.051
%RSD	1596.9	.34905	17.881	2.0830	.17302	6.8972	.04976	1.055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	57.508	361.56	265.04	77322.	676.89	10.661	4147.1	3608.6
Stddev	.928	1.11	.82	182.	34.74	2.137	29.3	21.4
%RSD	1.6145	.30787	.30904	.23599	5.1322	20.048	.70589	.59290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	113.23	202.06	394.87	382.20	.2035	1.4841	23.557	284.43
Stddev	1.94	7.87	6.88	5.61	1.100	1.8340	1.171	.13
%RSD	1.7160	3.8945	1.7412	1.4688	540.6	123.58	4.9698	.04735
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 240-85905-a-12-e@10 Acquired: 10/17/2017 6:17:24 Type: Unk
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.40897	18.564	2902.0	799.73	58.186
Stddev	.37122	1.127	65.1	6.92	3.978
%RSD	90.771	6.0712	2.2447	.86578	6.8362
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5126.2	3224.4	35373.	7107.7
Stddev	7.5	5.5	51.	24.2
%RSD	.14704	.17163	.14555	.34015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.97%	103.92%	105.75%	105.23%
Range				

Sample Name: CCV-3283852 Acquired: 10/17/2017 6:21:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1049.6	25821.	544.36	5377.9	2069.4	2032.0	50788.	529.3
Stddev	2.8	161.	5.06	43.1	3.9	4.1	149.	5.0
%RSD	.26656	.62364	.92931	.80161	.18923	.19970	.29410	.9531
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2093.4	2089.6	2024.6	26054.	51924.	5334.0	51577.	2010.6
Stddev	24.8	2.8	4.7	93.	98.	9.0	35.	8.5
%RSD	1.1833	.13274	.23297	.35602	.18807	.16808	.06769	.42235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2153.8	51710.	2094.8	517.63	537.5	540.25	5431.4	5206.5
Stddev	25.2	72.	24.9	3.26	4.7	6.22	71.0	31.8
%RSD	1.1708	.13871	1.1870	.63070	.8715	1.1520	1.3081	.61138
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-3283852 Acquired: 10/17/2017 6:21:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1084.7	2141.0	2118.2	5105.9	5198.7
Stddev	9.9	6.3	27.1	48.5	18.7
%RSD	.91342	.29588	1.2796	.95054	.35958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4721.9	3111.4	34063.	6988.1
Stddev	15.1	5.4	88.	20.2
%RSD	.31991	.17414	.25708	.28858

Sample Name: CCB Acquired: 10/17/2017 6:25:53 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04764	1.5838	2.0652	6.7090	-.32546	.16489	-217.67	-.1149
Stddev	.32575	16.358	.8707	.6251	.14696	.10520	2.87	.0223
%RSD	683.73	1032.8	42.160	9.3167	45.155	63.796	1.3167	19.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.04094	.10984	.49492	3.4391	64.780	2.8114	12.825	-.36292
Stddev	.16913	.49092	.24550	2.3689	18.234	3.6752	9.359	.03198
%RSD	413.11	446.94	49.603	68.882	28.148	130.72	72.980	8.8126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3700	2.6596	-.22414	.67106	1.216	1.1177	-.55076	2.3914
Stddev	.7600	5.1007	.38742	.74890	1.732	1.4497	.29309	.1195
%RSD	22.553	191.78	172.85	111.60	142.4	129.70	53.215	4.9970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 10/17/2017 6:25:53 Type: QC
Method: ICP I9 6010 200.7 Methods(v308) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.10287	-4.9213	-7.7881	-10.494	2.6489
Stddev	.71182	4.1781	.0600	.422	3.6801
%RSD	691.98	84.898	.77046	4.0184	138.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5253.2	3251.9	35872.	7083.2
Stddev	7.6	.2	60.	7.1
%RSD	.14375	.00700	.16619	.09970

MT6500BLKH20 260

Test America Canton ICP Data Review Checklist

Analysis Date: 10-16-17 **Analyst:** Ku **Instrument:** I9

Review Items

A. Calibration/Instrument Run QC
1. Instrument calibrated per method.
2. ICV/CCV analyzed at appropriate frequency and within acceptance criteria. (*ICV (2nd source)*:200.7=95 – 105%, 6010B 90-110%) *(CCV: 90 – 110%)*
3. ICB/CCB analyzed at appropriate frequency and within acceptance criteria.
4. CRI analyzed at SOP or project-specific frequency and within acceptance criteria. (project specific limits may vary)
5. ICSA/ICSAB analyzed at required frequency and within acceptance criteria.
B. Sample Results
1. Samples with concentrations > the linear range for any parameter diluted and reanalyzed.
2. Internal standard(s) within acceptance criteria.
3. Sample analyses done within holding time.
C. Preparation/Matrix QC
1. LCS performed per prep batch and within acceptance criteria.
2. Method blank performed per prep batch and within acceptance criteria.
3. MS performed at required frequency and evaluated.
4. MSD or DU performed at required frequency and evaluated.
5. Serial dilution performed per prep batch.
6. Post digest spike performed at required frequency and evaluated.
D. Other
1. Are all nonconformances documented appropriately in lims system.
2. Calculations checked for error.
3. All client/project specific requirements met.
4. Date/time of analysis verified as correct.

Level I Analyst: Kenn L Hunt **Date:** 10-17-17 **Time:** 8:48 - 6:25

Level I Analyst: _____ **Date:** _____ **Time:** _____

Level I Analyst: _____ **Date:** _____ **Time:** _____

Level II Reviewer: Anjali Sharma **Date:** 10/17/17 **Time:** 08:48 – 06:25

Level II Reviewer: _____ **Date:** _____ **Time:** _____

Level II Reviewer: _____ **Date:** _____ **Time:** _____

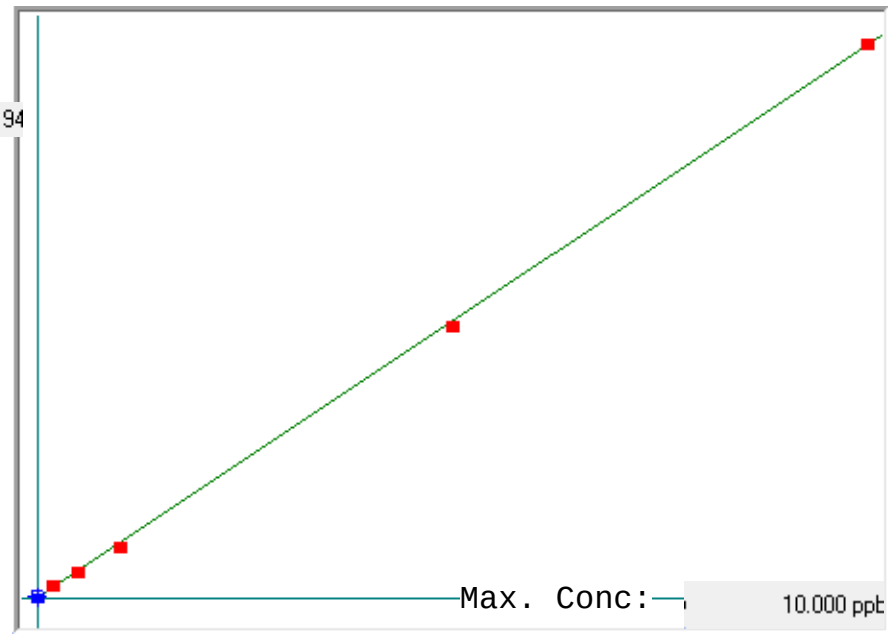
Comments: _____

Initial Method

Linear

μ Abs.:

50194



A= 0.0000e+000

B= 2.0007e-004

C= -4.7356e-003

Rho= 0.9999201

Accept= Accepted

Accepted Date=

10/06/17 09:29

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0 ppb	0.000	0.047	0.047	261	0.000	261				
0.2 ppb	0.200	0.239	0.039	1220	0.0 %	1220				
0.5 ppb	0.500	0.497	-0.003	2509	0.0 %	2509				
1.0 ppb	1.000	0.947	-0.053	4756	0.0 %	4756				
5.0 ppb	5.000	4.931	-0.069	24672	0.0 %	24672				
10.0 ppb	10.000	10.038	0.038	50194	0.0 %	50194				

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Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
0.0 ppb - 1	-	261	ppb	522	06 Oct 2017 09:08:19
0.2 ppb - 1	-	1220	ppb	523	06 Oct 2017 09:10:16
0.5 ppb - 1	-	2509	ppb	524	06 Oct 2017 09:12:13
1.0 ppb - 1	-	4756	ppb	525	06 Oct 2017 09:14:13
5.0 ppb - 1	-	24672	ppb	526	06 Oct 2017 09:16:12
10.0 ppb - 1	-	50194	ppb	527	06 Oct 2017 09:18:14
ICV - 1	101.6% 5.0823	25426	ppb	528	06 Oct 2017 09:29:41
ICB - 1	-0.0794	-373	ppb	529	06 Oct 2017 09:31:36
CRA - 1	87.6% 0.1751	899	ppb	530	06 Oct 2017 09:33:56
CCV - 1	95.9% 4.7940	23985	ppb	531	06 Oct 2017 09:35:51
CCB - 1	-0.0836	-394	ppb	532	06 Oct 2017 09:37:48
CCV - 1	99.8% 4.9913	24971	ppb	533	06 Oct 2017 09:40:08
CCB - 1	-0.0842	-397	ppb	534	06 Oct 2017 09:42:04
CCV - 1	100.0% 5.0017	25023	ppb	535	06 Oct 2017 11:07:23
CCB - 1	-0.0666	-309	ppb	536	06 Oct 2017 11:09:19
lb 240-297629/1-c - 1	0.0001	24	ppb	537	06 Oct 2017 11:11:42
mb 240-297705/2-a - 1	0.0057	52	ppb	538	06 Oct 2017 11:13:37
lcs 240-297705/3-a - 1	5.0047	25038	ppb	539	06 Oct 2017 11:15:32
190-14571-a-1-e - 1	0.2886	1466	ppb	540	06 Oct 2017 11:17:27
190-14571-a-1-f ms - 1	4.9923	24976	ppb	541	06 Oct 2017 11:19:48
190-14571-a-1-g msd - 1	5.1345	25687	ppb	542	06 Oct 2017 11:21:46
190-14575-a-1-c - 1	1.3784	6913	ppb	543	06 Oct 2017 11:24:06
240-85820-c-1-d - 1	-0.0454	-203	ppb	544	06 Oct 2017 11:26:29
190-14577-b-1-d - 1	0.0285	166	ppb	545	06 Oct 2017 11:28:37
240-85836-d-1-d - 1	0.0371	209	ppb	546	06 Oct 2017 11:30:33
CCV - 1	99.5% 4.9735	24882	ppb	547	06 Oct 2017 11:32:29
CCB - 1	-0.0518	-235	ppb	548	06 Oct 2017 11:34:25
240-85836-c-2-d - 1	0.0391	219	ppb	549	06 Oct 2017 11:36:48
240-85866-g-2-d - 1	0.0335	191	ppb	550	06 Oct 2017 11:38:44
CCV - 1	99.3% 4.9635	24832	ppb	551	06 Oct 2017 11:40:41
CCB - 1	-0.0608	-280	ppb	552	06 Oct 2017 11:42:37
lb 240-297630/1-d - 1	0.0075	61	ppb	553	06 Oct 2017 11:45:00
mb 240-297783/2-a - 1	-0.0045	1	ppb	554	06 Oct 2017 11:46:55
lcs 240-297783/3-a - 1	4.9484	24757	ppb	555	06 Oct 2017 11:48:50
240-85867-k-2-k - 1	-0.0800	-376	ppb	556	06 Oct 2017 11:50:45
240-85867-k-2-l ms - 1	5.0481	25255	ppb	557	06 Oct 2017 11:53:05
240-85867-k-2-m msd - 1	4.8782	24406	ppb	558	06 Oct 2017 11:55:00
CCV - 1	100.8% 5.0405	25217	ppb	559	06 Oct 2017 11:57:18
CCB - 1	-0.0998	-475	ppb	560	06 Oct 2017 11:59:40
mb 240-297696/1-a - 1	-0.0259	-106	ppb	561	06 Oct 2017 12:02:02
lcs 240-297696/2-a - 1	4.6950	23490	ppb	562	06 Oct 2017 12:03:57
CCV - 1	99.6% 4.9813	24921	ppb	563	06 Oct 2017 12:05:53
CCB - 1	-0.1092	-522	ppb	564	06 Oct 2017 12:08:15
240-85882-aa-1-d - 1	-0.0353	-153	ppb	565	06 Oct 2017 12:10:39
240-85882-aa-1-e ms - 1	0.9688	4866	ppb	566	06 Oct 2017 12:12:36
240-85882-aa-1-f msd - 1	0.8610	4327	ppb	567	06 Oct 2017 12:14:32
240-85882-ac-1-d - 1	-0.1032	-492	ppb	568	06 Oct 2017 12:16:34
240-85882-ac-1-e ms - 1	0.8788	4416	ppb	569	06 Oct 2017 12:18:38
240-85882-ac-1-f msd - 1	0.8640	4342	ppb	570	06 Oct 2017 12:20:33
240-85882-i-2-b - 1	-0.0728	-340	ppb	571	06 Oct 2017 12:22:36
240-85882-j-2-b - 1	-0.0201	-77	ppb	572	06 Oct 2017 12:24:41
240-85897-k-2-d - 1	-0.0107	-30	ppb	573	06 Oct 2017 12:26:36
240-85897-k-3-b - 1	-0.0095	-24	ppb	574	06 Oct 2017 12:28:32
CCV - 1	98.9% 4.9428	24729	ppb	575	06 Oct 2017 12:30:27
CCB - 1	-0.0904	-428	ppb	576	06 Oct 2017 12:32:23
240-85922-k-1-b - 1	0.0147	97	ppb	577	06 Oct 2017 12:34:45
CCV - 1	98.3% 4.9146	24588	ppb	578	06 Oct 2017 12:36:40
CCB - 1	-0.0632	-292	ppb	579	06 Oct 2017 12:38:36
mb 240-297749/1-a - 1	0.0297	172	ppb	580	06 Oct 2017 12:40:57
lcs 240-297749/2-a - 1	4.7262	23646	ppb	581	06 Oct 2017 12:42:52
240-85911-ab-12-d - 1	-0.0506	-229	ppb	582	06 Oct 2017 12:44:49
240-85911-ab-12-e ms - 1	0.8674	4359	ppb	583	06 Oct 2017 12:47:11
240-85911-ab-12-f msd - 1	0.6581	3313	ppb	584	06 Oct 2017 12:49:08
190-14585-c-2-b - 1	-0.0273	-113	ppb	585	06 Oct 2017 12:51:11
240-85883-b-1-b - 1	0.0017	32	ppb	586	06 Oct 2017 12:53:10
240-85884-a-1-b - 1	0.0115	81	ppb	587	06 Oct 2017 12:55:05
240-85885-c-6-b - 1	0.5513	2779	ppb	588	06 Oct 2017 12:57:01
CCV - 1	97.4% 4.8704	24367	ppb	589	06 Oct 2017 12:58:57
CCB - 1	-0.0842	-397	ppb	590	06 Oct 2017 13:01:09

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Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
240-85911-j-6-b - 1	-0.0085	-19	ppb	591	06 Oct 2017 13:03:35
240-85911-j-7-b - 1	-0.0159	-56	ppb	592	06 Oct 2017 13:05:30
240-85911-j-9-b - 1	-0.0153	-53	ppb	593	06 Oct 2017 13:07:26
240-85911-j-10-b - 1	-0.0197	-75	ppb	594	06 Oct 2017 13:09:21
240-85928-a-1-b - 1	0.0685	366	ppb	595	06 Oct 2017 13:11:17
240-85946-c-2-b - 1	-0.0197	-75	ppb	596	06 Oct 2017 13:13:13
240-85950-c-11-b - 1	-0.0127	-40	ppb	597	06 Oct 2017 13:15:10
240-85950-d-11-b - 1	-0.0109	-31	ppb	598	06 Oct 2017 13:17:07
240-85957-a-1-b - 1	-0.0239	-96	ppb	599	06 Oct 2017 13:19:04
240-85911-s-12-g - 1	-0.0423	-188	ppb	600	06 Oct 2017 13:20:59
CCV - 1	99.1% 4.9536	24783	ppb	601	06 Oct 2017 13:22:55
CCB - 1	-0.0872	-412	ppb	602	06 Oct 2017 13:24:52
240-85911-s-12-h ms - 1	0.8924	4484	ppb	603	06 Oct 2017 13:27:17
240-85911-s-12-i msd - 1	0.8168	4106	ppb	604	06 Oct 2017 13:29:12
240-85911-g-9-c - 1	-0.0982	-467	ppb	605	06 Oct 2017 13:31:17
240-85911-g-10-c - 1	-0.0137	-45	ppb	606	06 Oct 2017 13:33:19
240-85911-i-6-c - 1	-0.0055	-4	ppb	607	06 Oct 2017 13:35:15
240-85911-i-7-c - 1	-0.0019	14	ppb	608	06 Oct 2017 13:37:10
CCV - 1	98.0% 4.8982	24506	ppb	609	06 Oct 2017 13:39:06
CCB - 1	-0.0854	-403	ppb	610	06 Oct 2017 13:41:02
mb 240-297739/1-a - 1	-0.0013	17	ppb	611	06 Oct 2017 13:43:26
lcs 240-297739/2-a - 1	4.2906	21469	ppb	612	06 Oct 2017 13:45:22
240-85950-j-9-d - 1	-0.0542	-247	ppb	613	06 Oct 2017 13:47:18
240-85950-j-9-e ms - 1	0.9990	5017	ppb	614	06 Oct 2017 13:49:40
CCV - 1	97.4% 4.8676	24353	ppb	615	06 Oct 2017 13:51:37
CCB - 1	-0.0435	-194	ppb	616	06 Oct 2017 13:53:38
240-85950-j-9-f msd - 1	1.0052	5048	ppb	617	06 Oct 2017 13:56:01
240-85950-h-1-b - 1	-0.0263	-108	ppb	618	06 Oct 2017 13:57:58
240-85950-h-2-b - 1	0.0329	188	ppb	619	06 Oct 2017 14:00:01
240-85950-h-3-b - 1	0.0223	135	ppb	620	06 Oct 2017 14:01:56
240-85950-h-4-b - 1	0.0173	110	ppb	621	06 Oct 2017 14:03:52
240-85950-h-5-b - 1	0.0077	62	ppb	622	06 Oct 2017 14:05:48
240-85950-h-6-b - 1	0.0055	51	ppb	623	06 Oct 2017 14:07:43
240-85950-h-7-b - 1	-0.0007	20	ppb	624	06 Oct 2017 14:09:39
240-85950-h-8-b - 1	-0.0005	21	ppb	625	06 Oct 2017 14:11:35
240-85950-h-10-b - 1	-0.0115	-34	ppb	626	06 Oct 2017 14:13:31
CCV - 1	99.8% 4.9887	24958	ppb	627	06 Oct 2017 14:15:27
CCB - 1	-0.0874	-413	ppb	628	06 Oct 2017 14:17:23
240-85950-i-1-b - 1	-0.0201	-77	ppb	629	06 Oct 2017 14:19:47
240-85950-i-2-b - 1	-0.0365	-159	ppb	630	06 Oct 2017 14:21:44
240-85950-i-3-b - 1	-0.0287	-120	ppb	631	06 Oct 2017 14:23:41
240-85950-i-4-b - 1	-0.0313	-133	ppb	632	06 Oct 2017 14:25:37
240-85950-i-5-b - 1	-0.0245	-99	ppb	633	06 Oct 2017 14:27:33
240-85950-i-6-b - 1	-0.0311	-132	ppb	634	06 Oct 2017 14:29:29
240-85950-i-7-b - 1	-0.0247	-100	ppb	635	06 Oct 2017 14:31:25
240-85950-i-8-b - 1	-0.0221	-87	ppb	636	06 Oct 2017 14:33:21
240-85950-m-9-b - 1	-0.0169	-61	ppb	637	06 Oct 2017 14:35:16
240-85950-i-10-b - 1	-0.0143	-48	ppb	638	06 Oct 2017 14:37:12
CCV - 1	98.3% 4.9174	24602	ppb	639	06 Oct 2017 14:39:08
CCB - 1	-0.0918	-435	ppb	640	06 Oct 2017 14:41:04
CCV - 1	97.5% 4.8760	24395	ppb	641	06 Oct 2017 14:43:28
CCB - 1	-0.0920	-436	ppb	642	06 Oct 2017 14:45:24
CCV - 1	99.8% 4.9905	24967	ppb	643	06 Oct 2017 18:01:50
CCB - 1	-0.0894	-423	ppb	644	06 Oct 2017 18:03:46
lb 240-297819/1-c - 1	-0.0231	-92	ppb	645	06 Oct 2017 18:06:09
mb 240-297936/2-a - 1	-0.0179	-66	ppb	646	06 Oct 2017 18:08:04
lcs 240-297936/3-a - 1	4.8328	24179	ppb	647	06 Oct 2017 18:09:58
240-85914-d-1-n - 1	-0.0770	-361	ppb	648	06 Oct 2017 18:11:53
240-85914-d-1-o ms - 1	4.8464	24247	ppb	649	06 Oct 2017 18:14:14
240-85914-d-1-p msd - 1	4.7912	23971	ppb	650	06 Oct 2017 18:16:09
240-85914-d-2-j - 1	-0.0826	-389	ppb	651	06 Oct 2017 18:18:29
240-85914-d-3-p - 1	0.0091	69	ppb	652	06 Oct 2017 18:20:51
240-85797-a-1-c - 1	0.0205	126	ppb	653	06 Oct 2017 18:22:47
240-85892-a-2-c - 1	0.1993	1020	ppb	654	06 Oct 2017 18:24:43
CCV - 1	(L)75.7% 3.7836	18935	ppb	655	06 Oct 2017 18:26:40
CCV - 1	96.7% 4.8374	24202	ppb	656	06 Oct 2017 18:41:27
CCB - 1	-0.0706	-329	ppb	657	06 Oct 2017 18:43:23
lb 240-297819/1-c - 1	-0.0073	-13	ppb	658	06 Oct 2017 18:45:47
mb 240-297936/2-a - 1	-0.0083	-18	ppb	659	06 Oct 2017 18:47:42

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Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
lcs 240-297936/3-a - 1	4.8838	24434	ppb	660	06 Oct 2017 18:49:37
240-85914-d-1-n - 1	-0.0540	-246	ppb	661	06 Oct 2017 18:51:32
240-85914-d-1-o ms - 1	4.9324	24677	ppb	662	06 Oct 2017 18:53:53
240-85914-d-1-p msd - 1	4.9733	24881	ppb	663	06 Oct 2017 18:55:48
CCV - 1	100.0% 5.0021	25025	ppb	664	06 Oct 2017 18:58:07
CCB - 1	-0.0938	-445	ppb	665	06 Oct 2017 19:00:29
240-85914-d-2-j - 1	-0.0339	-146	ppb	666	06 Oct 2017 19:02:51
240-85914-d-3-p - 1	0.0027	37	ppb	667	06 Oct 2017 19:04:47
240-85797-a-1-c - 1	-0.0341	-147	ppb	668	06 Oct 2017 19:06:43
CCV - 1	96.9% 4.8474	24252	ppb	669	06 Oct 2017 19:08:39
CCB - 1	-0.0864	-408	ppb	670	06 Oct 2017 19:10:35
240-85892-a-2-c @10 - 1	-0.0047	0	ppb	671	06 Oct 2017 19:13:01
CCV - 1	95.4% 4.7714	23872	ppb	672	06 Oct 2017 19:14:57
CCB - 1	-0.0944	-448	ppb	673	06 Oct 2017 19:16:53
240-85941-e-3-c - 1	0.0331	189	ppb	674	06 Oct 2017 19:19:14
CCV - 1	97.8% 4.8904	24467	ppb	675	06 Oct 2017 19:21:11
CCB - 1	-0.0522	-237	ppb	676	06 Oct 2017 19:23:07
240-85706-b-1-e - 1	0.6397	3221	ppb	677	06 Oct 2017 19:25:29
240-85706-b-2-c - 1	0.2940	1493	ppb	678	06 Oct 2017 19:27:25
240-85706-b-3-c - 1	5.8682	29354	ppb	679	06 Oct 2017 19:29:23
240-85706-b-7-c - 1	14.6937	73466	ppb	680	06 Oct 2017 19:31:20
240-85706-b-8-c - 1	4.6263	23147	ppb	681	06 Oct 2017 19:33:40
CCV - 1	97.1% 4.8538	24284	ppb	682	06 Oct 2017 19:36:13
CCB - 1	-0.0866	-409	ppb	683	06 Oct 2017 19:38:34
lb 240-297877/1-c - 1	-0.0077	-15	ppb	684	06 Oct 2017 19:40:56
mb 240-297940/2-a - 1	-0.0113	-33	ppb	685	06 Oct 2017 19:42:51
lcs 240-297940/3-a - 1	5.0829	25429	ppb	686	06 Oct 2017 19:44:47
240-85710-b-2-i - 1	-0.0646	-299	ppb	687	06 Oct 2017 19:46:42
CCV - 1	99.7% 4.9863	24946	ppb	688	06 Oct 2017 19:49:04
CCB - 1	-0.0774	-363	ppb	689	06 Oct 2017 19:50:59
240-85710-b-2-j ms - 1	5.0701	25365	ppb	690	06 Oct 2017 19:53:22
240-85710-b-2-k msd - 1	5.0629	25329	ppb	691	06 Oct 2017 19:55:18
240-85693-a-1-c - 1	-0.1032	-492	ppb	692	06 Oct 2017 19:57:40
240-85710-d-1-g - 1	0.0035	41	ppb	693	06 Oct 2017 19:59:59
240-85710-d-3-e - 1	-0.0179	-66	ppb	694	06 Oct 2017 20:01:56
240-85738-c-4-d - 1	-0.0305	-129	ppb	695	06 Oct 2017 20:03:51
240-85738-c-6-e - 1	-0.0075	-14	ppb	696	06 Oct 2017 20:05:46
240-85738-a-7-c - 1	-0.0225	-89	ppb	697	06 Oct 2017 20:07:41
240-85794-a-1-e - 1	-0.0141	-47	ppb	698	06 Oct 2017 20:09:36
240-85794-b-2-e - 1	-0.0239	-96	ppb	699	06 Oct 2017 20:11:32
CCV - 1	97.4% 4.8696	24363	ppb	700	06 Oct 2017 20:13:27
CCB - 1	-0.0838	-395	ppb	701	06 Oct 2017 20:15:23
240-85796-a-13-d - 1	0.0379	213	ppb	702	06 Oct 2017 20:17:49
240-85796-a-16-f - 1	0.0489	268	ppb	703	06 Oct 2017 20:19:44
240-85892-b-1-c - 1	0.0275	161	ppb	704	06 Oct 2017 20:21:40
CCV - 1	97.6% 4.8794	24412	ppb	705	06 Oct 2017 20:23:36
CCB - 1	-0.0594	-273	ppb	706	06 Oct 2017 20:25:32
lb 240-297884/1-c - 1	0.0387	217	ppb	707	06 Oct 2017 20:27:54
mb 240-297942/2-a - 1	0.0257	152	ppb	708	06 Oct 2017 20:29:50
lcs 240-297942/3-a - 1	4.7068	23549	ppb	709	06 Oct 2017 20:31:47
240-85796-a-3-g - 1	-0.0730	-341	ppb	710	06 Oct 2017 20:33:44
240-85796-a-3-h ms - 1	4.7998	24014	ppb	711	06 Oct 2017 20:36:04
240-85796-a-3-i msd - 1	4.8384	24207	ppb	712	06 Oct 2017 20:37:59
240-85796-b-1-e - 1	-0.0598	-275	ppb	713	06 Oct 2017 20:40:18
CCV - 1	99.7% 4.9849	24939	ppb	714	06 Oct 2017 20:42:38
CCB - 1	-0.0822	-387	ppb	715	06 Oct 2017 20:44:34
240-85796-b-5-e - 1	-0.0079	-16	ppb	716	06 Oct 2017 20:46:56
240-85796-b-7-e - 1	-0.0091	-22	ppb	717	06 Oct 2017 20:48:52
240-85796-b-9-d - 1	-0.0051	-2	ppb	718	06 Oct 2017 20:50:47
240-85796-b-11-d - 1	0.0027	37	ppb	719	06 Oct 2017 20:52:42
240-85995-i-1-f - 1	-0.0101	-27	ppb	720	06 Oct 2017 20:54:38
240-85996-i-1-d - 1	-0.0053	-3	ppb	721	06 Oct 2017 20:56:35
CCV - 1	99.3% 4.9637	24833	ppb	722	06 Oct 2017 20:58:32
CCB - 1	-0.0886	-419	ppb	723	06 Oct 2017 21:00:28
lb 240-297823/1-b - 1	-0.0211	-82	ppb	724	06 Oct 2017 21:02:50
mb 240-297932/2-a - 1	-0.0187	-70	ppb	725	06 Oct 2017 21:04:47
lcs 240-297932/3-a - 1	4.5639	22835	ppb	726	06 Oct 2017 21:06:44
240-85706-b-4-c - 1	13.9915	64958	ppb	727	06 Oct 2017 21:08:39
CCV - 1	96.2% 4.8098	24064	ppb	728	06 Oct 2017 21:11:00

Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
CCB - 1	-0.1032	-492	ppb	729	06 Oct 2017 21:13:31
240-85706-b-4-d ms - 1	17.7040	88512	ppb	730	06 Oct 2017 21:15:56
240-85706-b-4-e msd - 1	17.0660	85323	ppb	731	06 Oct 2017 21:17:52
240-85706-b-5-c - 1	3.0618	15327	ppb	732	06 Oct 2017 21:20:28
240-85706-b-6-c - 1	0.3598	1822	ppb	733	06 Oct 2017 21:23:02
CCV - 1	96.7% 4.8362	24196	ppb	734	06 Oct 2017 21:25:18
CCB - 1	-0.0474	-213	ppb	735	06 Oct 2017 21:27:17
mb 240-297898/1-a - 1	0.0297	172	ppb	736	06 Oct 2017 21:29:41
lcs 240-297898/2-a - 1	4.9472	24751	ppb	737	06 Oct 2017 21:31:37
240-86012-e-1-d - 1	-0.0680	-316	ppb	738	06 Oct 2017 21:33:33
240-86012-e-1-e ms - 1	0.9996	5020	ppb	739	06 Oct 2017 21:35:54
240-86012-e-1-f msd - 1	0.9394	4719	ppb	740	06 Oct 2017 21:37:51
240-86012-d-2-b - 1	-0.0668	-310	ppb	741	06 Oct 2017 21:39:55
CCV - 1	97.8% 4.8924	24477	ppb	742	06 Oct 2017 21:41:59
CCB - 1	-0.0806	-379	ppb	743	06 Oct 2017 21:43:56
240-86012-j-4-b - 1	-0.0117	-35	ppb	744	06 Oct 2017 21:46:19
240-86012-j-5-b - 1	-0.0099	-26	ppb	745	06 Oct 2017 21:48:15
240-86012-e-7-b - 1	-0.0075	-14	ppb	746	06 Oct 2017 21:50:11
240-86012-e-8-b - 1	-0.0111	-32	ppb	747	06 Oct 2017 21:52:06
240-86012-e-9-b - 1	-0.0051	-2	ppb	748	06 Oct 2017 21:54:02
240-86012-e-11-b - 1	0.0067	57	ppb	749	06 Oct 2017 21:55:57
240-86012-e-12-b - 1	0.0179	113	ppb	750	06 Oct 2017 21:57:54
240-86012-e-13-b - 1	-0.0127	-40	ppb	751	06 Oct 2017 21:59:49
240-86012-j-15-b - 1	-0.0081	-17	ppb	752	06 Oct 2017 22:01:45
240-86012-e-16-b - 1	-0.0075	-14	ppb	753	06 Oct 2017 22:03:41
CCV - 1	97.7% 4.8828	24429	ppb	754	06 Oct 2017 22:05:37
CCB - 1	-0.0886	-419	ppb	755	06 Oct 2017 22:07:33
240-86012-e-17-b - 1	-0.0123	-38	ppb	756	06 Oct 2017 22:09:54
240-86012-j-19-b - 1	-0.0049	-1	ppb	757	06 Oct 2017 22:11:51
240-86012-j-20-b - 1	-0.0073	-13	ppb	758	06 Oct 2017 22:13:49
240-85919-k-1-b - 1	30.4446	152192	ppb	759	06 Oct 2017 22:15:45
CCV - 1	88.9% 4.4461	22246	ppb	760	06 Oct 2017 22:17:40
CCB - 1	-0.1246	-599	ppb	761	06 Oct 2017 22:20:55
CCV - 1	93.9% 4.6970	23500	ppb	762	06 Oct 2017 22:23:19
CCB - 1	-0.1102	-527	ppb	763	06 Oct 2017 22:25:16
mb 240-297987/1-a - 1	-0.0371	-162	ppb	764	06 Oct 2017 22:27:39
lcs 240-297987/2-a - 1	4.0945	20489	ppb	765	06 Oct 2017 22:29:35
190-14580-a-2-b - 1	-0.1004	-478	ppb	766	06 Oct 2017 22:31:31
190-14581-a-2-b - 1	0.0081	64	ppb	767	06 Oct 2017 22:33:51
190-14583-c-1-b - 1	0.0369	208	ppb	768	06 Oct 2017 22:35:47
190-14593-c-2-b - 1	0.0461	254	ppb	769	06 Oct 2017 22:37:44
CCV - 1	97.1% 4.8528	24279	ppb	770	06 Oct 2017 22:39:40
CCB - 1	-0.0472	-212	ppb	771	06 Oct 2017 22:41:36
190-14593-c-4-b - 1	0.0421	234	ppb	772	06 Oct 2017 22:43:57
240-85985-a-1-d - 1	0.0349	198	ppb	773	06 Oct 2017 22:45:53
240-85985-a-1-e ms - 1	0.9714	4879	ppb	774	06 Oct 2017 22:47:50
240-85985-a-1-f msd - 1	0.8730	4387	ppb	775	06 Oct 2017 22:49:47
240-85988-a-1-d - 1	-0.0552	-252	ppb	776	06 Oct 2017 22:51:49
240-85988-a-2-b - 1	0.0011	29	ppb	777	06 Oct 2017 22:53:53
240-85991-c-6-b - 1	0.5671	2858	ppb	778	06 Oct 2017 22:55:49
240-85994-a-1-b - 1	-0.0590	-271	ppb	779	06 Oct 2017 22:57:45
240-85997-a-1-d - 1	-0.0223	-88	ppb	780	06 Oct 2017 22:59:56
240-86028-o-2-b - 1	-0.0117	-35	ppb	781	06 Oct 2017 23:01:52
CCV - 1	97.0% 4.8520	24275	ppb	782	06 Oct 2017 23:03:48
CCB - 1	-0.0974	-463	ppb	783	06 Oct 2017 23:05:44
240-86028-o-3-b - 1	-0.0129	-41	ppb	784	06 Oct 2017 23:08:06
240-86028-o-4-b - 1	-0.0093	-23	ppb	785	06 Oct 2017 23:10:03
240-86048-a-1-b - 1	0.0025	36	ppb	786	06 Oct 2017 23:11:59
490-137957-a-1-b - 1	-0.0478	-215	ppb	787	06 Oct 2017 23:13:55
240-85980-q-1-c - 1	-0.0121	-37	ppb	788	06 Oct 2017 23:15:52
240-85099-a-6-a - 1	1.7465	8753	ppb	789	06 Oct 2017 23:17:48
240-85099-a-6-a @5 - 1	0.3094	1570	ppb	790	06 Oct 2017 23:19:46
190-14514-a-14-a - 1	0.1691	869	ppb	791	06 Oct 2017 23:21:58
190-14514-a-15-a - 1	0.4326	2186	ppb	792	06 Oct 2017 23:23:56
CCV - 1	93.7% 4.6854	23442	ppb	793	06 Oct 2017 23:25:54
CCB - 1	-0.0880	-416	ppb	794	06 Oct 2017 23:27:53
CRA - 1	0.1565	806	ppb	795	06 Oct 2017 23:30:19
CCV - 1	94.7% 4.7336	23683	ppb	796	06 Oct 2017 23:32:15
CCB - 1	-0.0918	-435	ppb	797	06 Oct 2017 23:34:13

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Method: Initial Method Operator: Admin Date of Analysis: 06 Oct 2017 09:01:54

Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
CCV - 1	96.8% 4.8376	24203	ppb	798	06 Oct 2017 23:36:36
CCB - 1	-0.0536	-244	ppb	799	06 Oct 2017 23:38:32
240-85892-a-2-c - 1	0.2125	1086	ppb	800	06 Oct 2017 23:40:53
240-85892-a-2-c @50 - 1	0.0005	26	ppb	801	06 Oct 2017 23:42:50
240-85892-a-2-c @100 - 1	0.0483	265	ppb	802	06 Oct 2017 23:44:48
240-85892-a-2-c @200 - 1	0.0331	189	ppb	803	06 Oct 2017 23:46:44
CCV - 1	99.4% 4.9701	24865	ppb	804	06 Oct 2017 23:48:41
CCB - 1	-0.0602	-277	ppb	805	06 Oct 2017 23:50:37

Test America Canton Hg Data Review Checklist

Curve Prep Batch: 297729

Circle Methods used: (7470A / 245.1) 7471 Analytical Batch: 298170

Analysis Date: 10/06/17 Analyst: DTN Instrument: H3

Review Items
A. Calibration/Instrument Run QC
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels.
2. ICV/CCV analyzed at appropriate frequency and within acceptance criteria.
3. ICV/ICB analyzed at appropriate frequency and within acceptance criteria.
4. CRA analyzed at SOP or project specific frequency and within acceptance criteria. (project specific limits may vary)
B. Sample Results
1. Samples with concentrations > high calibration standard diluted and reanalyzed.
2. Sample analyses done within holding time.
C. Preparation/ Matrix QC
1. LCS performed per prep batch and within acceptance criteria.
2. Method blank performed per prep batch and within acceptance criteria.
3. MS performed at required frequency and evaluated.
4. MSD or DU performed at required frequency and evaluated.
D. Other
1. All nonconformances documented appropriately in lims system.
2. All client/project specific requirements met.
3. Date of analysis verified as correct.

Level I

Analyst: Thuan Nguyen Date/Time: 10/09/17 Reviewed from 9:08 to 23:50

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: Paul B. Hess Date/Time: 10/9/17 Reviewed from 9:08 to 23:50

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 10/05/17 Curve Time 14:40 - 16:40 DILUTION H20 00011

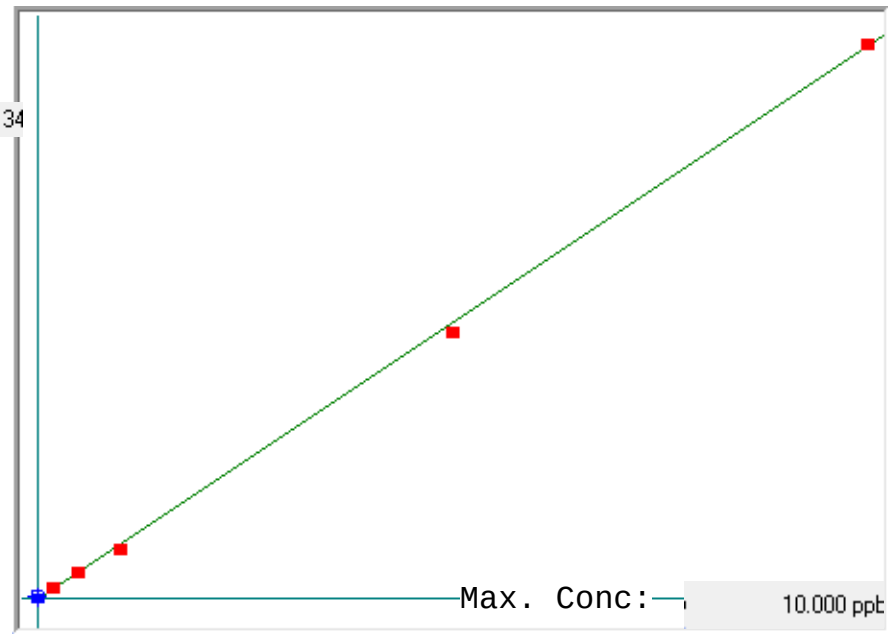
Revised 01/19/2016

Initial Method

Linear

μ Abs.:

44134



A= 0.0000e+000

B= 2.2757e-004

C= 2.4237e-002

Rho= 0.9997947

Accept= Accepted

Accepted Date=

10/17/17 09:21

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0 ppb	0.000	0.073	0.073	214	0.000	214				
0.2 ppb	0.200	0.237	0.037	935	0.0 %	935				
0.5 ppb	0.500	0.514	0.014	2152	0.0 %	2152				
1.0 ppb	1.000	0.942	-0.058	4032	0.0 %	4032				
5.0 ppb	5.000	4.866	-0.134	21277	0.0 %	21277				
10.0 ppb	10.000	10.068	0.068	44134	0.0 %	44134				

1017A17H3

Method: Initial Method Operator: Admin Date of Analysis: 17 Oct 2017 09:02:55

Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
0.0 ppb - 1	-	214	ppb	1620	17 Oct 2017 09:08:26
0.2 ppb - 1	-	935	ppb	1621	17 Oct 2017 09:10:23
0.5 ppb - 1	-	2152	ppb	1622	17 Oct 2017 09:12:20
1.0 ppb - 1	-	4032	ppb	1623	17 Oct 2017 09:14:18
5.0 ppb - 1	-	21277	ppb	1624	17 Oct 2017 09:16:17
10.0 ppb - 1	-	44134	ppb	1625	17 Oct 2017 09:18:20
ICV - 1	(L)94.6% 4.7286	20672	ppb	1626	17 Oct 2017 09:21:52
ICB - 1	-0.0445	-302	ppb	1627	17 Oct 2017 09:24:39
CRA - 1	103.9% 0.2079	807	ppb	1628	17 Oct 2017 09:26:44
CCV - 1	97.6% 4.8825	21348	ppb	1629	17 Oct 2017 09:28:38
CCB - 1	-0.0525	-337	ppb	1630	17 Oct 2017 09:30:36
CCV - 1	98.5% 4.9234	21528	ppb	1631	17 Oct 2017 09:33:00
CCB - 1	-0.0613	-376	ppb	1632	17 Oct 2017 09:34:56
240-86346-a-1-a - 1	HIGH	259294	ppb	1633	17 Oct 2017 09:39:10
240-86452-a-1-a - 1	0.1178	411	ppb	1634	17 Oct 2017 09:40:47
240-86452-a-2-a - 1	1.8544	8042	ppb	1635	17 Oct 2017 09:45:51
240-86346-a-1-a@10 - 1	24.1172	105869	ppb	1636	17 Oct 2017 09:48:42
mb 240-298917/1-a - 1	-0.4416	-2047	ppb	1637	17 Oct 2017 09:51:32
lcs 240-298917/2-a - 1	4.4178	19306	ppb	1638	17 Oct 2017 09:55:07
240-86346-a-1-a@50 - 1	5.6025	24512	ppb	1639	17 Oct 2017 09:57:04
240-86353-b-1-d - 1	-0.1976	-975	ppb	1640	17 Oct 2017 09:59:29
240-86353-b-1-e ms - 1	0.9521	4077	ppb	1641	17 Oct 2017 10:02:20
240-86353-b-1-f msd - 1	0.9327	3992	ppb	1642	17 Oct 2017 10:04:16
CCV - 1	95.6% 4.7810	20902	ppb	1643	17 Oct 2017 10:06:21
CCB - 1	-0.0720	-423	ppb	1644	17 Oct 2017 10:08:28
240-86403-h-1-d - 1	0.2766	1109	ppb	1645	17 Oct 2017 10:10:51
190-14631-d-1-b - 1	4.3242	18895	ppb	1646	17 Oct 2017 10:12:46
240-86336-a-1-b - 1	-0.0452	-305	ppb	1647	17 Oct 2017 10:14:44
190-14628-c-1-b - 1	0.1030	346	ppb	1648	17 Oct 2017 10:17:09
240-86366-c-1-b - 1	0.0190	-23	ppb	1649	17 Oct 2017 10:19:05
240-86392-l-1-b - 1	15.9971	70188	ppb	1650	17 Oct 2017 10:21:01
190-14629-c-1-b - 1	-0.0741	-432	ppb	1651	17 Oct 2017 10:22:58
240-86385-ad-1-c - 1	0.0110	-58	ppb	1652	17 Oct 2017 10:25:29
240-86064-a-1-b@100 - 1	4.8891	21377	ppb	1653	17 Oct 2017 10:27:25
lb 240-298849/1-c - 1	-0.0647	-391	ppb	1654	17 Oct 2017 10:29:22
CCV - 1	98.1% 4.9029	21438	ppb	1655	17 Oct 2017 10:31:48
CCB - 1	-0.0823	-468	ppb	1656	17 Oct 2017 10:33:45
mb 240-298961/2-a - 1	0.0251	4	ppb	1657	17 Oct 2017 10:36:05
lcs 240-298961/3-a - 1	4.9512	21650	ppb	1658	17 Oct 2017 10:38:01
240-86307-e-1-e - 1	-0.0620	-379	ppb	1659	17 Oct 2017 10:39:57
240-86307-e-1-f ms - 1	5.1335	22451	ppb	1660	17 Oct 2017 10:42:16
240-86307-e-1-g msd - 1	5.1048	22325	ppb	1661	17 Oct 2017 10:44:12
240-86188-a-1-e - 1	-0.0488	-321	ppb	1662	17 Oct 2017 10:46:35
240-85941-c-2-f - 1	0.0240	-1	ppb	1663	17 Oct 2017 10:48:58
240-86266-g-1-d - 1	0.0295	23	ppb	1664	17 Oct 2017 10:50:53
240-86315-c-1-e - 1	0.0677	191	ppb	1665	17 Oct 2017 10:52:49
lb 240-298848/1-c - 1	0.0072	-75	ppb	1666	17 Oct 2017 10:54:45
CCV - 1	98.4% 4.9180	21504	ppb	1667	17 Oct 2017 10:56:42
CCB - 1	-0.0447	-303	ppb	1668	17 Oct 2017 10:58:38
mb 240-298959/2-a - 1	0.0263	9	ppb	1669	17 Oct 2017 11:01:02
lcs 240-298959/3-a - 1	4.3067	18818	ppb	1670	17 Oct 2017 11:02:59
240-86321-a-1-e - 1	-0.0404	-284	ppb	1671	17 Oct 2017 11:04:56
240-86321-a-1-f ms - 1	5.3319	23323	ppb	1672	17 Oct 2017 11:07:17
240-86321-a-1-g msd - 1	5.0445	22060	ppb	1673	17 Oct 2017 11:09:14
240-86398-b-4-b - 1	-0.0402	-283	ppb	1674	17 Oct 2017 11:11:34
240-86398-b-5-b - 1	0.0231	-5	ppb	1675	17 Oct 2017 11:13:58
240-86417-e-1-b - 1	0.0254	5	ppb	1676	17 Oct 2017 11:15:54
190-14626-a-1-a - 1	0.0415	76	ppb	1677	17 Oct 2017 11:17:50
190-14626-a-2-a - 1	0.0377	59	ppb	1678	17 Oct 2017 11:19:46
CCV - 1	99.2% 4.9619	21697	ppb	1679	17 Oct 2017 11:21:43
CCB - 1	-0.0657	-395	ppb	1680	17 Oct 2017 11:23:39
190-14626-a-2-b ms - 1	1.1032	4741	ppb	1681	17 Oct 2017 11:26:01
190-14626-a-2-c msd - 1	1.0201	4376	ppb	1682	17 Oct 2017 11:27:57
190-14627-a-1-a - 1	-0.0370	-269	ppb	1683	17 Oct 2017 11:29:56
190-14627-a-2-a - 1	0.0324	36	ppb	1684	17 Oct 2017 11:31:59
240-86392-l-1-b@5 - 1	2.8562	12444	ppb	1685	17 Oct 2017 11:33:56
CCV - 1	96.4% 4.8194	21071	ppb	1686	17 Oct 2017 11:35:52
CCB - 1	-0.0645	390	ppb	1687	17 Oct 2017 11:38:09
240-86289-f-8-b - 1	0.0725	212	ppb	1688	17 Oct 2017 11:40:30

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Method: Initial Method Operator: Admin Date of Analysis: 17 Oct 2017 09:02:55

Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
CCV - 1	91.2% 4.5623	19941	ppb	1689	17 Oct 2017 11:42:26
CCB - 1	-0.0877	-492	ppb	1690	17 Oct 2017 11:44:22
mb 240-299172/1-a - 1	0.0170	-32	ppb	1691	17 Oct 2017 11:46:45
lcs 240-299172/2-a - 1	5.4220	23719	ppb	1692	17 Oct 2017 11:48:41
240-86519-g-1-f - 1	-0.0686	-408	ppb	1693	17 Oct 2017 11:50:38
240-86519-g-1-g ms - 1	1.0595	4549	ppb	1694	17 Oct 2017 11:52:59
CCV - 1	95.6% 4.7814	20904	ppb	1695	17 Oct 2017 11:54:56
CCB - 1	-0.0804	-460	ppb	1696	17 Oct 2017 11:57:01
240-86519-g-1-h msd - 1	1.0649	4573	ppb	1697	17 Oct 2017 11:59:21
240-86519-g-2-b - 1	-0.0786	-452	ppb	1698	17 Oct 2017 12:01:17
240-86519-g-3-b - 1	0.0238	-2	ppb	1699	17 Oct 2017 12:03:20
240-86519-g-4-b - 1	0.0256	6	ppb	1700	17 Oct 2017 12:05:16
240-86519-g-5-b - 1	0.0313	31	ppb	1701	17 Oct 2017 12:07:13
240-86519-g-6-b - 1	0.0270	12	ppb	1702	17 Oct 2017 12:09:09
240-86519-g-7-b - 1	0.0333	40	ppb	1703	17 Oct 2017 12:11:06
240-86519-g-8-b - 1	0.0254	5	ppb	1704	17 Oct 2017 12:13:03
460-142442-b-1-b - 1	0.0379	60	ppb	1705	17 Oct 2017 12:14:59
490-138670-a-1-b - 1	0.0279	16	ppb	1706	17 Oct 2017 12:16:55
CCV - 1	100.2% 5.0110	21913	ppb	1707	17 Oct 2017 12:18:51
CCB - 1	-0.0493	-323	ppb	1708	17 Oct 2017 12:20:48
240-86501-ad-1-c - 1	0.0265	10	ppb	1709	17 Oct 2017 12:23:10
190-14660-a-1-a - 1	9.4683	41499	ppb	1710	17 Oct 2017 12:25:06
190-14642-a-2-a - 1	-0.1171	-621	ppb	1711	17 Oct 2017 12:27:03
240-86421-a-1-b - 1	0.0199	-19	ppb	1712	17 Oct 2017 12:29:45
190-14645-b-1-a - 1	0.0129	-50	ppb	1713	17 Oct 2017 12:31:41
mb 240-299167/1-a - 1	0.0306	28	ppb	1714	17 Oct 2017 12:33:38
lcs 240-299167/2-a - 1	5.1660	22594	ppb	1715	17 Oct 2017 12:35:34
190-14656-b-1-d - 1	-0.0645	-390	ppb	1716	17 Oct 2017 12:37:30
190-14657-b-1-d - 1	0.0406	72	ppb	1717	17 Oct 2017 12:39:53
190-14658-c-1-b - 1	0.0415	76	ppb	1718	17 Oct 2017 12:41:50
CCV - 1	98.8% 4.9385	21594	ppb	1719	17 Oct 2017 12:43:46
CCB - 1	-0.0563	-354	ppb	1720	17 Oct 2017 12:45:42
190-14658-c-1-c ms - 1	1.0504	4509	ppb	1721	17 Oct 2017 12:48:04
190-14658-c-1-d msd - 1	1.0083	4324	ppb	1722	17 Oct 2017 12:50:00
190-14662-d-1-b - 1	-0.0668	-400	ppb	1723	17 Oct 2017 12:52:04
190-14662-d-1-c ms - 1	0.8085	3446	ppb	1724	17 Oct 2017 12:54:08
190-14662-d-1-d msd - 1	0.6699	2837	ppb	1725	17 Oct 2017 12:56:04
190-14664-a-1-b - 1	-0.0966	-531	ppb	1726	17 Oct 2017 12:58:10
190-14664-a-2-b - 1	0.0283	18	ppb	1727	17 Oct 2017 13:00:16
190-14664-a-3-b - 1	0.0336	41	ppb	1728	17 Oct 2017 13:02:12
190-14664-a-4-b - 1	0.0333	40	ppb	1729	17 Oct 2017 13:04:08
190-14665-b-2-b - 1	0.0251	4	ppb	1730	17 Oct 2017 13:06:04
CCV - 1	98.9% 4.9473	21633	ppb	1731	17 Oct 2017 13:08:01
CCB - 1	-0.0538	-343	ppb	1732	17 Oct 2017 13:09:58
190-14666-b-2-b - 1	0.0288	20	ppb	1733	17 Oct 2017 13:12:21
190-14667-b-2-b - 1	0.0247	2	ppb	1734	17 Oct 2017 13:14:18
240-86432-c-1-b - 1	0.0290	21	ppb	1735	17 Oct 2017 13:16:15
240-86432-c-2-b - 1	0.0308	29	ppb	1736	17 Oct 2017 13:18:12
240-86432-c-3-b - 1	0.0229	-6	ppb	1737	17 Oct 2017 13:20:08
240-86432-c-4-b - 1	0.0263	9	ppb	1738	17 Oct 2017 13:22:05
240-86432-c-5-b - 1	0.0108	-59	ppb	1739	17 Oct 2017 13:24:02
240-86432-c-6-b - 1	0.0377	59	ppb	1740	17 Oct 2017 13:25:59
240-86432-c-7-b - 1	0.0222	-9	ppb	1741	17 Oct 2017 13:27:56
240-86458-e-1-b - 1	0.0397	68	ppb	1742	17 Oct 2017 13:29:53
CCV - 1	97.4% 4.8715	21300	ppb	1743	17 Oct 2017 13:31:49
CCB - 1	-0.0652	-393	ppb	1744	17 Oct 2017 13:33:45
240-86436-a-1-b - 1	0.0352	48	ppb	1745	17 Oct 2017 13:36:08
mb 240-299164/1-a - 1	0.0135	-47	ppb	1746	17 Oct 2017 13:38:05
lcs 240-299164/2-a - 1	5.1703	22613	ppb	1747	17 Oct 2017 13:40:02
240-86471-c-1-d - 1	0.0845	265	ppb	1748	17 Oct 2017 13:41:58
240-86471-c-1-e ms - 1	1.2088	5205	ppb	1749	17 Oct 2017 13:44:22
240-86471-c-1-f msd - 1	1.1430	4916	ppb	1750	17 Oct 2017 13:46:21
240-86471-c-3-b - 1	-0.0286	-232	ppb	1751	17 Oct 2017 13:48:27
240-86510-f-8-b - 1	0.0170	-32	ppb	1752	17 Oct 2017 13:50:33
240-86476-j-8-b - 1	0.0165	-34	ppb	1753	17 Oct 2017 13:52:29
240-86496-b-1-b - 1	0.0226	-7	ppb	1754	17 Oct 2017 13:54:26
CCV - 1	96.4% 4.8201	21074	ppb	1755	17 Oct 2017 13:56:23
CCB - 1	-0.0591	-366	ppb	1756	17 Oct 2017 13:58:19
240-86496-b-2-b - 1	0.0445	89	ppb	1757	17 Oct 2017 14:00:42

1017A17H3

Method: Initial Method Operator: Admin Date of Analysis: 17 Oct 2017 09:02:55

Sample ID	Conc.	µ Abs.	Units	Seq ID	Date
240-86496-b-3-b - 1	0.0283	18	ppb	1758	17 Oct 2017 14:02:39
240-86496-b-4-b - 1	0.0377	59	ppb	1759	17 Oct 2017 14:04:36
240-86496-b-5-b - 1	0.0388	64	ppb	1760	17 Oct 2017 14:06:33
240-86496-b-6-b - 1	0.0395	67	ppb	1761	17 Oct 2017 14:08:29
240-86497-b-1-d - 1	0.0395	67	ppb	1762	17 Oct 2017 14:10:26
240-86497-b-2-b - 1	0.0393	66	ppb	1763	17 Oct 2017 14:12:23
240-86503-a-1-b - 1	0.0349	47	ppb	1764	17 Oct 2017 14:14:20
240-86505-d-1-b - 1	0.2136	832	ppb	1765	17 Oct 2017 14:16:17
240-86505-d-2-b - 1	0.0493	110	ppb	1766	17 Oct 2017 14:18:14
CCV - 1	98.9% 4.9462	21628	ppb	1767	17 Oct 2017 14:20:12
CCB - 1	-0.0572	-358	ppb	1768	17 Oct 2017 14:22:09
CRA - 1	0.1995	770	ppb	1769	17 Oct 2017 14:24:31
CCV - 1	99.1% 4.9542	21663	ppb	1770	17 Oct 2017 14:26:28
CCB - 1	-0.0750	-436	ppb	1771	17 Oct 2017 14:28:25

Test America Canton Hg Data Review Checklist

Curve Prep Batch: 299251

Circle Methods used: (7470A / 245.1) 7471 Analytical Batch: 299450

Analysis Date: 10/17/17 Analyst: DSH Instrument: H3

Review Items
A. Calibration/Instrument Run QC
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels.
2. ICV/CCV analyzed at appropriate frequency and within acceptance criteria.
3. ICV/ICB analyzed at appropriate frequency and within acceptance criteria.
4. CRA analyzed at SOP or project specific frequency and within acceptance criteria. (project specific limits may vary)
B. Sample Results
1. Samples with concentrations > high calibration standard diluted and reanalyzed.
2. Sample analyses done within holding time.
C. Preparation/ Matrix QC
1. LCS performed per prep batch and within acceptance criteria.
2. Method blank performed per prep batch and within acceptance criteria.
3. MS performed at required frequency and evaluated.
4. MSD or DU performed at required frequency and evaluated.
D. Other
1. All nonconformances documented appropriately in lims system.
2. All client/project specific requirements met.
3. Date of analysis verified as correct.

Level I

Analyst: Jane D. Hedr Date/Time: 10/17/17 Reviewed from 09:08 to 14:28

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: Roger K. Jodt Date/Time: 10-17-17 Reviewed from 09:08 to 14:28

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 10/16/17 Curve Time 8:15-10:15 DILUTION H20 0011

Revised 01/19/2016

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG No.:

Project: MRC Waste Characterization Block I

Client Sample ID	Lab Sample ID
WC-IS-100317	240-85941-2
WC-IW-100317	240-85941-3

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WC-IS-100317 Lab Sample ID: 240-85941-2

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG ID.:

Matrix: Solid Date Sampled: 10/03/2017 08:25

Reporting Basis: WET Date Received: 10/04/2017 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Flashpoint	>200	1.00	1.00	Degrees F			1	1010A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WC-IW-100317 Lab Sample ID: 240-85941-3

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG ID.:

Matrix: Water Date Sampled: 10/03/2017 08:00

Reporting Basis: WET Date Received: 10/04/2017 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Flashpoint	>200	1.00	1.00	Degrees F			1	1010A

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 297826 Date: 10/05/2017 15:50								
1010A		460-141869-A-1	Flashpoint	120	Degrees F			
1010A		460-141869-A-1 DU	Flashpoint	118.0	Degrees F	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 298677 Date: 10/12/2017 09:48								
1010A		240-86213-B-3	Flashpoint	>200	Degrees F			
1010A		240-86213-B-3 DU	Flashpoint	>200	Degrees F	NC	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 297826 Date: 10/05/2017 12:20											
						LCS Source: WCP-XYLENE_00020					
1010A	LCS 240-297826/1	Flashpoint	83.00		Degrees F	81.0	102	97-103			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 298677	Date: 10/12/2017 05:00										
						LCS Source: WCP-XYLENE_00020					
1010A	LCS 240-298677/1	Flashpoint	81.00		Degrees F	81.0	100	97-103			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: WHITEY

Method: 1010A RL Date: 01/28/2010 09:55

Analyte	Wavelength/ Mass	RL (Degrees F)	
Flashpoint		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: WHITEY

Method: 1010A XRL Date: 01/28/2010 09:55

Analyte	Wavelength/ Mass	XRL (Degrees F)	
Flashpoint		1	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Water Instrument ID: WHITEY

Method: 1010A RL Date: 01/28/2010 09:55

Analyte	Wavelength/ Mass	RL (Degrees F)	
Flashpoint		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Water Instrument ID: WHITEY

Method: 1010A XRL Date: 01/28/2010 09:55

Analyte	Wavelength/ Mass	XRL (Degrees F)	
Flashpoint		1	

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-85941-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: WHITEY Analysis Method: 1010A

Start Date: 10/05/2017 12:20 End Date: 10/05/2017 19:49

Lab Sample Id	D/F	Type	Time	Analytes																									
				FP																									
LCS 240-297826/1	1	T	12:20	X																									
ZZZZZZ			12:55																										
ZZZZZZ			13:30																										
ZZZZZZ			14:05																										
ZZZZZZ			14:40																										
ZZZZZZ			15:15																										
460-141869-A-1 DU	1	T	15:50	X																									
240-85941-2	1	T	16:25	X																									
ZZZZZZ			18:10																										
ZZZZZZ			18:55																										
ZZZZZZ			19:22																										
ZZZZZZ			19:49																										

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: WHITEY Analysis Method: 1010A

Start Date: 10/12/2017 05:00 End Date: 10/12/2017 11:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				FP																								
LCS 240-298677/1	1	T	05:00	X																								
ZZZZZZ			05:26																									
ZZZZZZ			05:52																									
ZZZZZZ			06:18																									
ZZZZZZ			06:45																									
ZZZZZZ			07:11																									
ZZZZZZ			07:37																									
ZZZZZZ			08:03																									
ZZZZZZ			08:30																									
ZZZZZZ			08:56																									
ZZZZZZ			09:22																									
240-86213-B-3 DU	1	T	09:48	X																								
ZZZZZZ			10:15																									
ZZZZZZ			10:41																									
240-85941-3	1	T	11:07	X																								
ZZZZZZ			11:33																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 10/05/2017 08:32 End Date: 10/05/2017 16:51

Lab Sample Id	D/F	Type	Time	Analytes																										
				% Sol	Moist																									
ZZZZZZ			08:32																											
ZZZZZZ			08:32																											
ZZZZZZ			08:32																											
ZZZZZZ			08:32																											
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ZZZZZZ			08:32																											
240-85941-2 DU	1	T	08:32	X	X																									
240-85941-2	1	T	08:32	X	X																									
ZZZZZZ			08:32																											
ZZZZZZ			08:32																											
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 10/05/2017 08:32 End Date: 10/05/2017 16:51

Lab Sample Id	D/F	Type	Time	Analytes																										
				% Sol	Moist																									
ZZZZZZ			14:10																											
ZZZZZZ			14:10																											
ZZZZZZ			14:10																											
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297826 Batch Start Date: 10/05/17 12:20 Batch Analyst: Weimer, Joshua W

Batch Method: 1010A Batch End Date: 10/05/17 19:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialTemp	WCP-XYLENE 00020		
LCS 240-297826/1		1010A		70 mL	70 mL	70.0 Degrees F	70 mL		
460-141869-A-1 DU		1010A	T	70 mL	70 mL	56.0 Degrees F			
240-85941-D-2	WC-IS-100317	1010A	T	70 g	70 g	72.0 Degrees F			

Batch Notes	
Equipment ID	Whitey

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 298677 Batch Start Date: 10/12/17 05:00 Batch Analyst: Harshman, Tom

Batch Method: 1010A Batch End Date: 10/12/17 12:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	InitialTemp	WCP-XYLENE 00020			
LCS 240-298677/1		1010A		70 mL	70 Degrees F	70 mL			
240-86213-B-3 DU		1010A	T	70 mL	62 Degrees F				
240-85941-G-3	WC-IW-100317	1010A	T	70 mL	68 Degrees F				

Batch Notes	
Equipment ID	Whitey

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-85941-1

SDG No.:

Batch Number: 297685 Batch Start Date: 10/05/17 08:32 Batch Analyst: Richards, Maria B

Batch Method: Moisture Batch End Date: 10/06/17 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-85941-A-2 DU	WC-IS-100317	Moisture	T	4.3376 g	10.6092 g	9.4534 g			
240-85941-A-2	WC-IS-100317	Moisture	T	4.3376 g	10.5819 g	9.1701 g			

Batch Notes	
Balance ID	B47 No Unit
Date samples were placed in the oven	10/05/17
Oven Temp In	103.3 Degrees C
Time samples were place in the oven	17:00
Date samples were removed from oven	10/6/17
Oven Temp Out	103.3 Degrees C
Time Samples were removed from oven	05:00
Oven ID	002
Thermometer ID	Tempguard Box c-6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

☆ North Canton ☆

Chain of Custody Record

3.2/C3.2

180325
000546
BALTIMORE

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tony Apanavage	Site Contact: Mullis	Date: 10/3/17	COC No:
Company Name: TETRA TECH INC	Tel/Fax: 301-528-3021	Lab Contact: McFadden	Carrier: FedEx	1 of 1 COCs
Address: 20251 Century Blvd. Ste. 200	Analysis Turnaround Time			Sampler: Mullis
City/State/Zip: Germantown, MD, 20874	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-3021	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: MRC Waste Char. Block I	☐ 1 week STANDARD			
Site: MRC Block I Inv.	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	PCBs	TCLP Metals	Ignitability	Sample Specific Notes:
TB-100317	10/3/17	—	G	Aq	2			X				
WC-IS-100317	↓	0825	↓	SOIL	3			X	X	X	X	
WC-IW-100317	↓	0800	↓	Aq	8			X	X	X	X	

10/3/17

240-85941 Chain of Custody



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: ☆ MRC Waste Characterization for the Block I investigation

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech Inc	10/3/17 1503	[signature]	TestAmerica	10-3-2017/1503
[signature]	TestAmerica	10-3-2017/162	Kierry Burns	TA Can	10/4/17 0945

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 85941

Client Tetra Tech Site Name _____

Cooler Received on 10/4/17 Opened on 10/4/17

Cooler unpacked by: Terry Burns

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 3.2 °C
   IR GUN #36 (CF +0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN # 627 (CF -1.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **NOVEMBER 6, 2017**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER CENTER (MRC)
SDG 140-9562-1

SAMPLES: 10/Soil Vapor/VOC

SV-178-MB-1	SV-179-MB-1	SV-180-MB-1	SV-181-MB-1
SV-182-MB-1	SV-183-MB-1	SV-184-MB-1	SV-185-MB-1
SV-186-MB-1	SV-187-MB-1		

Overview

The sample set for LMC - MRC, SDG 140-9562-1 consisted of ten (10) soil vapor samples. All samples were analyzed for select Volatile Organic Compounds (VOC). No field duplicate sample pairs were included in this SDG.

The samples were collected by Tetra Tech on October 12, 2017 and analyzed by TestAmerica. All analyses were conducted in accordance with EPA Method TO-15 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times/sample preservation, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike results, laboratory control sample results, internal standard areas, chromatographic resolution, compound identification, and detection limits. Areas of concern are listed below.

Major

No major issues were identified.

Minor

- 1,1,1-Trichloroethane was detected in a laboratory method blank at the following maximum concentrations:

Compound	Maximum Concentration	Action Level
1,1,1-Trichloroethane(1)	0.0175 ppb	0.0875 ppb
1,1,1-Trichloroethane(1)	0.0956 µg/m3	0.478 µg/m^3
1,1,1-Trichloroethane(2)	0.0167 ppb	0.0835 ppb
1,1,1-Trichloroethane(2)	0.0909 µg/m3	0.4545 µg/m^3

1 Concentration in method blank affecting samples in batch 15146.
2 Concentration in method blank affecting samples in batch 15230.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Dilution factor, if applicable, was taken into consideration when evaluating for blank contamination. Detected results for 1,1,1-trichloroethane less than the blank action level were qualified as nondetect (U).

- Detected results reported below the Reporting Limit (RL) limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

All internal standard areas were within ±40% of the standard.

The surrogate spike compound and Laboratory Control Sample (LCS) had Percent Recoveries (%Rs) within the quality control limits.

Twenty-five VOC target compounds were reported for the TO-15 analysis of the samples.

All sample canisters opened to the approximately -30 psig (-29 psig) and finished at approximately 0 psig.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: 1,1,1-Trichloroethane was detected in a laboratory method blank.

Other Factors Affecting Data Quality: Results below the RL were estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (January 2017) and EPA Method TO-15 analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech
Leanne M. Ganser
Environmental Scientist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08109	NSAMPLE	SV-178-MB-1			SV-179-MB-1			SV-180-MB-1			SV-181-MB-1		
SDG: 140-9562-1	LAB_ID	140-9562-10			140-9562-9			140-9562-8			140-9562-7		
FRACTION: OV-M3	SAMP_DATE	10/12/2017			10/12/2017			10/12/2017			10/12/2017		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2	U	A	0.33	U		0.44	U	A	0.98	U	A
1,1,2-TRICHLOROETHANE		0.57	U		0.57	U		0.57	U		0.57	U	
1,1-DICHLOROETHANE		7.9			39			1.4	J	P			
1,1-DICHLOROETHENE		0.28	U		1.6			0.28	U		18		
1,2,3-TRIMETHYLBENZENE		0.84	U		0.84	U		0.84	U		0.84	U	
1,2,4-TRICHLOROBENZENE		1.4	U		1.4	U		1.4	U		1.4	U	
1,2,4-TRIMETHYLBENZENE		1.8	J	P	1	J	P	1.1	J	P	1.3	J	P
1,2-DICHLOROETHANE		0.38	U		0.59	J	P	0.38	U		0.38	U	
1,3,5-TRIMETHYLBENZENE		0.64	U		0.64	U		0.64	U		0.64	U	
BENZENE		0.76	J	P	0.66	J	P	0.4	J	P	0.62	J	P
CARBON TETRACHLORIDE		0.47	U		0.55	J	P	0.47	U		0.47	U	
CHLORODIFLUOROMETHANE		1.3	J	P	1.1	J	P	1.2	J	P	1.3	J	P
CHLOROFORM		2.8			1.1	J	P	0.37	U		0.56	J	P
CIS-1,2-DICHLOROETHENE		0.48	U		0.48	U		0.48	U		0.48	U	
DICHLORODIFLUOROMETHANE		2.5			2.7			2.4			2.9		
ETHYLBENZENE		1	J	P	0.95	J	P	0.71	J	P	0.93	J	P
METHYL TERT-BUTYL ETHER		1.2	U		1.2	U		1.2	U		1.2	U	
METHYLENE CHLORIDE		6.6			5.9			6.7			6.6		
NAPHTHALENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		0.54	U		0.54	U		0.54	U		0.54	U	
TOLUENE		7.3			6.7			4.2			6.8		
TOTAL XYLENES		6			5.1			3.9			5.3		
TRANS-1,2-DICHLOROETHENE		0.4	U		0.4	U		0.4	U		0.4	U	
TRICHLOROETHENE		0.38	U		0.38	U		0.38	U		0.38	U	
VINYL CHLORIDE		0.37	U		0.37	U		0.37	U		0.37	U	

PROJ_NO: 08109	NSAMPLE	SV-181-MB-1-DL			SV-182-MB-1			SV-183-MB-1			SV-183-MB-1-DL		
SDG: 140-9562-1	LAB_ID	140-9562-7			140-9562-6			140-9562-5			140-9562-5		
FRACTION: OV-M3	SAMP_DATE	10/12/2017			10/12/2017			10/12/2017			10/12/2017		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE					4			190					
1,1,2-TRICHLOROETHANE					0.57	U		1.1	U				
1,1-DICHLOROETHANE		500			280						1700		
1,1-DICHLOROETHENE					9.4			270					
1,2,3-TRIMETHYLBENZENE					0.84	U		1.7	U				
1,2,4-TRICHLOROBENZENE					1.4	U		2.9	U				
1,2,4-TRIMETHYLBENZENE					1.2	J	P	1.2	U				
1,2-DICHLOROETHANE					0.38	U		0.77	U				
1,3,5-TRIMETHYLBENZENE					0.64	U		1.3	U				
BENZENE					0.8	J	P	1	J	P			
CARBON TETRACHLORIDE					0.47	U		0.94	U				
CHLORODIFLUOROMETHANE					1.1	J	P	0.53	U				
CHLOROFORM					0.37	U		0.93	J	P			
CIS-1,2-DICHLOROETHENE					0.48	U		0.95	U				
DICHLORODIFLUOROMETHANE					2.8			2.6	J	P			
ETHYLBENZENE					0.68	J	P	1.2	U				
METHYL TERT-BUTYL ETHER					1.2	U		2.5	U				
METHYLENE CHLORIDE					7.2			7.8					
NAPHTHALENE					1	U		2.1	U				
TETRACHLOROETHENE					0.54	U		1.1	U				
TOLUENE					4.3			4.5	U				
TOTAL XYLENES					4			1	U				
TRANS-1,2-DICHLOROETHENE					0.4	U		0.79	U				
TRICHLOROETHENE					0.39	J	P	2	J	P			
VINYL CHLORIDE					0.37	U		0.75	J	P			

PROJ_NO: 08109	NSAMPLE	SV-184-MB-1			SV-185-MB-1			SV-186-MB-1			SV-187-MB-1		
SDG: 140-9562-1	LAB_ID	140-9562-4			140-9562-3			140-9562-2			140-9562-1		
FRACTION: OV-M3	SAMP_DATE	10/12/2017			10/12/2017			10/12/2017			10/12/2017		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.43	U	A	0.8	U	A	0.39	U	A	1.1	U	A
1,1,2-TRICHLOROETHANE		0.57	U		0.57	U		0.57	U		0.57	U	
1,1-DICHLOROETHANE		0.52	J	P	0.89	J	P	5.1			2.9		
1,1-DICHLOROETHENE		0.28	U		0.28	U		0.28	U		0.28	U	
1,2,3-TRIMETHYLBENZENE		0.84	U		0.84	U		0.84	U		0.84	U	
1,2,4-TRICHLOROBENZENE		1.4	U		1.4	U		1.4	U		1.4	U	
1,2,4-TRIMETHYLBENZENE		1.5	J	P	1.3	J	P	1.3	J	P	1.5	J	P
1,2-DICHLOROETHANE		0.38	U		0.38	U		0.38	U		0.38	U	
1,3,5-TRIMETHYLBENZENE		0.64	U		0.64	U		0.64	U		0.64	U	
BENZENE		0.59	J	P	0.93	J	P	1.3			0.63	J	P
CARBON TETRACHLORIDE		0.48	J	P	0.47	U		0.47	U		0.47	U	
CHLORODIFLUOROMETHANE		0.96	J	P	0.93	J	P	0.27	U		1.1	J	P
CHLOROFORM		0.37	U		0.37	U		0.37	U		0.37	U	
CIS-1,2-DICHLOROETHENE		0.48	U		0.48	U		0.48	U		0.48	U	
DICHLORODIFLUOROMETHANE		2.5			2.3			2.4			2.6		
ETHYLBENZENE		0.79	J	P	1	J	P	1.1	J	P	1.1	J	P
METHYL TERT-BUTYL ETHER		1.2	U		1.2	U		1.2	U		1.2	U	
METHYLENE CHLORIDE		5.4			7			8			6.2		
NAPHTHALENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		0.54	U		0.61	J	P	0.94	J	P	0.54	U	
TOLUENE		5.4			6.5			6.9			6.9		
TOTAL XYLENES		4.5			5.6			5.5			5.8		
TRANS-1,2-DICHLOROETHENE		0.4	U		0.4	U		0.4	U		0.4	U	
TRICHLOROETHENE		0.38	U		0.38	U		0.38	U		0.38	U	
VINYL CHLORIDE		0.37	U		0.37	U		0.37	U		0.37	U	

Appendix B

Results as Reported by the Laboratory

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-187-MB-1 | Lab Sample ID: 140-9562-1

Matrix: Air | Lab File ID: JJ16P107.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:46

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 19:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.20	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.32	J	0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	0.71		0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.25	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.8		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.8		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.20	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.30	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-187-MB-1 | Lab Sample ID: 140-9562-1

Matrix: Air | Lab File ID: JJ16P107.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:46

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 19:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.63	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	2.9		1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	1.1	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	6.2		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	6.9		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	1.1	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	5.8		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-186-MB-1 Lab Sample ID: 140-9562-2

Matrix: Air Lab File ID: JJ16P108.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:46

Sample wt/vol: 100(mL) Date Analyzed: 10/16/2017 19:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15146 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.40		0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	ND		0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	1.3		0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.25	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	2.3		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.14	J	0.40	0.080
108-88-3	Toluene	92.14	1.8		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.072	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.26	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-186-MB-1 Lab Sample ID: 140-9562-2

Matrix: Air Lab File ID: JJ16P108.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:46

Sample wt/vol: 100(mL) Date Analyzed: 10/16/2017 19:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15146 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.3		1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	ND		1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	5.1		1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	1.1	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	8.0		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.94	J	2.7	0.54
108-88-3	Toluene	92.14	6.9		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	0.39	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	5.5		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-185-MB-1 | Lab Sample ID: 140-9562-3

Matrix: Air | Lab File ID: JJ16P109.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:45

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 20:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.29	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.26	J	0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.46		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	0.22	J	0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.23	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	2.0		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.090	J	0.40	0.080
108-88-3	Toluene	92.14	1.7		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.15	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.27	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-185-MB-1 | Lab Sample ID: 140-9562-3

Matrix: Air | Lab File ID: JJ16P109.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:45

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 20:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.93	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	0.93	J	1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	0.89	J	1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	1.0	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	7.0		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.61	J	2.7	0.54
108-88-3	Toluene	92.14	6.5		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	0.80	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	5.6		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-184-MB-1 | Lab Sample ID: 140-9562-4

Matrix: Air | Lab File ID: JJ16P110.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:47

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 21:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	0.077	J	0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.27	J	0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	0.13	J	0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.18	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.6		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.4		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.079	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.30	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.0		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-184-MB-1 Lab Sample ID: 140-9562-4

Matrix: Air Lab File ID: JJ16P110.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:47

Sample wt/vol: 100(mL) Date Analyzed: 10/16/2017 21:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15146 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.59	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	0.48	J	2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	0.96	J	1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	0.52	J	1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	0.79	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	5.4		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	5.4		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	0.43	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	4.5		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-183-MB-1 | Lab Sample ID: 140-9562-5

Matrix: Air | Lab File ID: JJ16P111.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:48

Sample wt/vol: 50(mL) | Date Analyzed: 10/16/2017 22:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.32	J	0.80	0.23
56-23-5	Carbon tetrachloride	153.81	ND		0.80	0.15
75-45-6	Chlorodifluoromethane	86.47	ND		0.80	0.15
67-66-3	Chloroform	119.38	0.19	J	0.80	0.15
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.80	0.24
75-71-8	Dichlorodifluoromethane	120.91	0.52	J	0.80	0.27
75-34-3	*1,1-Dichloroethane*	*98.96*	*660*	*E*	*0.80*	*0.10*
107-06-2	1,2-Dichloroethane	98.96	ND		0.80	0.19
75-35-4	1,1-Dichloroethene	96.94	68		0.80	0.14
100-41-4	Ethylbenzene	106.17	ND		0.80	0.27
75-09-2	Methylene Chloride	84.93	2.3		2.0	1.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		4.0	0.68
91-20-3	Naphthalene	128.17	ND		0.40	0.40
127-18-4	Tetrachloroethene	165.83	ND		0.80	0.16
108-88-3	Toluene	92.14	ND		1.2	1.2
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.80	0.20
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.80	0.39
71-55-6	1,1,1-Trichloroethane	133.41	34	B	0.80	0.12
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.80	0.21
79-01-6	Trichloroethene	131.39	0.37	J	0.40	0.14
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.80	0.34
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.80	0.25
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.80	0.26
75-01-4	Vinyl chloride	62.50	0.29	J	0.40	0.29
1330-20-7	Xylenes, Total	106.17	ND		1.6	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-183-MB-1 | Lab Sample ID: 140-9562-5

Matrix: Air | Lab File ID: JJ16P111.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:48

Sample wt/vol: 50(mL) | Date Analyzed: 10/16/2017 22:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.0	J	2.6	0.73
56-23-5	Carbon tetrachloride	153.81	ND		5.0	0.94
75-45-6	Chlorodifluoromethane	86.47	ND		2.8	0.53
67-66-3	Chloroform	119.38	0.93	J	3.9	0.73
156-59-2	cis-1,2-Dichloroethene	96.94	ND		3.2	0.95
75-71-8	Dichlorodifluoromethane	120.91	2.6	J	4.0	1.3
75-34-3	*1,1-Dichloroethane*	*98.96*	*2700*	*E*	*3.2*	*0.40*
107-06-2	1,2-Dichloroethane	98.96	ND		3.2	0.77
75-35-4	1,1-Dichloroethene	96.94	270		3.2	0.56
100-41-4	Ethylbenzene	106.17	ND		3.5	1.2
75-09-2	Methylene Chloride	84.93	7.8		6.9	4.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		14	2.5
91-20-3	Naphthalene	128.17	ND		2.1	2.1
127-18-4	Tetrachloroethene	165.83	ND		5.4	1.1
108-88-3	Toluene	92.14	ND		4.5	4.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		3.2	0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.9	2.9
71-55-6	1,1,1-Trichloroethane	133.41	190	B	4.4	0.65
79-00-5	1,1,2-Trichloroethane	133.41	ND		4.4	1.1
79-01-6	Trichloroethene	131.39	2.0	J	2.1	0.75
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		3.9	1.7
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	1.2
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.9	1.3
75-01-4	Vinyl chloride	62.50	0.75	J	1.0	0.74
1330-20-7	Xylenes, Total	106.17	ND		6.9	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-183-MB-1 DL Lab Sample ID: 140-9562-5 DL

Matrix: Air Lab File ID: JJ17P105.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:48

Sample wt/vol: 11(mL) Date Analyzed: 10/17/2017 19:41

Soil Aliquot Vol: Dilution Factor: 3.05

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15230 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	430		11	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-183-MB-1 DL Lab Sample ID: 140-9562-5 DL

Matrix: Air Lab File ID: JJ17P105.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:48

Sample wt/vol: 11(mL) Date Analyzed: 10/17/2017 19:41

Soil Aliquot Vol: Dilution Factor: 3.05

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15230 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	1700		45	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-182-MB-1 | Lab Sample ID: 140-9562-6

Matrix: Air | Lab File ID: JJ17P106.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:49

Sample wt/vol: 100(mL) | Date Analyzed: 10/17/2017 21:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.25	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.32	J	0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.57		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	69		0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	2.4		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.16	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	2.1		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.1		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.73	B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	0.072	J	0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.24	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	0.92		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-182-MB-1 | Lab Sample ID: 140-9562-6

Matrix: Air | Lab File ID: JJ17P106.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:49

Sample wt/vol: 100(mL) | Date Analyzed: 10/17/2017 21:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.80	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	280		1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	9.4		1.6	0.28
100-41-4	Ethylbenzene	106.17	0.68	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	7.2		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	4.3		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	4.0	B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	0.39	J	1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.2	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	4.0		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-181-MB-1 | Lab Sample ID: 140-9562-7

Matrix: Air | Lab File ID: JJ17P107X.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:51

Sample wt/vol: 100(mL) | Date Analyzed: 10/17/2017 21:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.36	J	0.40	0.075
67-66-3	Chloroform	119.38	0.12	J	0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.14
75-34-3	*1,1-Dichloroethane*	*98.96*	*120*	*E*	*0.40*	*0.050*
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	4.5		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.21	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.9		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.8		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.18	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.27	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.2		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-181-MB-1 | Lab Sample ID: 140-9562-7

Matrix: Air | Lab File ID: JJ17P107X.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:51

Sample wt/vol: 100(mL) | Date Analyzed: 10/17/2017 21:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.27
67-66-3	Chloroform	119.38	0.56	J	2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.67
75-34-3	*1,1-Dichloroethane*	*98.96*	*490*	*E*	*1.6*	*0.20*
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	18		1.6	0.28
100-41-4	Ethylbenzene	106.17	0.93	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	6.6		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	6.8		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	0.98	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	5.3		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-181-MB-1 DL Lab Sample ID: 140-9562-7 DL

Matrix: Air Lab File ID: JJ17P107DL.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:51

Sample wt/vol: 40(mL) Date Analyzed: 10/18/2017 10:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15230 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	120		1.0	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-181-MB-1 DL Lab Sample ID: 140-9562-7 DL

Matrix: Air Lab File ID: JJ17P107DL.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:51

Sample wt/vol: 40(mL) Date Analyzed: 10/18/2017 10:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15230 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	500		4.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-180-MB-1 | Lab Sample ID: 140-9562-8

Matrix: Air | Lab File ID: JJ17P108.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:51

Sample wt/vol: 100(mL) | Date Analyzed: 10/17/2017 22:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	0.36	J	0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.16	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.9		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.1		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.080	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.23	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	0.90		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-180-MB-1 Lab Sample ID: 140-9562-8

Matrix: Air Lab File ID: JJ17P108.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:51

Sample wt/vol: 100(mL) Date Analyzed: 10/17/2017 22:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15230 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.40	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	1.4	J	1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	0.71	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	6.7		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	4.2		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	0.44	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	3.9		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-179-MB-1 Lab Sample ID: 140-9562-9

Matrix: Air Lab File ID: JJ17P109.D

Analysis Method: TO 15 LL Date Collected: 10/12/2017 11:49

Sample wt/vol: 100(mL) Date Analyzed: 10/17/2017 23:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 15230 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	0.088	J	0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.075
67-66-3	Chloroform	119.38	0.22	J	0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.55		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	9.6		0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	0.15	J	0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	0.41		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.22	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.7		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.8		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.21	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.2		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-179-MB-1 | Lab Sample ID: 140-9562-9

Matrix: Air | Lab File ID: JJ17P109.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:49

Sample wt/vol: 100(mL) | Date Analyzed: 10/17/2017 23:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.66	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	0.55	J	2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.27
67-66-3	Chloroform	119.38	1.1	J	2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	39		1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	0.59	J	1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	1.6		1.6	0.28
100-41-4	Ethylbenzene	106.17	0.95	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	5.9		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	6.7		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	5.1		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-178-MB-1 | Lab Sample ID: 140-9562-10

Matrix: Air | Lab File ID: JJ17P110.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:50

Sample wt/vol: 100(mL) | Date Analyzed: 10/18/2017 00:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.24	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.38	J	0.40	0.075
67-66-3	Chloroform	119.38	0.58		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.50		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	2.0		0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.24	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.9		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.9		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.37	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.36	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.4		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-178-MB-1 | Lab Sample ID: 140-9562-10

Matrix: Air | Lab File ID: JJ17P110.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:50

Sample wt/vol: 100(mL) | Date Analyzed: 10/18/2017 00:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.76	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.27
67-66-3	Chloroform	119.38	2.8		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	7.9		1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	1.0	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	6.6		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	7.3		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	2.0	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.8	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	6.0		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Appendix C

Support Documentation

Job Narrative
140-9562-1

Receipt
The samples were received on 10/13/2017 at 9:40 AM. The samples arrived in good condition and properly preserved.

Air - GC/MS VOA - Method TO-15 LL
This report includes canister certification data for the batch certified and/or individually certified canisters used to collect samples as well as for any canisters used for dilution of those samples. All of the canisters used for sample collection or sample dilution for this job were certified to be clean to the levels listed on the results page. Please note that results for individually certified canisters that were not used for sample collection or sample dilution may also be included in the report because these canisters were in the same cleaning batch as the canisters used for this project. Since these canisters were not used for this job, the results have no bearing on the sample results.

EPA methods TO-14A and TO-15 specify the use of humidified “zero air” as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of “zero air” by TestAmerica Knoxville.

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

Comments
No additional comments.

Definitions/Glossary

Client: Tetra Tech, Inc. TestAmerica Job ID: 140-9562-1
Project/Site: Maintenance Building VMPs - Middle River

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

Glossary

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

Air - GC/MS VOA

Analysis Batch: 15146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-9562-1	SV-187-MB-1	Total/NA	Air	TO 15 LL	
140-9562-2	SV-186-MB-1	Total/NA	Air	TO 15 LL	
140-9562-3	SV-185-MB-1	Total/NA	Air	TO 15 LL	
140-9562-4	SV-184-MB-1	Total/NA	Air	TO 15 LL	
140-9562-5	SV-183-MB-1	Total/NA	Air	TO 15 LL	
MB 140-15146/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-15146/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 15230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-9562-5 - DL	SV-183-MB-1	Total/NA	Air	TO 15 LL	
140-9562-6	SV-182-MB-1	Total/NA	Air	TO 15 LL	
140-9562-7	SV-181-MB-1	Total/NA	Air	TO 15 LL	
140-9562-7 - DL	SV-181-MB-1	Total/NA	Air	TO 15 LL	
140-9562-8	SV-180-MB-1	Total/NA	Air	TO 15 LL	
140-9562-9	SV-179-MB-1	Total/NA	Air	TO 15 LL	
140-9562-10	SV-178-MB-1	Total/NA	Air	TO 15 LL	
MB 140-15230/8	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-15230/1006	Lab Control Sample	Total/NA	Air	TO 15 LL	

Method Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 140-9562-1
Project/Site: Maintenance Building VMPs - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Maintenance Building VMPs - Middle River

TestAmerica Job ID: 140-9562-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-9562-1	SV-187-MB-1	Air	10/12/17 11:46	10/13/17 09:40
140-9562-2	SV-186-MB-1	Air	10/12/17 11:46	10/13/17 09:40
140-9562-3	SV-185-MB-1	Air	10/12/17 11:45	10/13/17 09:40
140-9562-4	SV-184-MB-1	Air	10/12/17 11:47	10/13/17 09:40
140-9562-5	SV-183-MB-1	Air	10/12/17 11:48	10/13/17 09:40
140-9562-6	SV-182-MB-1	Air	10/12/17 11:49	10/13/17 09:40
140-9562-7	SV-181-MB-1	Air	10/12/17 11:51	10/13/17 09:40
140-9562-8	SV-180-MB-1	Air	10/12/17 11:51	10/13/17 09:40
140-9562-9	SV-179-MB-1	Air	10/12/17 11:49	10/13/17 09:40
140-9562-10	SV-178-MB-1	Air	10/12/17 11:50	10/13/17 09:40

Quantitation Limit Exceptions Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 140-9562-1
Project/Site: Maintenance Building VMPs - Middle River

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
TO 15 LL	Air	1,2,4-Trichlorobenzene	ppb v/v	0.080	0.4
TO 15 LL	Air	Naphthalene	ppb v/v	0.040	0.2

TestAmerica Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone (865) 291-3000 Fax (865) 584-4315

Chain of Custody Record

180325

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

BALTIMORE

Client Information	Sampler: J. Michael Wilks	Lab PM: Walker Wasmund, Terry	Carrier Tracking No(s):	COC No: 140-4437-1565.1
Client Contact: Mr. Ken Ives	Phone: 410-990-4607	E-Mail: terry.wasmund@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #:
Address: 7526 Connelley Suite F	Due Date Requested:			
City: Hanover	TAT Requested (days):			
State, Zip: MD, 21076				
Phone:	PO #: 1121397 (per Russ Murphy TT 3/15/16)			
Email: ken.ives@testamericainc.com	WO #:			
Project Name: Maintenance Building VMPs - Middle River	Project #: 14004215			
Site:	SSOW#:			

Analysis Requested

140-9562 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TO15_LL_PF - (MOD) Custom Analyte Pick list	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
SV-187-MB-1	10/12	1146	30/6 G	A			✓		C:11278 F:09704
SV-186-MB-1		1146	29/6 G				✓		11520 10863
SV-185-MB-1		1145	27/6 G				✓		09577 11245
SV-184-MB-1		1147	25/4 G				✓		09792 10845
SV-183-MB-1		1148	30/4 G				✓		10941 11272
SV-182-MB-1		1149	30/3 G				✓		10969 10021
SV-181-MB-1		1151	30/2 G				✓		10344 09653
SV-180-MB-1		1151	30/4 G				✓		11573 11527
SV-179-MB-1		1149	30/4 G				✓		09822 11490
SV-178-MB-1	↓	1150	30/3 G	↓			✓		11164 11550
									Canister # Flow Control #

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	J. Michael Wilks	10-12-2017/1505	TestAmerica		10-12-2017/1505	TestAmerica
2		10-12-2017/1630	TestAmerica		10/13/17 0946	TA
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

10/24/2017

Loc: 140
9562

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			/	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : 565 Correction factor: 0°			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Received @ ambient
1 box, Fedex so
trk# 7704869 7527
No Custody seal, KW 6/13
Ambient = 20.1°C
10 cans, 10 flows

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 1900 4215 PM Instructions:

Sample Receiving Associate: [signature] Date: 10/13/17

QA026R30.doc, 080916

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 10/13/2017

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BKK	140-9562-a-1	11278	9207	B	1	-2.5	1242	
BKK	140-9562-a-2	11520	9103	B	1	-2.4	1243	
BKK	140-9562-a-3	09577	9250	B	1	-2.5	1244	
BKK	140-9562-a-4	09792	9279	B	1	-2.5	1245	
BKK	140-9562-a-5	10941	9279	B	1	-2.4	1246	
BKK	140-9562-a-6	10969	9279	B	1	-2.4	1247	
BKK	140-9562-a-7	10344	9247	B	1	-1.5	1248	
BKK	140-9562-a-8	11573	9138	B	1	-1.5	1249	
BKK	140-9562-a-9	9822	9279	B	1	-2.4	1250	
BKK	140-9562-a-10	11164	9279	B	1	-2.1	1251	

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab File ID: JBFBI07.D BFB Injection Date: 09/07/2017

Instrument ID: MJ BFB Injection Time: 15:13

Analysis Batch No.: 14278

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.1	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	112.0	
175	5.0 - 9.0 % of mass 174	8.1	(7.2) 1
176	95.0 - 101.0 % of mass 174	110.2	(98.4) 1
177	5.0 - 9.0 % of mass 176	7.3	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-14278/3	JICI07L1.D	09/07/2017	16:27
	IC 140-14278/4	JICI07L2.D	09/07/2017	17:13
	IC 140-14278/5	JICI07L3.D	09/07/2017	18:00
	IC 140-14278/6	JICI07L4.D	09/07/2017	18:46
	IC 140-14278/7	JICISI07L5.D	09/07/2017	19:32
	ICIS 140-14278/8	JICI07L6.D	09/07/2017	20:18
	IC 140-14278/9	JICI07L7.D	09/07/2017	21:05
	IC 140-14278/10	JICI07L8.D	09/07/2017	21:50
	IC 140-14278/11	JICI07L9.D	09/07/2017	22:36
	ICV 140-14278/14	JLCSI07.D	09/08/2017	00:54

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab File ID: JBFBJ16.D BFB Injection Date: 10/16/2017

Instrument ID: MJ BFB Injection Time: 09:53

Analysis Batch No.: 15146

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.1	
75	30.0 - 60.0 % of mass 95	46.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	116.0	
175	5.0 - 9.0 % of mass 174	8.2	(7.1) 1
176	95.0 - 101.0 % of mass 174	113.1	(97.5) 1
177	5.0 - 9.0 % of mass 176	7.6	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-15146/2	JCCVJ16.D	10/16/2017	10:23
	LCS 140-15146/1002	JCCVJ16-LCS.d	10/16/2017	10:23
	MB 140-15146/4	J500BJ16.D	10/16/2017	11:54
SV-187-MB-1	140-9562-1	JJ16P107.D	10/16/2017	19:14
SV-186-MB-1	140-9562-2	JJ16P108.D	10/16/2017	19:59
SV-185-MB-1	140-9562-3	JJ16P109.D	10/16/2017	20:45
SV-184-MB-1	140-9562-4	JJ16P110.D	10/16/2017	21:31
SV-183-MB-1	140-9562-5	JJ16P111.D	10/16/2017	22:17

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab File ID: JBFBJ17A.D BFB Injection Date: 10/17/2017

Instrument ID: MJ BFB Injection Time: 11:45

Analysis Batch No.: 15230

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	119.1	
175	5.0 - 9.0 % of mass 174	8.4	(7.1) 1
176	95.0 - 101.0 % of mass 174	116.6	(97.9) 1
177	5.0 - 9.0 % of mass 176	7.6	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-15230/6	JCCVJ17A.D	10/17/2017	12:13
	LCS 140-15230/1006	JCCVJ17A-LCS .d	10/17/2017	12:13
	MB 140-15230/8	J500BJ17.D	10/17/2017	15:03
SV-183-MB-1 DL	140-9562-5 DL	JJ17P105.D	10/17/2017	19:41
SV-182-MB-1	140-9562-6	JJ17P106.D	10/17/2017	21:13
SV-181-MB-1	140-9562-7	JJ17P107X.D	10/17/2017	21:59
SV-180-MB-1	140-9562-8	JJ17P108.D	10/17/2017	22:45
SV-179-MB-1	140-9562-9	JJ17P109.D	10/17/2017	23:31
SV-178-MB-1	140-9562-10	JJ17P110.D	10/18/2017	00:17
SV-181-MB-1 DL	140-9562-7 DL	JJ17P107DL.D	10/18/2017	10:55

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-14278/3	JICI07L1.D
Level 2	IC 140-14278/4	JICI07L2.D
Level 3	IC 140-14278/5	JICI07L3.D
Level 4	IC 140-14278/6	JICI07L4.D
Level 5	IC 140-14278/7	JICISI07L5.D
Level 6	ICIS 140-14278/8	JICI07L6.D
Level 7	IC 140-14278/9	JICI07L7.D
Level 8	IC 140-14278/10	JICI07L8.D
Level 9	IC 140-14278/11	JICI07L9.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Chlorodifluoromethane	+++++ 0.4189	0.4444 0.3904	0.3929 0.4046	0.4145 0.3744	0.4027	Ave		0.4054				5.2		30.0			
Propene	+++++ 1.4293	1.5396 1.3490	1.6326 1.3773	1.4091 1.2627	1.3767	Ave		1.4220				8.1		30.0			
Dichlorodifluoromethane	+++++ 4.1099	3.9903 3.6762	3.9536 3.8412	3.7921 3.4124	3.8636	Ave		3.8299				5.6		30.0			
Chloromethane	+++++ 0.5141	+++++ 0.4729	0.6095 0.4967	0.5392 0.4584	0.4996	Ave		0.5129				9.8		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.8193	2.8770 2.5866	2.7529 2.6979	2.7008 2.4799	2.6864	Ave		2.7001				4.6		30.0			
Vinyl chloride	1.6546 1.6796	1.6082 1.5379	1.5869 1.5922	1.5755 1.4496	1.6020	Ave		1.5874				4.2		30.0			
Butane	+++++ 2.6963	2.7400 2.3924	2.6511 2.5250	2.5813 2.2793	2.5605	Ave		2.5532				6.1		30.0			
1,3-Butadiene	+++++ 1.2921	1.4088 1.1982	1.2699 1.2453	1.2733 1.1451	1.2355	Ave		1.2585				6.1		30.0			
Bromomethane	+++++ 1.5453	1.5471 1.4246	1.5114 1.4887	1.5147 1.3757	1.4745	Ave		1.4853				4.0		30.0			
Chloroethane	+++++ 0.8129	0.7324 0.7255	0.7615 0.7779	0.7838 0.7097	0.7715	Ave		0.7594				4.5		30.0			
Ethanol	+++++ 0.7490	0.6369 0.6468	0.7866 0.6649	0.7650 0.5818	0.7325	Ave		0.6954				10.5		30.0			
Vinyl bromide	1.5364 1.5166	1.4985 1.3896	1.4247 1.4551	1.4330 1.3460	1.4445	Ave		1.4494				4.2		30.0			
2-Methylbutane	2.3488 2.1109	2.0376 1.9067	2.0441 1.9964	2.0443 1.8211	2.0509	Ave		2.0401				7.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Trichlorofluoromethane	4.1980 4.2076	3.9688 3.7830	3.7927 3.9466	3.9941 3.5767	4.0167	Ave		3.9427				5.1		30.0			
Acrolein	+++++ 0.3378	+++++ 0.3373	0.4236 0.3653	0.4448 0.3952	0.3711	Ave		0.3822				10.8		30.0			
Acetonitrile	+++++ 0.6395	+++++ 0.5264	+++++ 0.6049	0.7098 0.5709	0.5766	Ave		0.6047				10.5		30.0			
Acetone	+++++ 0.6176	+++++ 0.5101	+++++ 0.5775	0.8905 0.5408	0.6436	Ave		0.6300				21.7		30.0			
Pentane	+++++ 0.2627	+++++ 0.2353	0.3722 0.2438	0.2921 0.2265	0.2639	Ave		0.2709				18.3		30.0			
Isopropyl alcohol	+++++ 1.8463	+++++ 1.6131	1.8826 1.5520	1.8120 1.4877	1.1106	Ave		1.6149				16.7		30.0			
Ethyl ether	+++++ 1.7121	1.4036 1.4591	1.6433 1.6043	1.7329 1.5412	1.7095	Ave		1.6008				7.7		30.0			
1,1-Dichloroethene	1.6251 1.4808	1.4943 1.3351	1.3896 1.4378	1.4191 1.3482	1.4436	Ave		1.4415				6.1		30.0			
Acrylonitrile	+++++ 0.9942	+++++ 0.8093	0.9902 0.9432	1.0026 0.9299	0.9206	Ave		0.9414				7.1		30.0			
tert-Butyl alcohol	+++++ 2.0649	+++++ 1.7998	1.7932 1.4394	1.9332 1.7361	0.9728	Ave		1.6771				21.8		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	3.2853 3.1875	3.1072 2.8173	2.9598 3.0704	3.1037 2.8936	3.1103	Ave		3.0595				4.8		30.0			
Methylene Chloride	+++++ 1.4172	+++++ 1.2198	2.2104 1.3099	1.6955 1.2189	1.4413	Ave		1.5018				23.5		30.0			
3-Chloropropene	+++++ 1.4654	1.4113 1.2964	1.4888 1.3973	1.4223 1.2792	1.4355	Ave		1.3995				5.4		30.0			
Carbon disulfide	4.7481 4.3345	4.8488 3.9523	4.7144 4.1911	4.2512 3.8271	4.2311	Ave		4.3443				8.2		30.0			
trans-1,2-Dichloroethene	1.5903 1.4789	1.4428 1.3121	1.3798 1.4393	1.4164 1.3527	1.4258	Ave		1.4265				5.6		30.0			
Methyl tert-butyl ether	3.1211 3.4914	2.5145 2.9012	3.3697 3.3527	3.5294 3.1311	3.3270	Ave		3.1931				10.1		30.0			
1,1-Dichloroethane	3.1113 2.8824	2.7806 2.5650	2.6640 2.7433	2.8295 2.5442	2.7952	Ave		2.7684				6.2		30.0			
Vinyl acetate	3.5009 3.7875	2.6396 3.0581	3.5986 3.5978	3.7662 3.3988	3.6261	Ave		3.4415				10.8		30.0			
2-Butanone (MEK)	+++++ 0.6087	+++++ 0.5081	0.8009 0.5957	0.7318 0.5562	0.6009	Ave		0.6289				16.2		30.0			
Hexane	1.7452 1.2672	1.4444 1.1144	1.2996 1.2185	1.2779 1.1444	1.2446	Ave		1.3063				14.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
cis-1,2-Dichloroethene	1.6724 1.5210	1.4499 1.3449	1.4092 1.4570	1.4517 1.3861	1.4538	Ave		1.4607				6.4		30.0			
Ethyl acetate	2.7100 3.0240	1.9948 2.4694	3.0282 2.9165	3.1054 2.7120	2.8931	Ave		2.7615				12.7		30.0			
Chloroform	3.7773 3.2484	3.2926 2.8682	3.1477 3.0614	3.1829 2.8489	3.1280	Ave		3.1728				8.6		30.0			
Tetrahydrofuran	2.1314 1.6223	1.4286 1.3135	1.7384 1.5391	1.6031 1.4285	1.5418	Ave		1.5941				14.9		30.0			
1,1,1-Trichloroethane	3.5588 3.2361	3.0873 2.8948	2.9725 3.0911	3.1718 2.9102	3.1745	Ave		3.1219				6.5		30.0			
1,2-Dichloroethane	0.3991 0.3967	0.3511 0.3434	0.3468 0.3778	0.3761 0.3427	0.3848	Ave		0.3687				6.2		30.0			
1-Butanol	+++++ 0.1045	0.0884 0.0872	0.0897 0.0689	0.1040 0.0793	0.0921	Ave		0.0893				13.2		30.0			
Cyclohexane	+++++ 0.1425	0.1691 0.1226	0.1548 0.1394	0.1424 0.1305	0.1392	Ave		0.1425				10.0		30.0			
Benzene	0.9719 0.8371	0.8130 0.7290	0.7661 0.8300	0.8046 0.7613	0.8085	Ave		0.8135				8.5		30.0			
Carbon tetrachloride	0.6565 0.6659	0.6063 0.5750	0.6079 0.6452	0.6274 0.5902	0.6361	Ave		0.6234				4.9		30.0			
2,2,4-Trimethylpentane	1.5876 1.4670	1.3743 1.2570	1.3733 1.3788	1.4171 1.2047	1.4177	Ave		1.3864				8.0		30.0			
Heptane	0.3912 0.2999	0.3109 0.2629	0.2895 0.2964	0.2883 0.2691	0.2906	Ave		0.2999				12.4		30.0			
1,2-Dichloropropane	0.3586 0.3281	0.3045 0.2806	0.3059 0.3240	0.3204 0.3070	0.3126	Ave		0.3158				6.7		30.0			
Trichloroethene	0.4085 0.3931	0.3743 0.3408	0.3763 0.3858	0.3678 0.3587	0.3755	Ave		0.3756				5.2		30.0			
Dibromomethane	0.4752 0.3559	0.3633 0.3090	0.3537 0.3501	0.3408 0.3268	0.3423	Ave		0.3574				13.2		30.0			
Bromodichloromethane	0.6906 0.6353	0.5757 0.5507	0.5838 0.6219	0.5973 0.5645	0.6031	Ave		0.6026				7.0		30.0			
1,4-Dioxane	0.0997 0.1005	0.0702 0.0820	0.0910 0.0930	0.1004 0.0891	0.0937	Ave		0.0911				10.9		30.0			
Methyl methacrylate	0.3723 0.3581	0.2368 0.2806	0.3677 0.3475	0.3579 0.3180	0.3342	Ave		0.3304				13.7		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.5722	0.3773 0.4523	0.5346 0.5435	0.5731 0.4983	0.5049	Ave		0.5070				13.0		30.0			
cis-1,3-Dichloropropene	0.4741 0.5012	0.4180 0.4416	0.4295 0.4945	0.4845 0.4578	0.4660	Ave		0.4630				6.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	0.3989 0.4664	0.3719 0.4015	0.4018 0.4559	0.4322 0.4501	0.4289	Ave		0.4231				7.4		30.0			
Toluene	1.0114 0.9988	0.8610 0.8449	0.8959 0.9507	0.9453 0.9102	0.9416	Ave		0.9289				6.1		30.0			
1,1,2-Trichloroethane	0.3381 0.3059	0.2778 0.2625	0.2822 0.2960	0.2954 0.2942	0.2890	Ave		0.2935				7.1		30.0			
2-Hexanone	0.2837 0.2897	0.1925 0.2340	0.2433 0.2632	0.2780 0.2674	0.2478	Ave		0.2555				11.8		30.0			
Octane	0.3688 0.3310	0.3208 0.2936	0.3216 0.3245	0.3115 0.3150	0.3177	Ave		0.3227				6.3		30.0			
C8 Range	3.7088 3.3499	3.2367 2.9455	3.2085 3.1780	3.1413 2.9857	3.2903	Ave		3.2272				6.9		30.0			
Dibromochloromethane	0.6367 0.7132	0.5741 0.6374	0.5595 0.6998	0.6170 0.6771	0.6566	Ave		0.6413				8.2		30.0			
1,2-Dibromoethane (EDB)	0.4986 0.5659	0.4577 0.4974	0.4679 0.5580	0.5163 0.5568	0.5324	Ave		0.5168				7.7		30.0			
Tetrachloroethene	0.4198 0.3940	0.3621 0.3477	0.3550 0.3896	0.3705 0.3830	0.3753	Ave		0.3775				5.9		30.0			
Chlorobenzene	0.7595 0.8067	0.6921 0.6990	0.7077 0.7737	0.7593 0.7613	0.7543	Ave		0.7459				5.1		30.0			
Ethylbenzene	1.1808 1.2253	0.9588 1.0304	1.1536 1.1754	1.1689 1.1276	1.1477	Ave		1.1298				7.4		30.0			
m-Xylene & p-Xylene	0.8573 0.9340	0.6962 0.7763	0.8836 0.9035	0.8764 0.8390	0.8578	Ave		0.8471				8.5		30.0			
Nonane	0.7106 0.7115	0.6270 0.6192	0.6591 0.6795	0.6704 0.6583	0.6731	Ave		0.6676				4.8		30.0			
Styrene	0.6280 0.7138	0.5266 0.6164	0.6546 0.7465	0.6485 0.7672	0.6546	Ave		0.6618				11.0		30.0			
Bromoform	0.6146 0.7616	0.5332 0.6843	0.5561 0.8010	0.6388 0.8072	0.6770	Ave		0.6749				14.8		30.0			
o-Xylene	0.9520 0.9805	0.7485 0.8013	0.9204 0.9332	0.9610 0.9263	0.9190	Ave		0.9047				8.6		30.0			
1,1,2,2-Tetrachloroethane	0.6939 0.7178	0.5548 0.5877	0.6823 0.7091	0.6926 0.6853	0.6772	Ave		0.6668				8.4		30.0			
1,2,3-Trichloropropane	0.1696 0.1848	0.1293 0.1496	0.1729 0.1822	0.1755 0.1795	0.1731	Ave		0.1685				10.6		30.0			
Isopropylbenzene	1.2658 1.2900	1.0033 1.0667	1.2723 1.2561	1.2792 1.1852	1.2434	Ave		1.2069				8.6		30.0			
Propylbenzene	0.3087 0.3670	0.2592 0.3017	0.3508 0.3749	0.3468 0.3741	0.3434	Ave		0.3363				11.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Chlorotoluene	0.3079 0.3593	0.2910 0.3081	0.3254 0.3572	0.3388 0.3604	0.3320	Ave		0.3311				7.6		30.0			
4-Ethyltoluene	1.1675 1.2925	0.8859 1.0479	1.2302 1.2735	1.2431 1.1908	1.2203	Ave		1.1724				11.0		30.0			
1,3,5-Trimethylbenzene	0.4603 0.5383	0.3698 0.4402	0.5108 0.5520	0.5163 0.5400	0.5131	Ave		0.4934				12.0		30.0			
Alpha Methyl Styrene	0.4812 0.5755	0.3649 0.4723	0.4747 0.5881	0.5104 0.5923	0.5252	Ave		0.5094				14.2		30.0			
Decane	0.7951 0.8655	0.7282 0.7266	0.8270 0.8319	0.8126 0.7765	0.8206	Ave		0.7982				5.9		30.0			
tert-Butylbenzene	1.0111 1.1756	0.8036 0.9673	1.0959 1.1938	1.1309 1.1303	1.1100	Ave		1.0687				11.5		30.0			
1,2,4-Trimethylbenzene	0.9736 1.0935	0.7308 0.8996	1.0469 1.1003	1.0337 1.0400	1.0297	Ave		0.9942				11.7		30.0			
sec-Butylbenzene	1.3912 1.6027	1.1080 1.2917	1.5114 1.5526	1.5382 1.4044	1.5148	Ave		1.4350				10.9		30.0			
1,3-Dichlorobenzene	0.8133 0.8022	0.6766 0.6935	0.7292 0.8273	0.7209 0.8326	0.7319	Ave		0.7586				7.9		30.0			
Benzyl chloride	0.9064 0.9483	0.5611 0.7935	0.7372 1.0012	0.8256 0.9525	0.8322	Ave		0.8398				16.1		30.0			
1,4-Dichlorobenzene	0.8231 0.8028	0.6700 0.6913	0.7210 0.8333	0.7169 0.8412	0.7151	Ave		0.7572				8.9		30.0			
4-Isopropyltoluene	1.1434 1.3331	0.8855 1.0752	1.2779 1.2944	1.2788 1.1882	1.2660	Ave		1.1936				11.9		30.0			
1,2,3-Trimethylbenzene	0.7916 0.9263	0.6464 0.7445	0.8873 0.9029	0.8904 0.8545	0.8787	Ave		0.8358				10.9		30.0			
1,2-Dichlorobenzene	0.7448 0.7579	0.5908 0.6393	0.7221 0.7743	0.6973 0.7707	0.6973	Ave		0.7105				8.8		30.0			
Butylbenzene	1.2268 1.2961	0.9214 1.0502	1.2808 1.2548	1.2536 1.1304	1.2440	Ave		1.1842				10.6		30.0			
Undecane	0.7761 0.9173	0.6411 0.7632	0.8830 0.8597	0.8590 0.7837	0.9065	Ave		0.8211				10.8		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3100	+++++ 0.2561	0.2679 0.3239	0.2720 0.3214	0.2831	Ave		0.2906				9.5		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.4513	+++++ 1.1813	1.4122 1.3682	1.3277 1.1673	1.3979	Ave		1.3294				8.5		30.0			
Dodecane	0.6995 0.7741	0.6149 0.5483	0.7564 0.4949	0.7096 0.3087	0.7793	Ave		0.6317				24.9		30.0			
1,2,4-Trichlorobenzene	0.7605 0.6101	0.5598 0.5241	0.6393 0.5945	0.5036 0.4054	0.5551	Ave		0.5725				17.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Naphthalene	1.5113 1.1224	1.0425 0.9250	1.2143 1.0011	1.0039 0.6694	1.0619	Ave		1.0613				21.3		30.0			
Hexachlorobutadiene	0.7341 0.7632	0.6414 0.6439	0.8051 0.6655	0.6852 0.4483	0.7854	Ave		0.6858				15.7		30.0			
1,2,3-Trichlorobenzene	0.7944 0.5478	0.5867 0.4391	0.6112 0.4480	0.4750 +++++	0.5167	Ave		0.5524				21.0		30.0			
2-Methylnaphthalene	+++++ 0.1474	+++++ 0.1121	+++++ 0.0785	0.1081 +++++	0.1116	Ave		0.1115				21.9		50.0			
1-Methylnaphthalene	+++++ 0.1261	+++++ 0.0954	+++++ 0.0635	0.0916 +++++	0.0987	Ave		0.0950				23.4		50.0			
4-Bromofluorobenzene (Surr)	0.7191 0.7535	0.7352 0.7424	0.7318 0.7076	0.7292 0.7188	0.7380	Ave		0.7306				1.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: ICV 140-14278/14 Calibration Date: 09/08/2017 00:54

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JLCSI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	0.4054	0.4059		2.00	2.00	0.1	35.0
Propene	Ave	1.422	1.403		1.97	2.00	-1.3	35.0
Dichlorodifluoromethane	Ave	3.830	3.892		2.03	2.00	1.6	35.0
Chloromethane	Ave	0.5129	0.5093		1.99	2.00	-0.7	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.700	2.680		1.99	2.00	-0.7	35.0
Vinyl chloride	Ave	1.587	1.656		2.09	2.00	4.3	35.0
1,3-Butadiene	Ave	1.259	1.241		1.97	2.00	-1.4	35.0
Butane	Ave	2.553	2.561		2.01	2.00	0.3	35.0
Bromomethane	Ave	1.485	1.461		1.97	2.00	-1.6	35.0
Chloroethane	Ave	0.7594	0.7584		2.00	2.00	-0.1	35.0
Ethanol	Ave	0.6954	0.5734		8.25	10.0	-17.6	35.0
Vinyl bromide	Ave	1.449	1.506		2.08	2.00	3.9	35.0
2-Methylbutane	Ave	2.040	1.977		1.94	2.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.943	3.885		1.97	2.00	-1.5	35.0
Acrolein	Ave	0.3822	0.3753		1.97	2.00	-1.8	35.0
Acetonitrile	Ave	0.6047	0.5194		1.72	2.00	-14.1	35.0
Acetone	Ave	0.6300	0.4560		4.35	6.00	-27.6	35.0
Isopropyl alcohol	Ave	1.615	1.327		4.93	6.00	-17.8	35.0
Pentane	Ave	0.2709	0.2494		1.84	2.00	-8.0	35.0
Ethyl ether	Ave	1.601	1.536		1.92	2.00	-4.0	35.0
1,1-Dichloroethene	Ave	1.442	1.381		1.92	2.00	-4.2	35.0
Acrylonitrile	Ave	0.9414	0.8569		1.82	2.00	-9.0	35.0
tert-Butyl alcohol	Ave	1.677	1.696		2.02	2.00	1.2	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.059	2.920		1.91	2.00	-4.6	35.0
Methylene Chloride	Ave	1.502	1.303		1.74	2.00	-13.2	35.0
3-Chloropropene	Ave	1.400	1.341		1.92	2.00	-4.2	35.0
Carbon disulfide	Ave	4.344	4.057		1.87	2.00	-6.6	35.0
trans-1,2-Dichloroethene	Ave	1.426	1.346		1.89	2.00	-5.6	35.0
Methyl tert-butyl ether	Ave	3.193	2.777		1.74	2.00	-13.0	35.0
1,1-Dichloroethane	Ave	2.768	2.704		1.95	2.00	-2.3	35.0
Vinyl acetate	Ave	3.441	3.183		1.85	2.00	-7.5	35.0
2-Butanone (MEK)	Ave	0.6289	0.4496		1.43	2.00	-28.5	35.0
Hexane	Ave	1.306	1.157		1.77	2.00	-11.4	35.0
cis-1,2-Dichloroethene	Ave	1.461	1.445		1.98	2.00	-1.1	35.0
Ethyl acetate	Ave	2.761	2.135		1.55	2.00	-22.7	35.0
Chloroform	Ave	3.173	3.015		1.90	2.00	-5.0	35.0
Tetrahydrofuran	Ave	1.594	1.255		1.58	2.00	-21.3	35.0
1,1,1-Trichloroethane	Ave	3.122	3.013		1.93	2.00	-3.5	35.0
1,2-Dichloroethane	Ave	0.3687	0.3548		1.93	2.00	-3.8	35.0
1-Butanol	Ave	0.0893	0.0814		1.82	2.00	-8.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: ICV 140-14278/14 Calibration Date: 09/08/2017 00:54

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JLCSI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Cyclohexane	Ave	0.1425	0.1253		1.76	2.00	-12.1	35.0
Benzene	Ave	0.8135	0.7725		1.90	2.00	-5.0	35.0
Carbon tetrachloride	Ave	0.6234	0.5794		1.86	2.00	-7.1	35.0
2,2,4-Trimethylpentane	Ave	1.386	1.322		1.91	2.00	-4.7	35.0
Heptane	Ave	0.2999	0.2678		1.79	2.00	-10.7	35.0
1,2-Dichloropropane	Ave	0.3158	0.3034		1.92	2.00	-3.9	35.0
Trichloroethene	Ave	0.3756	0.3517		1.87	2.00	-6.4	35.0
Dibromomethane	Ave	0.3574	0.3218		1.80	2.00	-10.0	35.0
Bromodichloromethane	Ave	0.6026	0.5796		1.92	2.00	-3.8	35.0
1,4-Dioxane	Ave	0.0911	0.0650		1.43	2.00	-28.6	35.0
Methyl methacrylate	Ave	0.3304	0.2497		1.51	2.00	-24.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5070	0.3574		1.41	2.00	-29.5	35.0
cis-1,3-Dichloropropene	Ave	0.4630	0.4782		2.07	2.00	3.3	35.0
trans-1,3-Dichloropropene	Ave	0.4231	0.4160		1.97	2.00	-1.7	35.0
Toluene	Ave	0.9289	0.9068		1.95	2.00	-2.4	35.0
1,1,2-Trichloroethane	Ave	0.2935	0.2729		1.86	2.00	-7.0	35.0
2-Hexanone	Ave	0.2555	0.1836		1.44	2.00	-28.2	35.0
Octane	Ave	0.3227	0.3106		1.93	2.00	-3.7	35.0
Dibromochloromethane	Ave	0.6413	0.6508		2.03	2.00	1.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5168	0.5225		2.02	2.00	1.1	35.0
Tetrachloroethene	Ave	0.3775	0.3650		1.94	2.00	-3.3	35.0
Chlorobenzene	Ave	0.7459	0.7605		2.04	2.00	2.0	35.0
Ethylbenzene	Ave	1.130	1.063		1.88	2.00	-5.9	35.0
m-Xylene & p-Xylene	Ave	0.8471	0.7908		3.74	4.00	-6.7	35.0
Nonane	Ave	0.6676	0.6588		1.97	2.00	-1.3	35.0
Styrene	Ave	0.6618	0.6131		1.85	2.00	-7.4	35.0
Bromoform	Ave	0.6749	0.6596		1.96	2.00	-2.3	35.0
o-Xylene	Ave	0.9047	0.8034		1.78	2.00	-11.2	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6668	0.5566		1.67	2.00	-16.5	35.0
1,2,3-Trichloropropane	Ave	0.1685	0.1392		1.65	2.00	-17.4	35.0
Isopropylbenzene	Ave	1.207	1.076		1.78	2.00	-10.8	35.0
Propylbenzene	Ave	0.3363	0.2916		1.74	2.00	-13.3	35.0
2-Chlorotoluene	Ave	0.3311	0.3203		1.94	2.00	-3.3	35.0
4-Ethyltoluene	Ave	1.172	0.9426		1.61	2.00	-19.6	35.0
1,3,5-Trimethylbenzene	Ave	0.4934	0.4085		1.66	2.00	-17.2	35.0
Alpha Methyl Styrene	Ave	0.5094	0.4364		1.71	2.00	-14.3	35.0
Decane	Ave	0.7982	0.7429		1.86	2.00	-6.9	35.0
tert-Butylbenzene	Ave	1.069	0.8926		1.67	2.00	-16.5	35.0
1,2,4-Trimethylbenzene	Ave	0.9942	0.8232		1.66	2.00	-17.2	35.0
sec-Butylbenzene	Ave	1.435	1.211		1.69	2.00	-15.6	35.0
1,3-Dichlorobenzene	Ave	0.7586	0.6816		1.80	2.00	-10.2	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: ICV 140-14278/14 Calibration Date: 09/08/2017 00:54

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JLCSI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzyl chloride	Ave	0.8398	0.6948		1.66	2.00	-17.3	35.0
1,4-Dichlorobenzene	Ave	0.7572	0.6753		1.78	2.00	-10.8	35.0
4-Isopropyltoluene	Ave	1.194	0.9699		1.63	2.00	-18.7	35.0
1,2,3-Trimethylbenzene	Ave	0.8358	0.7019		1.68	2.00	-16.0	35.0
1,2-Dichlorobenzene	Ave	0.7105	0.6218		1.75	2.00	-12.5	35.0
Butylbenzene	Ave	1.184	0.9519		1.61	2.00	-19.6	35.0
Undecane	Ave	0.8211	0.6859		1.67	2.00	-16.5	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.2906	0.1514		1.04	2.00	-47.9*	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.329	0.5219		0.786	2.00	-60.7*	35.0
Dodecane	Ave	0.6317	0.5384		1.71	2.00	-14.8	35.0
1,2,4-Trichlorobenzene	Ave	0.5725	0.4508		1.58	2.00	-21.3	35.0
Naphthalene	Ave	1.061	0.7655		1.44	2.00	-27.9	35.0
Hexachlorobutadiene	Ave	0.6858	0.5876		1.71	2.00	-14.3	35.0
1,2,3-Trichlorobenzene	Ave	0.5524	0.4034		1.46	2.00	-27.0	35.0
2-Methylnaphthalene	Ave	0.1115	0.0598		2.46	4.59	-46.4	50.0
1-Methylnaphthalene	Ave	0.0950	0.0563		2.73	4.60	-40.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7306	0.7281		3.99	4.00	-0.3	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: CCVIS 140-15146/2 Calibration Date: 10/16/2017 10:23

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JCCVJ16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	0.4054	0.4456		2.20	2.00	9.9	30.0
Propene	Ave	1.422	1.347		1.90	2.00	-5.3	30.0
Dichlorodifluoromethane	Ave	3.830	3.870		2.02	2.00	1.0	30.0
Chloromethane	Ave	0.5129	0.5266		2.05	2.00	2.7	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.700	2.971		2.20	2.00	10.0	30.0
Vinyl chloride	Ave	1.587	1.761		2.22	2.00	11.0	30.0
1,3-Butadiene	Ave	1.259	1.338		2.13	2.00	6.3	30.0
Butane	Ave	2.553	2.499		1.96	2.00	-2.1	30.0
Bromomethane	Ave	1.485	1.616		2.18	2.00	8.8	30.0
Chloroethane	Ave	0.7594	0.8637		2.28	2.00	13.7	30.0
Ethanol	Ave	0.6954	0.7080		10.2	10.0	1.8	30.0
Vinyl bromide	Ave	1.449	1.675		2.31	2.00	15.5	30.0
2-Methylbutane	Ave	2.040	2.072		2.03	2.00	1.6	30.0
Trichlorofluoromethane	Ave	3.943	4.122		2.09	2.00	4.5	30.0
Acrolein	Ave	0.3822	0.4654		2.44	2.00	21.8	30.0
Acetonitrile	Ave	0.6047	0.6047		2.00	2.00	0.0	30.0
Acetone	Ave	0.6300	0.5657		5.39	6.00	-10.2	30.0
Pentane	Ave	0.2709	0.2696		1.99	2.00	-0.5	30.0
Isopropyl alcohol	Ave	1.615	1.752		6.51	6.00	8.5	30.0
Ethyl ether	Ave	1.601	1.625		2.03	2.00	1.5	30.0
1,1-Dichloroethene	Ave	1.442	1.525		2.12	2.00	5.8	30.0
Acrylonitrile	Ave	0.9414	0.9487		2.02	2.00	0.8	30.0
tert-Butyl alcohol	Ave	1.677	2.267		2.71	2.00	35.2*	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.059	3.273		2.14	2.00	7.0	30.0
Methylene Chloride	Ave	1.502	1.459		1.94	2.00	-2.9	30.0
3-Chloropropene	Ave	1.400	1.313		1.88	2.00	-6.2	30.0
Carbon disulfide	Ave	4.344	4.128		1.90	2.00	-5.0	30.0
trans-1,2-Dichloroethene	Ave	1.426	1.489		2.09	2.00	4.4	30.0
Methyl tert-butyl ether	Ave	3.193	3.377		2.12	2.00	5.8	30.0
1,1-Dichloroethane	Ave	2.768	2.840		2.05	2.00	2.6	30.0
Vinyl acetate	Ave	3.441	3.445		2.00	2.00	0.1	30.0
2-Butanone (MEK)	Ave	0.6289	0.5738		1.83	2.00	-8.8	30.0
Hexane	Ave	1.306	1.202		1.84	2.00	-8.0	30.0
cis-1,2-Dichloroethene	Ave	1.461	1.527		2.09	2.00	4.5	30.0
Ethyl acetate	Ave	2.761	2.634		1.91	2.00	-4.6	30.0
Chloroform	Ave	3.173	3.164		2.00	2.00	-0.3	30.0
Tetrahydrofuran	Ave	1.594	1.444		1.81	2.00	-9.4	30.0
1,1,1-Trichloroethane	Ave	3.122	3.109		1.99	2.00	-0.4	30.0
1,2-Dichloroethane	Ave	0.3687	0.3829		2.08	2.00	3.8	30.0
1-Butanol	Ave	0.0893	0.1094		2.45	2.00	22.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: CCVIS 140-15146/2 Calibration Date: 10/16/2017 10:23

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JCCVJ16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzene	Ave	0.8135	0.8465		2.08	2.00	4.1	30.0
Cyclohexane	Ave	0.1425	0.1376		1.93	2.00	-3.5	30.0
Carbon tetrachloride	Ave	0.6234	0.6557		2.10	2.00	5.2	30.0
2,2,4-Trimethylpentane	Ave	1.386	1.441		2.08	2.00	3.9	30.0
Heptane	Ave	0.2999	0.2962		1.98	2.00	-1.2	30.0
1,2-Dichloropropane	Ave	0.3158	0.3109		1.97	2.00	-1.5	30.0
Trichloroethene	Ave	0.3756	0.3932		2.09	2.00	4.7	30.0
Dibromomethane	Ave	0.3574	0.3553		1.99	2.00	-0.6	30.0
Bromodichloromethane	Ave	0.6026	0.6203		2.06	2.00	2.9	30.0
1,4-Dioxane	Ave	0.0911	0.0909		2.00	2.00	-0.2	30.0
Methyl methacrylate	Ave	0.3304	0.3169		1.92	2.00	-4.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5070	0.5659		2.23	2.00	11.6	30.0
cis-1,3-Dichloropropene	Ave	0.4630	0.4921		2.13	2.00	6.3	30.0
trans-1,3-Dichloropropene	Ave	0.4231	0.4651		2.20	2.00	9.9	30.0
Toluene	Ave	0.9289	0.9929		2.14	2.00	6.9	30.0
1,1,2-Trichloroethane	Ave	0.2935	0.3133		2.14	2.00	6.7	30.0
2-Hexanone	Ave	0.2555	0.3197		2.50	2.00	25.1	30.0
Octane	Ave	0.3227	0.3532		2.19	2.00	9.4	30.0
Dibromochloromethane	Ave	0.6413	0.7146		2.23	2.00	11.4	30.0
1,2-Dibromoethane (EDB)	Ave	0.5168	0.5722		2.22	2.00	10.7	30.0
Tetrachloroethene	Ave	0.3775	0.4136		2.19	2.00	9.6	30.0
Chlorobenzene	Ave	0.7459	0.8230		2.21	2.00	10.3	30.0
Ethylbenzene	Ave	1.130	1.203		2.13	2.00	6.5	30.0
m-Xylene & p-Xylene	Ave	0.8471	0.9254		4.37	4.00	9.2	30.0
Nonane	Ave	0.6676	0.7228		2.17	2.00	8.3	30.0
Styrene	Ave	0.6618	0.7065		2.14	2.00	6.8	30.0
Bromoform	Ave	0.6749	0.6969		2.07	2.00	3.3	30.0
o-Xylene	Ave	0.9047	0.9434		2.09	2.00	4.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6668	0.7056		2.12	2.00	5.8	30.0
1,2,3-Trichloropropane	Ave	0.1685	0.1789		2.12	2.00	6.2	30.0
Isopropylbenzene	Ave	1.207	1.326		2.20	2.00	9.9	30.0
Propylbenzene	Ave	0.3363	0.3713		2.21	2.00	10.4	30.0
2-Chlorotoluene	Ave	0.3311	0.3611		2.18	2.00	9.0	30.0
4-Ethyltoluene	Ave	1.172	1.216		2.08	2.00	3.8	30.0
1,3,5-Trimethylbenzene	Ave	0.4934	0.5358		2.17	2.00	8.6	30.0
Alpha Methyl Styrene	Ave	0.5094	0.5552		2.18	2.00	9.0	30.0
Decane	Ave	0.7982	0.8598		2.16	2.00	7.7	30.0
tert-Butylbenzene	Ave	1.069	1.175		2.20	2.00	10.0	30.0
1,2,4-Trimethylbenzene	Ave	0.9942	1.070		2.15	2.00	7.6	30.0
sec-Butylbenzene	Ave	1.435	1.597		2.23	2.00	11.3	30.0
1,3-Dichlorobenzene	Ave	0.7586	0.7908		2.09	2.00	4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: CCVIS 140-15146/2 Calibration Date: 10/16/2017 10:23

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JCCVJ16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzyl chloride	Ave	0.8398	0.8746		2.08	2.00	4.1	30.0
1,4-Dichlorobenzene	Ave	0.7572	0.7727		2.04	2.00	2.0	30.0
4-Isopropyltoluene	Ave	1.194	1.294		2.17	2.00	8.4	30.0
1,2,3-Trimethylbenzene	Ave	0.8358	0.9110		2.18	2.00	9.0	30.0
1,2-Dichlorobenzene	Ave	0.7105	0.7344		2.07	2.00	3.4	30.0
Butylbenzene	Ave	1.184	1.262		2.13	2.00	6.6	30.0
Undecane	Ave	0.8211	0.8491		2.07	2.00	3.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2906	0.1803		1.24	2.00	-38.0*	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.329	0.7062		1.06	2.00	-46.9*	30.0
Dodecane	Ave	0.6317	0.7117		2.25	2.00	12.6	30.0
1,2,4-Trichlorobenzene	Ave	0.5725	0.5218		1.82	2.00	-8.9	30.0
Naphthalene	Ave	1.061	0.9570		1.80	2.00	-9.8	30.0
Hexachlorobutadiene	Ave	0.6858	0.7083		2.07	2.00	3.3	30.0
1,2,3-Trichlorobenzene	Ave	0.5524	0.4884		1.77	2.00	-11.6	30.0
2-Methylnaphthalene	Ave	0.1115	0.0590		2.43	4.59	-47.1	50.0
1-Methylnaphthalene	Ave	0.0950	0.0523		2.53	4.60	-45.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7306	0.6938		3.80	4.00	-5.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: CCVIS 140-15230/6 Calibration Date: 10/17/2017 12:13

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JCCVJ17A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	0.4054	0.4304		2.12	2.00	6.2	30.0
Propene	Ave	1.422	1.364		1.92	2.00	-4.1	30.0
Dichlorodifluoromethane	Ave	3.830	3.933		2.05	2.00	2.7	30.0
Chloromethane	Ave	0.5129	0.5306		2.07	2.00	3.4	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.700	2.923		2.17	2.00	8.2	30.0
Vinyl chloride	Ave	1.587	1.759		2.22	2.00	10.8	30.0
1,3-Butadiene	Ave	1.259	1.295		2.06	2.00	2.9	30.0
Butane	Ave	2.553	2.585		2.03	2.00	1.2	30.0
Bromomethane	Ave	1.485	1.552		2.09	2.00	4.5	30.0
Chloroethane	Ave	0.7594	0.7881		2.08	2.00	3.8	30.0
Ethanol	Ave	0.6954	0.6450		9.28	10.0	-7.3	30.0
Vinyl bromide	Ave	1.449	1.601		2.21	2.00	10.4	30.0
2-Methylbutane	Ave	2.040	2.045		2.01	2.00	0.2	30.0
Trichlorofluoromethane	Ave	3.943	4.129		2.10	2.00	4.7	30.0
Acrolein	Ave	0.3822	0.5001		2.62	2.00	30.8*	30.0
Acetonitrile	Ave	0.6047	0.5827		1.93	2.00	-3.6	30.0
Acetone	Ave	0.6300	0.5372		5.12	6.00	-14.7	30.0
Pentane	Ave	0.2709	0.2535		1.87	2.00	-6.4	30.0
Isopropyl alcohol	Ave	1.615	1.556		5.79	6.00	-3.6	30.0
Ethyl ether	Ave	1.601	1.608		2.01	2.00	0.4	30.0
1,1-Dichloroethene	Ave	1.442	1.433		1.99	2.00	-0.6	30.0
Acrylonitrile	Ave	0.9414	0.9167		1.95	2.00	-2.6	30.0
tert-Butyl alcohol	Ave	1.677	1.802		2.15	2.00	7.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.059	3.053		2.00	2.00	-0.2	30.0
Methylene Chloride	Ave	1.502	1.338		1.78	2.00	-10.9	30.0
3-Chloropropene	Ave	1.400	1.235		1.77	2.00	-11.7	30.0
Carbon disulfide	Ave	4.344	4.143		1.91	2.00	-4.6	30.0
trans-1,2-Dichloroethene	Ave	1.426	1.384		1.94	2.00	-3.0	30.0
Methyl tert-butyl ether	Ave	3.193	3.086		1.93	2.00	-3.3	30.0
1,1-Dichloroethane	Ave	2.768	2.724		1.97	2.00	-1.6	30.0
Vinyl acetate	Ave	3.441	3.401		1.98	2.00	-1.2	30.0
2-Butanone (MEK)	Ave	0.6289	0.5209		1.66	2.00	-17.2	30.0
Hexane	Ave	1.306	1.158		1.77	2.00	-11.3	30.0
cis-1,2-Dichloroethene	Ave	1.461	1.453		1.99	2.00	-0.6	30.0
Ethyl acetate	Ave	2.761	2.432		1.76	2.00	-11.9	30.0
Chloroform	Ave	3.173	3.082		1.94	2.00	-2.8	30.0
Tetrahydrofuran	Ave	1.594	1.384		1.74	2.00	-13.2	30.0
1,1,1-Trichloroethane	Ave	3.122	3.014		1.93	2.00	-3.4	30.0
1,2-Dichloroethane	Ave	0.3687	0.3461		1.88	2.00	-6.1	30.0
1-Butanol	Ave	0.0893	0.0788		1.77	2.00	-11.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: CCVIS 140-15230/6 Calibration Date: 10/17/2017 12:13

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JCCVJ17A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzene	Ave	0.8135	0.7719		1.90	2.00	-5.1	30.0
Cyclohexane	Ave	0.1425	0.1230		1.73	2.00	-13.7	30.0
Carbon tetrachloride	Ave	0.6234	0.5853		1.88	2.00	-6.1	30.0
2,2,4-Trimethylpentane	Ave	1.386	1.275		1.84	2.00	-8.1	30.0
Heptane	Ave	0.2999	0.2605		1.74	2.00	-13.1	30.0
1,2-Dichloropropane	Ave	0.3158	0.2912		1.85	2.00	-7.8	30.0
Trichloroethene	Ave	0.3756	0.3474		1.85	2.00	-7.5	30.0
Dibromomethane	Ave	0.3574	0.3137		1.76	2.00	-12.3	30.0
Bromodichloromethane	Ave	0.6026	0.5517		1.83	2.00	-8.4	30.0
1,4-Dioxane	Ave	0.0911	0.0734		1.61	2.00	-19.4	30.0
Methyl methacrylate	Ave	0.3304	0.2727		1.65	2.00	-17.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5070	0.4060		1.60	2.00	-19.9	30.0
cis-1,3-Dichloropropene	Ave	0.4630	0.4516		1.95	2.00	-2.5	30.0
trans-1,3-Dichloropropene	Ave	0.4231	0.4090		1.93	2.00	-3.3	30.0
Toluene	Ave	0.9289	0.9192		1.98	2.00	-1.0	30.0
1,1,2-Trichloroethane	Ave	0.2935	0.2749		1.87	2.00	-6.3	30.0
2-Hexanone	Ave	0.2555	0.2044		1.60	2.00	-20.0	30.0
Octane	Ave	0.3227	0.3027		1.88	2.00	-6.2	30.0
Dibromochloromethane	Ave	0.6413	0.6271		1.96	2.00	-2.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.5168	0.5133		1.99	2.00	-0.7	30.0
Tetrachloroethene	Ave	0.3775	0.3594		1.91	2.00	-4.8	30.0
Chlorobenzene	Ave	0.7459	0.7418		1.99	2.00	-0.6	30.0
Ethylbenzene	Ave	1.130	1.090		1.93	2.00	-3.6	30.0
m-Xylene & p-Xylene	Ave	0.8471	0.8323		3.93	4.00	-1.8	30.0
Nonane	Ave	0.6676	0.6460		1.94	2.00	-3.2	30.0
Styrene	Ave	0.6618	0.6229		1.88	2.00	-5.9	30.0
Bromoform	Ave	0.6749	0.6122		1.82	2.00	-9.3	30.0
o-Xylene	Ave	0.9047	0.8424		1.86	2.00	-6.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6668	0.6106		1.83	2.00	-8.4	30.0
1,2,3-Trichloropropane	Ave	0.1685	0.1541		1.83	2.00	-8.5	30.0
Isopropylbenzene	Ave	1.207	1.156		1.92	2.00	-4.2	30.0
Propylbenzene	Ave	0.3363	0.3220		1.92	2.00	-4.2	30.0
2-Chlorotoluene	Ave	0.3311	0.3285		1.99	2.00	-0.8	30.0
4-Ethyltoluene	Ave	1.172	1.018		1.74	2.00	-13.1	30.0
1,3,5-Trimethylbenzene	Ave	0.4934	0.4514		1.83	2.00	-8.5	30.0
Alpha Methyl Styrene	Ave	0.5094	0.4717		1.85	2.00	-7.4	30.0
Decane	Ave	0.7982	0.7582		1.90	2.00	-5.0	30.0
tert-Butylbenzene	Ave	1.069	0.9949		1.86	2.00	-6.9	30.0
1,2,4-Trimethylbenzene	Ave	0.9942	0.9132		1.84	2.00	-8.1	30.0
sec-Butylbenzene	Ave	1.435	1.351		1.88	2.00	-5.9	30.0
1,3-Dichlorobenzene	Ave	0.7586	0.6926		1.83	2.00	-8.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab Sample ID: CCVIS 140-15230/6 Calibration Date: 10/17/2017 12:13

Instrument ID: MJ Calib Start Date: 09/07/2017 16:27

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/07/2017 22:36

Lab File ID: JCCVJ17A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzyl chloride	Ave	0.8398	0.7515		1.79	2.00	-10.5	30.0
1,4-Dichlorobenzene	Ave	0.7572	0.6807		1.80	2.00	-10.1	30.0
4-Isopropyltoluene	Ave	1.194	1.096		1.84	2.00	-8.2	30.0
1,2,3-Trimethylbenzene	Ave	0.8358	0.7756		1.86	2.00	-7.2	30.0
1,2-Dichlorobenzene	Ave	0.7105	0.6448		1.82	2.00	-9.3	30.0
Butylbenzene	Ave	1.184	1.074		1.81	2.00	-9.3	30.0
Undecane	Ave	0.8211	0.7771		1.89	2.00	-5.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2906	0.1523		1.05	2.00	-47.6*	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.329	0.5976		0.899	2.00	-55.1*	30.0
Dodecane	Ave	0.6317	0.5758		1.82	2.00	-8.9	30.0
1,2,4-Trichlorobenzene	Ave	0.5725	0.4554		1.59	2.00	-20.5	30.0
Naphthalene	Ave	1.061	0.8526		1.61	2.00	-19.7	30.0
Hexachlorobutadiene	Ave	0.6858	0.6809		1.99	2.00	-0.7	30.0
1,2,3-Trichlorobenzene	Ave	0.5524	0.4202		1.52	2.00	-23.9	30.0
2-Methylnaphthalene	Ave	0.1115	0.0305		1.26	4.59	-72.6*	50.0
1-Methylnaphthalene	Ave	0.0950	0.0273		1.32	4.60	-71.3*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7306	0.7129		3.90	4.00	-2.4	30.0

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab File ID: J500BJ16.D Lab Sample ID: MB 140-15146/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MJ Date Analyzed: 10/16/2017 11:54

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-15146/1002	JCCVJ16-LCS.d	10/16/2017 10:23
SV-187-MB-1	140-9562-1	JJ16P107.D	10/16/2017 19:14
SV-186-MB-1	140-9562-2	JJ16P108.D	10/16/2017 19:59
SV-185-MB-1	140-9562-3	JJ16P109.D	10/16/2017 20:45
SV-184-MB-1	140-9562-4	JJ16P110.D	10/16/2017 21:31
SV-183-MB-1	140-9562-5	JJ16P111.D	10/16/2017 22:17

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 140-15146/4

Matrix: Air | Lab File ID: J500BJ16.D

Analysis Method: TO 15 LL | Date Collected:

Sample wt/vol: 500(mL) | Date Analyzed: 10/16/2017 11:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.023
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.015
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.015
67-66-3	Chloroform	119.38	ND		0.080	0.015
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.024
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.010
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.019
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.014
100-41-4	Ethylbenzene	106.17	ND		0.080	0.027
75-09-2	Methylene Chloride	84.93	ND		0.20	0.13
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.068
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.016
108-88-3	Toluene	92.14	ND		0.12	0.12
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.020
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.039
71-55-6	1,1,1-Trichloroethane	133.41	0.0175	J	0.080	0.012
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.021
79-01-6	Trichloroethene	131.39	ND		0.040	0.014
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.034
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.025
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.026
75-01-4	Vinyl chloride	62.50	ND		0.040	0.029
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 140-15146/4

Matrix: Air | Lab File ID: J500BJ16.D

Analysis Method: TO 15 LL | Date Collected:

Sample wt/vol: 500(mL) | Date Analyzed: 10/16/2017 11:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.073
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.094
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.053
67-66-3	Chloroform	119.38	ND		0.39	0.073
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.095
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.13
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.040
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.077
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.056
100-41-4	Ethylbenzene	106.17	ND		0.35	0.12
75-09-2	Methylene Chloride	84.93	ND		0.69	0.45
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.25
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.11
108-88-3	Toluene	92.14	ND		0.45	0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.079
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.29
71-55-6	1,1,1-Trichloroethane	133.41	0.0956	J	0.44	0.065
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.11
79-01-6	Trichloroethene	131.39	ND		0.21	0.075
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.12
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.13
75-01-4	Vinyl chloride	62.50	ND		0.10	0.074
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Lab File ID: J500BJ17.D Lab Sample ID: MB 140-15230/8

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MJ Date Analyzed: 10/17/2017 15:03

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-15230/1006	JCCVJ17A-LCS.d	10/17/2017 12:13
SV-183-MB-1 DL	140-9562-5 DL	JJ17P105.D	10/17/2017 19:41
SV-182-MB-1	140-9562-6	JJ17P106.D	10/17/2017 21:13
SV-181-MB-1	140-9562-7	JJ17P107X.D	10/17/2017 21:59
SV-180-MB-1	140-9562-8	JJ17P108.D	10/17/2017 22:45
SV-179-MB-1	140-9562-9	JJ17P109.D	10/17/2017 23:31
SV-178-MB-1	140-9562-10	JJ17P110.D	10/18/2017 00:17
SV-181-MB-1 DL	140-9562-7 DL	JJ17P107DL.D	10/18/2017 10:55

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 140-15230/8

Matrix: Air | Lab File ID: J500BJ17.D

Analysis Method: TO 15 LL | Date Collected:

Sample wt/vol: 500(mL) | Date Analyzed: 10/17/2017 15:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.023
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.015
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.015
67-66-3	Chloroform	119.38	ND		0.080	0.015
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.024
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.010
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.019
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.014
100-41-4	Ethylbenzene	106.17	ND		0.080	0.027
75-09-2	Methylene Chloride	84.93	ND		0.20	0.13
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.068
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.016
108-88-3	Toluene	92.14	ND		0.12	0.12
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.020
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.039
71-55-6	1,1,1-Trichloroethane	133.41	0.0167	J	0.080	0.012
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.021
79-01-6	Trichloroethene	131.39	ND		0.040	0.014
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.034
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.025
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.026
75-01-4	Vinyl chloride	62.50	ND		0.040	0.029
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 140-15230/8

Matrix: Air | Lab File ID: J500BJ17.D

Analysis Method: TO 15 LL | Date Collected:

Sample wt/vol: 500(mL) | Date Analyzed: 10/17/2017 15:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15230 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.073
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.094
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.053
67-66-3	Chloroform	119.38	ND		0.39	0.073
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.095
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.13
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.040
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.077
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.056
100-41-4	Ethylbenzene	106.17	ND		0.35	0.12
75-09-2	Methylene Chloride	84.93	ND		0.69	0.45
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.25
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.11
108-88-3	Toluene	92.14	ND		0.45	0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.079
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.29
71-55-6	1,1,1-Trichloroethane	133.41	0.0909	J	0.44	0.065
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.11
79-01-6	Trichloroethene	131.39	ND		0.21	0.075
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.12
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.13
75-01-4	Vinyl chloride	62.50	ND		0.10	0.074
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
SV-187-MB-1	140-9562-1	100
SV-186-MB-1	140-9562-2	98
SV-185-MB-1	140-9562-3	100
SV-184-MB-1	140-9562-4	97
SV-183-MB-1	140-9562-5	94
SV-183-MB-1 DL	140-9562-5 DL	93
SV-182-MB-1	140-9562-6	100
SV-181-MB-1	140-9562-7	92
SV-181-MB-1 DL	140-9562-7 DL	96
SV-180-MB-1	140-9562-8	96
SV-179-MB-1	140-9562-9	99
SV-178-MB-1	140-9562-10	101
	MB 140-15146/4	93
	MB 140-15230/8	94
	LCS 140-15146/1002	95
	LCS 140-15230/1006	98

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Matrix: Air Level: Low Lab File ID: JCCVJ16-LCS.d

Lab ID: LCS 140-15146/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	2.00	2.08	104	70-130	
Carbon tetrachloride	2.00	2.10	105	70-130	
Chlorodifluoromethane	2.00	2.20	110	60-140	
Chloroform	2.00	2.00	100	70-130	
cis-1,2-Dichloroethene	2.00	2.09	105	70-130	
Dichlorodifluoromethane	2.00	2.02	101	60-140	
1,1-Dichloroethane	2.00	2.05	103	70-130	
1,2-Dichloroethane	2.00	2.08	104	70-130	
1,1-Dichloroethene	2.00	2.12	106	70-130	
Ethylbenzene	2.00	2.13	106	70-130	
Methylene Chloride	2.00	1.94	97	70-130	
Methyl tert-butyl ether	2.00	2.12	106	60-140	
Naphthalene	2.00	1.80	90	60-140	
Tetrachloroethene	2.00	2.19	110	70-130	
Toluene	2.00	2.14	107	70-130	
trans-1,2-Dichloroethene	2.00	2.09	104	70-130	
1,2,4-Trichlorobenzene	2.00	1.82	91	60-140	
1,1,1-Trichloroethane	2.00	1.99	100	70-130	
1,1,2-Trichloroethane	2.00	2.14	107	70-130	
Trichloroethene	2.00	2.09	105	70-130	
1,2,3-Trimethylbenzene	2.00	2.18	109	70-130	
1,2,4-Trimethylbenzene	2.00	2.15	108	70-130	
1,3,5-Trimethylbenzene	2.00	2.17	109	70-130	
Vinyl chloride	2.00	2.22	111	70-130	
Xylenes, Total	6.00	6.46	108	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Matrix: Air Level: Low Lab File ID: JCCVJ17A-LCS.d

Lab ID: LCS 140-15230/1006 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	2.00	1.90	95	70-130	
Carbon tetrachloride	2.00	1.88	94	70-130	
Chlorodifluoromethane	2.00	2.12	106	60-140	
Chloroform	2.00	1.94	97	70-130	
cis-1,2-Dichloroethene	2.00	1.99	99	70-130	
Dichlorodifluoromethane	2.00	2.05	103	60-140	
1,1-Dichloroethane	2.00	1.97	98	70-130	
1,2-Dichloroethane	2.00	1.88	94	70-130	
1,1-Dichloroethene	2.00	1.99	99	70-130	
Ethylbenzene	2.00	1.93	96	70-130	
Methylene Chloride	2.00	1.78	89	70-130	
Methyl tert-butyl ether	2.00	1.93	97	60-140	
Naphthalene	2.00	1.61	80	60-140	
Tetrachloroethene	2.00	1.91	95	70-130	
Toluene	2.00	1.98	99	70-130	
trans-1,2-Dichloroethene	2.00	1.94	97	70-130	
1,2,4-Trichlorobenzene	2.00	1.59	80	60-140	
1,1,1-Trichloroethane	2.00	1.93	97	70-130	
1,1,2-Trichloroethane	2.00	1.87	94	70-130	
Trichloroethene	2.00	1.85	92	70-130	
1,2,3-Trimethylbenzene	2.00	1.86	93	70-130	
1,2,4-Trimethylbenzene	2.00	1.84	92	70-130	
1,3,5-Trimethylbenzene	2.00	1.83	91	70-130	
Vinyl chloride	2.00	2.22	111	70-130	
Xylenes, Total	6.00	5.79	96	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Sample No.: ICIS 140-14278/8 Date Analyzed: 09/07/2017 20:18

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): JICI07L6.D Heated Purge: (Y/N) N

Calibration ID: 1239

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		375276	9.74	1995807	11.84	1856317	16.45
UPPER LIMIT		525386	10.07	2794130	12.17	2598844	16.78
LOWER LIMIT		225166	9.41	1197484	11.51	1113790	16.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-14278/14		391731	9.74	2166167	11.85	2020062	16.45

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Sample No.: CCVIS 140-15146/2 Date Analyzed: 10/16/2017 10:23

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): JCCVJ16.D Heated Purge: (Y/N) N

Calibration ID: 1239

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		404910	9.74	2077244	11.84	1821911	16.45
UPPER LIMIT		566874	10.07	2908142	12.17	2550675	16.78
LOWER LIMIT		242946	9.41	1246346	11.51	1093147	16.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-15146/1002		404910	9.74	2077244	11.84	1821911	16.45
MB 140-15146/4		388002	9.73	1837154	11.83	1706033	16.44
140-9562-1	SV-187-MB-1	339030	9.73	1867280	11.84	1766211	16.44
140-9562-2	SV-186-MB-1	373752	9.73	2121644	11.84	1887690	16.44
140-9562-3	SV-185-MB-1	328311	9.73	1826253	11.83	1739429	16.44
140-9562-4	SV-184-MB-1	347085	9.73	1689457	11.83	1660157	16.44
140-9562-5	SV-183-MB-1	340585	9.74	1966142	11.83	1815718	16.44

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Sample No.: CCVIS 140-15230/6 Date Analyzed: 10/17/2017 12:13

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): JCCVJ17A.D Heated Purge: (Y/N) N

Calibration ID: 1239

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		381828	9.73	2141224	11.84	1937247	16.44
UPPER LIMIT		534559	10.06	2997714	12.17	2712146	16.77
LOWER LIMIT		229097	9.40	1284734	11.51	1162348	16.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-15230/1006		381828	9.73	2141224	11.84	1937247	16.44
MB 140-15230/8		388502	9.73	2120367	11.83	1844049	16.44
140-9562-5 DL	SV-183-MB-1 DL	350623	9.73	1887310	11.83	1714727	16.44
140-9562-6	SV-182-MB-1	301441	9.74	1630004	11.83	1587844	16.44
140-9562-7	SV-181-MB-1	299372	9.73	1662011	11.84	1613487	16.44
140-9562-8	SV-180-MB-1	354181	9.73	1991419	11.84	1808047	16.44
140-9562-9	SV-179-MB-1	320311	9.73	1754891	11.83	1712480	16.44
140-9562-10	SV-178-MB-1	319004	9.73	1786286	11.84	1678843	16.44
140-9562-7 DL	SV-181-MB-1 DL	300343	9.74	1572379	11.83	1539914	16.44

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Instrument ID: MJ Start Date: 09/07/2017 15:13

Analysis Batch Number: 14278 End Date: 09/08/2017 00:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-14278/1		09/07/2017 15:13	1	JBFBI07.D	RTX-5 0.32(mm)
IC 140-14278/3		09/07/2017 16:27	1	JICI07L1.D	RTX-5 0.32(mm)
IC 140-14278/4		09/07/2017 17:13	1	JICI07L2.D	RTX-5 0.32(mm)
IC 140-14278/5		09/07/2017 18:00	1	JICI07L3.D	RTX-5 0.32(mm)
IC 140-14278/6		09/07/2017 18:46	1	JICI07L4.D	RTX-5 0.32(mm)
IC 140-14278/7		09/07/2017 19:32	1	JICISI07L5.D	RTX-5 0.32(mm)
ICIS 140-14278/8		09/07/2017 20:18	1	JICI07L6.D	RTX-5 0.32(mm)
IC 140-14278/9		09/07/2017 21:05	1	JICI07L7.D	RTX-5 0.32(mm)
IC 140-14278/10		09/07/2017 21:50	1	JICI07L8.D	RTX-5 0.32(mm)
IC 140-14278/11		09/07/2017 22:36	1	JICI07L9.D	RTX-5 0.32(mm)
ICV 140-14278/14		09/08/2017 00:54	1	JLCSI07.D	RTX-5 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Instrument ID: MJ Start Date: 10/16/2017 09:53

Analysis Batch Number: 15146 End Date: 10/16/2017 22:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-15146/1		10/16/2017 09:53	1	JBFBJ16.D	RTX-5 0.32(mm)
CCVIS 140-15146/2		10/16/2017 10:23	1	JCCVJ16.D	RTX-5 0.32(mm)
LCS 140-15146/1002		10/16/2017 10:23	1	JCCVJ16-LCS.d	RTX-5 0.32(mm)
MB 140-15146/4		10/16/2017 11:54	1	J500BJ16.D	RTX-5 0.32(mm)
ZZZZZ		10/16/2017 12:38	1		RTX-5 0.32(mm)
ZZZZZ		10/16/2017 14:42	10.64		RTX-5 0.32(mm)
ZZZZZ		10/16/2017 15:27	1.58		RTX-5 0.32(mm)
ZZZZZ		10/16/2017 16:11	1.5		RTX-5 0.32(mm)
ZZZZZ		10/16/2017 16:57	1		RTX-5 0.32(mm)
ZZZZZ		10/16/2017 17:42	1.44		RTX-5 0.32(mm)
ZZZZZ		10/16/2017 18:28	1		RTX-5 0.32(mm)
140-9562-1		10/16/2017 19:14	1	JJ16P107.D	RTX-5 0.32(mm)
140-9562-2		10/16/2017 19:59	1	JJ16P108.D	RTX-5 0.32(mm)
140-9562-3		10/16/2017 20:45	1	JJ16P109.D	RTX-5 0.32(mm)
140-9562-4		10/16/2017 21:31	1	JJ16P110.D	RTX-5 0.32(mm)
140-9562-5		10/16/2017 22:17	1	JJ16P111.D	RTX-5 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1

SDG No.:

Instrument ID: MJ Start Date: 10/17/2017 11:45

Analysis Batch Number: 15230 End Date: 10/18/2017 10:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-15230/5		10/17/2017 11:45	1	JBFBJ17A.D	RTX-5 0.32(mm)
CCVIS 140-15230/6		10/17/2017 12:13	1	JCCVJ17A.D	RTX-5 0.32(mm)
LCS 140-15230/1006		10/17/2017 12:13	1	JCCVJ17A-LCS.d	RTX-5 0.32(mm)
MB 140-15230/8		10/17/2017 15:03	1	J500BJ17.D	RTX-5 0.32(mm)
ZZZZZ		10/17/2017 15:50	1		RTX-5 0.32(mm)
140-9562-5 DL		10/17/2017 19:41	3.05	JJ17P105.D	RTX-5 0.32(mm)
ZZZZZ		10/17/2017 20:27	1		RTX-5 0.32(mm)
140-9562-6		10/17/2017 21:13	1	JJ17P106.D	RTX-5 0.32(mm)
140-9562-7		10/17/2017 21:59	1	JJ17P107X.D	RTX-5 0.32(mm)
140-9562-8		10/17/2017 22:45	1	JJ17P108.D	RTX-5 0.32(mm)
140-9562-9		10/17/2017 23:31	1	JJ17P109.D	RTX-5 0.32(mm)
140-9562-10		10/18/2017 00:17	1	JJ17P110.D	RTX-5 0.32(mm)
ZZZZZ		10/18/2017 01:03	1.49		RTX-5 0.32(mm)
ZZZZZ		10/18/2017 01:49	1.41		RTX-5 0.32(mm)
ZZZZZ		10/18/2017 02:35	1.41		RTX-5 0.32(mm)
ZZZZZ		10/18/2017 03:21	1		RTX-5 0.32(mm)
ZZZZZ		10/18/2017 04:07	475.51		RTX-5 0.32(mm)
ZZZZZ		10/18/2017 04:53	1		RTX-5 0.32(mm)
140-9562-7 DL		10/18/2017 10:55	1	JJ17P107DL.D	RTX-5 0.32(mm)

Summa Canister Dilution Worksheet

Client: Tetra Tech, Inc.

Job No.: 140-9562-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Date	Analyst
140-9562-5	1	-6.6	0.78	0.78	20.2	2.37	2.37		3.05	3.05	10/17/17 13:10	Knight, Benjamin K

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg

Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

LMC - MRC

SAMPLE CALCULATION

SAMPLE IDENTIFICATION	SV-187-MB-1		
COMPOUND	1,1-Dichloroethane	MW=	106.17
		GAS CONSTANT =	24.45
COMPOUND AREA	33428		
INTERNAL STANDARD AMOUNT (ppbv)	4		
DILUTION FACTOR	1		
INTERNAL STANDARD AREA	339030		
AVERAGE RRF	2.7684		
SAMPLE VOLUME (mL)	100		
FINAL VOLUME (mL)	500		

	on column		final result	
	0.1425	ppbv	0.71	ppbv
	0.62	µg/m³	3.1	µg/m³

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-187-MB-1 | Lab Sample ID: 140-9562-1

Matrix: Air | Lab File ID: JJ16P107.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:46

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 19:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.20	J	0.40	0.12
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.075
75-45-6	Chlorodifluoromethane	86.47	0.32	J	0.40	0.075
67-66-3	Chloroform	119.38	ND		0.40	0.075
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.12
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.14
75-34-3	1,1-Dichloroethane	98.96	0.71		0.40	0.050
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.095
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.070
100-41-4	Ethylbenzene	106.17	0.25	J	0.40	0.14
75-09-2	Methylene Chloride	84.93	1.8		1.0	0.65
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.34
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.080
108-88-3	Toluene	92.14	1.8		0.60	0.60
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.20	J B	0.40	0.060
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.11
79-01-6	Trichloroethene	131.39	ND		0.20	0.070
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	120.20	0.30	J	0.40	0.13
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
75-01-4	Vinyl chloride	62.50	ND		0.20	0.15
1330-20-7	Xylenes, Total	106.17	1.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville | Job No.: 140-9562-1

SDG No.:

Client Sample ID: SV-187-MB-1 | Lab Sample ID: 140-9562-1

Matrix: Air | Lab File ID: JJ16P107.D

Analysis Method: TO 15 LL | Date Collected: 10/12/2017 11:46

Sample wt/vol: 100(mL) | Date Analyzed: 10/16/2017 19:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 15146 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.63	J	1.3	0.37
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.47
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.27
67-66-3	Chloroform	119.38	ND		2.0	0.37
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.48
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.67
75-34-3	1,1-Dichloroethane	98.96	2.9		1.6	0.20
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.38
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.28
100-41-4	Ethylbenzene	106.17	1.1	J	1.7	0.59
75-09-2	Methylene Chloride	84.93	6.2		3.5	2.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	1.2
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.54
108-88-3	Toluene	92.14	6.9		2.3	2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	1.4
71-55-6	1,1,1-Trichloroethane	133.41	1.1	J B	2.2	0.33
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.57
79-01-6	Trichloroethene	131.39	ND		1.1	0.38
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.84
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5	J	2.0	0.61
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.64
75-01-4	Vinyl chloride	62.50	ND		0.51	0.37
1330-20-7	Xylenes, Total	106.17	5.8		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20171011-6327.b\JJ16P107.D
Lims ID: 140-9562-A-1
Client ID: SV-187-MB-1
Sample Type: Client
Inject. Date: 16-Oct-2017 19:14:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0006327-013
Misc. Info.: 140-9562-a-1
Operator ID: 007126 Instrument ID: MJ

Method: \\ChromNA\Knoxville\ChromData\MJ\20171011-6327.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Oct-2017 10:27:44 Calib Date: 07-Sep-2017 22:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170907-6007.b\JICI07L9.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: tajh Date: 17-Oct-2017 08:42:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.733	9.737	-0.004	95	339030	4.00	
* 2 1,4-Difluorobenzene	114	11.836	11.841	-0.005	95	1867280	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.441	16.446	-0.005	87	1766211	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	18.039	18.043	-0.004	96	1295297	4.02	
6 Chlorodifluoromethane	67	4.197	4.191	0.006	97	2170	0.0632	M
8 Dichlorodifluoromethane	85	4.267	4.261	0.006	98	34264	0.1056	
30 Methylene Chloride	84	7.081	7.085	-0.004	99	45077	0.3541	
36 1,1-Dichloroethane	63	8.372	8.376	-0.004	100	33428	0.1425	
44 1,1,1-Trichloroethane	97	10.760	10.770	-0.010	97	10530	0.0398	
47 Benzene	78	11.330	11.341	-0.010	84	15031	0.0396	
64 Toluene	91	14.504	14.514	-0.010	93	150344	0.3666	
72 Ethylbenzene	91	16.758	16.768	-0.010	98	24948	0.0500	
73 m-Xylene & p-Xylene	91	16.914	16.924	-0.010	99	72973	0.1951	
77 o-Xylene	91	17.441	17.446	-0.005	99	29054	0.0727	
88 1,2,4-Trimethylbenzene	105	19.136	19.141	-0.005	98	26170	0.0596	
S 114 Xylenes, Total	100				0		0.2678	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSURP_00003 Amount Added: 40.00 Units: mL Run Reagent

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-9562-1 Analy Batch No.: 14278

SDG No.:

Instrument ID: MJ GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2017 16:27 Calibration End Date: 09/07/2017 22:36 Calibration ID: 1239

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Trichlorofluoromethane	4.1980 4.2076	3.9688 3.7830	3.7927 3.9466	3.9941 3.5767	4.0167	Ave		3.9427				5.1		30.0			
Acrolein	+++++ 0.3378	+++++ 0.3373	0.4236 0.3653	0.4448 0.3952	0.3711	Ave		0.3822				10.8		30.0			
Acetonitrile	+++++ 0.6395	+++++ 0.5264	+++++ 0.6049	0.7098 0.5709	0.5766	Ave		0.6047				10.5		30.0			
Acetone	+++++ 0.6176	+++++ 0.5101	+++++ 0.5775	0.8905 0.5408	0.6436	Ave		0.6300				21.7		30.0			
Pentane	+++++ 0.2627	+++++ 0.2353	0.3722 0.2438	0.2921 0.2265	0.2639	Ave		0.2709				18.3		30.0			
Isopropyl alcohol	+++++ 1.8463	+++++ 1.6131	1.8826 1.5520	1.8120 1.4877	1.1106	Ave		1.6149				16.7		30.0			
Ethyl ether	+++++ 1.7121	1.4036 1.4591	1.6433 1.6043	1.7329 1.5412	1.7095	Ave		1.6008				7.7		30.0			
1,1-Dichloroethene	1.6251 1.4808	1.4943 1.3351	1.3896 1.4378	1.4191 1.3482	1.4436	Ave		1.4415				6.1		30.0			
Acrylonitrile	+++++ 0.9942	+++++ 0.8093	0.9902 0.9432	1.0026 0.9299	0.9206	Ave		0.9414				7.1		30.0			
tert-Butyl alcohol	+++++ 2.0649	+++++ 1.7998	1.7932 1.4394	1.9332 1.7361	0.9728	Ave		1.6771				21.8		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	3.2853 3.1875	3.1072 2.8173	2.9598 3.0704	3.1037 2.8936	3.1103	Ave		3.0595				4.8		30.0			
Methylene Chloride	+++++ 1.4172	+++++ 1.2198	2.2104 1.3099	1.6955 1.2189	1.4413	Ave		1.5018				23.5		30.0			
3-Chloropropene	+++++ 1.4654	1.4113 1.2964	1.4888 1.3973	1.4223 1.2792	1.4355	Ave		1.3995				5.4		30.0			
Carbon disulfide	4.7481 4.3345	4.8488 3.9523	4.7144 4.1911	4.2512 3.8271	4.2311	Ave		4.3443				8.2		30.0			
trans-1,2-Dichloroethene	1.5903 1.4789	1.4428 1.3121	1.3798 1.4393	1.4164 1.3527	1.4258	Ave		1.4265				5.6		30.0			
Methyl tert-butyl ether	3.1211 3.4914	2.5145 2.9012	3.3697 3.3527	3.5294 3.1311	3.3270	Ave		3.1931				10.1		30.0			
1,1-Dichloroethane	3.1113 2.8824	2.7806 2.5650	2.6640 2.7433	2.8295 2.5442	2.7952	Ave		2.7684				6.2		30.0			
Vinyl acetate	3.5009 3.7875	2.6396 3.0581	3.5986 3.5978	3.7662 3.3988	3.6261	Ave		3.4415				10.8		30.0			
2-Butanone (MEK)	+++++ 0.6087	+++++ 0.5081	0.8009 0.5957	0.7318 0.5562	0.6009	Ave		0.6289				16.2		30.0			
Hexane	1.7452 1.2672	1.4444 1.1144	1.2996 1.2185	1.2779 1.1444	1.2446	Ave		1.3063				14.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

TETRA TECH **INTERNAL CORRESPONDENCE**

TO: **M. MARTIN** **DATE:** **DECEMBER 13, 2017**

FROM: **MICHELLE L. WOEBER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC/SVOC/GRO/DRO**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SDG 240-84753-1

SAMPLES: 6/Soil/VOC/SVOC/GRO/DRO

SB-118A-10-13'	SB-118B-53-55'	SB-120B-43-45'
SB-120B-48-50'	SB-121A-26.5-28.5'	SB-121B-30.5-32.5'

Overview

The sample set for LMC-MRC, SDG 240-84753-1 consisted of six (6) soil environmental samples. All six (6) soil samples were analyzed for Volatile Organic Compounds (VOC), Semi-Volatile Organic Compounds (SVOC), Gasoline Range Organics (GRO), and Diesel Range Organics (DRO). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on September 6-8, 2017 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Methods 8260B, 8270D, and 8015C analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times and sample preservation, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate results, matrix spike/matrix spike duplicate results, internal standard areas, sample quantitation, and detection limits. Areas of concern are listed below.

Major

No major issues were identified.

Minor

- The VOC continuing calibration performed on 09/13/2017 @ 04:03 had Percent Differences (%Ds) for chloroethane, 1,2,4-trimethylbenzene, sec-butylbenzene, and n-butylbenzene and a Percent Drift (%Drift) for bromomethane which exceeded the 20% quality control limit. All samples were affected. The non-detected results reported these compounds the affected samples were qualified as estimated, (UJ).

- The SVOC continuing calibration performed on 09/14/2017 @ 07:40 had a %D for pentachlorophenol which exceeded the 20% quality control limit. All samples were affected. The non-detected results reported for pentachlorophenol in the affected samples were qualified as estimated, (UJ).

- The following parameter was detected in the laboratory method blank at the following maximum concentration:

Parameter	Maximum Concentration	Action Level
GRO [(1)]	55.2 µg/Kg	276 µg/Kg

[(1)] - Maximum concentration detected in the laboratory method blank, MB

(1) - Maximum concentration detected in the laboratory method blank, MB 240-294460/1-A, affecting all samples.

An action level of 5X was established to evaluate for blank contamination. Dilution factor, if applicable, was taken into consideration during the application of the action level. The detected result reported in the affected sample below the established action level was qualified as non-detected, (U).

- Detected results reported below the RL but above the MDL were qualified as estimated, (J).

Notes

As stated in the laboratory case narrative, the VOC Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses had a %R for 1,2,3-trimethylbenzene above the upper quality control limit. The LCS/LCSD Form IIIs and associated raw data were missing from the data package. The data validator requested this information from the laboratory. No action was necessary because this compound was not detected in the associated samples.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: VOC and SVOC continuing calibration %Ds exceeded 20%. GRO was detected in the VOC method blank. The VOC LCS/LCSD had a noncompliant %R.

Other Factors Affecting Data Quality: Results below the RL were estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (January 2017). The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech, Inc.
Michelle L. Woeber
Chemist/Data Validator

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08109	NSAMPLE	SB-118A-10-13'			SB-118B-53-55'			SB-120B-43-45'			SB-120B-48-50'		
SDG: 240-84753-1	LAB_ID	240-84753-3			240-84753-4			240-84753-5			240-84753-6		
FRACTION: OV	SAMP_DATE	9/7/2017			9/7/2017			9/8/2017			9/8/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	86.4			89.8			78.1			81.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.38	U		0.37	U		0.45	U		0.42	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.29	U		0.27	U	
1,1,2,2-TETRACHLOROETHANE		0.28	U		0.27	U		0.33	U		0.31	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.52	U		0.5	U		0.62	U		0.58	U	
1,1-DICHLOROETHANE		0.35	U		0.34	U		0.42	U		0.39	U	
1,1-DICHLOROETHENE		0.57	U		0.56	U		9.3			1.4	J	P
1,1-DICHLOROPROPENE		0.2	U		0.2	U		0.24	U		0.22	U	
1,2,3-TRICHLOROBENZENE		0.37	U		0.36	U		0.44	U		0.41	U	
1,2,3-TRICHLOROPROPANE		0.41	U		0.4	U		0.49	U		0.46	U	
1,2,3-TRIMETHYLBENZENE		0.11	U		0.1	U		0.13	U		0.12	U	
1,2,4-TRICHLOROBENZENE		0.26	U		0.25	U		0.3	U		0.28	U	
1,2,4-TRIMETHYLBENZENE		0.27	UJ	C	0.26	UJ	C	0.32	UJ	C	0.29	UJ	C
1,2-DIBROMO-3-CHLOROPROPANE		0.72	U		0.7	U		0.86	U		0.8	U	
1,2-DIBROMOETHANE		0.37	U		0.36	U		0.44	U		0.41	U	
1,2-DICHLOROBENZENE		0.23	U		0.23	U		0.28	U		0.26	U	
1,2-DICHLOROETHANE		0.31	U		0.3	U		0.37	U		0.34	U	
1,2-DICHLOROPROPANE		0.33	U		0.32	U		0.39	U		0.37	U	
1,3-DICHLOROBENZENE		0.31	U		0.3	U		0.37	U		0.34	U	
1,3-DICHLOROPROPANE		0.24	U		0.24	U		0.29	U		0.27	U	
1,4-DICHLOROBENZENE		0.37	U		0.36	U		0.44	U		0.41	U	
2,2-DICHLOROPROPANE		0.32	U		0.31	U		0.38	U		0.35	U	
2-BUTANONE		3.3	J	P	1.3	U		1.6	U		1.5	U	
2-CHLOROETHYL VINYL ETHER		3	U		2.9	U		3.5	U		3.3	U	
2-CHLOROTOLUENE		0.39	U		0.38	U		0.47	U		0.44	U	
2-HEXANONE		0.62	U		0.6	U		0.73	U		0.68	U	
4-CHLOROTOLUENE		0.26	U		0.25	U		0.3	U		0.28	U	
4-ISOPROPYLTOLUENE		0.19	U		0.19	U		0.23	U		0.21	U	
4-METHYL-2-PENTANONE		0.95	U		0.92	U		1.1	U		1	U	
ACETONE		17	J	P	9.9	J	P	3.9	U		3.6	U	
BENZENE		0.34	U		0.33	U		0.4	U		0.38	U	
BROMOBENZENE		0.29	U		0.28	U		0.34	U		0.32	U	
BROMOCHLOROMETHANE		0.38	U		0.37	U		0.45	U		0.42	U	
BROMODICHLOROMETHANE		0.35	U		0.34	U		0.42	U		0.39	U	
BROMOFORM		0.43	U		0.41	U		0.5	U		0.47	U	
BROMOMETHANE		0.63	UJ	C	0.61	UJ	C	0.74	UJ	C	0.69	UJ	C

PROJ_NO: 08109	NSAMPLE	SB-121A-26.5-28.5'			SB-121B-30.5-32.5'		
SDG: 240-84753-1	LAB_ID	240-84753-1			240-84753-2		
FRACTION: OV	SAMP_DATE	9/6/2017			9/6/2017		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.41	U		0.45	U	
1,1,1-TRICHLOROETHANE		0.26	U		0.29	U	
1,1,2,2-TETRACHLOROETHANE		0.3	U		0.33	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.56	U		0.62	U	
1,1-DICHLOROETHANE		0.38	U		0.41	U	
1,1-DICHLOROETHENE		0.62	U		0.68	U	
1,1-DICHLOROPROPENE		0.22	U		0.24	U	
1,2,3-TRICHLOROBENZENE		0.4	U		0.44	U	
1,2,3-TRICHLOROPROPANE		0.45	U		0.49	U	
1,2,3-TRIMETHYLBENZENE		0.12	U		0.13	U	
1,2,4-TRICHLOROBENZENE		0.28	U		0.3	U	
1,2,4-TRIMETHYLBENZENE		0.29	UJ	C	0.31	UJ	C
1,2-DIBROMO-3-CHLOROPROPANE		0.78	U		0.85	U	
1,2-DIBROMOETHANE		0.4	U		0.44	U	
1,2-DICHLOROBENZENE		0.25	U		0.28	U	
1,2-DICHLOROETHANE		0.33	U		0.36	U	
1,2-DICHLOROPROPANE		0.36	U		0.39	U	
1,3-DICHLOROBENZENE		0.33	U		0.36	U	
1,3-DICHLOROPROPANE		0.26	U		0.29	U	
1,4-DICHLOROBENZENE		0.4	U		0.44	U	
2,2-DICHLOROPROPANE		0.35	U		0.38	U	
2-BUTANONE		1.5	U		1.6	U	
2-CHLOROETHYL VINYL ETHER		3.2	U		3.5	U	
2-CHLOROTOLUENE		0.43	U		0.46	U	
2-HEXANONE		0.67	U		0.73	U	
4-CHLOROTOLUENE		0.28	U		0.3	U	
4-ISOPROPYLTOLUENE		0.21	U		0.23	U	
4-METHYL-2-PENTANONE		1	U		1.1	U	
ACETONE		3.5	U		3.8	U	
BENZENE		0.37	U		0.4	U	
BROMOBENZENE		0.31	U		0.34	U	
BROMOCHLOROMETHANE		0.41	U		0.45	U	
BROMODICHLOROMETHANE		0.38	U		0.41	U	
BROMOFORM		0.46	U		0.5	U	
BROMOMETHANE		0.68	UJ	C	0.74	UJ	C

PROJ_NO: 08109	NSAMPLE	SB-118A-10-13'			SB-118B-53-55'			SB-120B-43-45'			SB-120B-48-50'		
SDG: 240-84753-1	LAB_ID	240-84753-3			240-84753-4			240-84753-5			240-84753-6		
FRACTION: OV	SAMP_DATE	9/7/2017			9/7/2017			9/8/2017			9/8/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	86.4			89.8			78.1			81.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.42	J	P	0.22	U		0.27	U		0.25	U	
CARBON TETRACHLORIDE		0.27	U		0.26	U		0.32	U		0.29	U	
CHLOROBENZENE		0.35	U		0.46	J	P	0.42	U		0.39	U	
CHLORODIBROMOMETHANE		0.32	U		0.31	U		0.38	U		0.35	U	
CHLOROETHANE		0.4	UJ	C	0.39	UJ	C	0.48	UJ	C	0.45	UJ	C
CHLOROFORM		0.24	U		0.24	U		0.37	J	P	0.27	U	
CHLOROMETHANE		0.4	U		0.39	U		0.48	U		0.45	U	
CIS-1,2-DICHLOROETHENE		0.3	U		0.29	U		4.4	J	P	2.8	J	P
CIS-1,3-DICHLOROPROPENE		0.28	U		0.27	U		0.33	U		0.31	U	
DIBROMOMETHANE		0.4	U		0.39	U		0.48	U		0.45	U	
DICHLORODIFLUOROMETHANE		0.37	U		0.36	U		0.44	U		0.41	U	
DIISOPROPYL ETHER		0.26	U		0.25	U		0.3	U		0.28	U	
ETHYL TERT-BUTYL ETHER		0.14	U		0.13	U		0.16	U		0.15	U	
ETHYLBENZENE		0.29	U		0.28	U		0.34	U		0.32	U	
HEXACHLOROBUTADIENE		0.47	U		0.45	U		0.56	U		0.52	U	
ISOPROPYLBENZENE		0.21	U		0.21	U		0.25	U		0.24	U	
M+P-XYLENES		0.43	U		0.41	U		0.5	U		0.47	U	
METHYL TERT-BUTYL ETHER		0.29	U		0.28	U		0.34	U		0.32	U	
METHYLENE CHLORIDE		0.26	U		0.25	U		0.3	U		0.28	U	
NAPHTHALENE		0.35	U		0.34	U		0.42	U		0.39	U	
N-BUTYLBENZENE		0.27	UJ	C	0.26	UJ	C	0.32	UJ	C	0.29	UJ	C
N-PROPYLBENZENE		0.3	U		0.29	U		0.35	U		0.33	U	
O-XYLENE		0.23	U		0.23	U		0.28	U		0.26	U	
SEC-BUTYLBENZENE		0.2	UJ	C	0.2	UJ	C	0.24	UJ	C	0.22	UJ	C
STYRENE		0.29	U		0.28	U		0.34	U		0.32	U	
TERT-AMYL METHYL ETHER		0.22	U		0.22	U		0.27	U		0.25	U	
TERT-BUTYLBENZENE		0.22	U		0.22	U		0.27	U		0.25	U	
TERTIARY-BUTYL ALCOHOL		2.5	U		6.5	J	P	3	U		2.8	U	
TETRACHLOROETHENE		0.39	U		0.38	U		0.47	U		0.44	U	
TOLUENE		0.36	U		0.35	U		0.43	U		0.4	U	
TOTAL XYLENES		0.43	U		0.41	U		0.5	U		0.47	U	
TRANS-1,2-DICHLOROETHENE		0.4	U		0.39	U		0.48	U		0.45	U	
TRANS-1,3-DICHLOROPROPENE		0.22	U		0.22	U		0.27	U		0.25	U	
TRICHLOROETHENE		0.62	J	P	0.42	U		77			22		
TRICHLOROFLUOROMETHANE		0.26	U		0.25	U		0.3	U		0.28	U	

PROJ_NO: 08109	NSAMPLE	SB-121A-26.5-28.5'			SB-121B-30.5-32.5'		
SDG: 240-84753-1	LAB_ID	240-84753-1			240-84753-2		
FRACTION: OV	SAMP_DATE	9/6/2017			9/6/2017		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.6		
	DUP_OF						

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE	0.24	U		0.26	U	
CARBON TETRACHLORIDE	0.29	U		0.31	U	
CHLOROBENZENE	0.38	U		0.41	U	
CHLORODIBROMOMETHANE	0.35	U		0.38	U	
CHLOROETHANE	0.44	UJ	C	0.48	UJ	C
CHLOROFORM	0.26	U		0.29	U	
CHLOROMETHANE	0.44	U		0.48	U	
CIS-1,2-DICHLOROETHENE	0.32	U		0.35	U	
CIS-1,3-DICHLOROPROPENE	0.3	U		0.33	U	
DIBROMOMETHANE	0.44	U		0.48	U	
DICHLORODIFLUOROMETHANE	0.4	U		0.44	U	
DIISOPROPYL ETHER	0.28	U		0.3	U	
ETHYL TERT-BUTYL ETHER	0.15	U		0.16	U	
ETHYLBENZENE	0.31	U		0.34	U	
HEXACHLOROBUTADIENE	0.51	U		0.55	U	
ISOPROPYLBENZENE	0.23	U		0.25	U	
M+P-XYLENES	0.46	U		0.5	U	
METHYL TERT-BUTYL ETHER	0.31	U		0.34	U	
METHYLENE CHLORIDE	0.28	U		0.3	U	
NAPHTHALENE	0.38	U		0.41	U	
N-BUTYLBENZENE	0.29	UJ	C	0.31	UJ	C
N-PROPYLBENZENE	0.32	U		0.35	U	
O-XYLENE	0.25	U		0.28	U	
SEC-BUTYLBENZENE	0.22	UJ	C	0.24	UJ	C
STYRENE	0.31	U		0.34	U	
TERT-AMYL METHYL ETHER	0.24	U		0.26	U	
TERT-BUTYLBENZENE	0.24	U		0.26	U	
TERTIARY-BUTYL ALCOHOL	2.7	U		3	U	
TETRACHLOROETHENE	0.43	U		0.46	U	
TOLUENE	0.39	U		0.43	U	
TOTAL XYLENES	0.46	U		0.5	U	
TRANS-1,2-DICHLOROETHENE	0.44	U		0.48	U	
TRANS-1,3-DICHLOROPROPENE	0.24	U		0.26	U	
TRICHLOROETHENE	0.47	U		1	J	P
TRICHLOROFLUOROMETHANE	0.28	U		0.3	U	

PROJ_NO: 08109	NSAMPLE	SB-118A-10-13'			SB-118B-53-55'			SB-120B-43-45'			SB-120B-48-50'		
SDG: 240-84753-1	LAB_ID	240-84753-3			240-84753-4			240-84753-5			240-84753-6		
FRACTION: OV	SAMP_DATE	9/7/2017			9/7/2017			9/8/2017			9/8/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	86.4			89.8			78.1			81.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.93	U		0.9	U		1.1	U		1	U	
VINYL CHLORIDE		0.3	U		0.29	U		0.35	U		0.33	U	

PROJ_NO: 08109	NSAMPLE	SB-121A-26.5-28.5'			SB-121B-30.5-32.5'		
SDG: 240-84753-1	LAB_ID	240-84753-1			240-84753-2		
FRACTION: OV	SAMP_DATE	9/6/2017			9/6/2017		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		1	U		1.1	U	
VINYL CHLORIDE		0.32	U		0.35	U	

PROJ_NO: 08109	NSAMPLE	SB-118A-10-13'			SB-118B-53-55'			SB-120B-43-45'			SB-120B-48-50'		
SDG: 240-84753-1	LAB_ID	240-84753-3			240-84753-4			240-84753-5			240-84753-6		
FRACTION: OS	SAMP_DATE	9/7/2017			9/7/2017			9/8/2017			9/8/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	86.4			89.8			78.1			81.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		4.1	U		3.9	U		4.5	U		4.3	U	
1,4-DIOXANE		25	U		25	U		28	U		27	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		11	U		11	U		12	U		12	U	
2,4,5-TRICHLOROPHENOL		29	U		28	U		32	U		31	U	
2,4,6-TRICHLOROPHENOL		10	U		10	U		11	U		11	U	
2,4-DICHLOROPHENOL		23	U		23	U		26	U		25	U	
2,4-DIMETHYLPHENOL		23	U		23	U		26	U		25	U	
2,4-DINITROPHENOL		24	U		24	U		27	U		26	U	
2,4-DINITROTOLUENE		20	U		19	U		22	U		21	U	
2,6-DINITROTOLUENE		24	U		24	U		27	U		26	U	
2-CHLORONAPHTHALENE		0.52	U		0.51	U		0.57	U		0.56	U	
2-CHLOROPHENOL		9.5	U		9.2	U		10	U		10	U	
2-METHYLNAPHTHALENE		0.58	U		0.56	U		0.64	U		0.62	U	
2-METHYLPHENOL		13	U		12	U		14	U		14	U	
2-NITROANILINE		11	U		10	U		12	U		11	U	
2-NITROPHENOL		9.6	U		9.3	U		11	U		10	U	
3&4-METHYLPHENOL		23	U		23	U		26	U		25	U	
3,3'-DICHLOROBENZIDINE		21	U		20	U		23	U		22	U	
3-NITROANILINE		19	U		18	U		20	U		20	U	
4,6-DINITRO-2-METHYLPHENOL		11	U		10	U		12	U		11	U	
4-BROMOPHENYL PHENYL ETHER		15	U		15	U		17	U		16	U	
4-CHLORO-3-METHYLPHENOL		24	U		24	U		27	U		26	U	
4-CHLOROANILINE		20	U		19	U		22	U		21	U	
4-CHLOROPHENYL PHENYL ETHER		15	U		15	U		17	U		16	U	
4-NITROANILINE		30	U		29	U		33	U		32	U	
4-NITROPHENOL		20	U		19	U		22	U		21	U	
ACENAPHTHENE		0.88	U		0.86	U		0.97	U		0.94	U	
ACENAPHTHYLENE		0.41	U		0.39	U		0.45	U		0.43	U	
ACETOPHENONE		11	U		10	U		12	U		11	U	
ANTHRACENE		0.9	U		0.88	U		1	U		0.97	U	
ATRAZINE		11	U		10	U		12	U		11	U	
BENZALDEHYDE		14	U		14	U		15	U		15	U	
BENZO(A)ANTHRACENE		0.73	U		0.71	U		0.8	U		0.78	U	
BENZO(A)PYRENE		0.74	U		0.72	U		0.82	U		0.79	U	
BENZO(B)FLUORANTHENE		0.68	U		0.66	U		0.75	U		0.73	U	

PROJ_NO: 08109	NSAMPLE	SB-121A-26.5-28.5'			SB-121B-30.5-32.5'		
SDG: 240-84753-1	LAB_ID	240-84753-1			240-84753-2		
FRACTION: OS	SAMP_DATE	9/6/2017			9/6/2017		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		4.1	U		4.6	U	
1,4-DIOXANE		26	U		29	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		11	U		12	U	
2,4,5-TRICHLOROPHENOL		29	U		33	U	
2,4,6-TRICHLOROPHENOL		10	U		12	U	
2,4-DICHLOROPHENOL		23	U		26	U	
2,4-DIMETHYLPHENOL		23	U		26	U	
2,4-DINITROPHENOL		25	U		27	U	
2,4-DINITROTOLUENE		20	U		22	U	
2,6-DINITROTOLUENE		25	U		27	U	
2-CHLORONAPHTHALENE		0.53	U		0.59	U	
2-CHLOROPHENOL		9.6	U		11	U	
2-METHYLNAPHTHALENE		0.59	U		0.65	U	
2-METHYLPHENOL		13	U		14	U	
2-NITROANILINE		11	U		12	U	
2-NITROPHENOL		9.7	U		11	U	
3&4-METHYLPHENOL		23	U		26	U	
3,3'-DICHLOROBENZIDINE		21	U		23	U	
3-NITROANILINE		19	U		21	U	
4,6-DINITRO-2-METHYLPHENOL		11	U		12	U	
4-BROMOPHENYL PHENYL ETHER		15	U		17	U	
4-CHLORO-3-METHYLPHENOL		25	U		27	U	
4-CHLOROANILINE		20	U		22	U	
4-CHLOROPHENYL PHENYL ETHER		15	U		17	U	
4-NITROANILINE		31	U		34	U	
4-NITROPHENOL		20	U		22	U	
ACENAPHTHENE		0.89	U		0.99	U	
ACENAPHTHYLENE		0.41	U		0.46	U	
ACETOPHENONE		11	U		12	U	
ANTHRACENE		0.92	U		1	U	
ATRAZINE		11	U		12	U	
BENZALDEHYDE		14	U		16	U	
BENZO(A)ANTHRACENE		0.74	U		0.82	U	
BENZO(A)PYRENE		0.75	U		0.83	U	
BENZO(B)FLUORANTHENE		0.69	U		0.77	U	

PROJ_NO: 08109	NSAMPLE	SB-118A-10-13'			SB-118B-53-55'			SB-120B-43-45'			SB-120B-48-50'		
SDG: 240-84753-1	LAB_ID	240-84753-3			240-84753-4			240-84753-5			240-84753-6		
FRACTION: OS	SAMP_DATE	9/7/2017			9/7/2017			9/8/2017			9/8/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	86.4			89.8			78.1			81.2		
	DUP_OF												

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE	0.41	U		0.39	U		0.45	U		0.43	U	
BENZO(K)FLUORANTHENE	0.79	U		0.77	U		0.87	U		0.84	U	
BIS(2-CHLOROETHOXY)METHANE	25	U		25	U		28	U		27	U	
BIS(2-CHLOROETHYL)ETHER	2.3	U		2.3	U		2.6	U		2.5	U	
BIS(2-ETHYLHEXYL)PHTHALATE	22	U		21	U		24	U		24	U	
BUTYL BENZYL PHTHALATE	12	U		11	U		13	U		12	U	
CAPROLACTAM	43	U		42	U		47	U		46	U	
CARBAZOLE	31	U		30	U		34	U		33	U	
CHRYSENE	1.3	U		1.2	U		1.4	U		1.4	U	
DIBENZO(A,H)ANTHRACENE	0.76	U		0.74	U		0.84	U		0.82	U	
DIBENZOFURAN	0.76	U		0.74	U		0.84	U		0.82	U	
DIETHYL PHTHALATE	19	U		18	U		20	U		20	U	
DIMETHYL PHTHALATE	20	U		19	U		22	U		21	U	
DI-N-BUTYL PHTHALATE	17	U		17	U		19	U		19	U	
DI-N-OCTYL PHTHALATE	9.2	U		8.9	U		10	U		9.8	U	
FLUORANTHENE	0.64	U		0.62	U		0.7	U		0.68	U	
FLUORENE	0.61	U		0.6	U		0.68	U		0.66	U	
HEXACHLOROBENZENE	2.4	U		2.4	U		2.7	U		2.6	U	
HEXACHLOROBUTADIENE	6.5	U		6.3	U		7.2	U		6.9	U	
HEXACHLOROCYCLOPENTADIENE	9.4	U		9.1	U		10	U		10	U	
HEXACHLOROETHANE	10	U		10	U		11	U		11	U	
INDENO(1,2,3-CD)PYRENE	0.41	U		0.39	U		0.45	U		0.43	U	
ISOPHORONE	15	U		15	U		17	U		16	U	
NAPHTHALENE	0.95	U		0.92	U		1	U		1	U	
NITROBENZENE	2.5	U		2.5	U		2.8	U		2.7	U	
N-NITROSODIMETHYLAMINE	19	U		18	U		20	U		20	U	
N-NITROSO-DI-N-PROPYLAMINE	7.3	U		7.1	U		8	U		7.8	U	
N-NITROSODIPHENYLAMINE	24	U		24	U		27	U		26	U	
PENTACHLOROPHENOL	11	UJ	C	10	UJ	C	12	UJ	C	11	UJ	C
PHENANTHRENE	0.85	U		0.82	U		0.93	U		0.9	U	
PHENOL	8.5	U		8.2	U		9.3	U		9	U	
PYRENE	0.51	U		0.5	U		0.56	U		0.55	U	

PROJ_NO: 08109	NSAMPLE	SB-121A-26.5-28.5'			SB-121B-30.5-32.5'		
SDG: 240-84753-1	LAB_ID	240-84753-1			240-84753-2		
FRACTION: OS	SAMP_DATE	9/6/2017			9/6/2017		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.41	U		0.46	U	
BENZO(K)FLUORANTHENE		0.8	U		0.89	U	
BIS(2-CHLOROETHOXY)METHANE		26	U		29	U	
BIS(2-CHLOROETHYL)ETHER		2.3	U		2.6	U	
BIS(2-ETHYLHEXYL)PHTHALATE		22	U		25	U	
BUTYL BENZYL PHTHALATE		12	U		13	U	
CAPROLACTAM		43	U		57	J	P
CARBAZOLE		32	U		35	U	
CHRYSENE		1.3	U		1.4	U	
DIBENZO(A,H)ANTHRACENE		0.77	U		0.86	U	
DIBENZOFURAN		0.77	U		0.86	U	
DIETHYL PHTHALATE		19	U		21	U	
DIMETHYL PHTHALATE		20	U		22	U	
DI-N-BUTYL PHTHALATE		18	U		20	U	
DI-N-OCTYL PHTHALATE		9.3	U		10	U	
FLUORANTHENE		0.65	U		0.72	U	
FLUORENE		0.62	U		0.69	U	
HEXACHLOROBENZENE		2.5	U		2.7	U	
HEXACHLOROBUTADIENE		6.6	U		7.3	U	
HEXACHLOROCYCLOPENTADIENE		9.5	U		11	U	
HEXACHLOROETHANE		11	U		12	U	
INDENO(1,2,3-CD)PYRENE		0.41	U		0.46	U	
ISOPHORONE		15	U		17	U	
NAPHTHALENE		0.96	U		1.1	U	
NITROBENZENE		2.6	U		2.9	U	
N-NITROSODIMETHYLAMINE		19	U		21	U	
N-NITROSO-DI-N-PROPYLAMINE		7.4	U		8.2	U	
N-NITROSODIPHENYLAMINE		25	U		27	U	
PENTACHLOROPHENOL		11	UJ	C	12	UJ	C
PHENANTHRENE		0.86	U		0.95	U	
PHENOL		8.6	U		9.5	U	
PYRENE		0.52	U		0.57	U	

PROJ_NO: 08109	NSAMPLE	SB-118A-10-13'						SB-118B-53-55'					
SDG: 240-84753-1	LAB_ID	240-84753-3						240-84753-4					
FRACTION: PET	SAMP_DATE	9/7/2017						9/7/2017					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	86.4			86.4			89.8			89.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					14	U					30	U	A
TPH (C10-C32)		7.4	U					8.6	J	P			

PROJ_NO: 08109	NSAMPLE	SB-120B-43-45'						SB-120B-48-50'					
SDG: 240-84753-1	LAB_ID	240-84753-5						240-84753-6					
FRACTION: PET	SAMP_DATE	9/8/2017						9/8/2017					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	78.1			78.1			81.2			81.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					57	U	A				15	U	
TPH (C10-C32)		8.2	U					7.8	U				

PROJ_NO: 08109	NSAMPLE	SB-121A-26.5-28.5'						SB-121B-30.5-32.5'					
SDG: 240-84753-1	LAB_ID	240-84753-1						240-84753-2					
FRACTION: PET	SAMP_DATE	9/6/2017						9/6/2017					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	85.2			85.2			77.6			77.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					30	U	A				15	U	
TPH (C10-C32)		7.5	U					8.2	U				

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: UX82418.D

Analysis Method: 8260B | Date Collected: 09/06/2017 13:00

Sample wt/vol: 5.10(g) | Date Analyzed: 09/13/2017 10:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.41	U	5.8	0.41
71-55-6	1,1,1-Trichloroethane	0.26	U	5.8	0.26
79-34-5	1,1,2,2-Tetrachloroethane	0.30	U	5.8	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.56	U	5.8	0.56
75-34-3	1,1-Dichloroethane	0.38	U	5.8	0.38
75-35-4	1,1-Dichloroethene	0.62	U	5.8	0.62
563-58-6	1,1-Dichloropropene	0.22	U	5.8	0.22
87-61-6	1,2,3-Trichlorobenzene	0.40	U	5.8	0.40
96-18-4	1,2,3-Trichloropropane	0.45	U	5.8	0.45
526-73-8	1,2,3-Trimethylbenzene	0.12	U *	5.8	0.12
120-82-1	1,2,4-Trichlorobenzene	0.28	U	5.8	0.28
95-63-6	1,2,4-Trimethylbenzene	0.29	U	5.8	0.29
96-12-8	1,2-Dibromo-3-Chloropropane	0.78	U	12	0.78
95-50-1	1,2-Dichlorobenzene	0.25	U	5.8	0.25
107-06-2	1,2-Dichloroethane	0.33	U	5.8	0.33
78-87-5	1,2-Dichloropropane	0.36	U	5.8	0.36
541-73-1	1,3-Dichlorobenzene	0.33	U	5.8	0.33
142-28-9	1,3-Dichloropropane	0.26	U	5.8	0.26
106-46-7	1,4-Dichlorobenzene	0.40	U	5.8	0.40
594-20-7	2,2-Dichloropropane	0.35	U	5.8	0.35
110-75-8	2-Chloroethyl vinyl ether	3.2	U	58	3.2
95-49-8	2-Chlorotoluene	0.43	U	5.8	0.43
591-78-6	2-Hexanone	0.67	U	23	0.67
108-86-1	Bromobenzene	0.31	U	5.8	0.31
74-97-5	Bromochloromethane	0.41	U	5.8	0.41
106-43-4	4-Chlorotoluene	0.28	U	5.8	0.28
99-87-6	p-Isopropyltoluene	0.21	U	5.8	0.21
67-64-1	Acetone	3.5	U	23	3.5
71-43-2	Benzene	0.37	U	5.8	0.37
75-25-2	Bromoform	0.46	U	5.8	0.46
74-83-9	Bromomethane	0.68	U	5.8	0.68
75-15-0	Carbon disulfide	0.24	U	5.8	0.24
56-23-5	Carbon tetrachloride	0.29	U	5.8	0.29
108-90-7	Chlorobenzene	0.38	U	5.8	0.38
75-00-3	Chloroethane	0.44	U	5.8	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: UX82418.D

Analysis Method: 8260B | Date Collected: 09/06/2017 13:00

Sample wt/vol: 5.10(g) | Date Analyzed: 09/13/2017 10:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.26	U	5.8	0.26
74-87-3	Chloromethane	0.44	U	5.8	0.44
156-59-2	cis-1,2-Dichloroethene	0.32	U	5.8	0.32
10061-01-5	cis-1,3-Dichloropropene	0.30	U	5.8	0.30
87-68-3	Hexachlorobutadiene	0.51	U	5.8	0.51
74-95-3	Dibromomethane	0.44	U	5.8	0.44
75-27-4	Bromodichloromethane	0.38	U	5.8	0.38
75-71-8	Dichlorodifluoromethane	0.40	U	5.8	0.40
100-41-4	Ethylbenzene	0.31	U	5.8	0.31
106-93-4	1,2-Dibromoethane	0.40	U	5.8	0.40
108-20-3	Diisopropyl ether	0.28	U	12	0.28
91-20-3	Naphthalene	0.38	U	5.8	0.38
179601-23-1	m-Xylene & p-Xylene	0.46	U	12	0.46
104-51-8	n-Butylbenzene	0.29	U	5.8	0.29
98-82-8	Isopropylbenzene	0.23	U	5.8	0.23
103-65-1	N-Propylbenzene	0.32	U	5.8	0.32
78-93-3	2-Butanone (MEK)	1.5	U	23	1.5
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	23	1.0
135-98-8	sec-Butylbenzene	0.22	U	5.8	0.22
1634-04-4	Methyl tert-butyl ether	0.31	U	5.8	0.31
994-05-8	Tert-amyl methyl ether	0.24	U	5.8	0.24
75-09-2	Methylene Chloride	0.28	U	5.8	0.28
95-47-6	o-Xylene	0.25	U	5.8	0.25
100-42-5	Styrene	0.31	U	5.8	0.31
637-92-3	Ethyl t-butyl ether	0.15	U	5.8	0.15
98-06-6	tert-Butylbenzene	0.24	U	5.8	0.24
127-18-4	Tetrachloroethene	0.43	U	5.8	0.43
108-88-3	Toluene	0.39	U	5.8	0.39
156-60-5	trans-1,2-Dichloroethene	0.44	U	5.8	0.44
10061-02-6	trans-1,3-Dichloropropene	0.24	U	5.8	0.24
79-01-6	Trichloroethene	0.47	U	5.8	0.47
75-69-4	Trichlorofluoromethane	0.28	U	5.8	0.28
108-05-4	Vinyl acetate	1.0	U	12	1.0
75-01-4	Vinyl chloride	0.32	U	5.8	0.32
75-65-0	tert-Butyl alcohol	2.7	U	230	2.7
1330-20-7	Xylenes, Total	0.46	U	12	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: UX82418.D

Analysis Method: 8260B | Date Collected: 09/06/2017 13:00

Sample wt/vol: 5.10(g) | Date Analyzed: 09/13/2017 10:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.35	U	5.8	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		61-127
460-00-4	4-Bromofluorobenzene (Surr)	94		61-132
2037-26-5	Toluene-d8 (Surr)	93		66-125
1868-53-7	Dibromofluoromethane (Surr)	87		43-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: UX82419.D

Analysis Method: 8260B | Date Collected: 09/06/2017 13:15

Sample wt/vol: 5.13(g) | Date Analyzed: 09/13/2017 11:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.4 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.45	U	6.3	0.45
71-55-6	1,1,1-Trichloroethane	0.29	U	6.3	0.29
79-34-5	1,1,2,2-Tetrachloroethane	0.33	U	6.3	0.33
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.62	U	6.3	0.62
75-34-3	1,1-Dichloroethane	0.41	U	6.3	0.41
75-35-4	1,1-Dichloroethene	0.68	U	6.3	0.68
563-58-6	1,1-Dichloropropene	0.24	U	6.3	0.24
87-61-6	1,2,3-Trichlorobenzene	0.44	U	6.3	0.44
96-18-4	1,2,3-Trichloropropane	0.49	U	6.3	0.49
526-73-8	1,2,3-Trimethylbenzene	0.13	U *	6.3	0.13
120-82-1	1,2,4-Trichlorobenzene	0.30	U	6.3	0.30
95-63-6	1,2,4-Trimethylbenzene	0.31	U	6.3	0.31
96-12-8	1,2-Dibromo-3-Chloropropane	0.85	U	13	0.85
95-50-1	1,2-Dichlorobenzene	0.28	U	6.3	0.28
107-06-2	1,2-Dichloroethane	0.36	U	6.3	0.36
78-87-5	1,2-Dichloropropane	0.39	U	6.3	0.39
541-73-1	1,3-Dichlorobenzene	0.36	U	6.3	0.36
142-28-9	1,3-Dichloropropane	0.29	U	6.3	0.29
106-46-7	1,4-Dichlorobenzene	0.44	U	6.3	0.44
594-20-7	2,2-Dichloropropane	0.38	U	6.3	0.38
110-75-8	2-Chloroethyl vinyl ether	3.5	U	63	3.5
95-49-8	2-Chlorotoluene	0.46	U	6.3	0.46
591-78-6	2-Hexanone	0.73	U	25	0.73
108-86-1	Bromobenzene	0.34	U	6.3	0.34
74-97-5	Bromochloromethane	0.45	U	6.3	0.45
106-43-4	4-Chlorotoluene	0.30	U	6.3	0.30
99-87-6	p-Isopropyltoluene	0.23	U	6.3	0.23
67-64-1	Acetone	3.8	U	25	3.8
71-43-2	Benzene	0.40	U	6.3	0.40
75-25-2	Bromoform	0.50	U	6.3	0.50
74-83-9	Bromomethane	0.74	U	6.3	0.74
75-15-0	Carbon disulfide	0.26	U	6.3	0.26
56-23-5	Carbon tetrachloride	0.31	U	6.3	0.31
108-90-7	Chlorobenzene	0.41	U	6.3	0.41
75-00-3	Chloroethane	0.48	U	6.3	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: UX82419.D

Analysis Method: 8260B | Date Collected: 09/06/2017 13:15

Sample wt/vol: 5.13(g) | Date Analyzed: 09/13/2017 11:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.4 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.29	U	6.3	0.29
74-87-3	Chloromethane	0.48	U	6.3	0.48
156-59-2	cis-1,2-Dichloroethene	0.35	U	6.3	0.35
10061-01-5	cis-1,3-Dichloropropene	0.33	U	6.3	0.33
87-68-3	Hexachlorobutadiene	0.55	U	6.3	0.55
74-95-3	Dibromomethane	0.48	U	6.3	0.48
75-27-4	Bromodichloromethane	0.41	U	6.3	0.41
75-71-8	Dichlorodifluoromethane	0.44	U	6.3	0.44
100-41-4	Ethylbenzene	0.34	U	6.3	0.34
106-93-4	1,2-Dibromoethane	0.44	U	6.3	0.44
108-20-3	Diisopropyl ether	0.30	U	13	0.30
91-20-3	Naphthalene	0.41	U	6.3	0.41
179601-23-1	m-Xylene & p-Xylene	0.50	U	13	0.50
104-51-8	n-Butylbenzene	0.31	U	6.3	0.31
98-82-8	Isopropylbenzene	0.25	U	6.3	0.25
103-65-1	N-Propylbenzene	0.35	U	6.3	0.35
78-93-3	2-Butanone (MEK)	1.6	U	25	1.6
108-10-1	4-Methyl-2-pentanone (MIBK)	1.1	U	25	1.1
135-98-8	sec-Butylbenzene	0.24	U	6.3	0.24
1634-04-4	Methyl tert-butyl ether	0.34	U	6.3	0.34
994-05-8	Tert-amyl methyl ether	0.26	U	6.3	0.26
75-09-2	Methylene Chloride	0.30	U	6.3	0.30
95-47-6	o-Xylene	0.28	U	6.3	0.28
100-42-5	Styrene	0.34	U	6.3	0.34
637-92-3	Ethyl t-butyl ether	0.16	U	6.3	0.16
98-06-6	tert-Butylbenzene	0.26	U	6.3	0.26
127-18-4	Tetrachloroethene	0.46	U	6.3	0.46
108-88-3	Toluene	0.43	U	6.3	0.43
156-60-5	trans-1,2-Dichloroethene	0.48	U	6.3	0.48
10061-02-6	trans-1,3-Dichloropropene	0.26	U	6.3	0.26
79-01-6	Trichloroethene	1.0	J	6.3	0.51
75-69-4	Trichlorofluoromethane	0.30	U	6.3	0.30
108-05-4	Vinyl acetate	1.1	U	13	1.1
75-01-4	Vinyl chloride	0.35	U	6.3	0.35
75-65-0	tert-Butyl alcohol	3.0	U	250	3.0
1330-20-7	Xylenes, Total	0.50	U	13	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: UX82419.D

Analysis Method: 8260B | Date Collected: 09/06/2017 13:15

Sample wt/vol: 5.13(g) | Date Analyzed: 09/13/2017 11:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.4 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.38	U	6.3	0.38

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		61-127
460-00-4	4-Bromofluorobenzene (Surr)	93		61-132
2037-26-5	Toluene-d8 (Surr)	96		66-125
1868-53-7	Dibromofluoromethane (Surr)	86		43-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: UX82420.D

Analysis Method: 8260B | Date Collected: 09/07/2017 17:00

Sample wt/vol: 5.44(g) | Date Analyzed: 09/13/2017 11:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.38	U	5.3	0.38
71-55-6	1,1,1-Trichloroethane	0.24	U	5.3	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.28	U	5.3	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.52	U	5.3	0.52
75-34-3	1,1-Dichloroethane	0.35	U	5.3	0.35
75-35-4	1,1-Dichloroethene	0.57	U	5.3	0.57
563-58-6	1,1-Dichloropropene	0.20	U	5.3	0.20
87-61-6	1,2,3-Trichlorobenzene	0.37	U	5.3	0.37
96-18-4	1,2,3-Trichloropropane	0.41	U	5.3	0.41
526-73-8	1,2,3-Trimethylbenzene	0.11	U *	5.3	0.11
120-82-1	1,2,4-Trichlorobenzene	0.26	U	5.3	0.26
95-63-6	1,2,4-Trimethylbenzene	0.27	U	5.3	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.72	U	11	0.72
95-50-1	1,2-Dichlorobenzene	0.23	U	5.3	0.23
107-06-2	1,2-Dichloroethane	0.31	U	5.3	0.31
78-87-5	1,2-Dichloropropane	0.33	U	5.3	0.33
541-73-1	1,3-Dichlorobenzene	0.31	U	5.3	0.31
142-28-9	1,3-Dichloropropane	0.24	U	5.3	0.24
106-46-7	1,4-Dichlorobenzene	0.37	U	5.3	0.37
594-20-7	2,2-Dichloropropane	0.32	U	5.3	0.32
110-75-8	2-Chloroethyl vinyl ether	3.0	U	53	3.0
95-49-8	2-Chlorotoluene	0.39	U	5.3	0.39
591-78-6	2-Hexanone	0.62	U	21	0.62
108-86-1	Bromobenzene	0.29	U	5.3	0.29
74-97-5	Bromochloromethane	0.38	U	5.3	0.38
106-43-4	4-Chlorotoluene	0.26	U	5.3	0.26
99-87-6	p-Isopropyltoluene	0.19	U	5.3	0.19
67-64-1	Acetone	17	J	21	3.3
71-43-2	Benzene	0.34	U	5.3	0.34
75-25-2	Bromoform	0.43	U	5.3	0.43
74-83-9	Bromomethane	0.63	U	5.3	0.63
75-15-0	Carbon disulfide	0.42	J	5.3	0.22
56-23-5	Carbon tetrachloride	0.27	U	5.3	0.27
108-90-7	Chlorobenzene	0.35	U	5.3	0.35
75-00-3	Chloroethane	0.40	U	5.3	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: UX82420.D

Analysis Method: 8260B | Date Collected: 09/07/2017 17:00

Sample wt/vol: 5.44(g) | Date Analyzed: 09/13/2017 11:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.24	U	5.3	0.24
74-87-3	Chloromethane	0.40	U	5.3	0.40
156-59-2	cis-1,2-Dichloroethene	0.30	U	5.3	0.30
10061-01-5	cis-1,3-Dichloropropene	0.28	U	5.3	0.28
87-68-3	Hexachlorobutadiene	0.47	U	5.3	0.47
74-95-3	Dibromomethane	0.40	U	5.3	0.40
75-27-4	Bromodichloromethane	0.35	U	5.3	0.35
75-71-8	Dichlorodifluoromethane	0.37	U	5.3	0.37
100-41-4	Ethylbenzene	0.29	U	5.3	0.29
106-93-4	1,2-Dibromoethane	0.37	U	5.3	0.37
108-20-3	Diisopropyl ether	0.26	U	11	0.26
91-20-3	Naphthalene	0.35	U	5.3	0.35
179601-23-1	m-Xylene & p-Xylene	0.43	U	11	0.43
104-51-8	n-Butylbenzene	0.27	U	5.3	0.27
98-82-8	Isopropylbenzene	0.21	U	5.3	0.21
103-65-1	N-Propylbenzene	0.30	U	5.3	0.30
78-93-3	2-Butanone (MEK)	3.3	J	21	1.4
108-10-1	4-Methyl-2-pentanone (MIBK)	0.95	U	21	0.95
135-98-8	sec-Butylbenzene	0.20	U	5.3	0.20
1634-04-4	Methyl tert-butyl ether	0.29	U	5.3	0.29
994-05-8	Tert-amyl methyl ether	0.22	U	5.3	0.22
75-09-2	Methylene Chloride	0.26	U	5.3	0.26
95-47-6	o-Xylene	0.23	U	5.3	0.23
100-42-5	Styrene	0.29	U	5.3	0.29
637-92-3	Ethyl t-butyl ether	0.14	U	5.3	0.14
98-06-6	tert-Butylbenzene	0.22	U	5.3	0.22
127-18-4	Tetrachloroethene	0.39	U	5.3	0.39
108-88-3	Toluene	0.36	U	5.3	0.36
156-60-5	trans-1,2-Dichloroethene	0.40	U	5.3	0.40
10061-02-6	trans-1,3-Dichloropropene	0.22	U	5.3	0.22
79-01-6	Trichloroethene	0.62	J	5.3	0.44
75-69-4	Trichlorofluoromethane	0.26	U	5.3	0.26
108-05-4	Vinyl acetate	0.93	U	11	0.93
75-01-4	Vinyl chloride	0.30	U	5.3	0.30
75-65-0	tert-Butyl alcohol	2.5	U	210	2.5
1330-20-7	Xylenes, Total	0.43	U	11	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: UX82420.D

Analysis Method: 8260B | Date Collected: 09/07/2017 17:00

Sample wt/vol: 5.44(g) | Date Analyzed: 09/13/2017 11:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.32	U	5.3	0.32

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		61-127
460-00-4	4-Bromofluorobenzene (Surr)	92		61-132
2037-26-5	Toluene-d8 (Surr)	93		66-125
1868-53-7	Dibromofluoromethane (Surr)	87		43-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: UX82421.D

Analysis Method: 8260B | Date Collected: 09/07/2017 17:15

Sample wt/vol: 5.41(g) | Date Analyzed: 09/13/2017 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.2 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.37	U	5.1	0.37
71-55-6	1,1,1-Trichloroethane	0.24	U	5.1	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	5.1	0.27
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	5.1	0.50
75-34-3	1,1-Dichloroethane	0.34	U	5.1	0.34
75-35-4	1,1-Dichloroethene	0.56	U	5.1	0.56
563-58-6	1,1-Dichloropropene	0.20	U	5.1	0.20
87-61-6	1,2,3-Trichlorobenzene	0.36	U	5.1	0.36
96-18-4	1,2,3-Trichloropropane	0.40	U	5.1	0.40
526-73-8	1,2,3-Trimethylbenzene	0.10	U *	5.1	0.10
120-82-1	1,2,4-Trichlorobenzene	0.25	U	5.1	0.25
95-63-6	1,2,4-Trimethylbenzene	0.26	U	5.1	0.26
96-12-8	1,2-Dibromo-3-Chloropropane	0.70	U	10	0.70
95-50-1	1,2-Dichlorobenzene	0.23	U	5.1	0.23
107-06-2	1,2-Dichloroethane	0.30	U	5.1	0.30
78-87-5	1,2-Dichloropropane	0.32	U	5.1	0.32
541-73-1	1,3-Dichlorobenzene	0.30	U	5.1	0.30
142-28-9	1,3-Dichloropropane	0.24	U	5.1	0.24
106-46-7	1,4-Dichlorobenzene	0.36	U	5.1	0.36
594-20-7	2,2-Dichloropropane	0.31	U	5.1	0.31
110-75-8	2-Chloroethyl vinyl ether	2.9	U	51	2.9
95-49-8	2-Chlorotoluene	0.38	U	5.1	0.38
591-78-6	2-Hexanone	0.60	U	21	0.60
108-86-1	Bromobenzene	0.28	U	5.1	0.28
74-97-5	Bromochloromethane	0.37	U	5.1	0.37
106-43-4	4-Chlorotoluene	0.25	U	5.1	0.25
99-87-6	p-Isopropyltoluene	0.19	U	5.1	0.19
67-64-1	Acetone	9.9	J	21	3.1
71-43-2	Benzene	0.33	U	5.1	0.33
75-25-2	Bromoform	0.41	U	5.1	0.41
74-83-9	Bromomethane	0.61	U	5.1	0.61
75-15-0	Carbon disulfide	0.22	U	5.1	0.22
56-23-5	Carbon tetrachloride	0.26	U	5.1	0.26
108-90-7	Chlorobenzene	0.46	J	5.1	0.34
75-00-3	Chloroethane	0.39	U	5.1	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: UX82421.D

Analysis Method: 8260B | Date Collected: 09/07/2017 17:15

Sample wt/vol: 5.41(g) | Date Analyzed: 09/13/2017 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.2 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.24	U	5.1	0.24
74-87-3	Chloromethane	0.39	U	5.1	0.39
156-59-2	cis-1,2-Dichloroethene	0.29	U	5.1	0.29
10061-01-5	cis-1,3-Dichloropropene	0.27	U	5.1	0.27
87-68-3	Hexachlorobutadiene	0.45	U	5.1	0.45
74-95-3	Dibromomethane	0.39	U	5.1	0.39
75-27-4	Bromodichloromethane	0.34	U	5.1	0.34
75-71-8	Dichlorodifluoromethane	0.36	U	5.1	0.36
100-41-4	Ethylbenzene	0.28	U	5.1	0.28
106-93-4	1,2-Dibromoethane	0.36	U	5.1	0.36
108-20-3	Diisopropyl ether	0.25	U	10	0.25
91-20-3	Naphthalene	0.34	U	5.1	0.34
179601-23-1	m-Xylene & p-Xylene	0.41	U	10	0.41
104-51-8	n-Butylbenzene	0.26	U	5.1	0.26
98-82-8	Isopropylbenzene	0.21	U	5.1	0.21
103-65-1	N-Propylbenzene	0.29	U	5.1	0.29
78-93-3	2-Butanone (MEK)	1.3	U	21	1.3
108-10-1	4-Methyl-2-pentanone (MIBK)	0.92	U	21	0.92
135-98-8	sec-Butylbenzene	0.20	U	5.1	0.20
1634-04-4	Methyl tert-butyl ether	0.28	U	5.1	0.28
994-05-8	Tert-amyl methyl ether	0.22	U	5.1	0.22
75-09-2	Methylene Chloride	0.25	U	5.1	0.25
95-47-6	o-Xylene	0.23	U	5.1	0.23
100-42-5	Styrene	0.28	U	5.1	0.28
637-92-3	Ethyl t-butyl ether	0.13	U	5.1	0.13
98-06-6	tert-Butylbenzene	0.22	U	5.1	0.22
127-18-4	Tetrachloroethene	0.38	U	5.1	0.38
108-88-3	Toluene	0.35	U	5.1	0.35
156-60-5	trans-1,2-Dichloroethene	0.39	U	5.1	0.39
10061-02-6	trans-1,3-Dichloropropene	0.22	U	5.1	0.22
79-01-6	Trichloroethene	0.42	U	5.1	0.42
75-69-4	Trichlorofluoromethane	0.25	U	5.1	0.25
108-05-4	Vinyl acetate	0.90	U	10	0.90
75-01-4	Vinyl chloride	0.29	U	5.1	0.29
75-65-0	tert-Butyl alcohol	6.5	J	210	2.4
1330-20-7	Xylenes, Total	0.41	U	10	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: UX82421.D

Analysis Method: 8260B | Date Collected: 09/07/2017 17:15

Sample wt/vol: 5.41(g) | Date Analyzed: 09/13/2017 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.2 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.31	U	5.1	0.31

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		61-127
460-00-4	4-Bromofluorobenzene (Surr)	95		61-132
2037-26-5	Toluene-d8 (Surr)	93		66-125
1868-53-7	Dibromofluoromethane (Surr)	88		43-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: UX82422.D

Analysis Method: 8260B | Date Collected: 09/08/2017 15:10

Sample wt/vol: 5.07(g) | Date Analyzed: 09/13/2017 12:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 21.9 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.45	U	6.3	0.45
71-55-6	1,1,1-Trichloroethane	0.29	U	6.3	0.29
79-34-5	1,1,2,2-Tetrachloroethane	0.33	U	6.3	0.33
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.62	U	6.3	0.62
75-34-3	1,1-Dichloroethane	0.42	U	6.3	0.42
75-35-4	1,1-Dichloroethene	9.3		6.3	0.68
563-58-6	1,1-Dichloropropene	0.24	U	6.3	0.24
87-61-6	1,2,3-Trichlorobenzene	0.44	U	6.3	0.44
96-18-4	1,2,3-Trichloropropane	0.49	U	6.3	0.49
526-73-8	1,2,3-Trimethylbenzene	0.13	U *	6.3	0.13
120-82-1	1,2,4-Trichlorobenzene	0.30	U	6.3	0.30
95-63-6	1,2,4-Trimethylbenzene	0.32	U	6.3	0.32
96-12-8	1,2-Dibromo-3-Chloropropane	0.86	U	13	0.86
95-50-1	1,2-Dichlorobenzene	0.28	U	6.3	0.28
107-06-2	1,2-Dichloroethane	0.37	U	6.3	0.37
78-87-5	1,2-Dichloropropane	0.39	U	6.3	0.39
541-73-1	1,3-Dichlorobenzene	0.37	U	6.3	0.37
142-28-9	1,3-Dichloropropane	0.29	U	6.3	0.29
106-46-7	1,4-Dichlorobenzene	0.44	U	6.3	0.44
594-20-7	2,2-Dichloropropane	0.38	U	6.3	0.38
110-75-8	2-Chloroethyl vinyl ether	3.5	U	63	3.5
95-49-8	2-Chlorotoluene	0.47	U	6.3	0.47
591-78-6	2-Hexanone	0.73	U	25	0.73
108-86-1	Bromobenzene	0.34	U	6.3	0.34
74-97-5	Bromochloromethane	0.45	U	6.3	0.45
106-43-4	4-Chlorotoluene	0.30	U	6.3	0.30
99-87-6	p-Isopropyltoluene	0.23	U	6.3	0.23
67-64-1	Acetone	3.9	U	25	3.9
71-43-2	Benzene	0.40	U	6.3	0.40
75-25-2	Bromoform	0.50	U	6.3	0.50
74-83-9	Bromomethane	0.74	U	6.3	0.74
75-15-0	Carbon disulfide	0.27	U	6.3	0.27
56-23-5	Carbon tetrachloride	0.32	U	6.3	0.32
108-90-7	Chlorobenzene	0.42	U	6.3	0.42
75-00-3	Chloroethane	0.48	U	6.3	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: UX82422.D

Analysis Method: 8260B | Date Collected: 09/08/2017 15:10

Sample wt/vol: 5.07(g) | Date Analyzed: 09/13/2017 12:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 21.9 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.37	J	6.3	0.29
74-87-3	Chloromethane	0.48	U	6.3	0.48
156-59-2	cis-1,2-Dichloroethene	4.4	J	6.3	0.35
10061-01-5	cis-1,3-Dichloropropene	0.33	U	6.3	0.33
87-68-3	Hexachlorobutadiene	0.56	U	6.3	0.56
74-95-3	Dibromomethane	0.48	U	6.3	0.48
75-27-4	Bromodichloromethane	0.42	U	6.3	0.42
75-71-8	Dichlorodifluoromethane	0.44	U	6.3	0.44
100-41-4	Ethylbenzene	0.34	U	6.3	0.34
106-93-4	1,2-Dibromoethane	0.44	U	6.3	0.44
108-20-3	Diisopropyl ether	0.30	U	13	0.30
91-20-3	Naphthalene	0.42	U	6.3	0.42
179601-23-1	m-Xylene & p-Xylene	0.50	U	13	0.50
104-51-8	n-Butylbenzene	0.32	U	6.3	0.32
98-82-8	Isopropylbenzene	0.25	U	6.3	0.25
103-65-1	N-Propylbenzene	0.35	U	6.3	0.35
78-93-3	2-Butanone (MEK)	1.6	U	25	1.6
108-10-1	4-Methyl-2-pentanone (MIBK)	1.1	U	25	1.1
135-98-8	sec-Butylbenzene	0.24	U	6.3	0.24
1634-04-4	Methyl tert-butyl ether	0.34	U	6.3	0.34
994-05-8	Tert-amyl methyl ether	0.27	U	6.3	0.27
75-09-2	Methylene Chloride	0.30	U	6.3	0.30
95-47-6	o-Xylene	0.28	U	6.3	0.28
100-42-5	Styrene	0.34	U	6.3	0.34
637-92-3	Ethyl t-butyl ether	0.16	U	6.3	0.16
98-06-6	tert-Butylbenzene	0.27	U	6.3	0.27
127-18-4	Tetrachloroethene	0.47	U	6.3	0.47
108-88-3	Toluene	0.43	U	6.3	0.43
156-60-5	trans-1,2-Dichloroethene	0.48	U	6.3	0.48
10061-02-6	trans-1,3-Dichloropropene	0.27	U	6.3	0.27
79-01-6	Trichloroethene	77		6.3	0.52
75-69-4	Trichlorofluoromethane	0.30	U	6.3	0.30
108-05-4	Vinyl acetate	1.1	U	13	1.1
75-01-4	Vinyl chloride	0.35	U	6.3	0.35
75-65-0	tert-Butyl alcohol	3.0	U	250	3.0
1330-20-7	Xylenes, Total	0.50	U	13	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: UX82422.D

Analysis Method: 8260B | Date Collected: 09/08/2017 15:10

Sample wt/vol: 5.07(g) | Date Analyzed: 09/13/2017 12:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 21.9 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.38	U	6.3	0.38

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		61-127
460-00-4	4-Bromofluorobenzene (Surr)	92		61-132
2037-26-5	Toluene-d8 (Surr)	93		66-125
1868-53-7	Dibromofluoromethane (Surr)	86		43-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: UX82423.D

Analysis Method: 8260B | Date Collected: 09/08/2017 15:20

Sample wt/vol: 5.23(g) | Date Analyzed: 09/13/2017 12:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.8 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.42	U	5.9	0.42
71-55-6	1,1,1-Trichloroethane	0.27	U	5.9	0.27
79-34-5	1,1,2,2-Tetrachloroethane	0.31	U	5.9	0.31
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.58	U	5.9	0.58
75-34-3	1,1-Dichloroethane	0.39	U	5.9	0.39
75-35-4	1,1-Dichloroethene	1.4	J	5.9	0.64
563-58-6	1,1-Dichloropropene	0.22	U	5.9	0.22
87-61-6	1,2,3-Trichlorobenzene	0.41	U	5.9	0.41
96-18-4	1,2,3-Trichloropropane	0.46	U	5.9	0.46
526-73-8	1,2,3-Trimethylbenzene	0.12	U *	5.9	0.12
120-82-1	1,2,4-Trichlorobenzene	0.28	U	5.9	0.28
95-63-6	1,2,4-Trimethylbenzene	0.29	U	5.9	0.29
96-12-8	1,2-Dibromo-3-Chloropropane	0.80	U	12	0.80
95-50-1	1,2-Dichlorobenzene	0.26	U	5.9	0.26
107-06-2	1,2-Dichloroethane	0.34	U	5.9	0.34
78-87-5	1,2-Dichloropropane	0.37	U	5.9	0.37
541-73-1	1,3-Dichlorobenzene	0.34	U	5.9	0.34
142-28-9	1,3-Dichloropropane	0.27	U	5.9	0.27
106-46-7	1,4-Dichlorobenzene	0.41	U	5.9	0.41
594-20-7	2,2-Dichloropropane	0.35	U	5.9	0.35
110-75-8	2-Chloroethyl vinyl ether	3.3	U	59	3.3
95-49-8	2-Chlorotoluene	0.44	U	5.9	0.44
591-78-6	2-Hexanone	0.68	U	24	0.68
108-86-1	Bromobenzene	0.32	U	5.9	0.32
74-97-5	Bromochloromethane	0.42	U	5.9	0.42
106-43-4	4-Chlorotoluene	0.28	U	5.9	0.28
99-87-6	p-Isopropyltoluene	0.21	U	5.9	0.21
67-64-1	Acetone	3.6	U	24	3.6
71-43-2	Benzene	0.38	U	5.9	0.38
75-25-2	Bromoform	0.47	U	5.9	0.47
74-83-9	Bromomethane	0.69	U	5.9	0.69
75-15-0	Carbon disulfide	0.25	U	5.9	0.25
56-23-5	Carbon tetrachloride	0.29	U	5.9	0.29
108-90-7	Chlorobenzene	0.39	U	5.9	0.39
75-00-3	Chloroethane	0.45	U	5.9	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: UX82423.D

Analysis Method: 8260B | Date Collected: 09/08/2017 15:20

Sample wt/vol: 5.23(g) | Date Analyzed: 09/13/2017 12:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.8 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.27	U	5.9	0.27
74-87-3	Chloromethane	0.45	U	5.9	0.45
156-59-2	cis-1,2-Dichloroethene	2.8	J	5.9	0.33
10061-01-5	cis-1,3-Dichloropropene	0.31	U	5.9	0.31
87-68-3	Hexachlorobutadiene	0.52	U	5.9	0.52
74-95-3	Dibromomethane	0.45	U	5.9	0.45
75-27-4	Bromodichloromethane	0.39	U	5.9	0.39
75-71-8	Dichlorodifluoromethane	0.41	U	5.9	0.41
100-41-4	Ethylbenzene	0.32	U	5.9	0.32
106-93-4	1,2-Dibromoethane	0.41	U	5.9	0.41
108-20-3	Diisopropyl ether	0.28	U	12	0.28
91-20-3	Naphthalene	0.39	U	5.9	0.39
179601-23-1	m-Xylene & p-Xylene	0.47	U	12	0.47
104-51-8	n-Butylbenzene	0.29	U	5.9	0.29
98-82-8	Isopropylbenzene	0.24	U	5.9	0.24
103-65-1	N-Propylbenzene	0.33	U	5.9	0.33
78-93-3	2-Butanone (MEK)	1.5	U	24	1.5
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	24	1.0
135-98-8	sec-Butylbenzene	0.22	U	5.9	0.22
1634-04-4	Methyl tert-butyl ether	0.32	U	5.9	0.32
994-05-8	Tert-amyl methyl ether	0.25	U	5.9	0.25
75-09-2	Methylene Chloride	0.28	U	5.9	0.28
95-47-6	o-Xylene	0.26	U	5.9	0.26
100-42-5	Styrene	0.32	U	5.9	0.32
637-92-3	Ethyl t-butyl ether	0.15	U	5.9	0.15
98-06-6	tert-Butylbenzene	0.25	U	5.9	0.25
127-18-4	Tetrachloroethene	0.44	U	5.9	0.44
108-88-3	Toluene	0.40	U	5.9	0.40
156-60-5	trans-1,2-Dichloroethene	0.45	U	5.9	0.45
10061-02-6	trans-1,3-Dichloropropene	0.25	U	5.9	0.25
79-01-6	Trichloroethene	22		5.9	0.48
75-69-4	Trichlorofluoromethane	0.28	U	5.9	0.28
108-05-4	Vinyl acetate	1.0	U	12	1.0
75-01-4	Vinyl chloride	0.33	U	5.9	0.33
75-65-0	tert-Butyl alcohol	2.8	U	240	2.8
1330-20-7	Xylenes, Total	0.47	U	12	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: UX82423.D

Analysis Method: 8260B | Date Collected: 09/08/2017 15:20

Sample wt/vol: 5.23(g) | Date Analyzed: 09/13/2017 12:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.8 | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.35	U	5.9	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		61-127
460-00-4	4-Bromofluorobenzene (Surr)	94		61-132
2037-26-5	Toluene-d8 (Surr)	94		66-125
1868-53-7	Dibromofluoromethane (Surr)	88		43-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: 70914012.D

Analysis Method: 8270D | Date Collected: 09/06/2017 13:00

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30.01(g) | Date Analyzed: 09/14/2017 11:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.1	U	59	4.1
123-91-1	1,4-Dioxane	26	U	120	26
88-06-2	2,4,6-Trichlorophenol	10	U	180	10
95-95-4	2,4,5-Trichlorophenol	29	U	180	29
120-83-2	2,4-Dichlorophenol	23	U	180	23
105-67-9	2,4-Dimethylphenol	23	U	180	23
51-28-5	2,4-Dinitrophenol	25	U	390	25
121-14-2	2,4-Dinitrotoluene	20	U	230	20
91-58-7	2-Chloronaphthalene	0.53	U	59	0.53
95-57-8	2-Chlorophenol	9.6	U	59	9.6
91-57-6	2-Methylnaphthalene	0.59	U	7.8	0.59
95-48-7	2-Methylphenol	13	U	230	13
88-74-4	2-Nitroaniline	11	U	230	11
88-75-5	2-Nitrophenol	9.7	U	59	9.7
15831-10-4	3 & 4 Methylphenol	23	U	470	23
91-94-1	3,3'-Dichlorobenzidine	21	U	120	21
99-09-2	3-Nitroaniline	19	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	11	U	180	11
101-55-3	4-Bromophenyl phenyl ether	15	U	59	15
59-50-7	4-Chloro-3-methylphenol	25	U	180	25
106-47-8	4-Chloroaniline	20	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	15	U	59	15
100-01-6	4-Nitroaniline	31	U	230	31
83-32-9	Acenaphthene	0.89	U	7.8	0.89
208-96-8	Acenaphthylene	0.41	U	7.8	0.41
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.92	U	7.8	0.92
1912-24-9	Atrazine	11	U	230	11
100-52-7	Benzaldehyde	14	U	120	14
56-55-3	Benzo[a]anthracene	0.74	U	7.8	0.74
50-32-8	Benzo[a]pyrene	0.75	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	0.69	U	7.8	0.69
191-24-2	Benzo[g,h,i]perylene	0.41	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	0.80	U	7.8	0.80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: 70914012.D

Analysis Method: 8270D | Date Collected: 09/06/2017 13:00

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30.01(g) | Date Analyzed: 09/14/2017 11:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	26	U	120	26
111-44-4	Bis(2-chloroethyl)ether	2.3	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	22	U	82	22
85-68-7	Butyl benzyl phthalate	12	U	82	12
105-60-2	Caprolactam	43	U	390	43
86-74-8	Carbazole	32	U	59	32
218-01-9	Chrysene	1.3	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	18	U	82	18
117-84-0	Di-n-octyl phthalate	9.3	U	82	9.3
53-70-3	Dibenz(a,h)anthracene	0.77	U	7.8	0.77
132-64-9	Dibenzofuran	0.77	U	59	0.77
84-66-2	Diethyl phthalate	19	U	82	19
131-11-3	Dimethyl phthalate	20	U	82	20
206-44-0	Fluoranthene	0.65	U	7.8	0.65
86-73-7	Fluorene	0.62	U	7.8	0.62
118-74-1	Hexachlorobenzene	2.5	U	7.8	2.5
87-68-3	Hexachlorobutadiene	6.6	U	59	6.6
77-47-4	Hexachlorocyclopentadiene	9.5	U	390	9.5
67-72-1	Hexachloroethane	11	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.41	U	7.8	0.41
78-59-1	Isophorone	15	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	7.4	U	59	7.4
62-75-9	N-Nitrosodimethylamine	19	U	120	19
86-30-6	N-Nitrosodiphenylamine	25	U	59	25
91-20-3	Naphthalene	0.96	U	7.8	0.96
98-95-3	Nitrobenzene	2.6	U	120	2.6
87-86-5	Pentachlorophenol	11	U	180	11
85-01-8	Phenanthrene	0.86	U	7.8	0.86
108-95-2	Phenol	8.6	U	59	8.6
129-00-0	Pyrene	0.52	U	7.8	0.52
108-60-1	2,2'-oxybis[1-chloropropane]	11	U	120	11
606-20-2	2,6-Dinitrotoluene	25	U	230	25
100-02-7	4-Nitrophenol	20	U	390	20

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: 70914012.D

Analysis Method: 8270D | Date Collected: 09/06/2017 13:00

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30.01(g) | Date Analyzed: 09/14/2017 11:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	106		41-120
4165-62-2	Phenol-d5 (Surr)	63		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	63		30-120
367-12-4	2-Fluorophenol (Surr)	55		29-120
321-60-8	2-Fluorobiphenyl (Surr)	62		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	36		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: 70914013.D

Analysis Method: 8270D | Date Collected: 09/06/2017 13:15

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.66(g) | Date Analyzed: 09/14/2017 12:18

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 22.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.6	U	65	4.6
123-91-1	1,4-Dioxane	29	U	130	29
88-06-2	2,4,6-Trichlorophenol	12	U	200	12
95-95-4	2,4,5-Trichlorophenol	33	U	200	33
120-83-2	2,4-Dichlorophenol	26	U	200	26
105-67-9	2,4-Dimethylphenol	26	U	200	26
51-28-5	2,4-Dinitrophenol	27	U	430	27
121-14-2	2,4-Dinitrotoluene	22	U	260	22
91-58-7	2-Chloronaphthalene	0.59	U	65	0.59
95-57-8	2-Chlorophenol	11	U	65	11
91-57-6	2-Methylnaphthalene	0.65	U	8.7	0.65
95-48-7	2-Methylphenol	14	U	260	14
88-74-4	2-Nitroaniline	12	U	260	12
88-75-5	2-Nitrophenol	11	U	65	11
15831-10-4	3 & 4 Methylphenol	26	U	520	26
91-94-1	3,3'-Dichlorobenzidine	23	U	130	23
99-09-2	3-Nitroaniline	21	U	260	21
534-52-1	4,6-Dinitro-2-methylphenol	12	U	200	12
101-55-3	4-Bromophenyl phenyl ether	17	U	65	17
59-50-7	4-Chloro-3-methylphenol	27	U	200	27
106-47-8	4-Chloroaniline	22	U	200	22
7005-72-3	4-Chlorophenyl phenyl ether	17	U	65	17
100-01-6	4-Nitroaniline	34	U	260	34
83-32-9	Acenaphthene	0.99	U	8.7	0.99
208-96-8	Acenaphthylene	0.46	U	8.7	0.46
98-86-2	Acetophenone	12	U	130	12
120-12-7	Anthracene	1.0	U	8.7	1.0
1912-24-9	Atrazine	12	U	260	12
100-52-7	Benzaldehyde	16	U	130	16
56-55-3	Benzo[a]anthracene	0.82	U	8.7	0.82
50-32-8	Benzo[a]pyrene	0.83	U	8.7	0.83
205-99-2	Benzo[b]fluoranthene	0.77	U	8.7	0.77
191-24-2	Benzo[g,h,i]perylene	0.46	U	8.7	0.46
207-08-9	Benzo[k]fluoranthene	0.89	U	8.7	0.89

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: 70914013.D

Analysis Method: 8270D | Date Collected: 09/06/2017 13:15

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.66(g) | Date Analyzed: 09/14/2017 12:18

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 22.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	29	U	130	29
111-44-4	Bis(2-chloroethyl)ether	2.6	U	130	2.6
117-81-7	Bis(2-ethylhexyl) phthalate	25	U	91	25
85-68-7	Butyl benzyl phthalate	13	U	91	13
105-60-2	Caprolactam	57	J	430	48
86-74-8	Carbazole	35	U	65	35
218-01-9	Chrysene	1.4	U	8.7	1.4
84-74-2	Di-n-butyl phthalate	20	U	91	20
117-84-0	Di-n-octyl phthalate	10	U	91	10
53-70-3	Dibenz(a,h)anthracene	0.86	U	8.7	0.86
132-64-9	Dibenzofuran	0.86	U	65	0.86
84-66-2	Diethyl phthalate	21	U	91	21
131-11-3	Dimethyl phthalate	22	U	91	22
206-44-0	Fluoranthene	0.72	U	8.7	0.72
86-73-7	Fluorene	0.69	U	8.7	0.69
118-74-1	Hexachlorobenzene	2.7	U	8.7	2.7
87-68-3	Hexachlorobutadiene	7.3	U	65	7.3
77-47-4	Hexachlorocyclopentadiene	11	U	430	11
67-72-1	Hexachloroethane	12	U	65	12
193-39-5	Indeno[1,2,3-cd]pyrene	0.46	U	8.7	0.46
78-59-1	Isophorone	17	U	65	17
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	65	8.2
62-75-9	N-Nitrosodimethylamine	21	U	130	21
86-30-6	N-Nitrosodiphenylamine	27	U	65	27
91-20-3	Naphthalene	1.1	U	8.7	1.1
98-95-3	Nitrobenzene	2.9	U	130	2.9
87-86-5	Pentachlorophenol	12	U	200	12
85-01-8	Phenanthrene	0.95	U	8.7	0.95
108-95-2	Phenol	9.5	U	65	9.5
129-00-0	Pyrene	0.57	U	8.7	0.57
108-60-1	2,2'-oxybis[1-chloropropane]	12	U	130	12
606-20-2	2,6-Dinitrotoluene	27	U	260	27
100-02-7	4-Nitrophenol	22	U	430	22

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: 70914013.D

Analysis Method: 8270D | Date Collected: 09/06/2017 13:15

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.66(g) | Date Analyzed: 09/14/2017 12:18

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 22.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	99		41-120
4165-62-2	Phenol-d5 (Surr)	75		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	56		30-120
367-12-4	2-Fluorophenol (Surr)	81		29-120
321-60-8	2-Fluorobiphenyl (Surr)	69		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	56		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: 70914014.D

Analysis Method: 8270D | Date Collected: 09/07/2017 17:00

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.98(g) | Date Analyzed: 09/14/2017 12:43

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.1	U	58	4.1
123-91-1	1,4-Dioxane	25	U	120	25
88-06-2	2,4,6-Trichlorophenol	10	U	170	10
95-95-4	2,4,5-Trichlorophenol	29	U	170	29
120-83-2	2,4-Dichlorophenol	23	U	170	23
105-67-9	2,4-Dimethylphenol	23	U	170	23
51-28-5	2,4-Dinitrophenol	24	U	380	24
121-14-2	2,4-Dinitrotoluene	20	U	230	20
91-58-7	2-Chloronaphthalene	0.52	U	58	0.52
95-57-8	2-Chlorophenol	9.5	U	58	9.5
91-57-6	2-Methylnaphthalene	0.58	U	7.7	0.58
95-48-7	2-Methylphenol	13	U	230	13
88-74-4	2-Nitroaniline	11	U	230	11
88-75-5	2-Nitrophenol	9.6	U	58	9.6
15831-10-4	3 & 4 Methylphenol	23	U	460	23
91-94-1	3,3'-Dichlorobenzidine	21	U	120	21
99-09-2	3-Nitroaniline	19	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	11	U	170	11
101-55-3	4-Bromophenyl phenyl ether	15	U	58	15
59-50-7	4-Chloro-3-methylphenol	24	U	170	24
106-47-8	4-Chloroaniline	20	U	170	20
7005-72-3	4-Chlorophenyl phenyl ether	15	U	58	15
100-01-6	4-Nitroaniline	30	U	230	30
83-32-9	Acenaphthene	0.88	U	7.7	0.88
208-96-8	Acenaphthylene	0.41	U	7.7	0.41
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.90	U	7.7	0.90
1912-24-9	Atrazine	11	U	230	11
100-52-7	Benzaldehyde	14	U	120	14
56-55-3	Benzo[a]anthracene	0.73	U	7.7	0.73
50-32-8	Benzo[a]pyrene	0.74	U	7.7	0.74
205-99-2	Benzo[b]fluoranthene	0.68	U	7.7	0.68
191-24-2	Benzo[g,h,i]perylene	0.41	U	7.7	0.41
207-08-9	Benzo[k]fluoranthene	0.79	U	7.7	0.79

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: 70914014.D

Analysis Method: 8270D | Date Collected: 09/07/2017 17:00

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.98(g) | Date Analyzed: 09/14/2017 12:43

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	25	U	120	25
111-44-4	Bis(2-chloroethyl)ether	2.3	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	22	U	81	22
85-68-7	Butyl benzyl phthalate	12	U	81	12
105-60-2	Caprolactam	43	U	380	43
86-74-8	Carbazole	31	U	58	31
218-01-9	Chrysene	1.3	U	7.7	1.3
84-74-2	Di-n-butyl phthalate	17	U	81	17
117-84-0	Di-n-octyl phthalate	9.2	U	81	9.2
53-70-3	Dibenz(a,h)anthracene	0.76	U	7.7	0.76
132-64-9	Dibenzofuran	0.76	U	58	0.76
84-66-2	Diethyl phthalate	19	U	81	19
131-11-3	Dimethyl phthalate	20	U	81	20
206-44-0	Fluoranthene	0.64	U	7.7	0.64
86-73-7	Fluorene	0.61	U	7.7	0.61
118-74-1	Hexachlorobenzene	2.4	U	7.7	2.4
87-68-3	Hexachlorobutadiene	6.5	U	58	6.5
77-47-4	Hexachlorocyclopentadiene	9.4	U	380	9.4
67-72-1	Hexachloroethane	10	U	58	10
193-39-5	Indeno[1,2,3-cd]pyrene	0.41	U	7.7	0.41
78-59-1	Isophorone	15	U	58	15
621-64-7	N-Nitrosodi-n-propylamine	7.3	U	58	7.3
62-75-9	N-Nitrosodimethylamine	19	U	120	19
86-30-6	N-Nitrosodiphenylamine	24	U	58	24
91-20-3	Naphthalene	0.95	U	7.7	0.95
98-95-3	Nitrobenzene	2.5	U	120	2.5
87-86-5	Pentachlorophenol	11	U	170	11
85-01-8	Phenanthrene	0.85	U	7.7	0.85
108-95-2	Phenol	8.5	U	58	8.5
129-00-0	Pyrene	0.51	U	7.7	0.51
108-60-1	2,2'-oxybis[1-chloropropane]	11	U	120	11
606-20-2	2,6-Dinitrotoluene	24	U	230	24
100-02-7	4-Nitrophenol	20	U	380	20

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: 70914014.D

Analysis Method: 8270D | Date Collected: 09/07/2017 17:00

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.98(g) | Date Analyzed: 09/14/2017 12:43

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	81		41-120
4165-62-2	Phenol-d5 (Surr)	71		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	56		30-120
367-12-4	2-Fluorophenol (Surr)	90		29-120
321-60-8	2-Fluorobiphenyl (Surr)	61		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	67		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: 70914015.D

Analysis Method: 8270D | Date Collected: 09/07/2017 17:15

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.68(g) | Date Analyzed: 09/14/2017 13:08

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	3.9	U	56	3.9
123-91-1	1,4-Dioxane	25	U	110	25
88-06-2	2,4,6-Trichlorophenol	10	U	170	10
95-95-4	2,4,5-Trichlorophenol	28	U	170	28
120-83-2	2,4-Dichlorophenol	23	U	170	23
105-67-9	2,4-Dimethylphenol	23	U	170	23
51-28-5	2,4-Dinitrophenol	24	U	370	24
121-14-2	2,4-Dinitrotoluene	19	U	230	19
91-58-7	2-Chloronaphthalene	0.51	U	56	0.51
95-57-8	2-Chlorophenol	9.2	U	56	9.2
91-57-6	2-Methylnaphthalene	0.56	U	7.5	0.56
95-48-7	2-Methylphenol	12	U	230	12
88-74-4	2-Nitroaniline	10	U	230	10
88-75-5	2-Nitrophenol	9.3	U	56	9.3
15831-10-4	3 & 4 Methylphenol	23	U	450	23
91-94-1	3,3'-Dichlorobenzidine	20	U	110	20
99-09-2	3-Nitroaniline	18	U	230	18
534-52-1	4,6-Dinitro-2-methylphenol	10	U	170	10
101-55-3	4-Bromophenyl phenyl ether	15	U	56	15
59-50-7	4-Chloro-3-methylphenol	24	U	170	24
106-47-8	4-Chloroaniline	19	U	170	19
7005-72-3	4-Chlorophenyl phenyl ether	15	U	56	15
100-01-6	4-Nitroaniline	29	U	230	29
83-32-9	Acenaphthene	0.86	U	7.5	0.86
208-96-8	Acenaphthylene	0.39	U	7.5	0.39
98-86-2	Acetophenone	10	U	110	10
120-12-7	Anthracene	0.88	U	7.5	0.88
1912-24-9	Atrazine	10	U	230	10
100-52-7	Benzaldehyde	14	U	110	14
56-55-3	Benzo[a]anthracene	0.71	U	7.5	0.71
50-32-8	Benzo[a]pyrene	0.72	U	7.5	0.72
205-99-2	Benzo[b]fluoranthene	0.66	U	7.5	0.66
191-24-2	Benzo[g,h,i]perylene	0.39	U	7.5	0.39
207-08-9	Benzo[k]fluoranthene	0.77	U	7.5	0.77

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: 70914015.D

Analysis Method: 8270D | Date Collected: 09/07/2017 17:15

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.68(g) | Date Analyzed: 09/14/2017 13:08

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	25	U	110	25
111-44-4	Bis(2-chloroethyl)ether	2.3	U	110	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	21	U	79	21
85-68-7	Butyl benzyl phthalate	11	U	79	11
105-60-2	Caprolactam	42	U	370	42
86-74-8	Carbazole	30	U	56	30
218-01-9	Chrysene	1.2	U	7.5	1.2
84-74-2	Di-n-butyl phthalate	17	U	79	17
117-84-0	Di-n-octyl phthalate	8.9	U	79	8.9
53-70-3	Dibenz(a,h)anthracene	0.74	U	7.5	0.74
132-64-9	Dibenzofuran	0.74	U	56	0.74
84-66-2	Diethyl phthalate	18	U	79	18
131-11-3	Dimethyl phthalate	19	U	79	19
206-44-0	Fluoranthene	0.62	U	7.5	0.62
86-73-7	Fluorene	0.60	U	7.5	0.60
118-74-1	Hexachlorobenzene	2.4	U	7.5	2.4
87-68-3	Hexachlorobutadiene	6.3	U	56	6.3
77-47-4	Hexachlorocyclopentadiene	9.1	U	370	9.1
67-72-1	Hexachloroethane	10	U	56	10
193-39-5	Indeno[1,2,3-cd]pyrene	0.39	U	7.5	0.39
78-59-1	Isophorone	15	U	56	15
621-64-7	N-Nitrosodi-n-propylamine	7.1	U	56	7.1
62-75-9	N-Nitrosodimethylamine	18	U	110	18
86-30-6	N-Nitrosodiphenylamine	24	U	56	24
91-20-3	Naphthalene	0.92	U	7.5	0.92
98-95-3	Nitrobenzene	2.5	U	110	2.5
87-86-5	Pentachlorophenol	10	U	170	10
85-01-8	Phenanthrene	0.82	U	7.5	0.82
108-95-2	Phenol	8.2	U	56	8.2
129-00-0	Pyrene	0.50	U	7.5	0.50
108-60-1	2,2'-oxybis[1-chloropropane]	11	U	110	11
606-20-2	2,6-Dinitrotoluene	24	U	230	24
100-02-7	4-Nitrophenol	19	U	370	19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: 70914015.D

Analysis Method: 8270D | Date Collected: 09/07/2017 17:15

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.68(g) | Date Analyzed: 09/14/2017 13:08

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	108		41-120
4165-62-2	Phenol-d5 (Surr)	73		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	65		30-120
367-12-4	2-Fluorophenol (Surr)	64		29-120
321-60-8	2-Fluorobiphenyl (Surr)	71		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	80		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: 70914016.D

Analysis Method: 8270D | Date Collected: 09/08/2017 15:10

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30.05(g) | Date Analyzed: 09/14/2017 13:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 21.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.5	U	64	4.5
123-91-1	1,4-Dioxane	28	U	130	28
88-06-2	2,4,6-Trichlorophenol	11	U	190	11
95-95-4	2,4,5-Trichlorophenol	32	U	190	32
120-83-2	2,4-Dichlorophenol	26	U	190	26
105-67-9	2,4-Dimethylphenol	26	U	190	26
51-28-5	2,4-Dinitrophenol	27	U	420	27
121-14-2	2,4-Dinitrotoluene	22	U	260	22
91-58-7	2-Chloronaphthalene	0.57	U	64	0.57
95-57-8	2-Chlorophenol	10	U	64	10
91-57-6	2-Methylnaphthalene	0.64	U	8.5	0.64
95-48-7	2-Methylphenol	14	U	260	14
88-74-4	2-Nitroaniline	12	U	260	12
88-75-5	2-Nitrophenol	11	U	64	11
15831-10-4	3 & 4 Methylphenol	26	U	510	26
91-94-1	3,3'-Dichlorobenzidine	23	U	130	23
99-09-2	3-Nitroaniline	20	U	260	20
534-52-1	4,6-Dinitro-2-methylphenol	12	U	190	12
101-55-3	4-Bromophenyl phenyl ether	17	U	64	17
59-50-7	4-Chloro-3-methylphenol	27	U	190	27
106-47-8	4-Chloroaniline	22	U	190	22
7005-72-3	4-Chlorophenyl phenyl ether	17	U	64	17
100-01-6	4-Nitroaniline	33	U	260	33
83-32-9	Acenaphthene	0.97	U	8.5	0.97
208-96-8	Acenaphthylene	0.45	U	8.5	0.45
98-86-2	Acetophenone	12	U	130	12
120-12-7	Anthracene	1.0	U	8.5	1.0
1912-24-9	Atrazine	12	U	260	12
100-52-7	Benzaldehyde	15	U	130	15
56-55-3	Benzo[a]anthracene	0.80	U	8.5	0.80
50-32-8	Benzo[a]pyrene	0.82	U	8.5	0.82
205-99-2	Benzo[b]fluoranthene	0.75	U	8.5	0.75
191-24-2	Benzo[g,h,i]perylene	0.45	U	8.5	0.45
207-08-9	Benzo[k]fluoranthene	0.87	U	8.5	0.87

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: 70914016.D

Analysis Method: 8270D | Date Collected: 09/08/2017 15:10

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30.05(g) | Date Analyzed: 09/14/2017 13:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 21.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	28	U	130	28
111-44-4	Bis(2-chloroethyl)ether	2.6	U	130	2.6
117-81-7	Bis(2-ethylhexyl) phthalate	24	U	89	24
85-68-7	Butyl benzyl phthalate	13	U	89	13
105-60-2	Caprolactam	47	U	420	47
86-74-8	Carbazole	34	U	64	34
218-01-9	Chrysene	1.4	U	8.5	1.4
84-74-2	Di-n-butyl phthalate	19	U	89	19
117-84-0	Di-n-octyl phthalate	10	U	89	10
53-70-3	Dibenz(a,h)anthracene	0.84	U	8.5	0.84
132-64-9	Dibenzofuran	0.84	U	64	0.84
84-66-2	Diethyl phthalate	20	U	89	20
131-11-3	Dimethyl phthalate	22	U	89	22
206-44-0	Fluoranthene	0.70	U	8.5	0.70
86-73-7	Fluorene	0.68	U	8.5	0.68
118-74-1	Hexachlorobenzene	2.7	U	8.5	2.7
87-68-3	Hexachlorobutadiene	7.2	U	64	7.2
77-47-4	Hexachlorocyclopentadiene	10	U	420	10
67-72-1	Hexachloroethane	11	U	64	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.45	U	8.5	0.45
78-59-1	Isophorone	17	U	64	17
621-64-7	N-Nitrosodi-n-propylamine	8.0	U	64	8.0
62-75-9	N-Nitrosodimethylamine	20	U	130	20
86-30-6	N-Nitrosodiphenylamine	27	U	64	27
91-20-3	Naphthalene	1.0	U	8.5	1.0
98-95-3	Nitrobenzene	2.8	U	130	2.8
87-86-5	Pentachlorophenol	12	U	190	12
85-01-8	Phenanthrene	0.93	U	8.5	0.93
108-95-2	Phenol	9.3	U	64	9.3
129-00-0	Pyrene	0.56	U	8.5	0.56
108-60-1	2,2'-oxybis[1-chloropropane]	12	U	130	12
606-20-2	2,6-Dinitrotoluene	27	U	260	27
100-02-7	4-Nitrophenol	22	U	420	22

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: 70914016.D

Analysis Method: 8270D | Date Collected: 09/08/2017 15:10

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30.05(g) | Date Analyzed: 09/14/2017 13:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 21.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	115		41-120
4165-62-2	Phenol-d5 (Surr)	78		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	66		30-120
367-12-4	2-Fluorophenol (Surr)	79		29-120
321-60-8	2-Fluorobiphenyl (Surr)	83		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	68		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: 70914017.D

Analysis Method: 8270D | Date Collected: 09/08/2017 15:20

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.82(g) | Date Analyzed: 09/14/2017 13:59

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.3	U	62	4.3
123-91-1	1,4-Dioxane	27	U	120	27
88-06-2	2,4,6-Trichlorophenol	11	U	190	11
95-95-4	2,4,5-Trichlorophenol	31	U	190	31
120-83-2	2,4-Dichlorophenol	25	U	190	25
105-67-9	2,4-Dimethylphenol	25	U	190	25
51-28-5	2,4-Dinitrophenol	26	U	410	26
121-14-2	2,4-Dinitrotoluene	21	U	250	21
91-58-7	2-Chloronaphthalene	0.56	U	62	0.56
95-57-8	2-Chlorophenol	10	U	62	10
91-57-6	2-Methylnaphthalene	0.62	U	8.3	0.62
95-48-7	2-Methylphenol	14	U	250	14
88-74-4	2-Nitroaniline	11	U	250	11
88-75-5	2-Nitrophenol	10	U	62	10
15831-10-4	3 & 4 Methylphenol	25	U	500	25
91-94-1	3,3'-Dichlorobenzidine	22	U	120	22
99-09-2	3-Nitroaniline	20	U	250	20
534-52-1	4,6-Dinitro-2-methylphenol	11	U	190	11
101-55-3	4-Bromophenyl phenyl ether	16	U	62	16
59-50-7	4-Chloro-3-methylphenol	26	U	190	26
106-47-8	4-Chloroaniline	21	U	190	21
7005-72-3	4-Chlorophenyl phenyl ether	16	U	62	16
100-01-6	4-Nitroaniline	32	U	250	32
83-32-9	Acenaphthene	0.94	U	8.3	0.94
208-96-8	Acenaphthylene	0.43	U	8.3	0.43
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.97	U	8.3	0.97
1912-24-9	Atrazine	11	U	250	11
100-52-7	Benzaldehyde	15	U	120	15
56-55-3	Benzo[a]anthracene	0.78	U	8.3	0.78
50-32-8	Benzo[a]pyrene	0.79	U	8.3	0.79
205-99-2	Benzo[b]fluoranthene	0.73	U	8.3	0.73
191-24-2	Benzo[g,h,i]perylene	0.43	U	8.3	0.43
207-08-9	Benzo[k]fluoranthene	0.84	U	8.3	0.84

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: 70914017.D

Analysis Method: 8270D | Date Collected: 09/08/2017 15:20

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.82(g) | Date Analyzed: 09/14/2017 13:59

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	27	U	120	27
111-44-4	Bis(2-chloroethyl)ether	2.5	U	120	2.5
117-81-7	Bis(2-ethylhexyl) phthalate	24	U	87	24
85-68-7	Butyl benzyl phthalate	12	U	87	12
105-60-2	Caprolactam	46	U	410	46
86-74-8	Carbazole	33	U	62	33
218-01-9	Chrysene	1.4	U	8.3	1.4
84-74-2	Di-n-butyl phthalate	19	U	87	19
117-84-0	Di-n-octyl phthalate	9.8	U	87	9.8
53-70-3	Dibenz(a,h)anthracene	0.82	U	8.3	0.82
132-64-9	Dibenzofuran	0.82	U	62	0.82
84-66-2	Diethyl phthalate	20	U	87	20
131-11-3	Dimethyl phthalate	21	U	87	21
206-44-0	Fluoranthene	0.68	U	8.3	0.68
86-73-7	Fluorene	0.66	U	8.3	0.66
118-74-1	Hexachlorobenzene	2.6	U	8.3	2.6
87-68-3	Hexachlorobutadiene	6.9	U	62	6.9
77-47-4	Hexachlorocyclopentadiene	10	U	410	10
67-72-1	Hexachloroethane	11	U	62	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.43	U	8.3	0.43
78-59-1	Isophorone	16	U	62	16
621-64-7	N-Nitrosodi-n-propylamine	7.8	U	62	7.8
62-75-9	N-Nitrosodimethylamine	20	U	120	20
86-30-6	N-Nitrosodiphenylamine	26	U	62	26
91-20-3	Naphthalene	1.0	U	8.3	1.0
98-95-3	Nitrobenzene	2.7	U	120	2.7
87-86-5	Pentachlorophenol	11	U	190	11
85-01-8	Phenanthrene	0.90	U	8.3	0.90
108-95-2	Phenol	9.0	U	62	9.0
129-00-0	Pyrene	0.55	U	8.3	0.55
108-60-1	2,2'-oxybis[1-chloropropane]	12	U	120	12
606-20-2	2,6-Dinitrotoluene	26	U	250	26
100-02-7	4-Nitrophenol	21	U	410	21

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: 70914017.D

Analysis Method: 8270D | Date Collected: 09/08/2017 15:20

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 29.82(g) | Date Analyzed: 09/14/2017 13:59

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	116		41-120
4165-62-2	Phenol-d5 (Surr)	73		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	68		30-120
367-12-4	2-Fluorophenol (Surr)	91		29-120
321-60-8	2-Fluorobiphenyl (Surr)	69		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	73		10-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: Y0912024.D

Analysis Method: 8015C | Date Collected: 09/06/2017 13:00

Sample wt/vol: 4.98(g) | Date Analyzed: 09/12/2017 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	30	J B	120	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	86		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: Y0912025.D

Analysis Method: 8015C | Date Collected: 09/06/2017 13:15

Sample wt/vol: 5.01(g) | Date Analyzed: 09/12/2017 21:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 22.4 | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	15	U	130	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	80		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: Y0912026.D

Analysis Method: 8015C | Date Collected: 09/07/2017 17:00

Sample wt/vol: 4.98(g) | Date Analyzed: 09/12/2017 21:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	14	U	120	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	80		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: Y0912027.D

Analysis Method: 8015C | Date Collected: 09/07/2017 17:15

Sample wt/vol: 4.95(g) | Date Analyzed: 09/12/2017 22:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 10.2 | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	30	J B	110	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	81		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: Y0912028.D

Analysis Method: 8015C | Date Collected: 09/08/2017 15:10

Sample wt/vol: 4.98(g) | Date Analyzed: 09/12/2017 23:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 21.9 | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	57	J B	130	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	75		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: Y0912029.D

Analysis Method: 8015C | Date Collected: 09/08/2017 15:20

Sample wt/vol: 5.01(g) | Date Analyzed: 09/12/2017 23:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 18.8 | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	15	U	120	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	79		43-120

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121A-26.5-28.5' | Lab Sample ID: 240-84753-1

Matrix: Solid | Lab File ID: P5R091214.D

Analysis Method: 8015C | Date Collected: 09/06/2017 13:00

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 30.17(g) | Date Analyzed: 09/12/2017 19:32

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	7.5	U	19	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	101		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-121B-30.5-32.5' | Lab Sample ID: 240-84753-2

Matrix: Solid | Lab File ID: P5R091215.D

Analysis Method: 8015C | Date Collected: 09/06/2017 13:15

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 30.13(g) | Date Analyzed: 09/12/2017 20:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 22.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	8.2	U	21	8.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	82		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118A-10-13' | Lab Sample ID: 240-84753-3

Matrix: Solid | Lab File ID: P5R091216.D

Analysis Method: 8015C | Date Collected: 09/07/2017 17:00

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/12/2017 20:27

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	7.4	U	19	7.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	92		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-118B-53-55' | Lab Sample ID: 240-84753-4

Matrix: Solid | Lab File ID: P5R091217.D

Analysis Method: 8015C | Date Collected: 09/07/2017 17:15

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 29.90(g) | Date Analyzed: 09/12/2017 20:54

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	8.6	J	19	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	95		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-43-45' | Lab Sample ID: 240-84753-5

Matrix: Solid | Lab File ID: P5R091218.D

Analysis Method: 8015C | Date Collected: 09/08/2017 15:10

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 30.01(g) | Date Analyzed: 09/12/2017 21:21

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 21.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	8.2	U	21	8.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	89		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: SB-120B-48-50' | Lab Sample ID: 240-84753-6

Matrix: Solid | Lab File ID: P5R091219.D

Analysis Method: 8015C | Date Collected: 09/08/2017 15:20

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 30.40(g) | Date Analyzed: 09/12/2017 21:48

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 18.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	7.8	U	20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	88		26-125

Appendix C

Support Documentation

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

1.6/C1.6

162562

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: TONY APANAVAGE	Site Contact:	Date:	COC No:
Company Name: Tetra Tech	Tel/Fax: 301-233-8230	Lab Contact:	Carrier:	____ of ____ COCs
Address: 20251 Century Blvd #200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown, MD 20874	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-5552	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: MRC				Job / SDG No.:
Site:				
PO # 112IC08109				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260C	SVOCs + dioxane 8270D	TPH-GRO/DRO 8015D	Sample Specific Notes:
SB-121A-26.5-28.5'	09/06/17	1300	G	S	3	N	N	X	X	X	
SB-121B-30.5-32.5'	09/06/17	1315	"	"	3	N	N	X	X	X	
SB-118A-10-13'	09/07/17	1700	"	"	3	N	N	X	X	X	
SB-118B-53-55'	09/07/17	1715	"	"	3	N	N	X	X	X	
SB-120B-43-45'	09/08/17	1515	"	"	3	N	N	X	X	X	
SB-120B-48-50'	09/08/17	1520	"	"	3	N	N	X	X	X	

240-84753 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

	Company	Date/Time		Company	Date/Time
Relinquished by: WALTER ONEIL	Tetra Tech	9/8/17 1530	Received by:	TAN	9/8/17@1533
Relinquished by:	TAN	9/8/17@1620	Received by:	TAL	09/09/17 930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 84753**
Canton Facility

Client Tetra Tech Site Name MRC
Cooler Received on 09/09/17 Opened on 09/09/17
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Cooler unpacked by: DsD

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 1.6 °C
   IR GUN #36 (CF +0.3°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No

If yes, Questions 11-15 have been checked at the originating laboratory.

11. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA	pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	Yes	No	
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA	
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No	
15. Was a LL Hg or Me Hg trip blank present?	Yes	No	

Contacted PM Date by via Verbal Voice Mail Other

Concerning

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

17. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC SOIL REMEDY

Report Number: 240-84753-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 9/9/2017 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-121A-26.5-28.5' (240-84753-1), SB-121B-30.5-32.5' (240-84753-2), SB-118A-10-13' (240-84753-3), SB-118B-53-55' (240-84753-4), SB-120B-43-45' (240-84753-5) and SB-120B-48-50' (240-84753-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared and analyzed on 09/13/2017.

1,2,3-Trimethylbenzene was detected in method blank MB 240-294570/11 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for preparation batch 240-294587 and analytical batch 240-294570 recovered outside control limits for the following analyte: 1,2,3-Trimethylbenzene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-121A-26.5-28.5' (240-84753-1), SB-121B-30.5-32.5' (240-84753-2), SB-118A-10-13' (240-84753-3), SB-118B-53-55' (240-84753-4), SB-120B-43-45' (240-84753-5) and SB-120B-48-50' (240-84753-6) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/12/2017 and analyzed on 09/14/2017.

The target analyte pentachlorophenol had a %D outside acceptance criteria in the CCV associated with analytical batch 294777. An LODV was analyzed to demonstrate sensitivity for this compound at the reporting limit thus supporting any ND results. The following samples were affected: SB-121A-26.5-28.5' (240-84753-1), SB-121B-30.5-32.5' (240-84753-2), SB-118A-10-13' (240-84753-3), SB-118B-53-55' (240-84753-4), SB-120B-43-45' (240-84753-5) and SB-120B-48-50' (240-84753-6).

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

GASOLINE RANGE ORGANICS

Samples SB-121A-26.5-28.5' (240-84753-1), SB-121B-30.5-32.5' (240-84753-2), SB-118A-10-13' (240-84753-3), SB-118B-53-55' (240-84753-4), SB-120B-43-45' (240-84753-5) and SB-120B-48-50' (240-84753-6) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The samples were prepared and analyzed on 09/12/2017.

Gasoline Range Organics [C6 - C10] was detected in method blank MB 240-294460/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

DIESEL RANGE ORGANICS (DRO)

Samples SB-121A-26.5-28.5' (240-84753-1), SB-121B-30.5-32.5' (240-84753-2), SB-118A-10-13' (240-84753-3), SB-118B-53-55' (240-84753-4), SB-120B-43-45' (240-84753-5) and SB-120B-48-50' (240-84753-6) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 09/11/2017 and analyzed on 09/12/2017.

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

PERCENT SOLIDS

Samples SB-121A-26.5-28.5' (240-84753-1), SB-121B-30.5-32.5' (240-84753-2), SB-118A-10-13' (240-84753-3), SB-118B-53-55' (240-84753-4), SB-120B-43-45' (240-84753-5) and SB-120B-48-50' (240-84753-6) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 09/12/2017.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC SOIL REMEDY

TestAmerica Job ID: 240-84753-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-84753-1	SB-121A-26.5-28.5'	Solid	09/06/17 13:00	09/09/17 09:40
240-84753-2	SB-121B-30.5-32.5'	Solid	09/06/17 13:15	09/09/17 09:40
240-84753-3	SB-118A-10-13'	Solid	09/07/17 17:00	09/09/17 09:40
240-84753-4	SB-118B-53-55'	Solid	09/07/17 17:15	09/09/17 09:40
240-84753-5	SB-120B-43-45'	Solid	09/08/17 15:10	09/09/17 09:40
240-84753-6	SB-120B-48-50'	Solid	09/08/17 15:20	09/09/17 09:40

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC SOIL REMEDY

TestAmerica Job ID: 240-84753-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB-121A-26.5-28.5'	240-84753-1	87	81	93	94
SB-121B-30.5-32.5'	240-84753-2	86	78	96	93
SB-118A-10-13'	240-84753-3	87	82	93	92
SB-118B-53-55'	240-84753-4	88	81	93	95
SB-120B-43-45'	240-84753-5	86	77	93	92
SB-120B-48-50'	240-84753-6	88	81	94	94
	MB 240-294374/4-A	86	78	90	92
	MB 240-294570/11	92	84	98	89
	LCS 240-294570/7	94	82	96	100
	LCS 240-294570/9	92	82	94	90
	LCSD 240-294570/8	92	83	95	99
	LCSD 240-294570/10	90	81	92	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	43-131
DCA = 1,2-Dichloroethane-d4 (Surr)	61-127
TOL = Toluene-d8 (Surr)	66-125
BFB = 4-Bromofluorobenzene (Surr)	61-132

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: ICIS 240-291804/6 Date Analyzed: 08/20/2017 02:00

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX81905.D Heated Purge: (Y/N) Y

Calibration ID: 41244

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1858152	5.16	1297679	7.68	699487	9.88
UPPER LIMIT		3716304	5.66	2595358	8.18	1398974	10.38
LOWER LIMIT		929076	4.66	648840	7.18	349744	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-291804/12		1793726	5.16	1306084	7.69	706618	9.88
CCVIS 240-294570/6		1778915	5.16	1291314	7.69	693803	9.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: CCVIS 240-294570/6 Date Analyzed: 09/13/2017 04:03

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX82399.D Heated Purge: (Y/N) Y

Calibration ID: 41244

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1778915	5.16	1291314	7.69	693803	9.88
UPPER LIMIT		3557830	5.66	2582628	8.19	1387606	10.38
LOWER LIMIT		889458	4.66	645657	7.19	346902	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-294570/5		1803518	5.16	1336235	7.69	708146	9.88
LCS 240-294570/7		1888171	5.16	1360058	7.69	678391	9.88
LCSD 240-294570/8		1840400	5.16	1318525	7.69	691015	9.88
LCS 240-294570/9		1791014	5.16	1318560	7.69	619780	9.88
LCSD 240-294570/10		1866028	5.16	1384290	7.69	709470	9.88
MB 240-294570/11		1780801	5.16	1266252	7.69	642414	9.88
MB 240-294374/4-A		1835838	5.16	1359383	7.69	692543	9.88
240-84753-1	SB-121A-26.5-28.5'	1856920	5.16	1355805	7.69	708380	9.88
240-84753-2	SB-121B-30.5-32.5'	1788596	5.16	1246910	7.69	636835	9.88
240-84753-3	SB-118A-10-13'	1605191	5.16	1148718	7.69	576223	9.88
240-84753-4	SB-118B-53-55'	1763768	5.16	1277242	7.69	662123	9.88
240-84753-5	SB-120B-43-45'	1810343	5.16	1279610	7.69	651729	9.88
240-84753-6	SB-120B-48-50'	1804794	5.16	1306595	7.69	666394	9.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: UX82404.D Lab Sample ID: MB 240-294570/11

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 09/13/2017 05:49

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-294570/7	UX82400.D	09/13/2017 04:24
	LCSD 240-294570/8	UX82401.D	09/13/2017 04:46
	LCS 240-294570/9	UX82402.D	09/13/2017 05:07
	LCSD 240-294570/10	UX82403.D	09/13/2017 05:28

NO SAMPLES ASSOCIATED

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-294570/11

Matrix: Solid Lab File ID: UX82404.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/13/2017 05:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 294570 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.36	U	5.0	0.36
71-55-6	1,1,1-Trichloroethane	0.23	U	5.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	5.0	0.26
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	U	5.0	0.49
75-34-3	1,1-Dichloroethane	0.33	U	5.0	0.33
75-35-4	1,1-Dichloroethene	0.54	U	5.0	0.54
563-58-6	1,1-Dichloropropene	0.19	U	5.0	0.19
87-61-6	1,2,3-Trichlorobenzene	0.35	U	5.0	0.35
96-18-4	1,2,3-Trichloropropane	0.39	U	5.0	0.39
526-73-8	1,2,3-Trimethylbenzene	0.147	J	5.0	0.10
120-82-1	1,2,4-Trichlorobenzene	0.24	U	5.0	0.24
95-63-6	1,2,4-Trimethylbenzene	0.25	U	5.0	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	0.68	U	10	0.68
95-50-1	1,2-Dichlorobenzene	0.22	U	5.0	0.22
107-06-2	1,2-Dichloroethane	0.29	U	5.0	0.29
78-87-5	1,2-Dichloropropane	0.31	U	5.0	0.31
541-73-1	1,3-Dichlorobenzene	0.29	U	5.0	0.29
142-28-9	1,3-Dichloropropane	0.23	U	5.0	0.23
106-46-7	1,4-Dichlorobenzene	0.35	U	5.0	0.35
594-20-7	2,2-Dichloropropane	0.30	U	5.0	0.30
110-75-8	2-Chloroethyl vinyl ether	2.8	U	50	2.8
95-49-8	2-Chlorotoluene	0.37	U	5.0	0.37
591-78-6	2-Hexanone	0.58	U	20	0.58
108-86-1	Bromobenzene	0.27	U	5.0	0.27
74-97-5	Bromochloromethane	0.36	U	5.0	0.36
106-43-4	4-Chlorotoluene	0.24	U	5.0	0.24
99-87-6	p-Isopropyltoluene	0.18	U	5.0	0.18
67-64-1	Acetone	3.1	U	20	3.1
71-43-2	Benzene	0.32	U	5.0	0.32
75-25-2	Bromoform	0.40	U	5.0	0.40
74-83-9	Bromomethane	0.59	U	5.0	0.59
75-15-0	Carbon disulfide	0.21	U	5.0	0.21
56-23-5	Carbon tetrachloride	0.25	U	5.0	0.25
108-90-7	Chlorobenzene	0.33	U	5.0	0.33
75-00-3	Chloroethane	0.38	U	5.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294570/11

Matrix: Solid | Lab File ID: UX82404.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 05:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.23	U	5.0	0.23
74-87-3	Chloromethane	0.38	U	5.0	0.38
156-59-2	cis-1,2-Dichloroethene	0.28	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	0.26	U	5.0	0.26
87-68-3	Hexachlorobutadiene	0.44	U	5.0	0.44
74-95-3	Dibromomethane	0.38	U	5.0	0.38
75-27-4	Bromodichloromethane	0.33	U	5.0	0.33
75-71-8	Dichlorodifluoromethane	0.35	U	5.0	0.35
100-41-4	Ethylbenzene	0.27	U	5.0	0.27
106-93-4	1,2-Dibromoethane	0.35	U	5.0	0.35
108-20-3	Diisopropyl ether	0.24	U	10	0.24
91-20-3	Naphthalene	0.33	U	5.0	0.33
179601-23-1	m-Xylene & p-Xylene	0.40	U	10	0.40
104-51-8	n-Butylbenzene	0.25	U	5.0	0.25
98-82-8	Isopropylbenzene	0.20	U	5.0	0.20
103-65-1	N-Propylbenzene	0.28	U	5.0	0.28
78-93-3	2-Butanone (MEK)	1.3	U	20	1.3
108-10-1	4-Methyl-2-pentanone (MIBK)	0.89	U	20	0.89
135-98-8	sec-Butylbenzene	0.19	U	5.0	0.19
1634-04-4	Methyl tert-butyl ether	0.27	U	5.0	0.27
994-05-8	Tert-amyl methyl ether	0.21	U	5.0	0.21
75-09-2	Methylene Chloride	0.24	U	5.0	0.24
95-47-6	o-Xylene	0.22	U	5.0	0.22
100-42-5	Styrene	0.27	U	5.0	0.27
637-92-3	Ethyl t-butyl ether	0.13	U	5.0	0.13
98-06-6	tert-Butylbenzene	0.21	U	5.0	0.21
127-18-4	Tetrachloroethene	0.37	U	5.0	0.37
108-88-3	Toluene	0.34	U	5.0	0.34
156-60-5	trans-1,2-Dichloroethene	0.38	U	5.0	0.38
10061-02-6	trans-1,3-Dichloropropene	0.21	U	5.0	0.21
79-01-6	Trichloroethene	0.41	U	5.0	0.41
75-69-4	Trichlorofluoromethane	0.24	U	5.0	0.24
108-05-4	Vinyl acetate	0.87	U	10	0.87
75-01-4	Vinyl chloride	0.28	U	5.0	0.28
75-65-0	tert-Butyl alcohol	2.4	U	200	2.4
1330-20-7	Xylenes, Total	0.40	U	10	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-294570/11

Matrix: Solid Lab File ID: UX82404.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/13/2017 05:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 294570 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.30	U	5.0	0.30

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		61-127
460-00-4	4-Bromofluorobenzene (Surr)	89		61-132
2037-26-5	Toluene-d8 (Surr)	98		66-125
1868-53-7	Dibromofluoromethane (Surr)	92		43-131

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX82400.D

Lab ID: LCS 240-294570/7 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	53.4	107	64-130	
1,1,1-Trichloroethane	50.0	53.6	107	60-136	
1,1,2,2-Tetrachloroethane	50.0	54.0	108	78-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.3	107	64-125	
1,1-Dichloroethane	50.0	49.2	98	72-120	
1,1-Dichloroethene	50.0	58.3	117	58-130	
1,1-Dichloropropene	50.0	52.2	104	70-126	
1,2,3-Trichlorobenzene	50.0	50.5	101	59-121	
1,2,3-Trichloropropane	50.0	50.4	101	79-120	
1,2,4-Trichlorobenzene	50.0	52.5	105	60-124	
1,2,4-Trimethylbenzene	50.0	58.7	117	78-122	
1,2-Dibromo-3-Chloropropane	50.0	53.3	107	40-133	
1,2-Dichlorobenzene	50.0	52.2	104	75-120	
1,2-Dichloroethane	50.0	44.4	89	71-120	
1,2-Dichloropropane	50.0	50.7	101	78-122	
1,3-Dichlorobenzene	50.0	50.2	100	72-120	
1,3-Dichloropropane	50.0	49.8	100	78-120	
1,4-Dichlorobenzene	50.0	48.3	97	71-120	
2,2-Dichloropropane	50.0	53.9	108	40-150	
2-Chloroethyl vinyl ether	50.0	58.8	118	61-143	
2-Chlorotoluene	50.0	57.5	115	78-120	
2-Hexanone	100	92.1	92	52-129	
Bromobenzene	50.0	53.3	107	75-120	
Bromochloromethane	50.0	52.7	105	76-120	
4-Chlorotoluene	50.0	57.3	115	75-120	
p-Isopropyltoluene	50.0	56.1	112	76-126	
Acetone	100	87.4	87	24-125	
Benzene	50.0	50.3	101	77-120	
Bromoform	50.0	48.8	98	40-140	
Bromomethane	50.0	44.7	89	10-153	
Carbon disulfide	50.0	56.0	112	17-163	
Carbon tetrachloride	50.0	54.9	110	43-144	
Chlorobenzene	50.0	49.5	99	76-120	
Chloroethane	50.0	32.5	65	10-166	
Chloroform	50.0	48.3	97	74-120	
Chloromethane	50.0	44.7	89	41-124	
cis-1,2-Dichloroethene	50.0	51.7	103	78-120	
cis-1,3-Dichloropropene	50.0	51.6	103	66-126	
Hexachlorobutadiene	50.0	48.8	98	62-133	
Dibromomethane	50.0	49.3	99	76-120	
Bromodichloromethane	50.0	54.1	108	61-132	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX82400.D

Lab ID: LCS 240-294570/7 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	50.0	47.9	96	15-127	
Ethylbenzene	50.0	53.7	107	76-120	
1,2-Dibromoethane	50.0	52.3	105	80-120	
Naphthalene	50.0	57.1	114	68-123	
m-Xylene & p-Xylene	50.0	54.2	108	78-120	
n-Butylbenzene	50.0	59.0	118	72-130	
Isopropylbenzene	50.0	53.8	108	76-124	
N-Propylbenzene	50.0	60.6	121	77-126	
2-Butanone (MEK)	100	79.0	79	51-120	
4-Methyl-2-pentanone (MIBK)	100	95.0	95	65-131	
sec-Butylbenzene	50.0	50.3	101	78-125	
Methyl tert-butyl ether	50.0	49.4	99	68-129	
Methylene Chloride	50.0	50.8	102	64-126	
o-Xylene	50.0	52.3	105	77-120	
Styrene	50.0	52.4	105	80-120	
tert-Butylbenzene	50.0	57.1	114	75-125	
Tetrachloroethene	50.0	49.7	99	68-122	
Toluene	50.0	51.0	102	74-120	
trans-1,2-Dichloroethene	50.0	54.3	109	74-124	
trans-1,3-Dichloropropene	50.0	48.0	96	55-121	
Trichloroethene	50.0	52.4	105	73-123	
Trichlorofluoromethane	50.0	39.5	79	28-152	
Vinyl acetate	50.0	43.2	86	36-132	
Vinyl chloride	50.0	45.5	91	49-131	
tert-Butyl alcohol	500	399	80	39-141	
Xylenes, Total	100	107	107	78-120	
Dibromochloromethane	50.0	56.9	114	46-125	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: UX82406.D Lab Sample ID: MB 240-294374/4-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 09/13/2017 06:32

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SB-121A-26.5-28.5'	240-84753-1	UX82418.D	09/13/2017 10:51
SB-121B-30.5-32.5'	240-84753-2	UX82419.D	09/13/2017 11:12
SB-118A-10-13'	240-84753-3	UX82420.D	09/13/2017 11:34
SB-118B-53-55'	240-84753-4	UX82421.D	09/13/2017 11:55
SB-120B-43-45'	240-84753-5	UX82422.D	09/13/2017 12:16
SB-120B-48-50'	240-84753-6	UX82423.D	09/13/2017 12:37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294374/4-A

Matrix: Solid | Lab File ID: UX82406.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/13/2017 06:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.36	U	5.0	0.36
71-55-6	1,1,1-Trichloroethane	0.23	U	5.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	5.0	0.26
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	U	5.0	0.49
75-34-3	1,1-Dichloroethane	0.33	U	5.0	0.33
75-35-4	1,1-Dichloroethene	0.54	U	5.0	0.54
563-58-6	1,1-Dichloropropene	0.19	U	5.0	0.19
87-61-6	1,2,3-Trichlorobenzene	0.35	U	5.0	0.35
96-18-4	1,2,3-Trichloropropane	0.39	U	5.0	0.39
526-73-8	1,2,3-Trimethylbenzene	0.10	U	5.0	0.10
120-82-1	1,2,4-Trichlorobenzene	0.24	U	5.0	0.24
95-63-6	1,2,4-Trimethylbenzene	0.25	U	5.0	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	0.68	U	10	0.68
95-50-1	1,2-Dichlorobenzene	0.22	U	5.0	0.22
107-06-2	1,2-Dichloroethane	0.29	U	5.0	0.29
78-87-5	1,2-Dichloropropane	0.31	U	5.0	0.31
541-73-1	1,3-Dichlorobenzene	0.29	U	5.0	0.29
142-28-9	1,3-Dichloropropane	0.23	U	5.0	0.23
106-46-7	1,4-Dichlorobenzene	0.35	U	5.0	0.35
594-20-7	2,2-Dichloropropane	0.30	U	5.0	0.30
110-75-8	2-Chloroethyl vinyl ether	2.8	U	50	2.8
95-49-8	2-Chlorotoluene	0.37	U	5.0	0.37
591-78-6	2-Hexanone	0.58	U	20	0.58
108-86-1	Bromobenzene	0.27	U	5.0	0.27
74-97-5	Bromochloromethane	0.36	U	5.0	0.36
106-43-4	4-Chlorotoluene	0.24	U	5.0	0.24
99-87-6	p-Isopropyltoluene	0.18	U	5.0	0.18
67-64-1	Acetone	3.1	U	20	3.1
71-43-2	Benzene	0.32	U	5.0	0.32
75-25-2	Bromoform	0.40	U	5.0	0.40
74-83-9	Bromomethane	0.59	U	5.0	0.59
75-15-0	Carbon disulfide	0.21	U	5.0	0.21
56-23-5	Carbon tetrachloride	0.25	U	5.0	0.25
108-90-7	Chlorobenzene	0.33	U	5.0	0.33
75-00-3	Chloroethane	0.38	U	5.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294374/4-A

Matrix: Solid | Lab File ID: UX82406.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/13/2017 06:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.23	U	5.0	0.23
74-87-3	Chloromethane	0.38	U	5.0	0.38
156-59-2	cis-1,2-Dichloroethene	0.28	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	0.26	U	5.0	0.26
87-68-3	Hexachlorobutadiene	0.44	U	5.0	0.44
74-95-3	Dibromomethane	0.38	U	5.0	0.38
75-27-4	Bromodichloromethane	0.33	U	5.0	0.33
75-71-8	Dichlorodifluoromethane	0.35	U	5.0	0.35
100-41-4	Ethylbenzene	0.27	U	5.0	0.27
106-93-4	1,2-Dibromoethane	0.35	U	5.0	0.35
108-20-3	Diisopropyl ether	0.24	U	10	0.24
91-20-3	Naphthalene	0.33	U	5.0	0.33
179601-23-1	m-Xylene & p-Xylene	0.40	U	10	0.40
104-51-8	n-Butylbenzene	0.25	U	5.0	0.25
98-82-8	Isopropylbenzene	0.20	U	5.0	0.20
103-65-1	N-Propylbenzene	0.28	U	5.0	0.28
78-93-3	2-Butanone (MEK)	1.3	U	20	1.3
108-10-1	4-Methyl-2-pentanone (MIBK)	0.89	U	20	0.89
135-98-8	sec-Butylbenzene	0.19	U	5.0	0.19
1634-04-4	Methyl tert-butyl ether	0.27	U	5.0	0.27
994-05-8	Tert-amyl methyl ether	0.21	U	5.0	0.21
75-09-2	Methylene Chloride	0.24	U	5.0	0.24
95-47-6	o-Xylene	0.22	U	5.0	0.22
100-42-5	Styrene	0.27	U	5.0	0.27
637-92-3	Ethyl t-butyl ether	0.13	U	5.0	0.13
98-06-6	tert-Butylbenzene	0.21	U	5.0	0.21
127-18-4	Tetrachloroethene	0.37	U	5.0	0.37
108-88-3	Toluene	0.34	U	5.0	0.34
156-60-5	trans-1,2-Dichloroethene	0.38	U	5.0	0.38
10061-02-6	trans-1,3-Dichloropropene	0.21	U	5.0	0.21
79-01-6	Trichloroethene	0.41	U	5.0	0.41
75-69-4	Trichlorofluoromethane	0.24	U	5.0	0.24
108-05-4	Vinyl acetate	0.87	U	10	0.87
75-01-4	Vinyl chloride	0.28	U	5.0	0.28
75-65-0	tert-Butyl alcohol	2.4	U	200	2.4
1330-20-7	Xylenes, Total	0.40	U	10	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294374/4-A

Matrix: Solid | Lab File ID: UX82406.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/13/2017 06:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294570 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.30	U	5.0	0.30

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		61-127
460-00-4	4-Bromofluorobenzene (Surr)	92		61-132
2037-26-5	Toluene-d8 (Surr)	90		66-125
1868-53-7	Dibromofluoromethane (Surr)	86		43-131

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: BFB8386.D BFB Injection Date: 07/02/2017

Instrument ID: A3UX8 BFB Injection Time: 04:39

Analysis Batch No.: 285693

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.0	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	74.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.5) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.0) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-285693/11	UX80991.D	07/02/2017	08:14
	STDA9 240-285693/12	UX80992.D	07/02/2017	08:36
	STDA9 240-285693/13	UX80993.D	07/02/2017	08:58
	STDA9 240-285693/14	UX80994.D	07/02/2017	09:19
	STDA9 240-285693/15	UX80995.D	07/02/2017	09:41
	STDA9 240-285693/16	UX80996.D	07/02/2017	10:03
	STDA9 240-285693/17	UX80997.D	07/02/2017	10:26
	STDA9 240-285693/18	UX80998.D	07/02/2017	10:48

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 285693

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/02/2017 08:14 Calibration End Date: 07/02/2017 10:48 Calibration ID: 40517

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-285693/18	UX80998.D
Level 2	STDA9 240-285693/17	UX80997.D
Level 3	STDA9 240-285693/16	UX80996.D
Level 4	STDA9 240-285693/15	UX80995.D
Level 5	STDA9 240-285693/14	UX80994.D
Level 6	STDA9 240-285693/13	UX80993.D
Level 7	STDA9 240-285693/12	UX80992.D
Level 8	STDA9 240-285693/11	UX80991.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	+++++ 0.0450	+++++ 0.0560	0.0454 0.0668	0.0440	0.0433	Qua	-0.392	0.0433	0.0000119						1.0000		0.9900
Diisopropyl ether	0.1879 0.2230	0.1825 0.2169	0.2212 0.2152	0.2140	0.2077	Ave		0.2086				7.3		15.0			
2-Chloro-1,3-butadiene	0.4371 0.4958	0.3493 0.4856	0.4371 0.4822	0.4527	0.4443	Ave		0.4480				10.3		15.0			
Ethyl t-butyl ether	0.8319 0.9096	0.6982 0.9060	0.8401 0.8883	0.8216	0.8184	Ave		0.8392				8.1		15.0			
Ethyl acetate	1.1747 0.4207	0.7207 0.5039	0.6054 0.6092	0.4906	0.4214	Qua	1.5447	0.3694	0.0005914						1.0000		0.9900
Propionitrile	0.0541 0.0498	0.0431 0.0600	0.0535 0.0716	0.0489	0.0480	Qua	-0.058	0.0464	0.0000127						1.0000		0.9900
Methacrylonitrile	0.2834 0.2715	0.2304 0.3203	0.2895 0.3185	0.2658	0.2583	Ave		0.2797				10.8		15.0			
Tert-amyl methyl ether	0.5796 0.6562	0.5131 0.6938	0.6237 0.7021	0.6023	0.5952	Ave		0.6207				10.1		15.0			
n-Butanol	+++++ 0.0090	+++++ 0.0136	0.0072 0.0195	0.0083	0.0075	Qua	-0.293	0.0072	0.0000025						1.0000		0.9900
Ethyl acrylate	+++++ 0.4350	0.2793 0.5009	0.3693 0.6081	0.3868	0.3639	Qua	-0.376	0.3924	0.0010895						1.0000		0.9900
Methyl methacrylate	+++++ 0.3915	+++++ 0.4518	0.3732 0.5195	0.3550	0.3400	Qua	-1.073	0.3796	0.0003578						1.0000		0.9900
2-Nitropropane	0.0862 0.0875	0.0550 0.1211	0.0686 +++++	0.0629	0.0654	Qua	0.0565	0.0522	0.0003431						1.0000		0.9900
n-Butyl acetate	+++++ 0.6436	+++++ 0.7412	0.6470 0.8705	0.5853	0.5744	Qua	-0.488	0.6030	0.0013531						1.0000		0.9900
1-Chlorohexane	0.3939 0.3485	0.2714 0.3393	0.3313 0.3557	0.3250	0.3248	Ave		0.3362				10.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 285693

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/02/2017 08:14 Calibration End Date: 07/02/2017 10:48 Calibration ID: 40517

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0103 0.0134	0.0094 0.0197	0.0132 0.0241	0.0126	0.0121	Qua	-0.251	0.0137	0.0000053						0.9990		0.9900
Pentachloroethane	+++++ 0.2725	0.1499 0.3186	0.2212 +++++	0.2234	0.1711	Qua	-0.473	0.2121	0.0005489						0.9980		0.9900
1,2,3-Trimethylbenzene	2.0426 2.4530	1.6937 2.3690	2.3051 2.3251	2.2837	2.2294	Ave		2.2127				10.9		15.0			
Benzyl chloride	+++++ 0.1366	0.0435 0.2008	0.0667 +++++	0.0695	0.0801	Qua	-0.123	0.0707	0.0013161						1.0000		0.9900
1,3,5-Trichlorobenzene	0.8707 0.9127	0.7261 0.8844	0.8775 0.8591	0.8875	0.8669	Ave		0.8606				6.6		15.0			
2-Methylnaphthalene	+++++ 1.5078	0.7770 1.7390	1.0754 +++++	1.1830	1.3559	Qua	-2.616	1.3180	0.0021699						1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: BFB8425.D BFB Injection Date: 08/20/2017

Instrument ID: A3UX8 BFB Injection Time: 00:19

Analysis Batch No.: 291804

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.1	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	82.9	
175	5.0 - 9.0 % of mass 174	6.2	(7.5) 1
176	95.0 - 101.0 % of mass 174	80.0	(96.5) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-291804/3	UX81902.D	08/20/2017	00:54
	STD8260 240-291804/4	UX81903.D	08/20/2017	01:17
	STD8260 240-291804/5	UX81904.D	08/20/2017	01:38
	ICIS 240-291804/6	UX81905.D	08/20/2017	02:00
	STD8260 240-291804/7	UX81906.D	08/20/2017	02:21
	STD8260 240-291804/8	UX81907.D	08/20/2017	02:42
	STD8260 240-291804/9	UX81908.D	08/20/2017	03:03
	STD8260 240-291804/10	UX81909.D	08/20/2017	03:24
	ICV 240-291804/12	UX81911.D	08/20/2017	04:10

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 291804

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41244

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-291804/10	UX81909.D
Level 2	STD8260 240-291804/9	UX81908.D
Level 3	STD8260 240-291804/8	UX81907.D
Level 4	STD8260 240-291804/7	UX81906.D
Level 5	ICIS 240-291804/6	UX81905.D
Level 6	STD8260 240-291804/5	UX81904.D
Level 7	STD8260 240-291804/4	UX81903.D
Level 8	STD8260 240-291804/3	UX81902.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2337 0.2308	0.2436 0.2393	0.2759 0.2413	0.2312	0.2355	Ave		0.2414				6.1		15.0			
Chloromethane	0.4004 0.3459	0.4024 0.3648	0.4391 0.3402	0.3507	0.3522	Ave		0.3744			0.1000	9.5		15.0			
Vinyl chloride	0.2311 0.2317	0.2837 0.2364	0.2894 0.2342	0.2305	0.2269	Ave		0.2455				10.4		15.0			
Butadiene	0.3086 0.3108	0.3360 0.3150	0.3720 0.3140	0.2957	0.3098	Ave		0.3202				7.4		15.0			
Bromomethane	+++++ 0.1088	+++++ 0.0970	0.1514 0.0887	0.1222	0.1215	Lin1	0.3718	0.0911							0.9940		0.9900
Chloroethane	0.1501 0.1429	0.1836 0.1440	0.1840 +++++	0.1487	0.1470	Ave		0.1572				11.7		15.0			
Dichlorofluoromethane	0.3887 0.3235	0.3821 0.3351	0.4270 0.3105	0.3346	0.3377	Ave		0.3549				11.2		15.0			
Trichlorofluoromethane	0.2944 0.2969	0.3116 0.2991	0.3660 0.2869	0.2936	0.2999	Ave		0.3061				8.2		15.0			
Ethyl ether	0.3239 0.2383	0.2997 0.2450	0.2643 0.2339	0.2570	0.2447	Ave		0.2634				12.2		15.0			
Acrolein	0.0354 0.0282	0.0306 0.0282	0.0337 0.0258	0.0303	0.0300	Ave		0.0303				10.2		15.0			
1,1-Dichloroethene	0.1873 0.1849	0.1644 0.1747	0.1954 0.1833	0.1693	0.1768	Ave		0.1795				5.6		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1707 0.1596	0.1492 0.1510	0.1514 0.1549	0.1590	0.1562	Ave		0.1565				4.4		15.0			
Acetone	0.7018 0.1494	0.4445 0.1436	0.2452 0.1328	0.1868	0.1611	Lin1	1.1678	0.1331							0.9990		0.9900
Iodomethane	0.3997 0.3567	0.4014 0.3530	0.3806 0.3444	0.3754	0.3593	Ave		0.3713				5.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 291804

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41244

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.5460 0.5752	0.5154 0.5789	0.5127 0.5922	0.5309	0.5251	Ave		0.5470				5.7		15.0			
3-Chloro-1-propene	0.1109 0.1189	0.1060 0.1190	0.1117 0.1215	0.1111	0.1136	Ave		0.1141				4.6		15.0			
Methyl acetate	0.4184 0.3387	0.4409 0.3399	0.3683 0.3226	0.3572	0.3303	Ave		0.3645				11.8		15.0			
Methylene Chloride	1.5130 0.2515	0.9114 0.2426	0.5013 0.2300	0.3330	0.2802	Lin1	1.3082	0.2246							0.9990		0.9900
tert-Butyl alcohol	0.0312 0.0320	0.0317 0.0308	0.0340 0.0289	0.0290	0.0302	Ave		0.0310				5.4		15.0			
Acrylonitrile	0.1585 0.1350	0.1609 0.1351	0.1403 0.1278	0.1454	0.1359	Ave		0.1424				8.3		15.0			
trans-1,2-Dichloroethene	0.2401 0.2179	0.2237 0.2175	0.2373 0.2106	0.2283	0.2230	Ave		0.2248				4.5		15.0			
Methyl tert-butyl ether	0.6990 0.6930	0.7323 0.7164	0.7167 0.7028	0.7179	0.6830	Ave		0.7076				2.3		15.0			
Hexane	0.2206 0.0634	0.1285 0.0634	0.0921 0.0659	0.0777	0.0680	Lin1	0.1444	0.0634							0.9990		0.9900
1,1-Dichloroethane	0.4862 0.4427	0.5044 0.4451	0.4642 0.4380	0.4813	0.4487	Ave		0.4638			0.1000	5.2		15.0			
Vinyl acetate	0.8089 0.7126	0.7148 0.7621	0.6732 0.7596	0.6913	0.6869	Ave		0.7262				6.4		15.0			
2-Butanone (MEK)	0.2943 0.2116	0.2705 0.2094	0.2271 0.2033	0.2258	0.2114	Ave		0.2317				14.2		15.0			
cis-1,2-Dichloroethene	0.2715 0.2472	0.2715 0.2518	0.2778 0.2438	0.2754	0.2494	Ave		0.2610				5.4		15.0			
2,2-Dichloropropane	0.1732 0.2441	0.2123 0.2454	0.2111 0.2282	0.2334	0.2211	Ave		0.2211				10.5		15.0			
Bromochloromethane	0.1158 0.1262	0.1551 0.1247	0.1307 0.1219	0.1331	0.1281	Ave		0.1295				9.0		15.0			
Tetrahydrofuran	0.1618 0.1339	0.1473 0.1344	0.1262 0.1298	0.1367	0.1290	Ave		0.1374				8.6		15.0			
Chloroform	0.5419 0.4054	0.4959 0.4135	0.4422 0.4018	0.4280	0.4051	Ave		0.4417				11.5		15.0			
1,1,1-Trichloroethane	0.3245 0.3404	0.3146 0.3403	0.3192 0.3458	0.3340	0.3285	Ave		0.3309				3.4		15.0			
Cyclohexane	0.4860 0.5124	0.4745 0.5005	0.4891 0.5048	0.5061	0.5064	Ave		0.4975				2.6		15.0			
1,1-Dichloropropene	0.2735 0.3035	0.2831 0.2992	0.2985 0.3055	0.3120	0.3021	Ave		0.2972				4.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 291804

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41244

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2682 0.3026	0.2587 0.3034	0.2627 0.3121	0.2822	0.2865	Ave		0.2845				7.1		15.0			
Isobutyl alcohol	0.0169 0.0166	0.0166 0.0160	0.0201 0.0151	0.0164	0.0167	Ave		0.0168				8.6		15.0			
1,2-Dichloroethane	0.5134 0.4253	0.5245 0.4410	0.4673 0.4268	0.4616	0.4240	Ave		0.4605				8.6		15.0			
Benzene	0.9819 0.8611	0.9574 0.8710	0.9257 0.8703	0.9511	0.8783	Ave		0.9121				5.2		15.0			
n-Heptane	+++++ 0.0676	0.0474 0.0694	0.0646 0.0723	0.0735	0.0635	Ave		0.0655				13.4		15.0			
Trichloroethene	0.2487 0.2392	0.2917 0.2370	0.2585 0.2387	0.2598	0.2341	Ave		0.2510				7.6		15.0			
Methylcyclohexane	0.3957 0.3964	0.3710 0.3934	0.3873 0.3942	0.3788	0.3957	Ave		0.3891				2.4		15.0			
1,2-Dichloropropane	0.2964 0.2444	0.2620 0.2507	0.2551 0.2514	0.2649	0.2533	Ave		0.2598				6.2		15.0			
Dibromomethane	0.1583 0.1377	0.1543 0.1449	0.1387 0.1406	0.1539	0.1412	Ave		0.1462				5.5		15.0			
1,4-Dioxane	0.0025 0.0027	0.0025 0.0026	0.0028 0.0025	0.0026	0.0027	Ave		0.0026				4.5		15.0			
Bromodichloromethane	0.2346 0.2912	0.2543 0.3156	0.2626 0.3211	0.2780	0.2688	Ave		0.2783				10.7		15.0			
2-Chloroethyl vinyl ether	0.1062 0.1249	0.1139 0.1357	0.1049 0.1401	0.1302	0.1240	Ave		0.1225				10.7		15.0			
cis-1,3-Dichloropropene	+++++ 0.3186	0.2262 0.3459	0.2429 0.3611	0.2986	0.2996	Lin1	-0.421	0.3523							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	0.3691 0.4201	0.4090 0.4250	0.3883 0.4173	0.4261	0.4218	Ave		0.4096				5.0		15.0			
Toluene	1.5138 1.2739	1.3692 1.2522	1.3216 1.2694	1.3524	1.2819	Ave		1.3293				6.4		15.0			
trans-1,3-Dichloropropene	+++++ 0.4055	0.2623 0.4304	0.3016 0.4569	0.3495	0.3588	Lin1	-0.611	0.4436							0.9970		0.9900
Ethyl methacrylate	0.3112 0.4264	0.3945 0.4223	0.3581 0.4287	0.4235	0.4034	Ave		0.3960				10.5		15.0			
1,1,2-Trichloroethane	0.3879 0.2753	0.3240 0.2669	0.3000 0.2648	0.2980	0.2822	Ave		0.2999				13.6		15.0			
1,3-Dichloropropane	0.4780 0.4863	0.5437 0.4769	0.5254 0.4771	0.5497	0.4864	Ave		0.5029				6.2		15.0			
Tetrachloroethene	0.3068 0.2726	0.2787 0.2591	0.2961 0.2577	0.3004	0.2817	Ave		0.2816				6.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 291804

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41244

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.3710 0.4159	0.4039 0.3999	0.3980 0.3921	0.4284	0.4192	Ave		0.4036				4.4		15.0			
Dibromochloromethane	+++++ 0.3016	0.2174 0.3130	0.2303 0.3196	0.2650	0.2696	Ave		0.2738				14.6		15.0			
1,2-Dibromoethane	0.2667 0.2868	0.2730 0.2799	0.2768 0.2773	0.2956	0.2848	Ave		0.2801				3.2		15.0			
Chlorobenzene	1.1048 0.8808	1.0327 0.8621	0.9865 0.8515	0.9428	0.8812	Ave		0.9428			0.3000	9.7		15.0			
1,1,1,2-Tetrachloroethane	0.2963 0.3351	0.2960 0.3283	0.3030 0.3227	0.3404	0.3187	Ave		0.3176				5.5		15.0			
Ethylbenzene	0.4587 0.4417	0.4388 0.4377	0.4405 0.4315	0.4757	0.4370	Ave		0.4452				3.3		15.0			
m-Xylene & p-Xylene	0.5791 0.5519	0.5250 0.5301	0.5125 0.5328	0.5465	0.5409	Ave		0.5398				3.7		15.0			
o-Xylene	0.5409 0.5555	0.5332 0.5310	0.5679 0.5098	0.5766	0.5422	Ave		0.5446				3.9		15.0			
Styrene	0.8951 0.9444	0.8694 0.9309	0.8943 0.9269	0.9326	0.8995	Ave		0.9116				2.8		15.0			
Bromoform	+++++ 0.1778	+++++ 0.1947	0.1323 0.1996	0.1465	0.1595	Lin1	-0.468	0.1984			0.1000				0.9980		0.9900
Isopropylbenzene	1.3074 1.4843	1.3281 1.4089	1.4025 1.3748	1.4603	1.4227	Ave		1.3986				4.3		15.0			
1,1,2,2-Tetrachloroethane	0.6949 0.6454	0.6035 0.6308	0.6225 0.6319	0.6760	0.6568	Ave		0.6452			0.3000	4.6		15.0			
Bromobenzene	0.7707 0.6855	0.7686 0.6641	0.7282 0.6956	0.7532	0.7124	Ave		0.7223				5.5		15.0			
1,2,3-Trichloropropane	0.3156 0.2313	0.2866 0.2259	0.2473 0.2212	0.2496	0.2421	Ave		0.2524				12.9		15.0			
trans-1,4-Dichloro-2-butene	0.2672 0.2703	0.2519 0.2867	0.2221 0.3059	0.2629	0.2632	Ave		0.2663				9.2		15.0			
N-Propylbenzene	0.6476 0.7543	0.6419 0.7310	0.7018 0.7526	0.7812	0.7789	Ave		0.7237				7.6		15.0			
2-Chlorotoluene	0.6127 0.6400	0.6689 0.6272	0.6418 0.6392	0.6842	0.6878	Ave		0.6502				4.2		15.0			
1,3,5-Trimethylbenzene	1.7979 2.3165	1.8682 2.2176	2.0679 2.2658	2.3114	2.3368	Ave		2.1478				9.9		15.0			
4-Chlorotoluene	0.6709 0.6701	0.6980 0.6557	0.6799 0.6799	0.7156	0.7057	Ave		0.6845				3.0		15.0			
tert-Butylbenzene	1.8122 2.1962	1.7958 2.1101	1.9925 2.2985	2.4360	2.2278	Ave		2.1086				10.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 291804

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/20/2017 00:54 Calibration End Date: 08/20/2017 03:24 Calibration ID: 41244

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	1.9239 2.3776	1.9178 2.3115	2.1867 2.3380	2.4213	2.4228	Ave		2.2374				9.4		15.0			
sec-Butylbenzene	2.2165 2.8599	2.3094 2.7587	2.5943 2.7598	2.8894	2.9334	Ave		2.6652				10.1		15.0			
1,3-Dichlorobenzene	1.5824 1.3184	1.5249 1.2962	1.4082 1.2991	1.4665	1.3952	Ave		1.4114				7.6		15.0			
p-Isopropyltoluene	1.9495 2.6544	2.0569 2.5509	2.3956 2.5743	2.6266	2.6378	Ave		2.4307				11.4		15.0			
1,4-Dichlorobenzene	1.8272 1.3627	1.7188 1.3312	1.4947 1.3399	1.5146	1.4404	Ave		1.5037				12.1		15.0			
n-Butylbenzene	1.6837 2.1653	1.7006 2.1152	1.9184 2.1435	2.1306	2.2041	Ave		2.0077				10.6		15.0			
1,2-Dichlorobenzene	1.6283 1.3082	1.4242 1.2642	1.3837 1.2368	1.4438	1.3445	Ave		1.3792				9.0		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1127	0.0774 0.1245	0.0889 0.1256	0.0912	0.0997	Lin1	-0.165	0.1236							0.9970		0.9900
1,2,4-Trichlorobenzene	0.8861 0.8675	0.8244 0.8654	0.8759 0.8541	0.8387	0.8519	Ave		0.8580				2.3		15.0			
Hexachlorobutadiene	0.5622 0.5049	0.4844 0.4686	0.5393 0.4504	0.5142	0.5125	Ave		0.5046				7.2		15.0			
Naphthalene	1.7665 2.2247	1.7703 2.2114	1.7839 2.0903	1.9178	2.0678	Ave		1.9791				9.8		15.0			
1,2,3-Trichlorobenzene	0.9888 0.8638	0.8618 0.8458	0.8500 0.8015	0.8968	0.8733	Ave		0.8727				6.2		15.0			
Dibromofluoromethane (Surr)	+++++ 0.2209	+++++ 0.2217	0.2697 0.2204	0.2505	0.2472	Ave		0.2384				8.6		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3096	+++++ 0.3243	0.4208 0.3226	0.3899	0.3699	Ave		0.3562				12.4		15.0			
Toluene-d8 (Surr)	+++++ 1.1979	+++++ 1.1405	1.4226 1.1301	1.3190	1.2868	Ave		1.2495				9.1		15.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4454	+++++ 0.4490	0.6422 0.4372	0.5573	0.5355	Lin1	1.2119	0.4333							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-291804/12 Calibration Date: 08/20/2017 04:10

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX81911.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2414	0.2447		0.0253	0.0250	1.4	50.0
Chloromethane	Ave	0.3744	0.3570	0.1000	0.0238	0.0250	-4.7	50.0
Vinyl chloride	Ave	0.2455	0.2124		0.0216	0.0250	-13.5	20.0
Butadiene	Ave	0.3202	0.2462		0.0192	0.0250	-23.1	50.0
Bromomethane	Lin1		0.1073		0.0254	0.0250	1.5	50.0
Chloroethane	Ave	0.1572	0.1249		0.0199	0.0250	-20.5	50.0
Dichlorofluoromethane	Ave	0.3549	0.2721		0.0192	0.0250	-23.3	50.0
Trichlorofluoromethane	Ave	0.3061	0.2486		0.0203	0.0250	-18.8	50.0
Ethyl ether	Ave	0.2634	0.2931		0.0278	0.0250	11.3	50.0
Acrolein	Ave	0.0303	0.0459		0.189	0.125	51.5*	50.0
1,1-Dichloroethene	Ave	0.1795	0.1764		0.0246	0.0250	-1.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1565	0.1514		0.0242	0.0250	-3.3	50.0
Acetone	Lin1		0.1569		0.0502	0.0500	0.4	50.0
Iodomethane	Ave	0.3713	0.3371		0.0227	0.0250	-9.2	50.0
Carbon disulfide	Ave	0.5470	0.4731		0.0216	0.0250	-13.5	50.0
3-Chloro-1-propene	Ave	0.1141	0.1155		0.0253	0.0250	1.2	50.0
Methyl acetate	Ave	0.3645	0.3456		0.0474	0.0500	-5.2	50.0
Methylene Chloride	Lin1		0.2745		0.0247	0.0250	-1.1	50.0
tert-Butyl alcohol	Ave	0.0310	0.0316		0.255	0.250	2.0	50.0
Acrylonitrile	Ave	0.1424	0.1408		0.247	0.250	-1.1	50.0
Methyl tert-butyl ether	Ave	0.7076	0.7098		0.0251	0.0250	0.3	50.0
trans-1,2-Dichloroethene	Ave	0.2248	0.2273		0.0253	0.0250	1.1	50.0
Hexane	Lin1		0.0672		0.0242	0.0250	-3.2	20.0
1,1-Dichloroethane	Ave	0.4638	0.4495	0.1000	0.0242	0.0250	-3.1	50.0
Vinyl acetate	Ave	0.7262	0.8361		0.0288	0.0250	15.1	50.0
2-Butanone (MEK)	Ave	0.2317	0.2255		0.0487	0.0500	-2.7	50.0
2,2-Dichloropropane	Ave	0.2211	0.1848		0.0209	0.0250	-16.4	50.0
cis-1,2-Dichloroethene	Ave	0.2610	0.2607		0.0250	0.0250	-0.2	50.0
Bromochloromethane	Ave	0.1295	0.1309		0.0253	0.0250	1.1	50.0
Tetrahydrofuran	Ave	0.1374	0.1437		0.0523	0.0500	4.6	50.0
Chloroform	Ave	0.4417	0.4195		0.0237	0.0250	-5.0	20.0
1,1,1-Trichloroethane	Ave	0.3309	0.3312		0.0250	0.0250	0.0	50.0
Cyclohexane	Ave	0.4975	0.4749		0.0239	0.0250	-4.5	50.0
1,1-Dichloropropene	Ave	0.2972	0.2979		0.0251	0.0250	0.2	50.0
Carbon tetrachloride	Ave	0.2845	0.2863		0.0252	0.0250	0.6	50.0
Isobutyl alcohol	Ave	0.0168	0.0173		0.644	0.625	3.0	50.0
1,2-Dichloroethane	Ave	0.4605	0.4610		0.0250	0.0250	0.1	50.0
Benzene	Ave	0.9121	0.9015		0.0247	0.0250	-1.2	50.0
n-Heptane	Ave	0.0655	0.0694		0.0265	0.0250	6.0	50.0
Trichloroethene	Ave	0.2510	0.2379		0.0237	0.0250	-5.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-291804/12 Calibration Date: 08/20/2017 04:10

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX81911.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2598	0.2709		0.0261	0.0250	4.3	20.0
Methylcyclohexane	Ave	0.3891	0.3576		0.0230	0.0250	-8.1	50.0
1,4-Dioxane	Ave	0.0026	0.0029		0.551	0.500	10.3	50.0
Dibromomethane	Ave	0.1462	0.1463		0.0250	0.0250	0.0	50.0
Bromodichloromethane	Ave	0.2783	0.2950		0.0265	0.0250	6.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1225	0.1380		0.0282	0.0250	12.7	50.0
cis-1,3-Dichloropropene	Lin1		0.3272		0.0244	0.0250	-2.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4096	0.4479		0.0547	0.0500	9.3	50.0
Toluene	Ave	1.329	1.320		0.0248	0.0250	-0.7	20.0
trans-1,3-Dichloropropene	Lin1		0.3717		0.0223	0.0250	-10.7	50.0
Ethyl methacrylate	Ave	0.3960	0.4476		0.0283	0.0250	13.0	50.0
1,1,2-Trichloroethane	Ave	0.2999	0.2995		0.0250	0.0250	-0.1	50.0
1,3-Dichloropropane	Ave	0.5029	0.5196		0.0258	0.0250	3.3	50.0
Tetrachloroethene	Ave	0.2816	0.2613		0.0232	0.0250	-7.2	50.0
2-Hexanone	Ave	0.4036	0.4294		0.0532	0.0500	6.4	50.0
Dibromochloromethane	Ave	0.2738	0.2950		0.0269	0.0250	7.7	50.0
1,2-Dibromoethane	Ave	0.2801	0.3019		0.0269	0.0250	7.8	50.0
Chlorobenzene	Ave	0.9428	0.8930	0.3000	0.0237	0.0250	-5.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3176	0.3292		0.0259	0.0250	3.7	50.0
Ethylbenzene	Ave	0.4452	0.4371		0.0245	0.0250	-1.8	20.0
m-Xylene & p-Xylene	Ave	0.5398	0.5363		0.0248	0.0250	-0.7	50.0
o-Xylene	Ave	0.5446	0.5516		0.0253	0.0250	1.3	50.0
Styrene	Ave	0.9116	0.9264		0.0254	0.0250	1.6	50.0
Bromoform	Lin1		0.1680	0.1000	0.0235	0.0250	-5.9	50.0
Isopropylbenzene	Ave	1.399	1.382		0.0247	0.0250	-1.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6452	0.6809	0.3000	0.0264	0.0250	5.5	50.0
Bromobenzene	Ave	0.7223	0.7335		0.0254	0.0250	1.5	50.0
1,2,3-Trichloropropane	Ave	0.2524	0.2596		0.0257	0.0250	2.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2663	0.2935		0.0276	0.0250	10.2	50.0
N-Propylbenzene	Ave	0.7237	0.7465		0.0258	0.0250	3.2	50.0
2-Chlorotoluene	Ave	0.6502	0.6696		0.0257	0.0250	3.0	50.0
1,3,5-Trimethylbenzene	Ave	2.148	2.204		0.0257	0.0250	2.6	50.0
4-Chlorotoluene	Ave	0.6845	0.6890		0.0252	0.0250	0.7	50.0
tert-Butylbenzene	Ave	2.109	2.099		0.0249	0.0250	-0.5	50.0
1,2,4-Trimethylbenzene	Ave	2.237	2.291		0.0256	0.0250	2.4	50.0
sec-Butylbenzene	Ave	2.665	2.740		0.0257	0.0250	2.8	50.0
1,3-Dichlorobenzene	Ave	1.411	1.349		0.0239	0.0250	-4.5	50.0
p-Isopropyltoluene	Ave	2.431	2.520		0.0259	0.0250	3.7	50.0
1,4-Dichlorobenzene	Ave	1.504	1.384		0.0230	0.0250	-8.0	50.0
n-Butylbenzene	Ave	2.008	1.931		0.0240	0.0250	-3.8	50.0
1,2-Dichlorobenzene	Ave	1.379	1.323		0.0240	0.0250	-4.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-291804/12 Calibration Date: 08/20/2017 04:10

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX81911.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1063		0.0228	0.0250	-8.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8580	0.7724		0.0225	0.0250	-10.0	50.0
Hexachlorobutadiene	Ave	0.5046	0.4588		0.0227	0.0250	-9.1	50.0
Naphthalene	Ave	1.979	1.923		0.0243	0.0250	-2.8	50.0
1,2,3-Trichlorobenzene	Ave	0.8727	0.7810		0.0224	0.0250	-10.5	50.0
Dibromofluoromethane (Surr)	Ave	0.2384	0.2192		0.0460	0.0500	-8.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3562	0.3159		0.0443	0.0500	-11.3	50.0
Toluene-d8 (Surr)	Ave	1.249	1.192		0.0477	0.0500	-4.6	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4599		0.0503	0.0500	0.5	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: BFB8442.D BFB Injection Date: 09/13/2017

Instrument ID: A3UX8 BFB Injection Time: 02:47

Analysis Batch No.: 294570

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.5	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	83.3	
175	5.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	95.0 - 101.0 % of mass 174	81.2	(97.6) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-294570/5	UX82398.D	09/13/2017	03:42
	CCVIS 240-294570/6	UX82399.D	09/13/2017	04:03
	LCS 240-294570/7	UX82400.D	09/13/2017	04:24
	LCSD 240-294570/8	UX82401.D	09/13/2017	04:46
	LCS 240-294570/9	UX82402.D	09/13/2017	05:07
	LCSD 240-294570/10	UX82403.D	09/13/2017	05:28
	MB 240-294570/11	UX82404.D	09/13/2017	05:49
	MB 240-294374/4-A	UX82406.D	09/13/2017	06:32
SB-121A-26.5-28.5'	240-84753-1	UX82418.D	09/13/2017	10:51
SB-121B-30.5-32.5'	240-84753-2	UX82419.D	09/13/2017	11:12
SB-118A-10-13'	240-84753-3	UX82420.D	09/13/2017	11:34
SB-118B-53-55'	240-84753-4	UX82421.D	09/13/2017	11:55
SB-120B-43-45'	240-84753-5	UX82422.D	09/13/2017	12:16
SB-120B-48-50'	240-84753-6	UX82423.D	09/13/2017	12:37

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294570/5 Calibration Date: 09/13/2017 03:42

Instrument ID: A3UX8 Calib Start Date: 07/02/2017 08:14

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2017 10:48

Lab File ID: UX82398.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Qua		0.0543		0.243	0.200	21.7	50.0
Diisopropyl ether	Ave	0.2086	0.2090		0.0200	0.0200	0.2	50.0
2-Chloro-1,3-butadiene	Ave	0.4480	0.5002		0.0223	0.0200	11.6	50.0
Ethyl t-butyl ether	Ave	0.8392	0.8169		0.0195	0.0200	-2.7	50.0
Ethyl acetate	Qua		0.3850		0.0355	0.0400	-11.3	50.0
Propionitrile	Qua		0.0509		0.209	0.200	4.4	50.0
Methacrylonitrile	Ave	0.2797	0.2659		0.190	0.200	-4.9	50.0
Tert-amyl methyl ether	Ave	0.6207	0.5998		0.0193	0.0200	-3.4	50.0
n-Butanol	Qua		0.0073		0.474	0.500	-5.2	50.0
Ethyl acrylate	Qua		0.3851		0.0195	0.0200	-2.4	50.0
Methyl methacrylate	Qua		0.3577		0.0391	0.0400	-2.3	50.0
2-Nitropropane	Qua		0.0718		0.0422	0.0400	5.4	50.0
n-Butyl acetate	Qua		0.5480		0.0182	0.0200	-8.8	50.0
1-Chlorohexane	Ave	0.3362	0.3678		0.0219	0.0200	9.4	50.0
Cyclohexanone	Qua		0.0122		0.183	0.200	-8.4	50.0
Pentachloroethane	Qua		0.3779		0.0632	0.0400	57.9*	50.0
1,2,3-Trimethylbenzene	Ave	2.213	2.475		0.0224	0.0200	11.8	50.0
Benzyl chloride	Qua		0.1129		0.0234	0.0200	17.2	50.0
1,3,5-Trichlorobenzene	Ave	0.8606	1.043		0.0242	0.0200	21.2	50.0
2-Methylnaphthalene	Qua		1.161		0.0352	0.0400	-12.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCVIS 240-294570/6 Calibration Date: 09/13/2017 04:03

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX82399.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2414	0.2563		0.0212	0.0200	6.2	50.0
Chloromethane	Ave	0.3744	0.3352	0.1000	0.0179	0.0200	-10.5	50.0
Vinyl chloride	Ave	0.2455	0.2349		0.0191	0.0200	-4.3	20.0
Butadiene	Ave	0.3202	0.2945		0.0184	0.0200	-8.0	50.0
Bromomethane	Lin1		0.0909		0.0159	0.0200	-20.6	50.0
Chloroethane	Ave	0.1572	0.1149		0.0146	0.0200	-26.9	50.0
Dichlorofluoromethane	Ave	0.3549	0.2774		0.0156	0.0200	-21.8	50.0
Trichlorofluoromethane	Ave	0.3061	0.2493		0.0163	0.0200	-18.5	50.0
Ethyl ether	Ave	0.2634	0.1917		0.0146	0.0200	-27.2	50.0
Acrolein	Ave	0.0303	0.0288		0.0950	0.100	-5.0	50.0
1,1-Dichloroethene	Ave	0.1795	0.2125		0.0237	0.0200	18.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1565	0.1785		0.0228	0.0200	14.1	50.0
Acetone	Lin1		0.1579		0.0387	0.0400	-3.3	50.0
Iodomethane	Ave	0.3713	0.3868		0.0208	0.0200	4.2	50.0
Carbon disulfide	Ave	0.5470	0.5768		0.0211	0.0200	5.4	50.0
3-Chloro-1-propene	Ave	0.1141	0.1256		0.0220	0.0200	10.1	50.0
Methyl acetate	Ave	0.3645	0.3351		0.0368	0.0400	-8.1	50.0
Methylene Chloride	Lin1		0.2774		0.0189	0.0200	-5.6	50.0
tert-Butyl alcohol	Ave	0.0310	0.0283		0.182	0.200	-8.8	50.0
Acrylonitrile	Ave	0.1424	0.1373		0.193	0.200	-3.5	50.0
Methyl tert-butyl ether	Ave	0.7076	0.7015		0.0198	0.0200	-0.9	50.0
trans-1,2-Dichloroethene	Ave	0.2248	0.2546		0.0226	0.0200	13.2	50.0
Hexane	Lin1		0.0720		0.0204	0.0200	2.1	20.0
1,1-Dichloroethane	Ave	0.4638	0.4738	0.1000	0.0204	0.0200	2.2	50.0
Vinyl acetate	Ave	0.7262	0.6288		0.0173	0.0200	-13.4	50.0
2-Butanone (MEK)	Ave	0.2317	0.2194		0.0379	0.0400	-5.3	50.0
cis-1,2-Dichloroethene	Ave	0.2610	0.2728		0.0209	0.0200	4.5	50.0
2,2-Dichloropropane	Ave	0.2211	0.2476		0.0224	0.0200	12.0	50.0
Bromochloromethane	Ave	0.1295	0.1399		0.0216	0.0200	8.1	50.0
Tetrahydrofuran	Ave	0.1374	0.1292		0.0376	0.0400	-6.0	50.0
Chloroform	Ave	0.4417	0.4384		0.0198	0.0200	-0.8	20.0
1,1,1-Trichloroethane	Ave	0.3309	0.3604		0.0218	0.0200	8.9	50.0
Cyclohexane	Ave	0.4975	0.5326		0.0214	0.0200	7.1	50.0
1,1-Dichloropropene	Ave	0.2972	0.3361		0.0226	0.0200	13.1	50.0
Carbon tetrachloride	Ave	0.2845	0.3166		0.0223	0.0200	11.3	50.0
Isobutyl alcohol	Ave	0.0168	0.0148		0.440	0.500	-12.0	50.0
1,2-Dichloroethane	Ave	0.4605	0.4293		0.0186	0.0200	-6.8	50.0
Benzene	Ave	0.9121	0.9674		0.0212	0.0200	6.1	50.0
n-Heptane	Ave	0.0655	0.0766		0.0234	0.0200	17.0	50.0
Trichloroethene	Ave	0.2510	0.2763		0.0220	0.0200	10.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCVIS 240-294570/6 Calibration Date: 09/13/2017 04:03

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX82399.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3891	0.4481		0.0230	0.0200	15.2	50.0
1,2-Dichloropropane	Ave	0.2598	0.2672		0.0206	0.0200	2.9	20.0
1,4-Dioxane	Ave	0.0026	0.0028		0.432	0.400	7.9	50.0
Dibromomethane	Ave	0.1462	0.1505		0.0206	0.0200	2.9	50.0
Bromodichloromethane	Ave	0.2783	0.2995		0.0215	0.0200	7.6	50.0
2-Chloroethyl vinyl ether	Ave	0.1225	0.1441		0.0471	0.0400	17.6	50.0
cis-1,3-Dichloropropene	Lin1		0.3257		0.0197	0.0200	-1.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4096	0.4189		0.0409	0.0400	2.3	50.0
Toluene	Ave	1.329	1.440		0.0217	0.0200	8.3	20.0
trans-1,3-Dichloropropene	Lin1		0.3841		0.0187	0.0200	-6.5	50.0
Ethyl methacrylate	Ave	0.3960	0.4386		0.0222	0.0200	10.8	50.0
1,1,2-Trichloroethane	Ave	0.2999	0.3003		0.0200	0.0200	0.1	50.0
1,3-Dichloropropane	Ave	0.5029	0.5145		0.0205	0.0200	2.3	50.0
Tetrachloroethene	Ave	0.2816	0.3103		0.0220	0.0200	10.2	50.0
2-Hexanone	Ave	0.4036	0.4050		0.0401	0.0400	0.4	50.0
Dibromochloromethane	Ave	0.2738	0.2983		0.0218	0.0200	9.0	50.0
1,2-Dibromoethane	Ave	0.2801	0.3026		0.0216	0.0200	8.0	50.0
Chlorobenzene	Ave	0.9428	0.9876	0.3000	0.0210	0.0200	4.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3176	0.3336		0.0210	0.0200	5.0	50.0
Ethylbenzene	Ave	0.4452	0.5119		0.0230	0.0200	15.0	20.0
m-Xylene & p-Xylene	Ave	0.5398	0.6208		0.0230	0.0200	15.0	50.0
o-Xylene	Ave	0.5446	0.6169		0.0227	0.0200	13.3	50.0
Styrene	Ave	0.9116	1.015		0.0223	0.0200	11.3	50.0
Bromoform	Lin1		0.1682	0.1000	0.0193	0.0200	-3.4	50.0
Isopropylbenzene	Ave	1.399	1.587		0.0227	0.0200	13.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6452	0.6989	0.3000	0.0217	0.0200	8.3	50.0
Bromobenzene	Ave	0.7223	0.7691		0.0213	0.0200	6.5	50.0
1,2,3-Trichloropropane	Ave	0.2524	0.2675		0.0212	0.0200	6.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2663	0.2714		0.0204	0.0200	1.9	50.0
N-Propylbenzene	Ave	0.7237	0.8709		0.0241	0.0200	20.4	50.0
2-Chlorotoluene	Ave	0.6502	0.7526		0.0232	0.0200	15.8	50.0
1,3,5-Trimethylbenzene	Ave	2.148	2.595		0.0242	0.0200	20.8	50.0
4-Chlorotoluene	Ave	0.6845	0.7968		0.0233	0.0200	16.4	50.0
tert-Butylbenzene	Ave	2.109	2.435		0.0231	0.0200	15.5	50.0
1,2,4-Trimethylbenzene	Ave	2.237	2.694		0.0241	0.0200	20.4	50.0
sec-Butylbenzene	Ave	2.665	3.253		0.0244	0.0200	22.1	50.0
1,3-Dichlorobenzene	Ave	1.411	1.515		0.0215	0.0200	7.3	50.0
p-Isopropyltoluene	Ave	2.431	2.971		0.0244	0.0200	22.2	50.0
1,4-Dichlorobenzene	Ave	1.504	1.560		0.0208	0.0200	3.8	50.0
n-Butylbenzene	Ave	2.008	2.439		0.0243	0.0200	21.5	50.0
1,2-Dichlorobenzene	Ave	1.379	1.472		0.0214	0.0200	6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCVIS 240-294570/6 Calibration Date: 09/13/2017 04:03

Instrument ID: A3UX8 Calib Start Date: 08/20/2017 00:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/20/2017 03:24

Lab File ID: UX82399.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1147		0.0199	0.0200	-0.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8580	0.9173		0.0214	0.0200	6.9	50.0
Hexachlorobutadiene	Ave	0.5046	0.5306		0.0210	0.0200	5.2	50.0
Naphthalene	Ave	1.979	2.089		0.0211	0.0200	5.6	50.0
1,2,3-Trichlorobenzene	Ave	0.8727	0.8993		0.0206	0.0200	3.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2384	0.2256		0.0473	0.0500	-5.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3562	0.2988		0.0419	0.0500	-16.1	50.0
Toluene-d8 (Surr)	Ave	1.249	1.206		0.0483	0.0500	-3.5	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4531		0.0495	0.0500	-1.0	50.0

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS/ ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
SB-121A-26.5-28.5'	240-84753-1	55	63	63	62	36	106
SB-121B-30.5-32.5'	240-84753-2	81	75	56	69	56	99
SB-118A-10-13'	240-84753-3	90	71	56	61	67	81
SB-118B-53-55'	240-84753-4	64	73	65	71	80	108
SB-120B-43-45'	240-84753-5	79	78	66	83	68	115
SB-120B-48-50'	240-84753-6	91	73	68	69	73	116
	MB 240-294476/19-A	102	84	87	74	46	104
	LCS 240-294476/20-A	68	71	78	87	83	105
	LCSD 240-294476/21-A	90	96	79	71	95	100

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	29-120
PHL = Phenol-d5 (Surr)	29-120
NBZ = Nitrobenzene-d5 (Surr)	30-120
FBP = 2-Fluorobiphenyl (Surr)	32-120
TBP = 2,4,6-Tribromophenol (Surr)	10-120
TPHL = Terphenyl-d14 (Surr)	41-120

Column to be used to flag recovery values

FORM II 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: STD6 240-294210/7 Date Analyzed: 09/09/2017 14:36

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70909007.D Heated Purge: (Y/N) N

Calibration ID: 41358

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		144957	6.44	587122	7.55	367296	9.05
UPPER LIMIT		289914	6.94	1174244	8.05	734592	9.55
LOWER LIMIT		72479	5.94	293561	7.05	183648	8.55
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-294210/11		185015	6.44	723915	7.55	449271	9.05
CCV 240-294777/2 CCVIS		121557	6.36	577475	7.48	362537	8.97

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: STD6 240-294210/7 Date Analyzed: 09/09/2017 14:36

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70909007.D Heated Purge: (Y/N) N

Calibration ID: 41358

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		573819	10.31	701066	12.61	555031	14.43
UPPER LIMIT		1147638	10.81	1402132	13.11	1110062	14.93
LOWER LIMIT		286910	9.81	350533	12.11	277516	13.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-294210/11		700801	10.31	841081	12.61	683646	14.43
CCV 240-294777/2 CCVIS		511378	10.24	684231	12.51	562195	14.27

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: CCV 240-294777/2 Date Analyzed: 09/14/2017 07:40

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70914002.D Heated Purge: (Y/N) N

Calibration ID: 41397

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		121557	6.36	577475	7.48	362537	8.97
UPPER LIMIT		243114	6.86	1154950	7.98	725074	9.47
LOWER LIMIT		60779	5.86	288738	6.98	181269	8.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-294777/3		137040	6.37	380940	7.48	225803	8.98
CCV 240-294777/4		133964	6.36	398356	7.48	324838	8.98
MB 240-294476/19-A		93202	6.36	353421	7.47	253572	8.97
LCS 240-294476/20-A		114116	6.37	524188	7.48	210870	8.98
LCSD 240-294476/21-A		103925	6.36	468497	7.48	258611	8.98
240-84753-1	SB-121A-26.5-28.5'	126564	6.37	496102	7.48	309312	8.97
240-84753-2	SB-121B-30.5-32.5'	108548	6.37	525738	7.48	319082	8.97
240-84753-3	SB-118A-10-13'	101995	6.36	485529	7.48	305274	8.98
240-84753-4	SB-118B-53-55'	123078	6.37	377226	7.48	241777	8.97
240-84753-5	SB-120B-43-45'	97794	6.37	447557	7.48	291009	8.98
240-84753-6	SB-120B-48-50'	90633	6.36	355819	7.48	234957	8.98

DCBd4 = 1,4-Dichlorobenzene-d4
DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
NPT = Naphthalene-d8
Area Limit = 50%-200% of internal standard area
ANT = Acenaphthene-d10
RT Limit = ± 0.5 minutes of internal standard RT
ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: CCV 240-294777/2 Date Analyzed: 09/14/2017 07:40

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70914002.D Heated Purge: (Y/N) N

Calibration ID: 41397

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		511378	10.24	684231	12.51	562195	14.27
UPPER LIMIT		1022756	10.74	1368462	13.01	1124390	14.77
LOWER LIMIT		255689	9.74	342116	12.01	281098	13.77
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-294777/3		383648	10.24	411355	12.51	333629	14.27
CCV 240-294777/4		533374	10.24	497033	12.51	325158	14.27
MB 240-294476/19-A		330412	10.24	449461	12.51	409923	14.27
LCS 240-294476/20-A		361304	10.24	518504	12.52	404762	14.27
LCSD 240-294476/21-A		459632	10.24	573404	12.52	422840	14.27
240-84753-1	SB-121A-26.5-28.5'	535975	10.24	539493	12.51	479132	14.27
240-84753-2	SB-121B-30.5-32.5'	449569	10.24	600809	12.51	446974	14.27
240-84753-3	SB-118A-10-13'	531150	10.24	505215	12.51	340616	14.27
240-84753-4	SB-118B-53-55'	517925	10.24	532768	12.51	448604	14.27
240-84753-5	SB-120B-43-45'	461018	10.24	365108	12.51	310783	14.27
240-84753-6	SB-120B-48-50'	473234	10.24	492514	12.51	412616	14.27

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
PRY = Perylene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: 70914006.D Lab Sample ID: MB 240-294476/19-A

Matrix: Solid Date Extracted: 09/12/2017 09:30

Instrument ID: A4HP9 Date Analyzed: 09/14/2017 09:21

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-294476/20-A	70914007.D	09/14/2017 09:46
	LCSD 240-294476/21-A	70914008.D	09/14/2017 10:12
SB-121A-26.5-28.5'	240-84753-1	70914012.D	09/14/2017 11:53
SB-121B-30.5-32.5'	240-84753-2	70914013.D	09/14/2017 12:18
SB-118A-10-13'	240-84753-3	70914014.D	09/14/2017 12:43
SB-118B-53-55'	240-84753-4	70914015.D	09/14/2017 13:08
SB-120B-43-45'	240-84753-5	70914016.D	09/14/2017 13:34
SB-120B-48-50'	240-84753-6	70914017.D	09/14/2017 13:59

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294476/19-A

Matrix: Solid | Lab File ID: 70914006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30(g) | Date Analyzed: 09/14/2017 09:21

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	3.5	U	50	3.5
123-91-1	1,4-Dioxane	22	U	100	22
88-06-2	2,4,6-Trichlorophenol	8.9	U	150	8.9
95-95-4	2,4,5-Trichlorophenol	25	U	150	25
120-83-2	2,4-Dichlorophenol	20	U	150	20
105-67-9	2,4-Dimethylphenol	20	U	150	20
51-28-5	2,4-Dinitrophenol	21	U	330	21
121-14-2	2,4-Dinitrotoluene	17	U	200	17
91-58-7	2-Chloronaphthalene	0.45	U	50	0.45
95-57-8	2-Chlorophenol	8.2	U	50	8.2
91-57-6	2-Methylnaphthalene	0.50	U	6.7	0.50
95-48-7	2-Methylphenol	11	U	200	11
88-74-4	2-Nitroaniline	9.1	U	200	9.1
88-75-5	2-Nitrophenol	8.3	U	50	8.3
15831-10-4	3 & 4 Methylphenol	20	U	400	20
91-94-1	3,3'-Dichlorobenzidine	18	U	100	18
99-09-2	3-Nitroaniline	16	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	9.2	U	150	9.2
101-55-3	4-Bromophenyl phenyl ether	13	U	50	13
59-50-7	4-Chloro-3-methylphenol	21	U	150	21
106-47-8	4-Chloroaniline	17	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	13	U	50	13
100-01-6	4-Nitroaniline	26	U	200	26
83-32-9	Acenaphthene	0.76	U	6.7	0.76
208-96-8	Acenaphthylene	0.35	U	6.7	0.35
98-86-2	Acetophenone	9.2	U	100	9.2
120-12-7	Anthracene	0.78	U	6.7	0.78
1912-24-9	Atrazine	9.1	U	200	9.1
100-52-7	Benzaldehyde	12	U	100	12
56-55-3	Benzo[a]anthracene	0.63	U	6.7	0.63
50-32-8	Benzo[a]pyrene	0.64	U	6.7	0.64
205-99-2	Benzo[b]fluoranthene	0.59	U	6.7	0.59
191-24-2	Benzo[g,h,i]perylene	0.35	U	6.7	0.35
207-08-9	Benzo[k]fluoranthene	0.68	U	6.7	0.68

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294476/19-A

Matrix: Solid | Lab File ID: 70914006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30(g) | Date Analyzed: 09/14/2017 09:21

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	22	U	100	22
111-44-4	Bis(2-chloroethyl)ether	2.0	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	19	U	70	19
85-68-7	Butyl benzyl phthalate	10	U	70	10
105-60-2	Caprolactam	37	U	330	37
86-74-8	Carbazole	27	U	50	27
218-01-9	Chrysene	1.1	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	15	U	70	15
117-84-0	Di-n-octyl phthalate	7.9	U	70	7.9
53-70-3	Dibenz(a,h)anthracene	0.66	U	6.7	0.66
132-64-9	Dibenzofuran	0.66	U	50	0.66
84-66-2	Diethyl phthalate	16	U	70	16
131-11-3	Dimethyl phthalate	17	U	70	17
206-44-0	Fluoranthene	0.55	U	6.7	0.55
86-73-7	Fluorene	0.53	U	6.7	0.53
118-74-1	Hexachlorobenzene	2.1	U	6.7	2.1
87-68-3	Hexachlorobutadiene	5.6	U	50	5.6
77-47-4	Hexachlorocyclopentadiene	8.1	U	330	8.1
67-72-1	Hexachloroethane	9.0	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	0.35	U	6.7	0.35
78-59-1	Isophorone	13	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	6.3	U	50	6.3
62-75-9	N-Nitrosodimethylamine	16	U	100	16
86-30-6	N-Nitrosodiphenylamine	21	U	50	21
91-20-3	Naphthalene	0.82	U	6.7	0.82
98-95-3	Nitrobenzene	2.2	U	100	2.2
87-86-5	Pentachlorophenol	9.1	U	150	9.1
85-01-8	Phenanthrene	0.73	U	6.7	0.73
108-95-2	Phenol	7.3	U	50	7.3
129-00-0	Pyrene	0.44	U	6.7	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	9.5	U	100	9.5
606-20-2	2,6-Dinitrotoluene	21	U	200	21
100-02-7	4-Nitrophenol	17	U	330	17

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294476/19-A

Matrix: Solid | Lab File ID: 70914006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/12/2017 09:30

Sample wt/vol: 30(g) | Date Analyzed: 09/14/2017 09:21

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294777 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	104		41-120
4165-62-2	Phenol-d5 (Surr)	84		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	87		30-120
367-12-4	2-Fluorophenol (Surr)	102		29-120
321-60-8	2-Fluorobiphenyl (Surr)	74		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	46		10-120

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 70914007.D

Lab ID: LCS 240-294476/20-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	538	81	48-120	
1,4-Dioxane	667	255	38	10-120	
2,4,6-Trichlorophenol	667	476	71	19-120	
2,4,5-Trichlorophenol	667	524	79	34-120	
2,4-Dichlorophenol	667	509	76	48-120	
2,4-Dimethylphenol	667	486	73	37-120	
2,4-Dinitrophenol	1330	448	34	10-120	
2,4-Dinitrotoluene	667	608	91	53-120	
2-Chloronaphthalene	667	530	79	49-120	
2-Chlorophenol	667	481	72	50-120	
2-Methylnaphthalene	667	350	53	49-120	
2-Methylphenol	667	529	79	49-120	
2-Nitroaniline	667	588	88	46-120	
2-Nitrophenol	667	514	77	46-120	
3 & 4 Methylphenol	667	586	88	50-120	
3,3'-Dichlorobenzidine	1330	1130	84	40-120	
3-Nitroaniline	667	568	85	48-120	
4,6-Dinitro-2-methylphenol	1330	676	51	18-120	
4-Bromophenyl phenyl ether	667	571	86	51-120	
4-Chloro-3-methylphenol	667	394	59	47-120	
4-Chloroaniline	667	442	66	37-120	
4-Chlorophenyl phenyl ether	667	535	80	49-120	
4-Nitroaniline	667	632	95	49-120	
Acenaphthene	667	520	78	48-120	
Acenaphthylene	667	504	76	46-120	
Acetophenone	667	521	78	46-120	
Anthracene	667	567	85	51-120	
Atrazine	1330	1370	103	57-120	
Benzaldehyde	1330	992	74	48-120	
Benzo[a]anthracene	667	527	79	53-120	
Benzo[a]pyrene	667	596	89	50-120	
Benzo[b]fluoranthene	667	587	88	48-120	
Benzo[g,h,i]perylene	667	686	103	50-120	
Benzo[k]fluoranthene	667	647	97	51-120	
Bis(2-chloroethoxy)methane	667	510	76	50-120	
Bis(2-chloroethyl)ether	667	453	68	48-120	
Bis(2-ethylhexyl) phthalate	667	577	87	52-120	
Butyl benzyl phthalate	667	596	89	53-120	
Caprolactam	1330	972	73	59-120	
Carbazole	667	627	94	56-120	
Chrysene	667	587	88	54-120	
Di-n-butyl phthalate	667	683	102	56-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 70914007.D

Lab ID: LCS 240-294476/20-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	540	81	42-120	
Dibenz(a,h)anthracene	667	721	108	48-120	
Dibenzofuran	667	536	80	49-120	
Diethyl phthalate	667	606	91	52-120	
Dimethyl phthalate	667	581	87	53-120	
Fluoranthene	667	786	118	53-120	
Fluorene	667	549	82	50-120	
Hexachlorobenzene	667	610	92	46-120	
Hexachlorobutadiene	667	493	74	44-120	
Hexachlorocyclopentadiene	667	406	61	14-120	
Hexachloroethane	667	540	81	45-120	
Indeno[1,2,3-cd]pyrene	667	696	104	49-120	
Isophorone	667	484	73	47-120	
N-Nitrosodi-n-propylamine	667	544	82	49-120	
N-Nitrosodimethylamine	667	452	68	41-120	
N-Nitrosodiphenylamine	667	563	85	53-120	
Naphthalene	667	500	75	48-120	
Nitrobenzene	667	500	75	48-120	
Pentachlorophenol	1330	688	52	14-120	
Phenanthrene	667	557	83	52-120	
Phenol	667	462	69	49-120	
Pyrene	667	643	97	55-120	
2,2'-oxybis[1-chloropropane]	667	530	80	37-120	
2,6-Dinitrotoluene	667	577	87	54-120	
4-Nitrophenol	1330	1280	96	42-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 70914008.D

Lab ID: LCSD 240-294476/21-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	667	442	66	20	40	48-120	
1,4-Dioxane	667	281	42	10	40	10-120	
2,4,6-Trichlorophenol	667	417	63	13	40	19-120	
2,4,5-Trichlorophenol	667	458	69	14	40	34-120	
2,4-Dichlorophenol	667	471	71	8	40	48-120	
2,4-Dimethylphenol	667	435	65	11	40	37-120	
2,4-Dinitrophenol	1330	479	36	7	40	10-120	
2,4-Dinitrotoluene	667	621	93	2	40	53-120	
2-Chloronaphthalene	667	434	65	20	40	49-120	
2-Chlorophenol	667	590	88	20	40	50-120	
2-Methylnaphthalene	667	398	60	13	40	49-120	
2-Methylphenol	667	485	73	9	40	49-120	
2-Nitroaniline	667	515	77	13	40	46-120	
2-Nitrophenol	667	468	70	9	40	46-120	
3 & 4 Methylphenol	667	519	78	12	40	50-120	
3,3'-Dichlorobenzidine	1330	1050	79	7	40	40-120	
3-Nitroaniline	667	525	79	8	40	48-120	
4,6-Dinitro-2-methylphenol	1330	762	57	12	40	18-120	
4-Bromophenyl phenyl ether	667	590	89	3	40	51-120	
4-Chloro-3-methylphenol	667	412	62	5	40	47-120	
4-Chloroaniline	667	294	44	40	40	37-120	
4-Chlorophenyl phenyl ether	667	594	89	10	40	49-120	
4-Nitroaniline	667	702	105	10	40	49-120	
Acenaphthene	667	521	78	0	40	48-120	
Acenaphthylene	667	454	68	11	40	46-120	
Acetophenone	667	471	71	10	40	46-120	
Anthracene	667	555	83	2	40	51-120	
Atrazine	1330	1400	105	2	40	57-120	
Benzaldehyde	1330	1240	93	22	40	48-120	
Benzo[a]anthracene	667	535	80	1	40	53-120	
Benzo[a]pyrene	667	608	91	2	40	50-120	
Benzo[b]fluoranthene	667	581	87	1	40	48-120	
Benzo[g,h,i]perylene	667	643	96	7	40	50-120	
Benzo[k]fluoranthene	667	614	92	5	40	51-120	
Bis(2-chloroethoxy)methane	667	415	62	20	40	50-120	
Bis(2-chloroethyl)ether	667	590	89	26	40	48-120	
Bis(2-ethylhexyl) phthalate	667	545	82	6	40	52-120	
Butyl benzyl phthalate	667	535	80	11	40	53-120	
Caprolactam	1330	970	73	0	40	59-120	
Carbazole	667	621	93	1	40	56-120	
Chrysene	667	565	85	4	40	54-120	
Di-n-butyl phthalate	667	665	100	3	40	56-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 70914008.D

Lab ID: LCSD 240-294476/21-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Di-n-octyl phthalate	667	587	88	8	40	42-120	
Dibenz(a,h)anthracene	667	664	100	8	40	48-120	
Dibenzofuran	667	545	82	2	40	49-120	
Diethyl phthalate	667	628	94	4	40	52-120	
Dimethyl phthalate	667	492	74	17	40	53-120	
Fluoranthene	667	650	97	19	40	53-120	
Fluorene	667	611	92	11	40	50-120	
Hexachlorobenzene	667	636	95	4	40	46-120	
Hexachlorobutadiene	667	393	59	23	40	44-120	
Hexachlorocyclopentadiene	667	343	51	17	40	14-120	
Hexachloroethane	667	523	78	3	40	45-120	
Indeno[1,2,3-cd]pyrene	667	629	94	10	40	49-120	
Isophorone	667	472	71	2	40	47-120	
N-Nitrosodi-n-propylamine	667	508	76	7	40	49-120	
N-Nitrosodimethylamine	667	439	66	3	40	41-120	
N-Nitrosodiphenylamine	667	594	89	5	40	53-120	
Naphthalene	667	477	72	5	40	48-120	
Nitrobenzene	667	499	75	0	40	48-120	
Pentachlorophenol	1330	675	51	2	40	14-120	
Phenanthrene	667	547	82	2	40	52-120	
Phenol	667	607	91	27	40	49-120	
Pyrene	667	594	89	8	40	55-120	
2,2'-oxybis[1-chloropropane]	667	482	72	10	40	37-120	
2,6-Dinitrotoluene	667	514	77	12	40	54-120	
4-Nitrophenol	1330	1230	92	4	40	42-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: 70909001.D DFTPP Injection Date: 09/09/2017

Instrument ID: A4HP9 DFTPP Injection Time: 12:02

Analysis Batch No.: 294210

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.9	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	56.5	
70	Less than 2.0% of mass 69	0.2	(0.4) 1
127	25.0 - 75.0% of mass 198	54.9	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	24.1	
365	Greater than 0.75% of mass 198	3.0	
441	Present, but less than mass 443	11.2	
442	40.0 - 110.0% of mass 198	67.6	
443	15.0 - 24.0% of mass 442	13.7	(20.3) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-294210/2	70909002.D	09/09/2017	12:29
	STD4 240-294210/3	70909003.D	09/09/2017	12:55
	STD3 240-294210/4	70909004.D	09/09/2017	13:20
	STD2 240-294210/5	70909005.D	09/09/2017	13:45
	STD1 240-294210/6	70909006.D	09/09/2017	14:11
	STD6 240-294210/7	70909007.D	09/09/2017	14:36
	STD7 240-294210/8	70909008.D	09/09/2017	15:01
	STD8 240-294210/9	70909009.D	09/09/2017	15:27
	STD9 240-294210/10	70909010.D	09/09/2017	15:52
	ICV 240-294210/11	70909011.D	09/09/2017	16:18

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294210/6	70909006.D
Level 2	STD2 240-294210/5	70909005.D
Level 3	STD3 240-294210/4	70909004.D
Level 4	STD4 240-294210/3	70909003.D
Level 5	STD5 240-294210/2	70909002.D
Level 6	STD6 240-294210/7	70909007.D
Level 7	STD7 240-294210/8	70909008.D
Level 8	STD8 240-294210/9	70909009.D
Level 9	STD9 240-294210/10	70909010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5652	0.6241 0.6488	0.6079 0.6337	0.6008 0.6068	0.5992	Ave		0.6108				4.1		20.0			
N-Nitrosodimethylamine	0.9714	0.8098 0.9963	0.8974 0.9893	0.9601 0.9789	0.9647	Ave		0.9460				6.6		20.0			
Pyridine	1.7470 1.7570	1.6314 1.7409	1.7299 1.7299	1.6293 1.7122	1.7809	Ave		1.7176				3.1		20.0			
Benzaldehyde	1.6670 1.3652	1.3653 1.2968	1.3921 1.2355	1.3851 1.1641	1.3158	Ave		1.3541			0.0100	10.3		20.0			
Phenol	1.8749	1.7930 1.9168	1.9135 1.8969	1.8006 1.8885	1.8921	Ave		1.8720			0.8000	2.6		20.0			
Aniline	2.3083	1.9963 2.3526	2.2966 2.3467	2.2266 2.3041	2.3097	Ave		2.2676				5.1		20.0			
Bis(2-chloroethyl)ether	1.5690	1.3924 1.5636	1.4754 1.5206	1.5244 1.5328	1.5320	Ave		1.5138			0.7000	3.8		20.0			
2-Chlorophenol	1.3755	1.2399 1.3935	1.3304 1.4066	1.3096 1.3943	1.3712	Ave		1.3526			0.8000	4.2		20.0			
n-Decane	1.5944	1.5667 1.6222	1.5953 1.6225	1.6156 1.5920	1.6073	Ave		1.6020				1.2		20.0			
1,3-Dichlorobenzene	1.5031	1.3019 1.5178	1.5213 1.5224	1.4464 1.5114	1.4915	Ave		1.4770				5.1		20.0			
1,4-Dichlorobenzene	1.5322	1.4811 1.5454	1.4809 1.5538	1.5292 1.5474	1.4860	Ave		1.5195				2.1		20.0			
Benzyl alcohol	0.9696	0.8432 1.0017	0.9592 1.0099	0.9180 0.9978	0.9738	Ave		0.9591				5.8		20.0			
1,2-Dichlorobenzene	1.4327	1.3762 1.4585	1.4109 1.4549	1.3956 1.4343	1.4346	Ave		1.4247				2.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	1.3941	1.2139 1.3976	1.3113 1.3837	1.3058 1.3678	1.3365	Ave		1.3388			0.7000	4.6		20.0			
2,2'-oxybis[1-chloropropane]	1.7589	1.6771 1.7675	1.8053 1.7446	1.7191 1.7200	1.7455	Ave		1.7422				2.2		20.0			
Indene	2.8513	2.6805 2.9242	2.8392 2.9322	2.7099 2.9044	2.7412	Ave		2.8229				3.5		20.0			
3 & 4 Methylphenol	1.4330	1.3033 1.4985	1.4018 1.4708	1.3568 1.4756	1.3956	Ave		1.4169				4.7		20.0			
N-Nitrosodi-n-propylamine	1.2830	1.2057 1.3113	1.3042 1.3057	1.2354 1.2982	1.2690	Ave		1.2766			0.5000	3.0		20.0			
Acetophenone	2.2424	2.0970 2.3001	2.2974 2.2778	2.1204 2.2786	2.2033	Ave		2.2271			0.0100	3.6		20.0			
Hexachloroethane	0.6850	0.6512 0.6945	0.6641 0.6927	0.6512 0.6759	0.6551	Ave		0.6712			0.3000	2.7		20.0			
Nitrobenzene	0.4971	0.4538 0.4996	0.4776 0.4982	0.4791 0.4787	0.4849	Ave		0.4836			0.2000	3.1		20.0			
Isophorone	0.8428	0.7520 0.8592	0.7917 0.8796	0.8215 0.8419	0.8312	Ave		0.8275			0.4000	4.8		20.0			
2-Nitrophenol	0.1908	0.1533 0.1991	0.1694 0.2093	0.1842 0.2026	0.1930	Ave		0.1877			0.1000	9.8		20.0			
2,4-Dimethylphenol	0.4310	0.3906 0.4403	0.4051 0.4511	0.4073 0.4380	0.4200	Ave		0.4229			0.2000	4.9		20.0			
Benzoic acid	0.2083	0.1060 0.2147	0.1434 0.2252	0.1619 0.2241	0.1931	Lin1	-0.156	0.2232							0.9990		0.9900
Bis(2-chloroethoxy)methane	0.4553	0.4215 0.4689	0.4349 0.4793	0.4445 0.4610	0.4460	Ave		0.4514			0.3000	4.1		20.0			
2,4-Dichlorophenol	0.2950	0.2619 0.3030	0.2690 0.3108	0.2771 0.3049	0.2894	Ave		0.2889			0.2000	6.2		20.0			
1,2,4-Trichlorobenzene	0.3260	0.2845 0.3308	0.3158 0.3434	0.3128 0.3296	0.3046	Ave		0.3184				5.7		20.0			
Naphthalene	1.0715 1.0181	0.9748 1.0276	1.0175 1.0657	1.0131 1.0389	1.0097	Ave		1.0263			0.7000	2.9		20.0			
4-Chloroaniline	0.4315	0.3775 0.4549	0.4338 0.4700	0.4194 0.4360	0.4355	Ave		0.4323			0.0100	6.3		20.0			
2,6-Dichlorophenol	0.2908	0.2736 0.2954	0.2855 0.3050	0.2818 0.2961	0.2809	Ave		0.2886				3.5		20.0			
Hexachlorobutadiene	0.2005	0.1827 0.2033	0.1914 0.2118	0.1934 0.2040	0.1916	Ave		0.1973			0.0100	4.7		20.0			
Caprolactam	0.0765 0.1054	0.0936 0.1096	0.1031 0.1107	0.1030 0.1081	0.1045	Ave		0.1016			0.0100	10.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3619	0.3024 0.3676	0.3302 0.3768	0.3391 0.3659	0.3496	Ave		0.3492			0.2000	7.0		20.0			
2-Methylnaphthalene	0.6567 0.6879	0.5899 0.7094	0.6458 0.7375	0.6590 0.7209	0.6560	Ave		0.6737			0.4000	6.7		20.0			
1-Methylnaphthalene	0.5688 0.6336	0.5524 0.6444	0.5965 0.6766	0.6027 0.6514	0.6055	Ave		0.6147				6.5		20.0			
Hexachlorocyclopentadiene	0.3826	0.3107 0.4004	0.3340 0.4111	0.3593 0.4037	0.3691	Ave		0.3714			0.0500	9.6		20.0			
1,2,4,5-Tetrachlorobenzene	0.5247	0.4901 0.5543	0.5173 0.5872	0.5059 0.5711	0.5021	Ave		0.5316			0.0100	6.6		20.0			
2,4,6-Trichlorophenol	0.3582	0.2976 0.3771	0.3198 0.3933	0.3445 0.3859	0.3478	Ave		0.3530			0.2000	9.3		20.0			
2,4,5-Trichlorophenol	0.3696	0.3306 0.3773	0.3558 0.3939	0.3561 0.3793	0.3532	Ave		0.3645			0.2000	5.4		20.0			
1,1'-Biphenyl	1.2506 1.3081	1.1792 1.3541	1.2742 1.4591	1.2618 1.4026	1.2606	Ave		1.3056			0.0100	6.6		20.0			
2-Chloronaphthalene	0.9998 1.0624	1.0002 1.1037	1.0274 1.1674	1.0590 1.1466	1.0537	Ave		1.0689			0.8000	5.6		20.0			
2-Nitroaniline	0.4265	0.3521 0.4309	0.3885 0.4379	0.3990 0.4281	0.4060	Ave		0.4086			0.0100	7.0		20.0			
Dimethyl phthalate	1.2794	1.1866 1.2766	1.2630 1.3256	1.2453 1.2637	1.2368	Ave		1.2596			0.0100	3.2		20.0			
1,3-Dinitrobenzene	0.2056	0.1594 0.2124	0.1868 0.2206	0.1885 0.2153	0.2041	Ave		0.1991				10.1		20.0			
2,6-Dinitrotoluene	0.2967	0.2474 0.2983	0.2650 0.3122	0.2822 0.2941	0.2865	Ave		0.2853				7.2		20.0			
Acenaphthylene	1.4365 1.6198	1.4751 1.6928	1.5822 1.7702	1.5971 1.7226	1.5701	Ave		1.6074			0.9000	6.8		20.0			
3-Nitroaniline	0.2730	0.2342 0.2827	0.2640 0.2945	0.2950 0.2923	0.2740	Ave		0.2762			0.0100	7.4		20.0			
2,4-Dinitrophenol	0.1726	+++++ 0.1980	0.1033 0.2156	0.1256 0.2111	0.1717	Lin1	-0.290	0.2117			0.0100				0.9950		0.9900
Acenaphthene	1.0275 1.0824	0.9921 1.1184	1.0485 1.1832	1.0361 1.1521	1.0286	Ave		1.0743			0.9000	6.0		20.0			
4-Nitrophenol	0.2573	0.2122 0.2619	0.2357 0.2720	0.2275 0.2545	0.2334	Ave		0.2443				8.3		20.0			
2,4-Dinitrotoluene	0.3795	0.3309 0.3980	0.3681 0.4247	0.3721 0.4119	0.3782	Ave		0.3829			0.2000	7.6		20.0			
Dibenzofuran	1.4551 1.5279	1.4479 1.6035	1.5127 1.6626	1.4723 1.6154	1.4715	Ave		1.5299			0.8000	5.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.2893	0.2514 0.2965	0.2777 0.3190	0.2959 0.3173	0.2933	Ave		0.2926			0.0100	7.4		20.0			
Diethyl phthalate	1.2326	1.2410 1.2945	1.2942 1.3574	1.2950 1.3149	1.2189	Ave		1.2811			0.0100	3.7		20.0			
Hexadecane	0.8275	0.7408 0.8435	0.7843 0.8727	0.8163 0.8279	0.8016	Ave		0.8143				4.9		20.0			
4-Chlorophenyl phenyl ether	0.6101	0.5710 0.6383	0.5998 0.6547	0.5759 0.6333	0.5820	Ave		0.6081			0.4000	5.2		20.0			
4-Nitroaniline	0.2926	0.2385 0.3062	0.2789 0.3181	0.2432 0.3022	0.2770	Ave		0.2821			0.0100	10.2		20.0			
Fluorene	1.0428 1.2677	1.1723 1.3141	1.2126 1.3547	1.2095 1.3199	1.2064	Ave		1.2333			0.9000	7.7		20.0			
4,6-Dinitro-2-methylphenol	0.1513	0.0691 0.1698	0.1010 0.1719	0.1026 0.1725	0.1361	Lin1	-0.149	0.1711			0.0100				0.9960		0.9900
Diphenylamine	0.6197	0.5453 0.6412	0.6014 0.6424	0.5837 0.6508	0.6675	Ave		0.6190				6.5		20.0			
N-Nitrosodiphenylamine	0.5268	0.4636 0.5451	0.5113 0.5462	0.4963 0.5533	0.5675	Ave		0.5263			0.0100	6.5		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.0373	0.8538 1.0208	0.9278 0.9682	0.8931 0.9240	1.0106	Ave		0.9552				6.7		20.0			
Azobenzene	1.0371	0.8598 1.0210	0.9258 0.9689	0.8952 0.9235	1.0106	Ave		0.9552				6.7		20.0			
4-Bromophenyl phenyl ether	0.2226	0.1759 0.2159	0.1956 0.2146	0.1999 0.2103	0.2135	Ave		0.2060			0.1000	7.3		20.0			
Hexachlorobenzene	0.1876 0.2530	0.2001 0.2537	0.2184 0.2486	0.2229 0.2454	0.2346	Ave		0.2294			0.1000	10.4		20.0			
Atrazine	0.2002 0.2315	0.1832 0.2229	0.1893 0.2189	0.1776 0.2183	0.2150	Ave		0.2063			0.0100	9.3		20.0			
n-Octadecane	0.4588	0.4353 0.4549	0.4605 0.4264	0.4694 0.4128	0.5158	Ave		0.4542				6.9		20.0			
Pentachlorophenol	0.1586	0.0904 0.1732	0.1146 0.1768	0.1205 0.1748	0.1395	Lin1	-0.125	0.1744			0.0500				0.9970		0.9900
Phenanthrene	1.0799 1.0325	0.9658 1.1033	1.0036 1.1214	0.9907 1.1297	0.9957	Ave		1.0470			0.7000	6.0		20.0			
Anthracene	0.9648 1.0613	0.9866 1.1418	1.0057 1.1594	1.0109 1.1631	1.0226	Ave		1.0573			0.7000	7.4		20.0			
Carbazole	0.9164	0.8283 0.9320	0.9042 0.9235	0.7911 0.8858	0.8955	Ave		0.8846			0.0100	5.6		20.0			
Di-n-butyl phthalate	1.3256	0.9695 1.2709	0.9759 1.2694	0.9930 1.2627	1.2222	Ave		1.1612			0.0100	13.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	1.0051 1.2294	0.9394 1.2640	0.9881 1.2585	0.9139 1.2522	1.0906	Ave		1.1046			0.6000	13.3		20.0			
Benzidine	 0.4993	+++++ 0.5311	0.2639 0.5279	0.2938 0.5177	0.4188	Lin1	-0.728	0.5379							0.9980		0.9900
Pyrene	0.9240 1.0423	0.9378 1.0401	0.9450 1.0779	0.9125 1.1042	0.9757	Ave		0.9955			0.6000	7.2		20.0			
Butyl benzyl phthalate	 0.5165	0.4311 0.5337	0.5264 0.5328	0.5002 0.5372	0.5173	Ave		0.5119			0.0100	6.8		20.0			
Bis(2-ethylhexyl) phthalate	 0.6971	0.5807 0.7134	0.6814 0.7212	0.6547 0.7099	0.6888	Ave		0.6809			0.0100	6.7		20.0			
3,3'-Dichlorobenzidine	 0.2944	0.2644 0.3240	0.3127 0.3517	0.2967 0.3594	0.2863	Ave		0.3112			0.0100	10.5		20.0			
Benzo[a]anthracene	1.0044 1.0024	0.9522 1.0404	1.0112 1.0586	0.9440 1.0519	0.9750	Ave		1.0045			0.8000	4.1		20.0			
Chrysene	0.9335 0.9647	0.8977 0.9958	0.9769 1.0018	0.9062 1.0087	0.9226	Ave		0.9564			0.7000	4.4		20.0			
Di-n-octyl phthalate	 1.4507	0.9881 1.5196	1.3154 1.5772	1.3833 1.5318	1.4439	Ave		1.4012			0.0100	13.3		20.0			
Benzo[b]fluoranthene	0.8543 1.1637	0.9424 1.2590	1.1446 1.2601	1.0805 1.2867	1.1308	Ave		1.1247			0.7000	13.1		20.0			
Benzo[k]fluoranthene	1.1278 1.2378	1.0561 1.2778	1.1807 1.3913	1.1600 1.3063	1.1893	Ave		1.2141			0.7000	8.3		20.0			
Benzo[a]pyrene	0.8291 1.1170	0.9037 1.1728	1.0375 1.2295	1.0357 1.2183	1.0711	Ave		1.0683			0.7000	12.7		20.0			
Dibenz(a,h)anthracene	0.6394 0.9875	0.7514 1.0443	0.9066 +++++	0.9263 +++++	0.9406	Ave		0.8851			0.4000	15.9		20.0			
Indeno[1,2,3-cd]pyrene	0.7835 1.1959	0.9719 1.2563	1.1360 1.3087	1.0983 1.2887	1.1518	Ave		1.1324			0.5000	14.8		20.0			
Benzo[g,h,i]perylene	0.8405 0.9565	0.8654 0.9860	1.0076 1.0162	0.9502 0.9828	0.9512	Ave		0.9507			0.5000	6.4		20.0			
2-Fluorophenol (Surr)	 1.3038	1.1294 1.3302	1.3007 1.3303	1.2812 1.3137	1.3491	Ave		1.2923				5.3		20.0			
Phenol-d5 (Surr)	 1.7317	1.5944 1.7680	1.7302 1.7779	1.7249 1.7575	1.7511	Ave		1.7295				3.3		20.0			
Nitrobenzene-d5 (Surr)	0.5083 0.5192	0.4726 0.5236	0.5013 0.5409	0.5090 0.5125	0.5092	Ave		0.5107				3.6		20.0			
2-Fluorobiphenyl (Surr)	1.1341 1.1741	1.1137 1.2152	1.1707 1.2971	1.1530 1.2611	1.1516	Ave		1.1856				5.1		20.0			
2,4,6-Tribromophenol (Surr)	 0.1491	0.1284 0.1602	0.1558 0.1687	0.1497 0.1661	0.1561	Ave		0.1543				8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Terphenyl-d14 (Surr)	0.5755 0.6860	0.6093 0.7271	0.6639 0.7388	0.6602 0.7436	0.6482	Ave		0.6725				8.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-294210/11 Calibration Date: 09/09/2017 16:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70909011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6108	0.6080		9.95	10.0	-0.5	30.0
N-Nitrosodimethylamine	Ave	0.9460	0.9510		10.1	10.0	0.5	30.0
Pyridine	Ave	1.718	1.647		19.2	20.0	-4.1	30.0
Benzaldehyde	Ave	1.354	1.303	0.0100	19.2	20.0	-3.8	30.0
Phenol	Ave	1.872	1.811	0.8000	9.67	10.0	-3.3	30.0
Aniline	Ave	2.268	2.054		9.06	10.0	-9.4	30.0
Bis(2-chloroethyl)ether	Ave	1.514	1.473	0.7000	9.73	10.0	-2.7	30.0
2-Chlorophenol	Ave	1.353	1.310	0.8000	9.69	10.0	-3.1	30.0
n-Decane	Ave	1.602	1.517		9.47	10.0	-5.3	30.0
1,3-Dichlorobenzene	Ave	1.477	1.427		9.66	10.0	-3.4	30.0
1,4-Dichlorobenzene	Ave	1.520	1.464		9.63	10.0	-3.7	30.0
Benzyl alcohol	Ave	0.9591	0.9618		10.0	10.0	0.3	30.0
1,2-Dichlorobenzene	Ave	1.425	1.380		9.69	10.0	-3.1	30.0
2-Methylphenol	Ave	1.339	1.284	0.7000	9.59	10.0	-4.1	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.742	1.608		9.23	10.0	-7.7	30.0
Indene	Ave	2.823	2.572		18.2	20.0	-8.9	30.0
3 & 4 Methylphenol	Ave	1.417	1.393		9.83	10.0	-1.7	30.0
N-Nitrosodi-n-propylamine	Ave	1.277	1.221	0.5000	9.56	10.0	-4.4	30.0
Acetophenone	Ave	2.227	2.117	0.0100	9.51	10.0	-4.9	30.0
Hexachloroethane	Ave	0.6712	0.6481	0.3000	9.65	10.0	-3.5	30.0
Nitrobenzene	Ave	0.4836	0.4807	0.2000	9.94	10.0	-0.6	30.0
Isophorone	Ave	0.8275	0.8343	0.4000	10.1	10.0	0.8	30.0
2-Nitrophenol	Ave	0.1877	0.1929	0.1000	10.3	10.0	2.8	30.0
2,4-Dimethylphenol	Ave	0.4229	0.3551	0.2000	8.39	10.0	-16.1	30.0
Benzoic acid	Lin1		0.2087		19.4	20.0	-3.0	30.0
Bis(2-chloroethoxy)methane	Ave	0.4514	0.4589	0.3000	10.2	10.0	1.7	30.0
2,4-Dichlorophenol	Ave	0.2889	0.2851	0.2000	9.87	10.0	-1.3	30.0
1,2,4-Trichlorobenzene	Ave	0.3184	0.3147		9.88	10.0	-1.2	30.0
Naphthalene	Ave	1.026	0.9898	0.7000	9.64	10.0	-3.6	30.0
4-Chloroaniline	Ave	0.4323	0.4133	0.0100	9.56	10.0	-4.4	30.0
2,6-Dichlorophenol	Ave	0.2886	0.2843		9.85	10.0	-1.5	30.0
Hexachlorobutadiene	Ave	0.1973	0.2015	0.0100	10.2	10.0	2.1	30.0
Caprolactam	Ave	0.1016	0.1101	0.0100	21.7	20.0	8.4	30.0
4-Chloro-3-methylphenol	Ave	0.3492	0.3596	0.2000	10.3	10.0	3.0	30.0
2-Methylnaphthalene	Ave	0.6737	0.6665	0.4000	9.89	10.0	-1.1	30.0
1-Methylnaphthalene	Ave	0.6147	0.6322		10.3	10.0	2.9	30.0
Hexachlorocyclopentadiene	Ave	0.3714	0.3245	0.0500	8.74	10.0	-12.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5316	0.5130	0.0100	9.65	10.0	-3.5	30.0
2,4,6-Trichlorophenol	Ave	0.3530	0.3598	0.2000	10.2	10.0	1.9	30.0
2,4,5-Trichlorophenol	Ave	0.3645	0.3741	0.2000	10.3	10.0	2.6	30.0
1,1'-Biphenyl	Ave	1.306	1.288	0.0100	9.87	10.0	-1.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-294210/11 Calibration Date: 09/09/2017 16:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70909011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloronaphthalene	Ave	1.069	1.052	0.8000	9.84	10.0	-1.6	30.0
2-Nitroaniline	Ave	0.4086	0.4241	0.0100	10.4	10.0	3.8	30.0
Dimethyl phthalate	Ave	1.260	1.236	0.0100	9.81	10.0	-1.9	30.0
1,3-Dinitrobenzene	Ave	0.1991	0.2062		10.4	10.0	3.6	30.0
2,6-Dinitrotoluene	Ave	0.2853	0.2906		10.2	10.0	1.9	30.0
Acenaphthylene	Ave	1.607	1.636	0.9000	10.2	10.0	1.8	30.0
3-Nitroaniline	Ave	0.2762	0.2671	0.0100	9.67	10.0	-3.3	30.0
2,4-Dinitrophenol	Lin1		0.1713	0.0100	17.6	20.0	-12.2	30.0
Acenaphthene	Ave	1.074	1.058	0.9000	9.84	10.0	-1.6	30.0
4-Nitrophenol	Ave	0.2443	0.2507		20.5	20.0	2.6	30.0
2,4-Dinitrotoluene	Ave	0.3829	0.3832	0.2000	10.0	10.0	0.0	30.0
Dibenzofuran	Ave	1.530	1.511	0.8000	9.88	10.0	-1.2	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.2926	0.2800	0.0100	9.57	10.0	-4.3	30.0
Diethyl phthalate	Ave	1.281	1.229	0.0100	9.59	10.0	-4.1	30.0
Hexadecane	Ave	0.8143	0.8089		9.93	10.0	-0.7	30.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.5919	0.4000	9.73	10.0	-2.7	30.0
4-Nitroaniline	Ave	0.2821	0.2871	0.0100	10.2	10.0	1.8	30.0
Fluorene	Ave	1.233	1.268	0.9000	10.3	10.0	2.8	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1562	0.0100	19.1	20.0	-4.4	30.0
Diphenylamine	Ave	0.6190	0.5990		8.24	8.51	-3.2	30.0
N-Nitrosodiphenylamine	Ave	0.5263	0.5098	0.0100	9.69	10.0	-3.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9544	1.032		10.8	10.0	8.1	30.0
Azobenzene	Ave	0.9552	1.032		10.8	10.0	8.0	30.0
4-Bromophenyl phenyl ether	Ave	0.2060	0.2064	0.1000	10.0	10.0	0.2	30.0
Hexachlorobenzene	Ave	0.2294	0.2521	0.1000	11.0	10.0	9.9	30.0
Atrazine	Ave	0.2063	0.2339	0.0100	22.7	20.0	13.4	30.0
n-Octadecane	Ave	0.4542	0.4461		9.82	10.0	-1.8	30.0
Pentachlorophenol	Lin1		0.1644	0.0500	19.6	20.0	-2.1	30.0
Phenanthrene	Ave	1.047	1.022	0.7000	9.76	10.0	-2.4	30.0
Anthracene	Ave	1.057	1.031	0.7000	9.75	10.0	-2.5	30.0
Carbazole	Ave	0.8846	0.8909	0.0100	10.1	10.0	0.7	30.0
Di-n-butyl phthalate	Ave	1.161	1.273	0.0100	11.0	10.0	9.7	30.0
Fluoranthene	Ave	1.105	1.196	0.6000	10.8	10.0	8.2	30.0
Benzidine	Lin1		0.4532		18.2	20.0	-9.0	30.0
Pyrene	Ave	0.996	1.019	0.6000	10.2	10.0	2.4	30.0
Butyl benzyl phthalate	Ave	0.5119	0.5082	0.0100	9.93	10.0	-0.7	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6809	0.6887	0.0100	10.1	10.0	1.1	30.0
3,3'-Dichlorobenzidine	Ave	0.3112	0.3140	0.0100	20.2	20.0	0.9	30.0
Benzo[a]anthracene	Ave	1.004	0.9816	0.8000	9.77	10.0	-2.3	30.0
Chrysene	Ave	0.9564	0.9482	0.7000	9.91	10.0	-0.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-294210/11 Calibration Date: 09/09/2017 16:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70909011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Ave	1.401	1.386	0.0100	9.89	10.0	-1.1	30.0
Benzo[b]fluoranthene	Ave	1.125	1.111	0.7000	9.87	10.0	-1.3	30.0
Benzo[k]fluoranthene	Ave	1.214	1.238	0.7000	10.2	10.0	2.0	30.0
Benzo[a]pyrene	Ave	1.068	1.045	0.7000	9.78	10.0	-2.2	30.0
Dibenz(a,h)anthracene	Ave	0.8851	0.9690	0.4000	10.9	10.0	9.5	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.132	1.155	0.5000	10.2	10.0	2.0	30.0
Benzo[g,h,i]perylene	Ave	0.9507	0.9113	0.5000	9.58	10.0	-4.2	30.0
2-Fluorophenol (Surr)	Ave	1.292	1.401		10.8	10.0	8.4	30.0
Phenol-d5 (Surr)	Ave	1.729	1.888		10.9	10.0	9.2	30.0
Nitrobenzene-d5 (Surr)	Ave	0.5107	0.5726		11.2	10.0	12.1	30.0
2-Fluorobiphenyl (Surr)	Ave	1.186	1.336		11.3	10.0	12.7	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1543	0.1695		11.0	10.0	9.8	30.0
Terphenyl-d14 (Surr)	Ave	0.6725	0.7757		11.5	10.0	15.4	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab File ID: 70914001.D DFTPP Injection Date: 09/14/2017

Instrument ID: A4HP9 DFTPP Injection Time: 07:15

Analysis Batch No.: 294777

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	46.2	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	52.5	
70	Less than 2.0% of mass 69	0.3	(0.5) 1
127	25.0 - 75.0% of mass 198	54.6	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.2	
275	10.0- 30.0% of mass 198	27.0	
365	Greater than 0.75% of mass 198	3.4	
441	Present, but less than mass 443	13.7	
442	40.0 - 110.0% of mass 198	83.3	
443	15.0 - 24.0% of mass 442	15.9	(19.0) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-294777/2	70914002.D	09/14/2017	07:40
	CCV 240-294777/3	70914003.D	09/14/2017	08:06
	CCV 240-294777/4	70914004.D	09/14/2017	08:31
	MB 240-294476/19-A	70914006.D	09/14/2017	09:21
	LCS 240-294476/20-A	70914007.D	09/14/2017	09:46
	LCSD 240-294476/21-A	70914008.D	09/14/2017	10:12
SB-121A-26.5-28.5'	240-84753-1	70914012.D	09/14/2017	11:53
SB-121B-30.5-32.5'	240-84753-2	70914013.D	09/14/2017	12:18
SB-118A-10-13'	240-84753-3	70914014.D	09/14/2017	12:43
SB-118B-53-55'	240-84753-4	70914015.D	09/14/2017	13:08
SB-120B-43-45'	240-84753-5	70914016.D	09/14/2017	13:34
SB-120B-48-50'	240-84753-6	70914017.D	09/14/2017	13:59

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294777/2 Calibration Date: 09/14/2017 07:40

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70914002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6108	0.6355		10.4	10.0	4.0	20.0
N-Nitrosodimethylamine	Ave	0.9460	0.8505		8.99	10.0	-10.1	20.0
Pyridine	Ave	1.718	1.497		17.4	20.0	-12.8	20.0
Benzaldehyde	Ave	1.354	1.272	0.0100	18.8	20.0	-6.1	20.0
Phenol	Ave	1.872	1.760	0.8000	9.40	10.0	-6.0	20.0
Aniline	Ave	2.268	2.263		9.98	10.0	-0.2	20.0
Bis(2-chloroethyl)ether	Ave	1.514	1.446	0.7000	9.55	10.0	-4.5	20.0
2-Chlorophenol	Ave	1.353	1.319	0.8000	9.75	10.0	-2.5	20.0
n-Decane	Ave	1.602	1.565		9.77	10.0	-2.3	20.0
1,3-Dichlorobenzene	Ave	1.477	1.461		9.89	10.0	-1.1	20.0
1,4-Dichlorobenzene	Ave	1.520	1.531		10.1	10.0	0.7	20.0
Benzyl alcohol	Ave	0.9591	1.013		10.6	10.0	5.6	20.0
1,2-Dichlorobenzene	Ave	1.425	1.512		10.6	10.0	6.2	20.0
2-Methylphenol	Ave	1.339	1.426	0.7000	10.7	10.0	6.5	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.742	1.872		10.7	10.0	7.4	20.0
Indene	Ave	2.823	3.081		21.8	20.0	9.1	20.0
3 & 4 Methylphenol	Ave	1.417	1.606		11.3	10.0	13.4	20.0
N-Nitrosodi-n-propylamine	Ave	1.277	1.413	0.5000	11.1	10.0	10.7	20.0
Acetophenone	Ave	2.227	2.486	0.0100	11.2	10.0	11.6	20.0
Hexachloroethane	Ave	0.6712	0.7252	0.3000	10.8	10.0	8.0	20.0
Nitrobenzene	Ave	0.4836	0.4691	0.2000	9.70	10.0	-3.0	20.0
Isophorone	Ave	0.8275	0.8144	0.4000	9.84	10.0	-1.6	20.0
2-Nitrophenol	Ave	0.1877	0.1845	0.1000	9.83	10.0	-1.7	20.0
2,4-Dimethylphenol	Ave	0.4229	0.4091	0.2000	9.67	10.0	-3.3	20.0
Benzoic acid	Lin1		0.2050		19.1	20.0	-4.7	20.0
Bis(2-chloroethoxy)methane	Ave	0.4514	0.4426	0.3000	9.80	10.0	-2.0	20.0
2,4-Dichlorophenol	Ave	0.2889	0.2941	0.2000	10.2	10.0	1.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3184	0.3196		10.0	10.0	0.4	20.0
Naphthalene	Ave	1.026	1.019	0.7000	9.93	10.0	-0.7	20.0
4-Chloroaniline	Ave	0.4323	0.4350	0.0100	10.1	10.0	0.6	20.0
2,6-Dichlorophenol	Ave	0.2886	0.2918		10.1	10.0	1.1	20.0
Hexachlorobutadiene	Ave	0.1973	0.2007	0.0100	10.2	10.0	1.7	20.0
Caprolactam	Ave	0.1016	0.1084	0.0100	21.3	20.0	6.7	20.0
4-Chloro-3-methylphenol	Ave	0.3492	0.3472	0.2000	9.94	10.0	-0.6	20.0
2-Methylnaphthalene	Ave	0.6737	0.6416	0.4000	9.52	10.0	-4.8	20.0
1-Methylnaphthalene	Ave	0.6147	0.5962		9.70	10.0	-3.0	20.0
Hexachlorocyclopentadiene	Ave	0.3714	0.3661	0.0500	9.86	10.0	-1.4	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5316	0.5123	0.0100	9.64	10.0	-3.6	20.0
2,4,6-Trichlorophenol	Ave	0.3530	0.3540	0.2000	10.0	10.0	0.3	20.0
2,4,5-Trichlorophenol	Ave	0.3645	0.3644	0.2000	10.0	10.0	-0.0	20.0
1,1'-Biphenyl	Ave	1.306	1.291	0.0100	9.89	10.0	-1.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294777/2 Calibration Date: 09/14/2017 07:40

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70914002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloronaphthalene	Ave	1.069	1.057	0.8000	9.89	10.0	-1.1	20.0
2-Nitroaniline	Ave	0.4086	0.4095	0.0100	10.0	10.0	0.2	20.0
Dimethyl phthalate	Ave	1.260	1.266	0.0100	10.1	10.0	0.5	20.0
1,3-Dinitrobenzene	Ave	0.1991	0.2113		10.6	10.0	6.1	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2986		10.5	10.0	4.6	20.0
Acenaphthylene	Ave	1.607	1.645	0.9000	10.2	10.0	2.4	20.0
3-Nitroaniline	Ave	0.2762	0.2872	0.0100	10.4	10.0	4.0	20.0
2,4-Dinitrophenol	Lin1		0.1645	0.0100	16.9	20.0	-15.5	20.0
Acenaphthene	Ave	1.074	1.050	0.9000	9.77	10.0	-2.3	20.0
4-Nitrophenol	Ave	0.2443	0.2311		18.9	20.0	-5.4	20.0
2,4-Dinitrotoluene	Ave	0.3829	0.3916	0.2000	10.2	10.0	2.3	20.0
Dibenzofuran	Ave	1.530	1.531	0.8000	10.0	10.0	0.0	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2926	0.3062	0.0100	10.5	10.0	4.7	20.0
Diethyl phthalate	Ave	1.281	1.188	0.0100	9.27	10.0	-7.3	20.0
Hexadecane	Ave	0.8143	0.7745		9.51	10.0	-4.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.5874	0.4000	9.66	10.0	-3.4	20.0
4-Nitroaniline	Ave	0.2821	0.2990	0.0100	10.6	10.0	6.0	20.0
Fluorene	Ave	1.233	1.224	0.9000	9.92	10.0	-0.8	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1705	0.0100	20.8	20.0	4.0	20.0
Diphenylamine	Ave	0.6190	0.7064		9.70	8.50	14.1	20.0
N-Nitrosodiphenylamine	Ave	0.5263	0.6006	0.0100	11.4	10.0	14.1	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9544	1.069		11.2	10.0	12.0	20.0
Azobenzene	Ave	0.9552	1.069		11.2	10.0	11.9	20.0
4-Bromophenyl phenyl ether	Ave	0.2060	0.2303	0.1000	11.2	10.0	11.8	20.0
Hexachlorobenzene	Ave	0.2294	0.2564	0.1000	11.2	10.0	11.8	20.0
Atrazine	Ave	0.2063	0.2364	0.0100	22.9	20.0	14.6	20.0
n-Octadecane	Ave	0.4542	0.5058		11.1	10.0	11.4	20.0
Pentachlorophenol	Lin1		0.1320	0.0500	15.9	20.0	-20.7*	20.0
Phenanthrene	Ave	1.047	1.061	0.7000	10.1	10.0	1.4	20.0
Anthracene	Ave	1.057	1.091	0.7000	10.3	10.0	3.2	20.0
Carbazole	Ave	0.8846	0.9906	0.0100	11.2	10.0	12.0	20.0
Di-n-butyl phthalate	Ave	1.161	1.315	0.0100	11.3	10.0	13.2	20.0
Fluoranthene	Ave	1.105	1.324	0.6000	12.0	10.0	19.8	20.0
Benzidine	Lin1		0.4820		19.3	20.0	-3.6	20.0
Pyrene	Ave	0.996	1.050	0.6000	10.5	10.0	5.5	20.0
Butyl benzyl phthalate	Ave	0.5119	0.5102	0.0100	9.97	10.0	-0.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6809	0.6883	0.0100	10.1	10.0	1.1	20.0
3,3'-Dichlorobenzidine	Ave	0.3112	0.2899	0.0100	18.6	20.0	-6.8	20.0
Benzo[a]anthracene	Ave	1.004	1.000	0.8000	9.96	10.0	-0.4	20.0
Chrysene	Ave	0.9564	0.9528	0.7000	9.96	10.0	-0.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294777/2 Calibration Date: 09/14/2017 07:40

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70914002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Ave	1.401	1.404	0.0100	10.0	10.0	0.2	20.0
Benzo[b]fluoranthene	Ave	1.125	1.183	0.7000	10.5	10.0	5.2	20.0
Benzo[k]fluoranthene	Ave	1.214	1.197	0.7000	9.86	10.0	-1.4	20.0
Benzo[a]pyrene	Ave	1.068	1.090	0.7000	10.2	10.0	2.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.132	1.237	0.5000	10.9	10.0	9.2	20.0
Dibenz(a,h)anthracene	Ave	0.8851	1.007	0.4000	11.4	10.0	13.7	20.0
Benzo[g,h,i]perylene	Ave	0.9507	1.002	0.5000	10.5	10.0	5.4	20.0
2-Fluorophenol (Surr)	Ave	1.292	1.183		9.16	10.0	-8.4	20.0
Phenol-d5 (Surr)	Ave	1.729	1.622		9.38	10.0	-6.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5107	0.4801		9.40	10.0	-6.0	20.0
2-Fluorobiphenyl (Surr)	Ave	1.186	1.173		9.90	10.0	-1.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1543	0.1565		10.1	10.0	1.5	20.0
Terphenyl-d14 (Surr)	Ave	0.6725	0.6877		10.2	10.0	2.3	20.0

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Batch Number: 294476 Batch Start Date: 09/12/17 12:25 Batch Analyst: Trushel, Jessica

Batch Method: 3540C Batch End Date: 09/13/17 04:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	exBENZALDEHYD 00049	exBNASPIKE 00080	exBNASURR W 00048	
240-84753-D-1	SB-121A-26.5-28.5'	3540C, 8270D	T	30.01 g	2 mL			1 mL	
240-84753-D-2	SB-121B-30.5-32.5'	3540C, 8270D	T	29.66 g	2 mL			1 mL	
240-84753-D-3	SB-118A-10-13'	3540C, 8270D	T	29.98 g	2 mL			1 mL	
240-84753-D-4	SB-118B-53-55'	3540C, 8270D	T	29.68 g	2 mL			1 mL	
240-84753-D-5	SB-120B-43-45'	3540C, 8270D	T	30.05 g	2 mL			1 mL	
240-84753-D-6	SB-120B-48-50'	3540C, 8270D	T	29.82 g	2 mL			1 mL	
MB 240-294476/19		3540C, 8270D		30 g	2 mL			1 mL	
LCS 240-294476/20		3540C, 8270D		30 g	2 mL	1 mL	1 mL	1 mL	
LCSD 240-294476/21		3540C, 8270D		30 g	2 mL	1 mL	1 mL	1 mL	

Batch Notes	
Balance ID	1339907
Na2SO4 ID	2548159
Prep Solvent ID	3231080

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45(mm)

Client Sample ID	Lab Sample ID	TFT1 #
SB-121A-26.5-28.5'	240-84753-1	86
SB-121B-30.5-32.5'	240-84753-2	80
SB-118A-10-13'	240-84753-3	80
SB-118B-53-55'	240-84753-4	81
SB-120B-43-45'	240-84753-5	75
SB-120B-48-50'	240-84753-6	79
	MB 240-294460/1-A	70
	LCS 240-294460/2-A	77
SB-120B-48-50' MS	240-84753-6 MS	78
SB-120B-48-50' MSD	240-84753-6 MSD	76

	QC LIMITS
TFT = Trifluorotoluene (Surr)	43-120

Column to be used to flag recovery values

FORM II 8015C

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: MB 240-294460/1-A

Matrix: Solid Date Extracted: 09/12/2017 08:36

Lab File ID:(1) Y0912021.D Lab File ID:(2)

Date Analyzed:(1) 09/12/2017 18:22 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-294460/2-A	09/12/2017 19:03	
SB-121A-26.5-28.5'	240-84753-1	09/12/2017 20:24	
SB-121B-30.5-32.5'	240-84753-2	09/12/2017 21:04	
SB-118A-10-13'	240-84753-3	09/12/2017 21:44	
SB-118B-53-55'	240-84753-4	09/12/2017 22:24	
SB-120B-43-45'	240-84753-5	09/12/2017 23:05	
SB-120B-48-50'	240-84753-6	09/12/2017 23:45	
SB-120B-48-50' MS	240-84753-6 MS	09/13/2017 00:25	
SB-120B-48-50' MSD	240-84753-6 MSD	09/13/2017 01:05	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294460/1-A

Matrix: Solid | Lab File ID: Y0912021.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/12/2017 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294421 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	55.2	J	100	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	70		43-120

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0912022.D

Lab ID: LCS 240-294460/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	736	92	76-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0912030.D

Lab ID: 240-84753-6 MS Client ID: SB-120B-48-50' MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	974	15 U	801	82	25-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0912031.D

Lab ID: 240-84753-6 MSD Client ID: SB-120B-48-50' MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	970	821	85	2	40	25-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Instrument ID: YPID Start Date: 07/17/2017 17:41

Analysis Batch Number: 287466 End Date: 07/17/2017 21:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-287466/4 IC		07/17/2017 17:41	1	Y0717004.D	RTX-VRX 0.45(mm)
STD2 240-287466/5 IC		07/17/2017 18:23	1	Y0717005.D	RTX-VRX 0.45(mm)
STD3 240-287466/6 IC		07/17/2017 19:04	1	Y0717006.D	RTX-VRX 0.45(mm)
STD4 240-287466/7 IC		07/17/2017 19:45	1	Y0717007.D	RTX-VRX 0.45(mm)
STD5 240-287466/8 IC		07/17/2017 20:26	1	Y0717008.D	RTX-VRX 0.45(mm)
STD6 240-287466/9 IC		07/17/2017 21:07	1	Y0717009.D	RTX-VRX 0.45(mm)
ICV 240-287466/10		07/17/2017 21:47	1	Y0717010.D	RTX-VRX 0.45(mm)

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 287466

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/17/2017 17:41 Calibration End Date: 07/17/2017 21:07 Calibration ID: 40792

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-287466/4	Y0717004.D
Level 2	STD2 240-287466/5	Y0717005.D
Level 3	STD3 240-287466/6	Y0717006.D
Level 4	STD4 240-287466/7	Y0717007.D
Level 5	STD5 240-287466/8	Y0717008.D
Level 6	STD6 240-287466/9	Y0717009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Gasoline Range Organics [C6 - C10]	175253 126932	133083 129784	136001	129729	Lin1	3901527.68	125323.199							0.9990		0.9900
C6-C12	222148 141119	156680 143794	155451	145139	Lin1	7055447.63	136958.732							0.9980		0.9900
Trifluorotoluene (Surr)	142302 117432	121786 118415	120127	115591	Lin1	70521.1388	117113.955							1.0000		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-287466/10 Calibration Date: 07/17/2017 21:47

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0717010.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		139338		858	800	7.3	20.0
C6-C12	Lin1		160825		888	800	11.0	20.0
Trifluorotoluene (Surr)	Lin1		121350		40.8	40.0	2.1	20.0

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Instrument ID: YPID Start Date: 09/12/2017 08:54

Analysis Batch Number: 294421 End Date: 09/13/2017 01:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-294421/7		09/12/2017 08:54	1	Y0912007.D	RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 09:34	1		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 10:15	1		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 10:57	10		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 11:38	10		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 12:19	20		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 12:59	50		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 13:39	20		RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 14:20	50		RTX-VRX 0.45(mm)
CCV 240-294421/16		09/12/2017 15:00	1	Y0912016.D	RTX-VRX 0.45(mm)
CCV 240-294421/20		09/12/2017 17:42	1	Y0912020.D	RTX-VRX 0.45(mm)
MB 240-294460/1-A		09/12/2017 18:22	1	Y0912021.D	RTX-VRX 0.45(mm)
LCS 240-294460/2-A		09/12/2017 19:03	1	Y0912022.D	RTX-VRX 0.45(mm)
ZZZZZ		09/12/2017 19:43	1		RTX-VRX 0.45(mm)
240-84753-1		09/12/2017 20:24	1	Y0912024.D	RTX-VRX 0.45(mm)
240-84753-2		09/12/2017 21:04	1	Y0912025.D	RTX-VRX 0.45(mm)
240-84753-3		09/12/2017 21:44	1	Y0912026.D	RTX-VRX 0.45(mm)
240-84753-4		09/12/2017 22:24	1	Y0912027.D	RTX-VRX 0.45(mm)
240-84753-5		09/12/2017 23:05	1	Y0912028.D	RTX-VRX 0.45(mm)
240-84753-6		09/12/2017 23:45	1	Y0912029.D	RTX-VRX 0.45(mm)
240-84753-6 MS		09/13/2017 00:25	1	Y0912030.D	RTX-VRX 0.45(mm)
240-84753-6 MSD		09/13/2017 01:05	1	Y0912031.D	RTX-VRX 0.45(mm)
CCV 240-294421/32		09/13/2017 01:45	1	Y0912032.D	RTX-VRX 0.45(mm)

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: CCVRT 240-294421/7 Date Analyzed: 09/12/2017 08:54

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): Y0912007.D Heated Purge: (Y/N) N

Calibration ID: 40792

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT		
				RT #		
CONTINUING CALIBRATION SURROGATE				9.51		
UPPER LIMIT				9.61		
LOWER LIMIT				9.41		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-294421/7		09/12/2017 08:54	Y0912007.D	9.51		
CCV 240-294421/16		09/12/2017 15:00	Y0912016.D	9.51		
CCV 240-294421/20		09/12/2017 17:42	Y0912020.D	9.51		
MB 240-294460/1-A		09/12/2017 18:22	Y0912021.D	9.51		
LCS 240-294460/2-A		09/12/2017 19:03	Y0912022.D	9.52		
240-84753-1	SB-121A-26.5-28.5'	09/12/2017 20:24	Y0912024.D	9.51		
240-84753-2	SB-121B-30.5-32.5'	09/12/2017 21:04	Y0912025.D	9.51		
240-84753-3	SB-118A-10-13'	09/12/2017 21:44	Y0912026.D	9.51		
240-84753-4	SB-118B-53-55'	09/12/2017 22:24	Y0912027.D	9.51		
240-84753-5	SB-120B-43-45'	09/12/2017 23:05	Y0912028.D	9.52		
240-84753-6	SB-120B-48-50'	09/12/2017 23:45	Y0912029.D	9.51		
240-84753-6 MS	SB-120B-48-50' MS	09/13/2017 00:25	Y0912030.D	9.51		
240-84753-6 MSD	SB-120B-48-50' MSD	09/13/2017 01:05	Y0912031.D	9.52		
CCV 240-294421/32		09/13/2017 01:45	Y0912032.D	9.52		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCVRT 240-294421/7 Calibration Date: 09/12/2017 08:54

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0912007.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		146014		901	800	12.6	20.0
C6-C12	Lin1		190430		1060	800	32.6*	20.0
Trifluorotoluene (Surr)	Lin1		119106		40.1	40.0	0.2	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294421/16 Calibration Date: 09/12/2017 15:00

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0912016.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		131633		809	800	1.1	20.0
C6-C12	Lin1		161922		894	800	11.8	20.0
Trifluorotoluene (Surr)	Lin1		130065		43.8	40.0	9.6	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294421/20 Calibration Date: 09/12/2017 17:42

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0912020.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		143606		886	800	10.7	20.0
C6-C12	Lin1		617657		3560	800	344.5*	20.0
Trifluorotoluene (Surr)	Lin1		110926		37.3	40.0	-6.8	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294421/32 Calibration Date: 09/13/2017 01:45

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0912032.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		121595		745	800	-6.9	20.0
C6-C12	Lin1		153812		847	800	5.9	20.0
Trifluorotoluene (Surr)	Lin1		112956		38.0	40.0	-5.1	20.0

GASOLINE RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Batch Number: 294460 Batch Start Date: 09/12/17 08:36 Batch Analyst: Reed, Rachel T

Batch Method: 5030A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 240-294460/1		5030A, 8015C		5 g	5 mL				
LCS 240-294460/2		5030A, 8015C		5 g	5 mL				
240-84753-A-1	SB-121A-26.5-28.5'	5030A, 8015C	T	4.98 g	5 mL				
240-84753-A-2	SB-121B-30.5-32.5'	5030A, 8015C	T	5.01 g	5 mL				
240-84753-A-3	SB-118A-10-13'	5030A, 8015C	T	4.98 g	5 mL				
240-84753-A-4	SB-118B-53-55'	5030A, 8015C	T	4.95 g	5 mL				
240-84753-A-5	SB-120B-43-45'	5030A, 8015C	T	4.98 g	5 mL				
240-84753-A-6	SB-120B-48-50'	5030A, 8015C	T	5.01 g	5 mL				
240-84753-A-6 MS	SB-120B-48-50'	5030A, 8015C	T	5.06 g	5 mL				
240-84753-A-6 MSD	SB-120B-48-50'	5030A, 8015C	T	5.08 g	5 mL				

Batch Notes	
Balance ID	B045

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rxi-5HT ID: 0.53(mm)

Client Sample ID	Lab Sample ID	OTPH1 #
SB-121A-26.5-28.5'	240-84753-1	101
SB-121B-30.5-32.5'	240-84753-2	82
SB-118A-10-13'	240-84753-3	92
SB-118B-53-55'	240-84753-4	95
SB-120B-43-45'	240-84753-5	89
SB-120B-48-50'	240-84753-6	88
	MB 240-294302/9-A	93
	LCS 240-294302/10-A	94
SB-120B-48-50' MS	240-84753-6 MS	94
SB-120B-48-50' MSD	240-84753-6 MSD	90

	QC LIMITS
OTPH = o-Terphenyl (Surr)	26-125

Column to be used to flag recovery values

FORM II 8015C

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: MB 240-294302/9-A

Matrix: Solid Date Extracted: 09/11/2017 10:06

Lab File ID:(1) P5R091212.D Lab File ID:(2)

Date Analyzed:(1) 09/12/2017 18:38 Date Analyzed:(2)

Instrument ID:(1) A2HP5R Instrument ID:(2)

GC Column:(1) Rxi-5HT ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-294302/10-A	09/12/2017 19:05	
SB-121A-26.5-28.5'	240-84753-1	09/12/2017 19:32	
SB-121B-30.5-32.5'	240-84753-2	09/12/2017 20:00	
SB-118A-10-13'	240-84753-3	09/12/2017 20:27	
SB-118B-53-55'	240-84753-4	09/12/2017 20:54	
SB-120B-43-45'	240-84753-5	09/12/2017 21:21	
SB-120B-48-50'	240-84753-6	09/12/2017 21:48	
SB-120B-48-50' MS	240-84753-6 MS	09/12/2017 22:15	
SB-120B-48-50' MSD	240-84753-6 MSD	09/12/2017 22:42	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84753-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294302/9-A

Matrix: Solid | Lab File ID: P5R091212.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3540C | Date Extracted: 09/11/2017 10:06

Sample wt/vol: 30(g) | Date Analyzed: 09/12/2017 18:38

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 294533 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	6.4	U	17	6.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	93		26-125

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5R091213.D

Lab ID: LCS 240-294302/10-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	75.2	90	45-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5R091220.D

Lab ID: 240-84753-6 MS Client ID: SB-120B-48-50' MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel	103	7.8 U	91.0	89	10-158	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5R091221.D

Lab ID: 240-84753-6 MSD Client ID: SB-120B-48-50' MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Diesel	104	85.5	82	6	40	10-158	

Column to be used to flag recovery and RPD values

FORM III 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Instrument ID: A2HP5R Start Date: 09/01/2017 19:22

Analysis Batch Number: 293496 End Date: 09/02/2017 08:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-293496/6		09/01/2017 19:22	1		Rxi-5HT 0.53(mm)
STD1 240-293496/7 IC		09/01/2017 19:49	1	P5R090107.D	Rxi-5HT 0.53(mm)
STD2 240-293496/8 IC		09/01/2017 20:16	1	P5R090108.D	Rxi-5HT 0.53(mm)
STD3 240-293496/9 ICRT		09/01/2017 20:43	1	P5R090109.D	Rxi-5HT 0.53(mm)
STD4 240-293496/10 IC		09/01/2017 21:10	1	P5R090110.D	Rxi-5HT 0.53(mm)
STD5 240-293496/11 IC		09/01/2017 21:37	1	P5R090111.D	Rxi-5HT 0.53(mm)
ICV 240-293496/12		09/01/2017 22:04	1	P5R090112.D	Rxi-5HT 0.53(mm)
CCV 240-293496/15		09/01/2017 23:26	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/01/2017 23:53	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 00:20	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 00:47	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 01:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 01:41	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 02:08	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 02:36	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 03:03	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 03:30	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 03:57	1		Rxi-5HT 0.53(mm)
RTC 240-293496/26		09/02/2017 04:24	1		Rxi-5HT 0.53(mm)
CCV 240-293496/27		09/02/2017 04:51	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 05:18	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 05:45	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 06:12	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 06:39	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 07:07	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 07:34	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 08:01	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/02/2017 08:28	1		Rxi-5HT 0.53(mm)
CCV 240-293496/36		09/02/2017 08:55	1		Rxi-5HT 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84753-1 Analy Batch No.: 293496

SDG No.:

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2017 19:49 Calibration End Date: 09/01/2017 21:37 Calibration ID: 41304

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-293496/7	P5R090107.D
Level 2	STD2 240-293496/8	P5R090108.D
Level 3	STD3 240-293496/9	P5R090109.D
Level 4	STD4 240-293496/10	P5R090110.D
Level 5	STD5 240-293496/11	P5R090111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	150789 145036	143328	149711	149392	Ave		147651.170				2.2		20.0			
o-Terphenyl (Surr)	170654 174457	162191	175274	174928	Ave		171500.741				3.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: STD3 240-293496/9 Date Analyzed: 09/01/2017 20:43

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P5R090109.D Heated Purge: (Y/N) N

Calibration ID: 41304

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
INITIAL CALIBRATION SURROGATE				8.62		
UPPER LIMIT				8.72		
LOWER LIMIT				8.52		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-293496/9 ICRT		09/01/2017 20:43	P5R090109.D	8.62		

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: ICV 240-293496/12 Calibration Date: 09/01/2017 22:04

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R090112.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	147651	153049		520	502	3.7	20.0

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Instrument ID: A2HP5R Start Date: 09/12/2017 15:55

Analysis Batch Number: 294533 End Date: 09/12/2017 23:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-294533/6		09/12/2017 15:55	1	P5R091206.D	Rxi-5HT 0.53(mm)
CCV 240-294533/7 CCVRT		09/12/2017 16:23	1	P5R091207.D	Rxi-5HT 0.53(mm)
ZZZZZ		09/12/2017 16:50	10		Rxi-5HT 0.53(mm)
ZZZZZ		09/12/2017 17:17	5		Rxi-5HT 0.53(mm)
ZZZZZ		09/12/2017 17:44	5		Rxi-5HT 0.53(mm)
CCV 240-294533/11		09/12/2017 18:11	1	P5R091211.D	Rxi-5HT 0.53(mm)
MB 240-294302/9-A		09/12/2017 18:38	1	P5R091212.D	Rxi-5HT 0.53(mm)
LCS 240-294302/10-A		09/12/2017 19:05	1	P5R091213.D	Rxi-5HT 0.53(mm)
240-84753-1		09/12/2017 19:32	1	P5R091214.D	Rxi-5HT 0.53(mm)
240-84753-2		09/12/2017 20:00	1	P5R091215.D	Rxi-5HT 0.53(mm)
240-84753-3		09/12/2017 20:27	1	P5R091216.D	Rxi-5HT 0.53(mm)
240-84753-4		09/12/2017 20:54	1	P5R091217.D	Rxi-5HT 0.53(mm)
240-84753-5		09/12/2017 21:21	1	P5R091218.D	Rxi-5HT 0.53(mm)
240-84753-6		09/12/2017 21:48	1	P5R091219.D	Rxi-5HT 0.53(mm)
240-84753-6 MS		09/12/2017 22:15	1	P5R091220.D	Rxi-5HT 0.53(mm)
240-84753-6 MSD		09/12/2017 22:42	1	P5R091221.D	Rxi-5HT 0.53(mm)
CCV 240-294533/22		09/12/2017 23:10	1	P5R091222.D	Rxi-5HT 0.53(mm)

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Sample No.: CCV 240-294533/7 Date Analyzed: 09/12/2017 16:23

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P5R091207.D Heated Purge: (Y/N) N

Calibration ID: 41304

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.63		
UPPER LIMIT				8.73		
LOWER LIMIT				8.53		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-294533/7 CCVRT		09/12/2017 16:23	P5R091207.D	8.63		
CCV 240-294533/11		09/12/2017 18:11	P5R091211.D	8.63		
MB 240-294302/9-A		09/12/2017 18:38	P5R091212.D	8.63		
LCS 240-294302/10-A		09/12/2017 19:05	P5R091213.D	8.63		
240-84753-1	SB-121A-26.5-28.5'	09/12/2017 19:32	P5R091214.D	8.63		
240-84753-2	SB-121B-30.5-32.5'	09/12/2017 20:00	P5R091215.D	8.63		
240-84753-3	SB-118A-10-13'	09/12/2017 20:27	P5R091216.D	8.63		
240-84753-4	SB-118B-53-55'	09/12/2017 20:54	P5R091217.D	8.63		
240-84753-5	SB-120B-43-45'	09/12/2017 21:21	P5R091218.D	8.63		
240-84753-6	SB-120B-48-50'	09/12/2017 21:48	P5R091219.D	8.63		
240-84753-6 MS	SB-120B-48-50' MS	09/12/2017 22:15	P5R091220.D	8.63		
240-84753-6 MSD	SB-120B-48-50' MSD	09/12/2017 22:42	P5R091221.D	8.63		
CCV 240-294533/22		09/12/2017 23:10	P5R091222.D	8.63		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294533/7 Calibration Date: 09/12/2017 16:23

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R091207.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	147651	139357		472	500	-5.6	20.0
o-Terphenyl (Surr)	Ave	171501	164270		38.3	40.0	-4.2	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294533/11 Calibration Date: 09/12/2017 18:11

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R091211.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	147651	138430		469	500	-6.2	20.0
o-Terphenyl (Surr)	Ave	171501	165010		38.5	40.0	-3.8	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Lab Sample ID: CCV 240-294533/22 Calibration Date: 09/12/2017 23:10

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R091222.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	147651	137621		466	500	-6.8	20.0
o-Terphenyl (Surr)	Ave	171501	163572		38.2	40.0	-4.6	20.0

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-84753-1

SDG No.:

Batch Number: 294302 Batch Start Date: 09/11/17 14:25 Batch Analyst: Trushel, Jessica

Batch Method: 3540C Batch End Date: 09/12/17 06:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	exDIESELSPKw 00080	exOTPSURRW 00020		
240-84753-D-1	SB-121A-26.5-28.5'	3540C, 8015C	T	30.17 g	5 mL		1 mL		
240-84753-D-2	SB-121B-30.5-32.5'	3540C, 8015C	T	30.13 g	5 mL		1 mL		
240-84753-D-3	SB-118A-10-13'	3540C, 8015C	T	30.00 g	5 mL		1 mL		
240-84753-D-4	SB-118B-53-55'	3540C, 8015C	T	29.90 g	5 mL		1 mL		
240-84753-D-5	SB-120B-43-45'	3540C, 8015C	T	30.01 g	5 mL		1 mL		
240-84753-D-6	SB-120B-48-50'	3540C, 8015C	T	30.40 g	5 mL		1 mL		
240-84753-D-6 MS	SB-120B-48-50'	3540C, 8015C	T	30.00 g	5 mL	1 mL	1 mL		
240-84753-D-6 MSD	SB-120B-48-50'	3540C, 8015C	T	29.69 g	5 mL	1 mL	1 mL		
MB 240-294302/9		3540C, 8015C		30 g	5 mL		1 mL		
LCS 240-294302/10		3540C, 8015C		30 g	5 mL	1 mL	1 mL		

Batch Notes	
Balance ID	1339907
Concentration End Time	09/12/2017
Analyst ID - Concentration	STEVEEARLE KAITLINHARPER
Na2SO4 ID	2548159
Prep Solvent ID	3231080

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **OCTOBER 19, 2017**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SAMPLE DELIVERY GROUP (SDG) 240-85360-1

SAMPLES:

2/Aqueous/VOC

DPT-1A-40-45' DPT-2D-45-50'

Overview

The sample set for LMC-MRC, SDG 240-81286-1 consisted of two (2) aqueous environmental samples. The samples were analyzed for volatile organic compounds (VOC). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech on September 20, 2017 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with analytical and reporting protocols for SW-846 Method 8260C.

The data contained in this SDG were validated with regard the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method/preparation blanks, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate results, matrix spike/matrix spike duplicate results, internal standard areas and recoveries, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major – None.

Minor

- VOC continuing calibration percent difference (%D) was greater than quality control (QC) limits (20%) on 9/27/2017 at 17:35 for cyclohexane affecting all samples. All results for cyclohexane were nondetect and were qualified as estimated (UJ).

- Detected results reported below the RL limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

Non-detected results were reported to the MDL.

Methylene chloride was detected in the laboratory method blank at the following maximum concentration:

Maximum Concentration (µg/L)	Action Level (µg/L)
1.2	12

An action level of 10X the maximum contaminant level for the common lab contaminant has been used to evaluate sample data for blank contamination. Sample dilution factor, if applicable, was taken into consideration when evaluating for blank contamination. No action was taken as methylene chloride was nondetect in all samples.

Matrix spike/matrix spike duplicate (MS/MSD) relative percent difference was outside QC limits. No action was taken as MS/MSD percent recoveries were acceptable.

Executive Summary

Laboratory Performance: Calibration noncompliance was noted for VOCs. Methylene chloride was present in the laboratory blank.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (January 2017). The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech
Leanne M. Ganser
Environmental Scientist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08109	NSAMPLE	DPT-1A-40-45'			DPT-2D-45-50'		
SDG: 240-85360-1	LAB_ID	240-85360-1			240-85360-2		
FRACTION: OV	SAMP_DATE	9/19/2017			9/20/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.23	U		0.23	U	
1,1,2,2-TETRACHLOROETHANE		0.32	U		0.32	U	
1,1,2-TRICHLOROETHANE		0.34	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.25	U		0.25	U	
1,1-DICHLOROETHENE		0.27	U		0.27	U	
1,2,4-TRICHLOROBENZENE		0.27	U		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.47	U		0.47	U	
1,2-DIBROMOETHANE		0.23	U		0.23	U	
1,2-DICHLOROBENZENE		0.26	U		0.26	U	
1,2-DICHLOROETHANE		0.3	U		0.3	U	
1,2-DICHLOROPROPANE		0.3	U		0.3	U	
1,3-DICHLOROBENZENE		0.32	U		0.32	U	
1,4-DICHLOROBENZENE		0.23	U		0.23	U	
2-BUTANONE		1	U		3.5	J	P
2-HEXANONE		1.2	U		1.2	U	
4-METHYL-2-PENTANONE		0.71	U		0.71	U	
ACETONE		2.2	J	P	1.8	U	
BENZENE		1.9			0.28	U	
BROMODICHLOROMETHANE		0.3	U		0.3	U	
BROMOFORM		0.43	U		0.43	U	
BROMOMETHANE		0.42	U		0.42	U	
CARBON DISULFIDE		0.34	U		0.34	J	P
CARBON TETRACHLORIDE		0.35	U		0.35	U	
CHLOROBENZENE		0.32	U		0.32	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U	
CHLOROETHANE		0.41	U		0.41	U	
CHLOROFORM		1.6			0.31	U	
CHLOROMETHANE		0.43	U		0.43	U	
CIS-1,2-DICHLOROETHENE		3.1			0.3	U	
CIS-1,3-DICHLOROPROPENE		0.26	U		0.26	U	
CYCLOHEXANE		0.44	UJ	C	0.44	UJ	C
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U	
ETHYLBENZENE		0.26	U		0.26	U	
ISOPROPYLBENZENE		0.21	U		0.21	U	

PROJ_NO: 08109	NSAMPLE	DPT-1A-40-45'			DPT-2D-45-50'		
SDG: 240-85360-1	LAB_ID	240-85360-1			240-85360-2		
FRACTION: OV	SAMP_DATE	9/19/2017			9/20/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U		1.4	U	
METHYL CYCLOHEXANE		0.45	U		0.45	U	
METHYL TERT-BUTYL ETHER		0.27	U		0.27	U	
METHYLENE CHLORIDE		0.53	U		0.53	U	
STYRENE		0.23	U		0.23	U	
TETRACHLOROETHENE		0.3	U		0.3	U	
TOLUENE		2.5			2.1		
TOTAL XYLENES		1	J	P	0.72	J	P
TRANS-1,2-DICHLOROETHENE		0.29	U		0.29	U	
TRANS-1,3-DICHLOROPROPENE		0.31	U		0.31	U	
TRICHLOROETHENE		31			0.33	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U	
VINYL CHLORIDE		0.45	U		0.45	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: DPT-1A-40-45' | Lab Sample ID: 240-85360-1

Matrix: Water | Lab File ID: UX965908.D

Analysis Method: 8260C | Date Collected: 09/19/2017 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 23:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	2.2	J	10	1.8
71-43-2	Benzene	1.9		1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	1.6		1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	3.1		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: DPT-1A-40-45' | Lab Sample ID: 240-85360-1

Matrix: Water | Lab File ID: UX965908.D

Analysis Method: 8260C | Date Collected: 09/19/2017 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 23:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	2.5		1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	31		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	1.0	J	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	89		69-124
460-00-4	4-Bromofluorobenzene (Surr)	88		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: DPT-2D-45-50' | Lab Sample ID: 240-85360-2

Matrix: Water | Lab File ID: UX965909.D

Analysis Method: 8260C | Date Collected: 09/20/2017 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 23:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	3.5	J	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	J	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: DPT-2D-45-50' | Lab Sample ID: 240-85360-2

Matrix: Water | Lab File ID: UX965909.D

Analysis Method: 8260C | Date Collected: 09/20/2017 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 23:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	2.1		1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.72	J	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	90		69-124
460-00-4	4-Bromofluorobenzene (Surr)	86		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		61-138

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: LMC Assessment

Report Number: 240-85360-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 9/22/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DPT-1A-40-45' (240-85360-1) and DPT-2D-45-50' (240-85360-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/27/2017.

Methylene Chloride was detected in method blank MB 240-296578/8 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The continuing calibration verification (CCV) analyzed in batch 240-296578 was outside the method criteria for cyclohexane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The method blank for analytical batch 240-296578 contained methylene chloride above the reporting limit (RL). This compound is considered a common laboratory contaminant. The associated samples were not re-extracted and/or re-analyzed because the concentration of the common lab contaminant in the method blank was less than 5 times the RL.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: LMC Assessment

TestAmerica Job ID: 240-85360-1

GC/MS VOA

Analysis Batch: 296578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-85360-1	DPT-1A-40-45'	Total/NA	Water	8260C	
240-85360-2	DPT-2D-45-50'	Total/NA	Water	8260C	
MB 240-296578/8	Method Blank	Total/NA	Water	8260C	
LCS 240-296578/4	Lab Control Sample	Total/NA	Water	8260C	

Method Summary

Client: Tetra Tech, Inc.
Project/Site: LMC Assessment

TestAmerica Job ID: 240-85360-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: LMC Assessment

TestAmerica Job ID: 240-85360-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-85360-1	DPT-1A-40-45'	Water	09/19/17 10:20	09/22/17 09:00
240-85360-2	DPT-2D-45-50'	Water	09/20/17 14:40	09/22/17 09:00

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

0.8 | CO.8

Chain of Custody Record

000529

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tony Ayannaeze	Site Contact: W. O'Neill 706-201-3646	Date: 09/19/2017	COC No:
Company Name: TetraTech	Tel/Fax: 301-233-8230	Lab Contact: Ken Ivey	Carrier:	1 of 1 COCs
Address: 20251 Century Blvd, #200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown MD 20874	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-5552	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: LMC Assessment	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO# 112IC08109	☐ 1 day			

180325
BALTIMORE

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260C	Sample Specific Notes:
DPT-1A-40-45'	9/19/17	1020	G	W	3	N	N	X	
DPT-2D-45-50'	9/20/17	1440	"	"	"	N	N	X	time is 1440

240-85360 Chain of Custody

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Walter O'Neill	TetraTech	09/21/17		TestAmerica	9/21/17 12:02
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	09/21/17 13:50		TA	92217 900
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 85300**
Canton Facility

Client Tetratech Site Name _____ Cooler unpacked by:

Cooler Received on 9-22-17 Opened on 9-22-17

FedEx: 1st Grd ~~Exp~~ UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble~~ Wrap Foam Plastic Bag None Other _____

COOLANT: ~~Wet~~ Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **+0** °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.8 °C

IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	~~Yes~~	No
-Were the seals on the outside of the cooler(s) signed & dated?	~~Yes~~	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	~~No~~ NA
-Were tamper/custody seals intact and uncompromised?	~~Yes~~	No NA
3. Shippers' packing slip attached to the cooler(s)?	~~Yes~~	No
4. Did custody papers accompany the sample(s)?	~~Yes~~	No
5. Were the custody papers relinquished & signed in the appropriate place?	~~Yes~~	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	~~No~~
7. Did all bottles arrive in good condition (Unbroken)?	~~Yes~~	No
8. Could all bottle labels be reconciled with the COC?	~~Yes~~	No
9. Were correct bottle(s) used for the test(s) indicated?	~~Yes~~	No
10. Sufficient quantity received to perform indicated analyses?	~~Yes~~	No
11. Are these work share samples?	Yes	~~No~~
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No ~~NA~~ pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	~~Yes~~	No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	~~No~~ NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	~~No~~
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	~~No~~

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab File ID: BFB3774.D BFB Injection Date: 08/28/2017

Instrument ID: A3UX9 BFB Injection Time: 15:15

Analysis Batch No.: 292814

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.2	
175	5.0 - 9.0 % of mass 174	6.1	(7.8) 1
176	95.0 - 101.0 % of mass 174	76.3	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-292814/9	UX965278.D	08/28/2017	15:40
	STD8260 240-292814/10	UX965279.D	08/28/2017	16:05
	STD8260 240-292814/11	UX965280.D	08/28/2017	16:29
	ICIS 240-292814/12	UX965281.D	08/28/2017	16:53
	STD8260 240-292814/13	UX965282.D	08/28/2017	17:20
	STD8260 240-292814/14	UX965283.D	08/28/2017	17:44
	ICV 240-292814/15	UX965284.D	08/28/2017	18:09
	ICV 240-292814/22	UX965291.D	08/28/2017	21:01

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab File ID: BFB3803.D BFB Injection Date: 09/27/2017

Instrument ID: A3UX9 BFB Injection Time: 17:09

Analysis Batch No.: 296578

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.3	
75	30.0 - 60.0 % of mass 95	54.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.2	
175	5.0 - 9.0 % of mass 174	6.5	(8.3) 1
176	95.0 - 101.0 % of mass 174	76.6	(96.7) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-296578/3	UX965893.D	09/27/2017	17:35
	LCS 240-296578/4	UX965894.D	09/27/2017	17:59
	CCV 240-296578/5	UX965895.D	09/27/2017	18:23
	MB 240-296578/8	UX965898.D	09/27/2017	19:35
DPT-1A-40-45'	240-85360-1	UX965908.D	09/27/2017	23:33
DPT-2D-45-50'	240-85360-2	UX965909.D	09/27/2017	23:56
	240-85248-B-2 MS	UX965918.D	09/28/2017	03:32
	240-85248-B-2 MSD	UX965919.D	09/28/2017	03:56

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85360-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-292814/9	UX965278.D
Level 2	STD8260 240-292814/10	UX965279.D
Level 3	STD8260 240-292814/11	UX965280.D
Level 4	ICIS 240-292814/12	UX965281.D
Level 5	STD8260 240-292814/13	UX965282.D
Level 6	STD8260 240-292814/14	UX965283.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2667 0.3580	0.3045	0.3492	0.3527	0.3423	Ave		0.3289			0.1000	10.9		20.0			
Chloromethane	+++++ 0.2308	0.2557	0.2683	0.2331	0.2346	Ave		0.2445			0.1000	6.8		20.0			
Vinyl chloride	0.3162 0.2758	0.2613	0.2912	0.2872	0.2711	Ave		0.2838			0.1000	6.8		20.0			
Butadiene	0.3541 0.2747	0.3319	0.2835	0.2838	0.2701	Ave		0.2997				11.6		20.0			
Bromomethane	0.2586 0.2581	0.2280	0.2465	0.2334	0.2191	Ave		0.2406			0.0500	6.8		20.0			
Chloroethane	0.1767 0.2121	0.2145	0.2189	0.1960	0.2009	Ave		0.2032			0.0500	7.7		20.0			
Dichlorofluoromethane	0.5198 0.4820	0.5344	0.5419	0.4779	0.5015	Ave		0.5096				5.3		20.0			
Trichlorofluoromethane	0.4054 0.4861	0.4585	0.4771	0.4708	0.4867	Ave		0.4641			0.1000	6.6		20.0			
Ethyl ether	0.2042 0.1798	0.2028	0.1949	0.1737	0.1827	Ave		0.1897				6.7		20.0			
Acrolein	0.0235 0.0217	0.0240	0.0241	0.0219	0.0225	Ave		0.0229				4.6		20.0			
1,1-Dichloroethene	0.4608 0.3974	0.3729	0.4058	0.3900	0.4186	Ave		0.4076			0.1000	7.4		20.0			
Acetone	+++++ 0.0638	0.1337	0.0746	0.0664	0.0594	Lin1	0.1534	0.0613			0.0100	7.8			0.9970		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2633 0.2906	0.3033	0.2719	0.2830	0.3039	Ave		0.2860			0.0500	5.8		20.0			
Iodomethane	0.4546 0.4386	0.4220	0.4805	0.4414	0.4613	Ave		0.4497				4.5		20.0			
Carbon disulfide	0.9377 0.6307	0.7945	0.6928	0.6495	0.6743	Ave		0.7299			0.1000	16.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85360-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.3595 0.2698	0.3212	0.2717	0.2590	0.2442	Ave		0.2876				15.2		20.0			
Methyl acetate	0.1918 0.1415	0.1763	0.1534	0.1461	0.1470	Ave		0.1593			0.1000	12.6		20.0			
Methylene Chloride	+++++ 0.2755	0.3957	0.3151	0.2589	0.2863	Ave		0.3063			0.1000	17.6		20.0			
2-Methyl-2-propanol	0.0173 0.0190	0.0207	0.0193	0.0192	0.0174	Ave		0.0188				6.8		20.0			
Acrylonitrile	0.0803 0.0742	0.0909	0.0802	0.0759	0.0757	Ave		0.0795				7.7		20.0			
Methyl tert-butyl ether	0.7591 0.7212	0.7483	0.7592	0.7214	0.7485	Ave		0.7430			0.1000	2.4		20.0			
trans-1,2-Dichloroethene	0.2698 0.2983	0.3083	0.3122	0.2938	0.3038	Ave		0.2977			0.1000	5.1		20.0			
Hexane	0.2289 0.2639	0.2630	0.2183	0.2574	0.2609	Ave		0.2487				8.0		20.0			
1,1-Dichloroethane	0.3675 0.3708	0.3745	0.3736	0.3513	0.3667	Ave		0.3674			0.2000	2.3		20.0			
Vinyl acetate	0.2940 0.3138	0.3085	0.2967	0.2869	0.3094	Ave		0.3016				3.5		20.0			
2-Butanone (MEK)	0.0956 0.0850	0.0960	0.0919	0.0851	0.0860	Ave		0.0899			0.0100	5.8		20.0			
cis-1,2-Dichloroethene	0.3169 0.2753	0.2829	0.2883	0.2609	0.2763	Ave		0.2834			0.1000	6.6		20.0			
2,2-Dichloropropane	0.1841 0.2038	0.2226	0.1919	0.1889	0.2012	Ave		0.1988				7.0		20.0			
Chlorobromomethane	0.1817 0.1599	0.1759	0.1838	0.1603	0.1686	Ave		0.1717				6.1		20.0			
Tetrahydrofuran	+++++ 0.0515	0.0614	0.0587	0.0527	0.0540	Ave		0.0557				7.6		20.0			
Chloroform	0.4166 0.4104	0.4191	0.4289	0.4018	0.4142	Ave		0.4152			0.2000	2.2		20.0			
1,1,1-Trichloroethane	0.2310 0.3619	0.3581	0.3436	0.3511	0.3433	Ave		0.3315			0.1000	15.0		20.0			
Cyclohexane	0.3898 0.4056	0.4376	0.3701	0.3848	0.3972	Ave		0.3975			0.1000	5.8		20.0			
1,1-Dichloropropene	0.3995 0.3378	0.3118	0.3345	0.3255	0.3350	Ave		0.3407				8.9		20.0			
Carbon tetrachloride	0.2492 0.3235	0.2261	0.2886	0.2866	0.3133	Ave		0.2812			0.1000	13.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85360-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0043 0.0040	0.0036	0.0036	0.0031	0.0031	Ave		0.0036				13.2		20.0			
1,2-Dichloroethane	0.3304 0.3427	0.3818	0.3704	0.3442	0.3465	Ave		0.3526			0.1000	5.5		20.0			
Benzene	0.9670 0.9515	1.0258	1.0052	0.9246	0.9544	Ave		0.9714			0.5000	3.8		20.0			
n-Heptane	+++++ 0.1893	0.3175	0.1578	0.1855	0.1906	Lin1	0.1022	0.1838				15.2			0.9960		0.9900
Trichloroethene	0.3753 0.2985	0.2908	0.3110	0.2872	0.2915	Ave		0.3091			0.1500	10.9		20.0			
Methylcyclohexane	0.3243 0.3998	0.3368	0.3422	0.3780	0.3862	Ave		0.3612			0.1000	8.5		20.0			
1,2-Dichloropropane	0.2207 0.2136	0.2133	0.2107	0.1993	0.2109	Ave		0.2114			0.1000	3.3		20.0			
Dibromomethane	0.1767 0.1771	0.1931	0.1851	0.1730	0.1784	Ave		0.1806				4.0		20.0			
1,4-Dioxane	+++++ 0.0035	0.0024	0.0035	0.0027	0.0018	Ave		0.0028				26.2	*	20.0			
Dichlorobromomethane	0.2739 0.3160	0.2582	0.2990	0.2840	0.3154	Ave		0.2911			0.1500	8.0		20.0			
2-Chloroethyl vinyl ether	0.1462 0.1551	0.1460	0.1586	0.1501	0.1535	Ave		0.1516				3.3		20.0			
cis-1,3-Dichloropropene	0.2888 0.3687	0.2675	0.3249	0.3301	0.3601	Ave		0.3234			0.1500	12.2		20.0			
4-Methyl-2-pentanone (MIBK)	0.1574 0.1801	0.1842	0.1943	0.1777	0.1811	Ave		0.1791			0.0500	6.8		20.0			
Toluene	1.2974 1.2430	1.3018	1.3247	1.2225	1.2457	Ave		1.2725			0.4000	3.2		20.0			
trans-1,3-Dichloropropene	0.3268 0.4000	0.2952	0.3400	0.3424	0.3843	Ave		0.3481			0.1000	11.0		20.0			
Ethyl methacrylate	0.2669 0.3513	0.2781	0.3168	0.3195	0.3384	Ave		0.3118				10.6		20.0			
1,1,2-Trichloroethane	0.2654 0.2601	0.2716	0.2741	0.2546	0.2611	Ave		0.2645			0.1000	2.8		20.0			
1,3-Dichloropropane	0.4636 0.4553	0.4813	0.4862	0.4497	0.4647	Ave		0.4668				3.1		20.0			
Tetrachloroethene	0.3483 0.3115	0.3380	0.3231	0.3076	0.3110	Ave		0.3233			0.1500	5.1		20.0			
2-Hexanone	0.0980 0.1450	0.1523	0.1491	0.1455	0.1448	Ave		0.1391			0.0500	14.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85360-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2248 0.2779	0.2204	0.2485	0.2358	0.2696	Ave		0.2462				9.6		20.0			
Ethylene Dibromide	0.2719 0.2860	0.3184	0.2978	0.2804	0.2914	Ave		0.2910				5.5		20.0			
Chlorobenzene	1.0111 0.8982	0.9177	0.9617	0.8843	0.9077	Ave		0.9301			0.3000	5.1		20.0			
1,1,1,2-Tetrachloroethane	0.1999 0.2978	0.2526	0.2761	0.2649	0.2909	Ave		0.2637				13.4		20.0			
Ethylbenzene	0.4719 0.4843	0.4708	0.5044	0.4559	0.4785	Ave		0.4776				3.4		20.0			
m-Xylene & p-Xylene	0.5941 0.6058	0.5620	0.5926	0.5621	0.6063	Ave		0.5871				3.5		20.0			
o-Xylene	0.5592 0.5905	0.5582	0.5974	0.5704	0.5860	Ave		0.5770				2.9		20.0			
Styrene	0.8902 1.0393	0.8455	1.0133	0.9537	1.0269	Ave		0.9615			0.3000	8.3		20.0			
Bromoform	+++++ 0.1652	0.0959	0.1279	0.1334	0.1562	Ave		0.1357			0.1000	20.0		20.0			
Isopropylbenzene	1.3507 1.4574	1.2219	1.4603	1.3823	1.4500	Ave		1.3871			0.1000	6.7		20.0			
1,1,2,2-Tetrachloroethane	0.6885 0.6446	0.6573	0.6674	0.6432	0.6471	Ave		0.6580			0.3000	2.7		20.0			
Bromobenzene	0.7718 0.7016	0.7753	0.7383	0.6883	0.7214	Ave		0.7328				4.9		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1490	0.1138	0.1042	0.1138	0.1347	Ave		0.1231				14.8		20.0			
1,2,3-Trichloropropane	0.2062 0.2512	0.2980	0.2786	0.2521	0.2552	Ave		0.2569				12.1		20.0			
N-Propylbenzene	0.7981 0.7663	0.7624	0.7460	0.7326	0.7540	Ave		0.7599				2.9		20.0			
2-Chlorotoluene	0.6495 0.6780	0.6827	0.6878	0.6634	0.6825	Ave		0.6740				2.2		20.0			
1,3,5-Trimethylbenzene	1.8581 2.2405	1.9159	2.1456	2.1564	2.2261	Ave		2.0904				7.8		20.0			
4-Chlorotoluene	0.7579 0.7331	0.7026	0.7389	0.6937	0.7410	Ave		0.7279				3.4		20.0			
tert-Butylbenzene	1.8339 2.1950	1.7323	1.9743	2.1074	2.1977	Ave		2.0067				9.7		20.0			
1,2,4-Trimethylbenzene	2.1138 2.3815	2.1477	2.3096	2.2435	2.3570	Ave		2.2588				4.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85360-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	0.5081 0.6079	0.5170	0.5751	0.5826	0.5961	Ave		0.5645				7.4		20.0			
1,3-Dichlorobenzene	1.4254 1.3692	1.3704	1.4152	1.3314	1.3805	Ave		1.3820			0.6000	2.5		20.0			
4-Isopropyltoluene	2.0316 2.3944	1.9116	2.3288	2.2643	2.4164	Ave		2.2245				9.3		20.0			
1,4-Dichlorobenzene	1.5587 1.4268	1.4528	1.4599	1.3892	1.4437	Ave		1.4552			0.5000	3.9		20.0			
n-Butylbenzene	1.8336 1.9530	1.6838	1.8461	1.8181	1.9039	Ave		1.8397				5.0		20.0			
1,2-Dichlorobenzene	1.6168 1.3270	1.4725	1.3520	1.3299	1.3486	Ave		1.4078			0.4000	8.2		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1479	0.1247	0.1230	0.1331	0.1357	Ave		0.1329			0.0500	7.5		20.0			
1,2,4-Trichlorobenzene	0.9108 0.8218	0.8031	0.8013	0.7738	0.7794	Ave		0.8150			0.2000	6.1		20.0			
Hexachlorobutadiene	0.3323 0.2931	0.2348	0.2958	0.2786	0.2840	Ave		0.2864				11.0		20.0			
Naphthalene	2.3389 2.4919	2.2285	2.4380	2.3996	2.4112	Ave		2.3847				3.8		20.0			
1,2,3-Trichlorobenzene	0.7323 0.7742	0.7009	0.8014	0.7516	0.7374	Ave		0.7496				4.7		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2355	0.2374	0.2513	0.2257	0.2404	Ave		0.2381				3.9		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2893	0.2824	0.2946	0.2732	0.2823	Ave		0.2844				2.9		20.0			
Toluene-d8 (Surr)	+++++ 1.1017	1.1137	1.1673	1.0744	1.1092	Ave		1.1133				3.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4489	0.4705	0.4506	0.4235	0.4565	Ave		0.4500				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: ICV 240-292814/15 Calibration Date: 08/28/2017 18:09

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3289	0.3697	0.1000	0.0225	0.0200	12.4	30.0
Chloromethane	Ave	0.2445	0.2680	0.1000	0.0219	0.0200	9.6	30.0
Vinyl chloride	Ave	0.2838	0.3016	0.1000	0.0213	0.0200	6.3	30.0
Butadiene	Ave	0.2997	0.2693		0.0180	0.0200	-10.1	30.0
Bromomethane	Ave	0.2406	0.2322	0.0500	0.0193	0.0200	-3.5	30.0
Chloroethane	Ave	0.2032	0.2132	0.0500	0.0210	0.0200	4.9	30.0
Dichlorofluoromethane	Ave	0.5096	0.5110		0.0201	0.0200	0.3	30.0
Trichlorofluoromethane	Ave	0.4641	0.4932	0.1000	0.0213	0.0200	6.3	30.0
Ethyl ether	Ave	0.1897	0.1855		0.0196	0.0200	-2.2	30.0
Acrolein	Ave	0.0229	0.0276		0.120	0.100	20.1	50.0
1,1-Dichloroethene	Ave	0.4076	0.3981	0.1000	0.0195	0.0200	-2.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2860	0.2706	0.0500	0.0189	0.0200	-5.4	30.0
Acetone	Lin1		0.0605	0.0100	0.0370	0.0400	-7.5	50.0
Iodomethane	Ave	0.4497	0.4491		0.0200	0.0200	-0.1	30.0
Carbon disulfide	Ave	0.7299	0.6466	0.1000	0.0177	0.0200	-11.4	30.0
3-Chloro-1-propene	Ave	0.2876	0.2414		0.0168	0.0200	-16.1	30.0
Methyl acetate	Ave	0.1593	0.1376	0.1000	0.0345	0.0400	-13.7	30.0
Methylene Chloride	Ave	0.3063	0.2837	0.1000	0.0185	0.0200	-7.4	50.0
2-Methyl-2-propanol	Ave	0.0188	0.0199		0.211	0.200	5.4	50.0
Acrylonitrile	Ave	0.0795	0.0712		0.179	0.200	-10.5	30.0
Methyl tert-butyl ether	Ave	0.7430	0.7140	0.1000	0.0192	0.0200	-3.9	30.0
trans-1,2-Dichloroethene	Ave	0.2977	0.3117	0.1000	0.0209	0.0200	4.7	30.0
Hexane	Ave	0.2487	0.2304		0.0185	0.0200	-7.4	30.0
1,1-Dichloroethane	Ave	0.3674	0.3688	0.2000	0.0201	0.0200	0.4	30.0
Vinyl acetate	Ave	0.3016	0.3403		0.0226	0.0200	12.8	50.0
2-Butanone (MEK)	Ave	0.0899	0.0809	0.0100	0.0360	0.0400	-10.1	30.0
cis-1,2-Dichloroethene	Ave	0.2834	0.2811	0.1000	0.0198	0.0200	-0.8	30.0
2,2-Dichloropropane	Ave	0.1988	0.2077		0.0209	0.0200	4.5	30.0
Chlorobromomethane	Ave	0.1717	0.1649		0.0192	0.0200	-3.9	30.0
Tetrahydrofuran	Ave	0.0557	0.0521		0.0374	0.0400	-6.5	30.0
Chloroform	Ave	0.4152	0.4198	0.2000	0.0202	0.0200	1.1	30.0
1,1,1-Trichloroethane	Ave	0.3315	0.3598	0.1000	0.0217	0.0200	8.5	30.0
Cyclohexane	Ave	0.3975	0.3736	0.1000	0.0188	0.0200	-6.0	30.0
1,1-Dichloropropene	Ave	0.3407	0.3331		0.0196	0.0200	-2.2	30.0
Carbon tetrachloride	Ave	0.2812	0.3125	0.1000	0.0222	0.0200	11.1	30.0
Isobutyl alcohol	Ave	0.0036	0.0038		0.518	0.500	3.5	30.0
1,2-Dichloroethane	Ave	0.3526	0.3531	0.1000	0.0200	0.0200	0.1	30.0
Benzene	Ave	0.9714	0.9658	0.5000	0.0199	0.0200	-0.6	30.0
n-Heptane	Lin1		0.1710		0.0181	0.0200	-9.7	30.0
Trichloroethene	Ave	0.3091	0.3023	0.1500	0.0196	0.0200	-2.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: ICV 240-292814/15 Calibration Date: 08/28/2017 18:09

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3612	0.3619	0.1000	0.0200	0.0200	0.2	30.0
1,2-Dichloropropane	Ave	0.2114	0.2169	0.1000	0.0205	0.0200	2.6	30.0
1,4-Dioxane	Ave	0.0028	0.0034		0.490	0.400	22.6	50.0
Dibromomethane	Ave	0.1806	0.1733		0.0192	0.0200	-4.0	30.0
Dichlorobromomethane	Ave	0.2911	0.3100	0.1500	0.0213	0.0200	6.5	30.0
2-Chloroethyl vinyl ether	Ave	0.1516	0.1511		0.0199	0.0200	-0.3	30.0
cis-1,3-Dichloropropene	Ave	0.3234	0.3611	0.1500	0.0223	0.0200	11.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1791	0.1740	0.0500	0.0389	0.0400	-2.9	30.0
Toluene	Ave	1.273	1.282	0.4000	0.0201	0.0200	0.7	30.0
trans-1,3-Dichloropropene	Ave	0.3481	0.3749	0.1000	0.0215	0.0200	7.7	30.0
Ethyl methacrylate	Ave	0.3118	0.3339		0.0214	0.0200	7.1	30.0
1,1,2-Trichloroethane	Ave	0.2645	0.2722	0.1000	0.0206	0.0200	2.9	30.0
1,3-Dichloropropane	Ave	0.4668	0.4676		0.0200	0.0200	0.2	30.0
Tetrachloroethene	Ave	0.3233	0.3132	0.1500	0.0194	0.0200	-3.1	30.0
2-Hexanone	Ave	0.1391	0.1378	0.0500	0.0396	0.0400	-0.9	30.0
Chlorodibromomethane	Ave	0.2462	0.2774		0.0225	0.0200	12.7	30.0
Ethylene Dibromide	Ave	0.2910	0.2841		0.0195	0.0200	-2.4	30.0
Chlorobenzene	Ave	0.9301	0.9309	0.3000	0.0200	0.0200	0.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.2637	0.2991		0.0227	0.0200	13.4	30.0
Ethylbenzene	Ave	0.4776	0.4828		0.0202	0.0200	1.1	30.0
m-Xylene & p-Xylene	Ave	0.5871	0.6137		0.0209	0.0200	4.5	30.0
o-Xylene	Ave	0.5770	0.6009		0.0208	0.0200	4.2	30.0
Styrene	Ave	0.9615	0.9896	0.3000	0.0206	0.0200	2.9	30.0
Bromoform	Ave	0.1357	0.1459	0.1000	0.0215	0.0200	7.5	30.0
Isopropylbenzene	Ave	1.387	1.482	0.1000	0.0214	0.0200	6.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6580	0.6425	0.3000	0.0195	0.0200	-2.4	30.0
Bromobenzene	Ave	0.7328	0.7365		0.0201	0.0200	0.5	30.0
1,2,3-Trichloropropane	Ave	0.2569	0.2656		0.0207	0.0200	3.4	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.1233		0.0200	0.0200	0.1	30.0
N-Propylbenzene	Ave	0.7599	0.7566		0.0199	0.0200	-0.4	30.0
2-Chlorotoluene	Ave	0.6740	0.6859		0.0204	0.0200	1.8	30.0
1,3,5-Trimethylbenzene	Ave	2.090	2.266		0.0217	0.0200	8.4	30.0
4-Chlorotoluene	Ave	0.7279	0.7538		0.0207	0.0200	3.6	30.0
tert-Butylbenzene	Ave	2.007	2.088		0.0208	0.0200	4.0	30.0
1,2,4-Trimethylbenzene	Ave	2.259	2.370		0.0210	0.0200	4.9	30.0
sec-Butylbenzene	Ave	0.5645	0.6107		0.0216	0.0200	8.2	30.0
1,3-Dichlorobenzene	Ave	1.382	1.411	0.6000	0.0204	0.0200	2.1	30.0
4-Isopropyltoluene	Ave	2.225	2.498		0.0225	0.0200	12.3	30.0
1,4-Dichlorobenzene	Ave	1.455	1.443	0.5000	0.0198	0.0200	-0.9	30.0
n-Butylbenzene	Ave	1.840	2.037		0.0221	0.0200	10.7	30.0
1,2-Dichlorobenzene	Ave	1.408	1.364	0.4000	0.0194	0.0200	-3.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: ICV 240-292814/15 Calibration Date: 08/28/2017 18:09

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1329	0.1362	0.0500	0.0205	0.0200	2.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8150	0.8632	0.2000	0.0212	0.0200	5.9	50.0
Hexachlorobutadiene	Ave	0.2864	0.3359		0.0235	0.0200	17.3	30.0
Naphthalene	Ave	2.385	2.490		0.0209	0.0200	4.4	50.0
1,2,3-Trichlorobenzene	Ave	0.7496	0.8347		0.0223	0.0200	11.3	30.0
Dibromofluoromethane (Surr)	Ave	0.2381	0.2237		0.0188	0.0200	-6.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2844	0.2696		0.0190	0.0200	-5.2	30.0
Toluene-d8 (Surr)	Ave	1.113	1.105		0.0198	0.0200	-0.8	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4500	0.4548		0.0202	0.0200	1.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: ICV 240-292814/22 Calibration Date: 08/28/2017 21:01

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965291.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2381	0.2272		0.0191	0.0200	-4.6	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2844	0.2777		0.0195	0.0200	-2.3	30.0
Toluene-d8 (Surr)	Ave	1.113	1.126		0.0202	0.0200	1.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4500	0.4485		0.0199	0.0200	-0.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: ICV 240-292814/22 Calibration Date: 08/28/2017 21:01

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 18:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 20:39

Lab File ID: UX965291.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0261	0.0263		0.202	0.200	0.8	30.0
Isopropyl ether	Ave	0.2166	0.2358		0.0218	0.0200	8.8	30.0
2-Chloro-1,3-butadiene	Ave	0.2950	0.2972		0.0201	0.0200	0.7	30.0
Tert-butyl ethyl ether	Ave	0.6317	0.6872		0.0218	0.0200	8.8	30.0
Ethyl acetate	Ave	0.1538	0.1789		0.0465	0.0400	16.4	50.0
Propionitrile	Ave	0.0271	0.0295		0.218	0.200	9.1	30.0
Methacrylonitrile	Ave	0.1109	0.1213		0.219	0.200	9.4	30.0
Tert-amyl methyl ether	Ave	0.6997	0.7469		0.0214	0.0200	6.8	30.0
n-Butanol	Ave	0.0027	0.0032		0.582	0.500	16.5	30.0
Ethyl acrylate	Ave	0.2303	0.2620		0.0227	0.0200	13.7	30.0
Methyl methacrylate	Ave	0.1598	0.1756		0.0440	0.0400	9.9	30.0
2-Nitropropane	Ave	0.0205	0.0229		0.0445	0.0400	11.3	30.0
n-Butyl acetate	Ave	0.2696	0.3038		0.0225	0.0200	12.7	30.0
1-Chlorohexane	Ave	0.3741	0.3382		0.0181	0.0200	-9.6	30.0
Cyclohexanone	Ave	0.0140	0.0152		0.218	0.200	8.8	30.0
Pentachloroethane	Ave	0.2616	0.2854		0.0436	0.0400	9.1	30.0
1,2,3-Trimethylbenzene	Ave	2.324	2.622		0.0226	0.0200	12.8	30.0
Benzyl chloride	Qua		0.1775		0.0209	0.0200	4.7	30.0
1,3,5-Trichlorobenzene	Ave	0.8508	1.008		0.0237	0.0200	18.5	30.0
2-Methylnaphthalene	Ave	1.229	1.558		0.0507	0.0400	26.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: CCVIS 240-296578/3 Calibration Date: 09/27/2017 17:35

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965893.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3289	0.3003	0.1000	0.0183	0.0200	-8.7	20.0
Chloromethane	Ave	0.2445	0.2614	0.1000	0.0214	0.0200	6.9	20.0
Vinyl chloride	Ave	0.2838	0.2724	0.1000	0.0192	0.0200	-4.0	20.0
Butadiene	Ave	0.2997	0.2373		0.0158	0.0200	-20.8*	20.0
Bromomethane	Ave	0.2406	0.2146	0.0500	0.0178	0.0200	-10.8	20.0
Chloroethane	Ave	0.2032	0.2148	0.0500	0.0211	0.0200	5.7	20.0
Dichlorofluoromethane	Ave	0.5096	0.5038		0.0198	0.0200	-1.1	20.0
Trichlorofluoromethane	Ave	0.4641	0.4218	0.1000	0.0182	0.0200	-9.1	20.0
Ethyl ether	Ave	0.1897	0.1809		0.0191	0.0200	-4.6	20.0
Acrolein	Ave	0.0229	0.0179		0.0779	0.100	-22.1	50.0
Acetone	Lin1		0.0722	0.0100	0.0446	0.0400	11.6	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2860	0.2574	0.0500	0.0180	0.0200	-10.0	20.0
1,1-Dichloroethene	Ave	0.4076	0.3954	0.1000	0.0194	0.0200	-3.0	20.0
Iodomethane	Ave	0.4497	0.3803		0.0169	0.0200	-15.4	20.0
Carbon disulfide	Ave	0.7299	0.5848	0.1000	0.0160	0.0200	-19.9	20.0
3-Chloro-1-propene	Ave	0.2876	0.2586		0.0180	0.0200	-10.1	20.0
Methyl acetate	Ave	0.1593	0.1601	0.1000	0.0402	0.0400	0.4	20.0
Methylene Chloride	Ave	0.3063	0.2552	0.1000	0.0167	0.0200	-16.7	50.0
2-Methyl-2-propanol	Ave	0.0188	0.0195		0.207	0.200	3.6	50.0
Acrylonitrile	Ave	0.0795	0.0853		0.214	0.200	7.2	20.0
Methyl tert-butyl ether	Ave	0.7430	0.7267	0.1000	0.0196	0.0200	-2.2	20.0
trans-1,2-Dichloroethene	Ave	0.2977	0.2973	0.1000	0.0200	0.0200	-0.1	20.0
Hexane	Ave	0.2487	0.2476		0.0199	0.0200	-0.5	20.0
1,1-Dichloroethane	Ave	0.3674	0.3718	0.2000	0.0202	0.0200	1.2	20.0
Vinyl acetate	Ave	0.3016	0.3133		0.0208	0.0200	3.9	50.0
2-Butanone (MEK)	Ave	0.0899	0.0986	0.0100	0.0439	0.0400	9.7	20.0
cis-1,2-Dichloroethene	Ave	0.2834	0.2675	0.1000	0.0189	0.0200	-5.6	20.0
2,2-Dichloropropane	Ave	0.1988	0.2116		0.0213	0.0200	6.5	20.0
Chlorobromomethane	Ave	0.1717	0.1932		0.0225	0.0200	12.5	20.0
Tetrahydrofuran	Ave	0.0557	0.0588		0.0423	0.0400	5.6	20.0
Chloroform	Ave	0.4152	0.4116	0.2000	0.0198	0.0200	-0.9	20.0
1,1,1-Trichloroethane	Ave	0.3315	0.3264	0.1000	0.0197	0.0200	-1.5	20.0
Cyclohexane	Ave	0.3975	0.2832	0.1000	0.0142	0.0200	-28.8*	20.0
1,1-Dichloropropene	Ave	0.3407	0.3367		0.0198	0.0200	-1.2	20.0
Carbon tetrachloride	Ave	0.2812	0.2607	0.1000	0.0185	0.0200	-7.3	20.0
Isobutyl alcohol	Ave	0.0036	0.0049		0.670	0.500	33.9*	20.0
1,2-Dichloroethane	Ave	0.3526	0.3509	0.1000	0.0199	0.0200	-0.5	20.0
Benzene	Ave	0.9714	0.9822	0.5000	0.0202	0.0200	1.1	20.0
n-Heptane	Lin1		0.1615		0.0170	0.0200	-14.9	20.0
Trichloroethene	Ave	0.3091	0.2617	0.1500	0.0169	0.0200	-15.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: CCVIS 240-296578/3 Calibration Date: 09/27/2017 17:35

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965893.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3612	0.3305	0.1000	0.0183	0.0200	-8.5	20.0
1,2-Dichloropropane	Ave	0.2114	0.2274	0.1000	0.0215	0.0200	7.6	20.0
1,4-Dioxane	Ave	0.0028	0.0019		0.268	0.400	-33.0	50.0
Dibromomethane	Ave	0.1806	0.1563		0.0173	0.0200	-13.4	20.0
Dichlorobromomethane	Ave	0.2911	0.2878	0.1500	0.0198	0.0200	-1.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1516	0.1517		0.0400	0.0400	0.0	20.0
cis-1,3-Dichloropropene	Ave	0.3234	0.3280	0.1500	0.0203	0.0200	1.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1791	0.2005	0.0500	0.0448	0.0400	11.9	20.0
Toluene	Ave	1.273	1.313	0.4000	0.0206	0.0200	3.2	20.0
trans-1,3-Dichloropropene	Ave	0.3481	0.3577	0.1000	0.0205	0.0200	2.7	20.0
Ethyl methacrylate	Ave	0.3118	0.3343		0.0214	0.0200	7.2	20.0
1,1,2-Trichloroethane	Ave	0.2645	0.2682	0.1000	0.0203	0.0200	1.4	20.0
1,3-Dichloropropane	Ave	0.4668	0.4979		0.0213	0.0200	6.7	20.0
Tetrachloroethene	Ave	0.3233	0.2997	0.1500	0.0185	0.0200	-7.3	20.0
2-Hexanone	Ave	0.1391	0.1640	0.0500	0.0472	0.0400	17.9	20.0
Chlorodibromomethane	Ave	0.2462	0.2253		0.0183	0.0200	-8.5	20.0
Ethylene Dibromide	Ave	0.2910	0.2815		0.0193	0.0200	-3.3	20.0
Chlorobenzene	Ave	0.9301	0.9154	0.3000	0.0197	0.0200	-1.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2637	0.2658		0.0202	0.0200	0.8	20.0
Ethylbenzene	Ave	0.4776	0.4721		0.0198	0.0200	-1.1	20.0
m-Xylene & p-Xylene	Ave	0.5871	0.5849		0.0199	0.0200	-0.4	20.0
o-Xylene	Ave	0.5770	0.5759		0.0200	0.0200	-0.2	20.0
Styrene	Ave	0.9615	0.9872	0.3000	0.0205	0.0200	2.7	20.0
Bromoform	Ave	0.1357	0.1170	0.1000	0.0172	0.0200	-13.8	20.0
Isopropylbenzene	Ave	1.387	1.421	0.1000	0.0205	0.0200	2.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6580	0.7090	0.3000	0.0215	0.0200	7.7	20.0
Bromobenzene	Ave	0.7328	0.6788		0.0185	0.0200	-7.4	20.0
1,2,3-Trichloropropane	Ave	0.2569	0.2787		0.0217	0.0200	8.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.0913		0.0148	0.0200	-25.8*	20.0
N-Propylbenzene	Ave	0.7599	0.7371		0.0194	0.0200	-3.0	20.0
2-Chlorotoluene	Ave	0.6740	0.6831		0.0203	0.0200	1.4	20.0
1,3,5-Trimethylbenzene	Ave	2.090	2.200		0.0211	0.0200	5.3	20.0
4-Chlorotoluene	Ave	0.7279	0.7081		0.0195	0.0200	-2.7	20.0
tert-Butylbenzene	Ave	2.007	2.138		0.0213	0.0200	6.5	20.0
1,2,4-Trimethylbenzene	Ave	2.259	2.365		0.0209	0.0200	4.7	20.0
sec-Butylbenzene	Ave	0.5645	0.5619		0.0199	0.0200	-0.5	20.0
1,3-Dichlorobenzene	Ave	1.382	1.379	0.6000	0.0200	0.0200	-0.2	20.0
4-Isopropyltoluene	Ave	2.225	2.313		0.0208	0.0200	4.0	20.0
1,4-Dichlorobenzene	Ave	1.455	1.399	0.5000	0.0192	0.0200	-3.9	20.0
n-Butylbenzene	Ave	1.840	1.968		0.0214	0.0200	7.0	20.0
1,2-Dichlorobenzene	Ave	1.408	1.343	0.4000	0.0191	0.0200	-4.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab Sample ID: CCVIS 240-296578/3 Calibration Date: 09/27/2017 17:35

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965893.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1329	0.1204	0.0500	0.0181	0.0200	-9.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8150	0.7439	0.2000	0.0183	0.0200	-8.7	50.0
Hexachlorobutadiene	Ave	0.2864	0.2586		0.0181	0.0200	-9.7	20.0
Naphthalene	Ave	2.385	2.397		0.0201	0.0200	0.5	50.0
1,2,3-Trichlorobenzene	Ave	0.7496	0.6791		0.0181	0.0200	-9.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2381	0.2242		0.0188	0.0200	-5.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2844	0.2902		0.0204	0.0200	2.0	20.0
Toluene-d8 (Surr)	Ave	1.113	1.186		0.0213	0.0200	6.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4500	0.4231		0.0188	0.0200	-6.0	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Lab File ID: UX965898.D Lab Sample ID: MB 240-296578/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX9 Date Analyzed: 09/27/2017 19:35

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-296578/4	UX965894.D	09/27/2017 17:59
DPT-1A-40-45'	240-85360-1	UX965908.D	09/27/2017 23:33
DPT-2D-45-50'	240-85360-2	UX965909.D	09/27/2017 23:56
	240-85248-B-2 MS	UX965918.D	09/28/2017 03:32
	240-85248-B-2 MSD	UX965919.D	09/28/2017 03:56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-296578/8

Matrix: Water | Lab File ID: UX965898.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 19:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-296578/8

Matrix: Water | Lab File ID: UX965898.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 19:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	1.20		1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	109		73-120
1868-53-7	Dibromofluoromethane (Surr)	89		69-124
460-00-4	4-Bromofluorobenzene (Surr)	90		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		61-138

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DPT-1A-40-45'	240-85360-1	89	101	106	88
DPT-2D-45-50'	240-85360-2	90	100	102	86
	MB 240-296578/8	89	101	109	90
	LCS 240-296578/4	98	105	110	98
	240-85248-B-2 MS	93	102	107	95
	240-85248-B-2 MSD	91	98	103	93

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	69-124
DCA = 1,2-Dichloroethane-d4 (Surr)	61-138
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	69-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX965894.D

Lab ID: LCS 240-296578/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	19.7	98	64-147	
1,1,2,2-Tetrachloroethane	20.0	21.7	108	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.8	89	65-144	
1,1,2-Trichloroethane	20.0	20.4	102	76-121	
1,1-Dichloroethane	20.0	18.9	95	74-120	
1,1-Dichloroethene	20.0	17.6	88	65-127	
1,2,4-Trichlorobenzene	20.0	17.6	88	34-141	
1,2-Dibromo-3-Chloropropane	20.0	17.5	88	50-130	
Ethylene Dibromide	20.0	18.3	92	80-120	
1,2-Dichlorobenzene	20.0	18.5	93	80-120	
1,2-Dichloroethane	20.0	18.1	91	68-133	
1,2-Dichloropropane	20.0	20.0	100	78-127	
1,3-Dichlorobenzene	20.0	18.6	93	80-120	
1,4-Dichlorobenzene	20.0	18.7	94	80-120	
2-Butanone (MEK)	40.0	41.5	104	43-149	
2-Hexanone	40.0	47.6	119	28-169	
4-Methyl-2-pentanone (MIBK)	40.0	43.6	109	53-144	
Acetone	40.0	41.0	102	35-131	
Benzene	20.0	18.6	93	79-120	
Dichlorobromomethane	20.0	17.9	89	79-125	
Bromoform	20.0	16.4	82	55-145	
Bromomethane	20.0	17.0	85	17-158	
Carbon disulfide	20.0	14.9	74	49-141	
Carbon tetrachloride	20.0	17.2	86	55-171	
Chlorobenzene	20.0	18.9	95	80-120	
Chloroethane	20.0	19.0	95	10-149	
Chloroform	20.0	18.5	93	80-120	
Chloromethane	20.0	20.8	104	59-124	
cis-1,2-Dichloroethene	20.0	17.8	89	77-120	
cis-1,3-Dichloropropene	20.0	19.9	100	75-120	
Cyclohexane	20.0	15.6	78	66-135	
Chlorodibromomethane	20.0	16.9	85	64-129	
Dichlorodifluoromethane	20.0	20.3	101	42-141	
Ethylbenzene	20.0	18.4	92	80-120	
Isopropylbenzene	20.0	19.4	97	80-128	
Methyl acetate	40.0	38.4	96	63-137	
Methyl tert-butyl ether	20.0	18.3	91	73-120	
Methylcyclohexane	20.0	18.8	94	63-141	
Methylene Chloride	20.0	14.5	73	64-140	
Styrene	20.0	18.8	94	80-121	
Tetrachloroethene	20.0	17.1	86	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX965894.D

Lab ID: LCS 240-296578/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	19.8	99	78-120	
trans-1,2-Dichloroethene	20.0	19.5	97	74-124	
trans-1,3-Dichloropropene	20.0	18.5	93	67-120	
Trichloroethene	20.0	16.3	82	76-124	
Trichlorofluoromethane	20.0	18.7	93	27-176	
Vinyl chloride	20.0	19.3	96	65-124	
Xylenes, Total	40.0	37.9	95	80-120	
m-Xylene & p-Xylene	20.0	18.9	95	80-120	
o-Xylene	20.0	19.0	95	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX965918.D

Lab ID: 240-85248-B-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	4000	46 U	4030	101	57-156	
1,1,2,2-Tetrachloroethane	4000	64 U	4730	118	51-123	
1,1,2-Trichloroethane	4000	68 U	4570	114	68-127	
1,1-Dichloroethane	4000	50 U	4510	113	69-122	
1,1-Dichloroethene	4000	54 U	4160	104	62-127	
1,2-Dichlorobenzene	4000	52 U	4150	104	70-120	
1,2-Dichloroethane	4000	60 U	4390	110	64-138	
1,3-Dichlorobenzene	4000	64 U	4080	102	71-120	
1,4-Dichlorobenzene	4000	46 U	4140	103	72-120	
Acetone	8000	350 U	10000	125	19-133	
Benzene	4000	56 U	4310	108	69-127	
Carbon disulfide	4000	68 U	3010	75	46-143	
Chloroethane	4000	82 U	4790	120	10-141	
Chloroform	4000	62 U	4350	109	74-125	
cis-1,2-Dichloroethene	4000	2400	6730	108	69-127	
Ethylbenzene	4000	52 U	4310	108	72-121	
Methylene Chloride	4000	210	4030	95	52-137	
Tetrachloroethene	4000	3700	7670	100	69-126	
Toluene	4000	46 U	4510	113	69-125	
trans-1,2-Dichloroethene	4000	58 U	4540	114	66-131	
Trichloroethene	4000	330	3980	91	68-129	
Vinyl chloride	4000	130 J	4360	106	55-123	
Xylenes, Total	8000	48 U	8590	107	71-122	
m-Xylene & p-Xylene	4000	48 U	4230	106	70-121	
o-Xylene	4000	56 U	4360	109	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX965919.D

Lab ID: 240-85248-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	4000	3600	90	11	13	57-156	
1,1,2,2-Tetrachloroethane	4000	4380	110	8	17	51-123	
1,1,2-Trichloroethane	4000	4150	104	10	11	68-127	
1,1-Dichloroethane	4000	3990	100	12	11	69-122	F2
1,1-Dichloroethene	4000	3690	92	12	14	62-127	
1,2-Dichlorobenzene	4000	3640	91	13	19	70-120	
1,2-Dichloroethane	4000	3880	97	12	11	64-138	F2
1,3-Dichlorobenzene	4000	3820	95	7	18	71-120	
1,4-Dichlorobenzene	4000	3680	92	12	17	72-120	
Acetone	8000	8170	102	20	35	19-133	
Benzene	4000	3890	97	10	10	69-127	
Carbon disulfide	4000	2580	65	15	18	46-143	
Chloroethane	4000	4140	103	15	35	10-141	
Chloroform	4000	3810	95	13	11	74-125	F2
cis-1,2-Dichloroethene	4000	6020	91	11	11	69-127	
Ethylbenzene	4000	3630	91	17	15	72-121	F2
Methylene Chloride	4000	4340	103	7	12	52-137	
Tetrachloroethene	4000	6680	75	14	18	69-126	
Toluene	4000	4020	100	12	14	69-125	
trans-1,2-Dichloroethene	4000	4050	101	11	11	66-131	
Trichloroethene	4000	3630	83	9	12	68-129	
Vinyl chloride	4000	3950	96	10	12	55-123	
Xylenes, Total	8000	7530	94	13	14	71-122	
m-Xylene & p-Xylene	4000	3740	93	12	15	70-121	
o-Xylene	4000	3790	95	14	15	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Sample No.: ICIS 240-292814/12 Date Analyzed: 08/28/2017 16:53

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX965281.D Heated Purge: (Y/N) N

Calibration ID: 41275

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		819642	5.72	732704	8.41	400571	10.65
UPPER LIMIT		1639284	6.22	1465408	8.91	801142	11.15
LOWER LIMIT		409821	5.22	366352	7.91	200286	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-292814/15		908730	5.73	806211	8.41	448303	10.65
ICV 240-292814/22		844258	5.73	756180	8.41	396443	10.65
CCVIS 240-296578/3		825696	5.72	708874	8.41	385737	10.65

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Sample No.: CCVIS 240-296578/3 Date Analyzed: 09/27/2017 17:35

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX965893.D Heated Purge: (Y/N) N

Calibration ID: 41278

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		825696	5.72	708874	8.41	385737	10.65
UPPER LIMIT		1651392	6.22	1417748	8.91	771474	11.15
LOWER LIMIT		412848	5.22	354437	7.91	192869	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-296578/4		842897	5.72	708729	8.41	379684	10.65
CCV 240-296578/5		888427	5.72	723625	8.41	359451	10.65
MB 240-296578/8		766423	5.72	623272	8.41	330478	10.65
240-85360-1	DPT-1A-40-45'	745910	5.73	633974	8.41	328252	10.65
240-85360-2	DPT-2D-45-50'	743083	5.72	636492	8.41	323100	10.65
240-85248-B-2 MS		812416	5.73	688999	8.41	381239	10.65
240-85248-B-2 MSD		876302	5.72	744528	8.41	402542	10.65

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Instrument ID: A3UX9 Start Date: 08/28/2017 15:15

Analysis Batch Number: 292814 End Date: 08/28/2017 22:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-292814/2		08/28/2017 15:15	1	BFB3774.D	DB-624 0.18(mm)
STD8260 240-292814/9 IC		08/28/2017 15:40	1	UX965278.D	DB-624 0.18(mm)
STD8260 240-292814/10 IC		08/28/2017 16:05	1	UX965279.D	DB-624 0.18(mm)
STD8260 240-292814/11 IC		08/28/2017 16:29	1	UX965280.D	DB-624 0.18(mm)
ICIS 240-292814/12		08/28/2017 16:53	1	UX965281.D	DB-624 0.18(mm)
STD8260 240-292814/13 IC		08/28/2017 17:20	1	UX965282.D	DB-624 0.18(mm)
STD8260 240-292814/14 IC		08/28/2017 17:44	1	UX965283.D	DB-624 0.18(mm)
ICV 240-292814/15		08/28/2017 18:09	1	UX965284.D	DB-624 0.18(mm)
ZZZZZ		08/28/2017 18:09	1		DB-624 0.18(mm)
STDA9 240-292814/16 IC		08/28/2017 18:40	1		DB-624 0.18(mm)
STDA9 240-292814/17 IC		08/28/2017 19:04	1		DB-624 0.18(mm)
STDA9 240-292814/18 IC		08/28/2017 19:28	1		DB-624 0.18(mm)
STDA9 240-292814/19 IC		08/28/2017 19:52	1		DB-624 0.18(mm)
STDA9 240-292814/20 IC		08/28/2017 20:16	1		DB-624 0.18(mm)
STDA9 240-292814/21 IC		08/28/2017 20:39	1		DB-624 0.18(mm)
ICV 240-292814/22		08/28/2017 21:01	1	UX965291.D	DB-624 0.18(mm)
ZZZZZ		08/28/2017 22:37	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-85360-1

SDG No.:

Instrument ID: A3UX9 Start Date: 09/27/2017 17:09

Analysis Batch Number: 296578 End Date: 09/28/2017 03:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-296578/1		09/27/2017 17:09	1	BFB3803.D	DB-624 0.18(mm)
CCVIS 240-296578/3		09/27/2017 17:35	1	UX965893.D	DB-624 0.18(mm)
LCS 240-296578/4		09/27/2017 17:59	1	UX965894.D	DB-624 0.18(mm)
CCV 240-296578/5		09/27/2017 18:23	1	UX965895.D	DB-624 0.18(mm)
MRL 240-296578/6 MDLV		09/27/2017 18:47	1		DB-624 0.18(mm)
MRL 240-296578/7 MDLV		09/27/2017 19:11	1		DB-624 0.18(mm)
MB 240-296578/8		09/27/2017 19:35	1	UX965898.D	DB-624 0.18(mm)
ZZZZZ		09/27/2017 19:59	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 20:23	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 20:47	20		DB-624 0.18(mm)
ZZZZZ		09/27/2017 21:11	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 21:35	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 21:59	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 22:21	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 22:45	1		DB-624 0.18(mm)
ZZZZZ		09/27/2017 23:09	1		DB-624 0.18(mm)
240-85360-1		09/27/2017 23:33	1	UX965908.D	DB-624 0.18(mm)
240-85360-2		09/27/2017 23:56	1	UX965909.D	DB-624 0.18(mm)
ZZZZZ		09/28/2017 00:20	1		DB-624 0.18(mm)
ZZZZZ		09/28/2017 00:43	1		DB-624 0.18(mm)
ZZZZZ		09/28/2017 01:07	1		DB-624 0.18(mm)
ZZZZZ		09/28/2017 01:31	1		DB-624 0.18(mm)
ZZZZZ		09/28/2017 01:55	1		DB-624 0.18(mm)
ZZZZZ		09/28/2017 02:19	1		DB-624 0.18(mm)
ZZZZZ		09/28/2017 02:43	200		DB-624 0.18(mm)
ZZZZZ		09/28/2017 03:08	1		DB-624 0.18(mm)
240-85248-B-2 MS		09/28/2017 03:32	200	UX965918.D	DB-624 0.18(mm)
240-85248-B-2 MSD		09/28/2017 03:56	200	UX965919.D	DB-624 0.18(mm)

SAMPLE IDENTIFICATION	DPT-1A-40-45'
COMPOUND	cis-1,2-dichloroethene
COMPOUND AREA	32880
INTERNAL STANDARD AMOUNT	20
DILUTION FACTOR	1
INTERNAL STANDARD AREA	745910
AVERAGE RRF	0.2834

3.11 µg/L

32880 x 20 x 1 / 745910 x 0.2834

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-85360-1

SDG No.:

Client Sample ID: DPT-1A-40-45' | Lab Sample ID: 240-85360-1

Matrix: Water | Lab File ID: UX965908.D

Analysis Method: 8260C | Date Collected: 09/19/2017 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 09/27/2017 23:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 296578 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	2.2	J	10	1.8
71-43-2	Benzene	1.9		1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	1.6		1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	3.1		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX9\20170927-69096.b\UX965908.D
Lims ID: 240-85360-B-1
Client ID: DPT-1A-40-45'
Sample Type: Client
Inject. Date: 27-Sep-2017 23:33:30 ALS Bottle#: 9 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069096-018
Operator ID: 001904 Instrument ID: A3UX9

Method: \\ChromNA\Canton\ChromData\A3UX9\20170927-69096.b\8260_9.m
Limit Group: MSV 8260C ICAL
Last Update: 28-Sep-2017 14:21:19 Calib Date: 28-Aug-2017 20:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX9\20170828-68245.b\UX965290.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: laveyt Date: 28-Sep-2017 14:21:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.726	5.723	0.003	99	745910	20.0	
* 2 Chlorobenzene-d5	117	8.412	8.409	0.003	85	633974	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.648	10.646	0.002	96	328252	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.146	5.143	0.003	92	157945	17.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.442	5.439	0.003	100	213996	20.2	
$ 6 Toluene-d8 (Surr)	98	7.099	7.095	0.004	93	744895	21.1	
$ 7 4-Bromofluorobenzene (Surr	95	9.524	9.521	0.003	89	250976	17.6	
9 Dichlorodifluoromethane	85		1.711				ND	
10 Chloromethane	50		1.889				ND	
11 Vinyl chloride	62		2.020				ND	
13 Bromomethane	94		2.374				ND	
15 Chloroethane	64		2.504				ND	
17 Trichlorofluoromethane	101		2.729				ND	
23 Acetone	43	3.229	3.226	0.003	74	10729	2.19	
22 1,1,2-Trichloro-1,2,2-trif	101		3.238				ND	
24 1,1-Dichloroethene	61		3.238				ND	
26 Carbon disulfide	76	3.430	3.439	-0.009	35	6631	0.2436	
29 Methyl acetate	43		3.534				ND	
30 Methylene Chloride	49	3.667	3.676	-0.009	29	4579	0.4008	
33 Methyl tert-butyl ether	73		3.877				ND	
34 trans-1,2-Dichloroethene	61		3.877				ND	
36 1,1-Dichloroethane	63	4.247	4.244	0.003	1	3080	0.2248	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
43 cis-1,2-Dichloroethene	96	4.744	4.741	0.003	81	32880	3.11	
41 2-Butanone (MEK)	43		4.741				ND	
49 Chloroform	83	5.016	5.013	0.003	96	24851	1.60	
50 1,1,1-Trichloroethane	97		5.190				ND	
51 Cyclohexane	84		5.238				ND	
53 Carbon tetrachloride	117		5.332				ND	
55 Benzene	78	5.501	5.498	0.003	97	70087	1.93	
56 1,2-Dichloroethane	62		5.498				ND	
60 Trichloroethene	130	6.046	6.042	0.004	96	357391	31.0	
62 Methylcyclohexane	83		6.220				ND	
63 1,2-Dichloropropane	63		6.231				ND	
67 Dichlorobromomethane	83		6.456				ND	
71 cis-1,3-Dichloropropene	75		6.847				ND	
72 4-Methyl-2-pentanone (MIBK	43		6.977				ND	
73 Toluene	91	7.158	7.154	0.004	97	99863	2.48	
74 trans-1,3-Dichloropropene	75		7.332				ND	
76 1,1,2-Trichloroethane	97		7.509				ND	
78 Tetrachloroethene	166		7.663				ND	
80 2-Hexanone	43		7.711				ND	
82 Chlorodibromomethane	129		7.876				ND	
83 Ethylene Dibromide	107		7.983				ND	
85 Chlorobenzene	112		8.444				ND	
87 Ethylbenzene	106	8.530	8.539	-0.009	94	3590	0.2371	
88 m-Xylene & p-Xylene	106	8.637	8.645	-0.008	95	13131	0.7055	
90 Styrene	104		9.024				ND	
89 o-Xylene	106	9.027	9.024	0.003	91	5933	0.3244	
91 Bromoform	173		9.213				ND	
92 Isopropylbenzene	105		9.367				ND	
94 1,1,2,2-Tetrachloroethane	83		9.639				ND	
108 1,3-Dichlorobenzene	146		10.586				ND	
110 1,4-Dichlorobenzene	146		10.669				ND	
114 1,2-Dichlorobenzene	146		11.047				ND	
115 1,2-Dibromo-3-Chloropropan	157		11.817				ND	
117 1,2,4-Trichlorobenzene	180		12.645				ND	
S 131 Xylenes, Total	106				0		1.03	

Reagents:

vm100ss_stk_00027	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-85360-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.3595 0.2698	0.3212	0.2717	0.2590	0.2442	Ave		0.2876				15.2		20.0			
Methyl acetate	0.1918 0.1415	0.1763	0.1534	0.1461	0.1470	Ave		0.1593			0.1000	12.6		20.0			
Methylene Chloride	+++++ 0.2755	0.3957	0.3151	0.2589	0.2863	Ave		0.3063			0.1000	17.6		20.0			
2-Methyl-2-propanol	0.0173 0.0190	0.0207	0.0193	0.0192	0.0174	Ave		0.0188				6.8		20.0			
Acrylonitrile	0.0803 0.0742	0.0909	0.0802	0.0759	0.0757	Ave		0.0795				7.7		20.0			
Methyl tert-butyl ether	0.7591 0.7212	0.7483	0.7592	0.7214	0.7485	Ave		0.7430			0.1000	2.4		20.0			
trans-1,2-Dichloroethene	0.2698 0.2983	0.3083	0.3122	0.2938	0.3038	Ave		0.2977			0.1000	5.1		20.0			
Hexane	0.2289 0.2639	0.2630	0.2183	0.2574	0.2609	Ave		0.2487				8.0		20.0			
1,1-Dichloroethane	0.3675 0.3708	0.3745	0.3736	0.3513	0.3667	Ave		0.3674			0.2000	2.3		20.0			
Vinyl acetate	0.2940 0.3138	0.3085	0.2967	0.2869	0.3094	Ave		0.3016				3.5		20.0			
2-Butanone (MEK)	0.0956 0.0850	0.0960	0.0919	0.0851	0.0860	Ave		0.0899			0.0100	5.8		20.0			
cis-1,2-Dichloroethene	0.3169 0.2753	0.2829	0.2883	0.2609	0.2763	Ave		0.2834			0.1000	6.6		20.0			
2,2-Dichloropropane	0.1841 0.2038	0.2226	0.1919	0.1889	0.2012	Ave		0.1988				7.0		20.0			
Chlorobromomethane	0.1817 0.1599	0.1759	0.1838	0.1603	0.1686	Ave		0.1717				6.1		20.0			
Tetrahydrofuran	+++++ 0.0515	0.0614	0.0587	0.0527	0.0540	Ave		0.0557				7.6		20.0			
Chloroform	0.4166 0.4104	0.4191	0.4289	0.4018	0.4142	Ave		0.4152			0.2000	2.2		20.0			
1,1,1-Trichloroethane	0.2310 0.3619	0.3581	0.3436	0.3511	0.3433	Ave		0.3315			0.1000	15.0		20.0			
Cyclohexane	0.3898 0.4056	0.4376	0.3701	0.3848	0.3972	Ave		0.3975			0.1000	5.8		20.0			
1,1-Dichloropropene	0.3995 0.3378	0.3118	0.3345	0.3255	0.3350	Ave		0.3407				8.9		20.0			
Carbon tetrachloride	0.2492 0.3235	0.2261	0.2886	0.2866	0.3133	Ave		0.2812			0.1000	13.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **FEBRUARY 13, 2018**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOCs / SVOCs / DRO / GRO**
MRC-BLOCK E – FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-84819-1

SAMPLES: 4 / Soil / VOCs / SVOCs / DRO / GRO

SB-117B-47-50' SB-119A-10-12.5' SB-119B-56-58'
SB-131B-33-35'

OVERVIEW

The sample set for MRC-Block E, SDG 240-84819-1, consists of four (4) soil environmental samples. All samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), diesel range organics (DRO), and gasoline range organics (GRO). No field duplicate pairs are included in this SDG.

The samples were collected by Tetra Tech on September 9 and 10, 2017, and analyzed by TestAmerica. Analyses were conducted in accordance with SW-846 Methods 8260C (for VOCs), 8207D (for SVOCs), and 8015C (for DRO and GRO) analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blanks, surrogate spike recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern with respect to data quality are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The VOC continuing calibration performed on 09/13/17 at 09:29 on instrument A3UX14 had a percent difference (%D) for methylene chloride that was greater than the 20% quality control limit. All samples were associated with this calibration. Non-detected results for methylene chloride were qualified as estimated (UJ) in all samples.

- The following VOC analyte was detected in the method blank at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Acetone	5.29 ug/kg	52.9 ug/kg

An action level of 10x the maximum concentration of the common laboratory contaminant acetone was used to evaluate sample data for blank contamination. Sample percent solids and dilution factors, if applicable, were considered in evaluating for blank contamination. The detected result for acetone in sample SB-119A-10-12.5' was less than the action level and was qualified as non-detected due to blank contamination.

- Tentatively identified compounds (TICs) were identified in several VOC samples. TICs were qualified as estimated (NJ) and these compounds are assumed to be presumptively present.

- Detected results below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Sample SB-122A-13-15' is listed on the chain of custody but is marked as hold.

Non-detected results were reported to the MDL.

In the VOC fraction, the following compounds were not listed on the laboratory control sample (LCS) Form III: 1,2,3-trimethylbenzene, diisopropyl ether, ethyl tert-butyl ether, and tert-amyl methyl ether. These compounds were included in the database and on the LCS Form I, which is in Appendix C of this report.

Although not included on the VOC LCS Form III, the database results for LCS 240-294629/6 and case narrative report indicate the LCS percent recovery (%R) for diisopropyl ether was greater than the laboratory quality control limits. All samples were associated with this LCS. No action was necessary because diisopropyl ether was non-detected in the associated samples.

The following TICs were detected in the method blank at the following maximum concentrations:

TIC	Concentration
Acetonitrile	7.08 ug/kg
Hexane	0.504 ug/kg
2-Methylnaphthalene	2.15 ug/kg

No action was taken on this basis.

The SVOC continuing calibration performed on 09/16/17 at 10:30 on instrument A4HP9 had a %D for dibenzo(a,h)anthracene that was greater than the 20% quality control limit. No action was necessary because no environmental samples from this SDG were associated with this calibration.

Sample SB-117A-33-35' was incorrectly recorded on the chain of custody record. The sample ID should have been MW131B. The laboratory updated the data report and the database was revised.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Non-detected results for one VOC analyte were qualified due to calibration noncompliance. One VOC result was qualified as non-detected due to laboratory blank contamination.

Other Factors Affecting Data Quality: TIC results were qualified as estimated and assumed to be presumptively present. Detected results below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017). The text of this report has been formulated to address only those problem areas affecting data quality.

Leigh A. Ciofani

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Joseph A. Samchuck

Tetra Tech
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Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

131B

PROJ_NO: 08109	NSAMPLE	SB-~~117A~~ 33-35'			SB-117B-47-50'			SB-119A-10-12.5'			SB-119B-56-58'		
SDG: 240-84819-1	LAB_ID	240-84819-3			240-84819-4			240-84819-1			240-84819-2		
FRACTION: OV	SAMP_DATE	9/10/2017			9/10/2017			9/9/2017			9/9/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.1			85.4			82.8			79.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.4	U		0.41	U		0.4	U		0.4	U	
1,1,1-TRICHLOROETHANE		0.26	U		0.26	U		0.26	U		0.26	U	
1,1,2,2-TETRACHLOROETHANE		0.29	U		0.3	U		0.29	U		0.29	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.55	U		0.56	U		0.55	U		0.55	U	
1,1-DICHLOROETHANE		0.37	U		0.38	U		0.37	U		0.37	U	
1,1-DICHLOROETHENE		1.4	J	P	0.61	U		0.6	U		0.61	U	
1,1-DICHLOROPROPENE		0.21	U		0.22	U		0.21	U		0.21	U	
1,2,3-TRICHLOROBENZENE		0.39	U		0.4	U		0.39	U		0.39	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.44	U		0.43	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
1,2,4-TRICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
1,2,4-TRIMETHYLBENZENE		0.28	U		0.28	U		0.28	U		0.28	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.76	U		0.77	U		0.76	U		0.76	U	
1,2-DIBROMOETHANE		0.39	U		0.4	U		0.39	U		0.39	U	
1,2-DICHLOROBENZENE		0.24	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.32	U		0.33	U		0.32	U		0.33	U	
1,2-DICHLOROPROPANE		0.34	U		0.35	U		0.35	U		0.35	U	
1,3-DICHLOROBENZENE		0.32	U		0.33	U		0.32	U		0.33	U	
1,3-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
1,4-DICHLOROBENZENE		0.39	U		0.4	U		0.39	U		0.39	U	
2,2-DICHLOROPROPANE		0.33	U		0.34	U		0.33	U		0.34	U	
2-BUTANONE		1.4	U		1.4	U		1.8	J	P	1.4	U	
2-CHLOROETHYL VINYL ETHER		3.1	U		3.2	U		3.1	U		3.2	U	
2-CHLOROTOLUENE		0.41	U		0.42	U		0.41	U		0.42	U	
2-HEXANONE		0.65	U		0.66	U		0.65	U		0.65	U	
4-CHLOROTOLUENE		0.27	U		0.27	U		0.27	U		0.27	U	
4-ISOPROPYLTOLUENE		0.2	U		0.2	U		0.37	J	P	0.2	U	
4-METHYL-2-PENTANONE		0.99	U		1	U		0.99	U		1	U	
ACETONE		3.4	U		3.5	U		19	U	A	3.4	U	
BENZENE		0.36	U		0.36	U		0.36	U		14		
BROMOBENZENE		0.3	U		0.31	U		0.3	U		0.3	U	
BROMOCHLOROMETHANE		0.4	U		0.41	U		0.4	U		0.4	U	
BROMODICHLOROMETHANE		0.37	U		0.38	U		0.37	U		0.37	U	
BROMOFORM		0.45	U		0.45	U		0.45	U		0.45	U	
BROMOMETHANE		0.66	U		0.67	U		0.66	U		0.66	U	

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PROJ_NO: 08109	NSAMPLE	SB-~~117A-~~33-35'			SB-117B-47-50'			SB-119A-10-12.5'			SB-119B-56-58'		
SDG: 240-84819-1	LAB_ID	240-84819-3			240-84819-4			240-84819-1			240-84819-2		
FRACTION: OV	SAMP_DATE	9/10/2017			9/10/2017			9/9/2017			9/9/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.1			85.4			82.8			79.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.23	U		0.24	U		0.23	U		0.24	U	
CARBON TETRACHLORIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CHLOROBENZENE		0.37	U		0.38	U		0.37	U		0.37	U	
CHLORODIBROMOMETHANE		0.33	U		0.34	U		0.33	U		0.34	U	
CHLOROETHANE		0.42	U		0.43	U		0.42	U		0.43	U	
CHLOROFORM		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROMETHANE		0.42	U		0.43	U		0.42	U		0.43	U	
CIS-1,2-DICHLOROETHENE		47			0.32	U		0.31	U		18		
CIS-1,3-DICHLOROPROPENE		0.29	U		0.3	U		0.29	U		0.29	U	
DIBROMOMETHANE		0.42	U		0.43	U		0.42	U		0.43	U	
DICHLORODIFLUOROMETHANE		0.39	U		0.4	U		0.39	U		0.39	U	
DIISOPROPYL ETHER		0.27	U		0.27	U		0.27	U		0.27	U	
ETHYL TERT-BUTYL ETHER		0.14	U		0.15	U		0.14	U		0.15	U	
ETHYLBENZENE		0.3	U		0.31	U		0.3	U		0.3	U	
HEXACHLOROBUTADIENE		0.49	U		0.5	U		0.49	U		0.49	U	
ISOPROPYLBENZENE		0.22	U		0.23	U		0.22	U		0.22	U	
M+P-XYLENES		0.45	U		0.45	U		0.45	U		0.45	U	
METHYL TERT-BUTYL ETHER		0.3	U		0.31	U		0.3	U		1.7	J	P
METHYLENE CHLORIDE		0.27	UJ	C	0.27	UJ	C	0.27	UJ	C	0.27	UJ	C
NAPHTHALENE		0.37	U		0.38	U		0.37	U		0.37	U	
N-BUTYLBENZENE		0.28	U		0.28	U		0.28	U		0.28	U	
N-PROPYLBENZENE		0.31	U		0.32	U		0.31	U		0.31	U	
O-XYLENE		0.24	U		0.25	U		0.25	U		0.53	J	P
SEC-BUTYLBENZENE		0.21	U		0.22	U		0.21	U		0.21	U	
STYRENE		0.3	U		0.31	U		0.3	U		0.3	U	
TERT-AMYL METHYL ETHER		0.23	U		0.24	U		0.23	U		0.24	U	
TERT-BUTYLBENZENE		0.23	U		0.24	U		0.23	U		0.24	U	
TERTIARY-BUTYL ALCOHOL		2.6	U		2.7	U		2.7	U		2.7	U	
TETRACHLOROETHENE		0.41	U		0.42	U		0.41	U		0.42	U	
TOLUENE		0.38	U		0.39	U		0.38	U		0.38	U	
TOTAL XYLENES		0.45	U		0.45	U		0.45	U		0.53	J	P
TRANS-1,2-DICHLOROETHENE		1.9	J	P	0.43	U		0.42	U		1.3	J	P
TRANS-1,3-DICHLOROPROPENE		0.23	U		0.24	U		0.23	U		0.24	U	
TRICHLOROETHENE		8.9			0.47	U		0.46	U		13		
TRICHLOROFLUOROMETHANE		0.27	U		0.27	U		0.27	U		0.27	U	

PROJ_NO: 08109	NSAMPLE	SB-~~117A-~~33-35'			SB-117B-47-50'			SB-119A-10-12.5'			SB-119B-56-58'		
SDG: 240-84819-1	LAB_ID	240-84819-3			240-84819-4			240-84819-1			240-84819-2		
FRACTION: OV	SAMP_DATE	9/10/2017			9/10/2017			9/9/2017			9/9/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.1			85.4			82.8			79.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.97	U		0.99	U		0.97	U		0.98	U	
VINYL CHLORIDE		2.1	J	P	0.32	U		0.31	U		0.72	J	P

PROJ_NO: 08109	NSAMPLE	SB-119A-10-12.5'			SB-119B-56-58'		
SDG: 240-84819-1	LAB_ID	240-84819-1			240-84819-2		
FRACTION: TICOV	SAMP_DATE	9/9/2017			9/9/2017		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	82.8			79.3		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-METHYL-4-(1-METHYLETHYL)-CYCLOHEXANE		55	NJ	Z1			
BICYCLO[2.2.1]HEPTANE, 2,2,3-TRIMETHYL-		12	NJ	Z1			
BUTANE, 2-METHYL-					9.5	NJ	Z1

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PROJ_NO: 08109	NSAMPLE	SB-~~117A-~~33-35'			SB-117B-47-50'			SB-119A-10-12.5'			SB-119B-56-58'		
SDG: 240-84819-1	LAB_ID	240-84819-3			240-84819-4			240-84819-1			240-84819-2		
FRACTION: OS	SAMP_DATE	9/10/2017			9/10/2017			9/9/2017			9/9/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.1			85.4			82.8			79.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		4.1	U		4.1	U		4.2	U		4.4	U	
1,4-DIOXANE		26	U		26	U		26	U		27	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		11	U		11	U		11	U		12	U	
2,4,5-TRICHLOROPHENOL		29	U		29	U		30	U		31	U	
2,4,6-TRICHLOROPHENOL		10	U		10	U		11	U		11	U	
2,4-DICHLOROPHENOL		23	U		23	U		24	U		25	U	
2,4-DIMETHYLPHENOL		23	U		23	U		24	U		25	U	
2,4-DINITROPHENOL		25	U		25	U		25	U		26	U	
2,4-DINITROTOLUENE		20	U		20	U		20	U		21	U	
2,6-DINITROTOLUENE		25	U		25	U		25	U		26	U	
2-CHLORONAPHTHALENE		0.53	U		0.53	U		0.54	U		0.56	U	
2-CHLOROPHENOL		9.6	U		9.6	U		9.9	U		10	U	
2-METHYLNAPHTHALENE		0.59	U		0.59	U		0.6	U		0.62	U	
2-METHYLPHENOL		13	U		13	U		13	U		14	U	
2-NITROANILINE		11	U		11	U		11	U		11	U	
2-NITROPHENOL		9.7	U		9.7	U		10	U		10	U	
3&4-METHYLPHENOL		23	U		23	U		24	U		25	U	
3,3'-DICHLOROBENZIDINE		21	U		21	U		22	U		22	U	
3-NITROANILINE		19	U		19	U		19	U		20	U	
4,6-DINITRO-2-METHYLPHENOL		11	U		11	U		11	U		11	U	
4-BROMOPHENYL PHENYL ETHER		15	U		15	U		16	U		16	U	
4-CHLORO-3-METHYLPHENOL		25	U		25	U		25	U		26	U	
4-CHLOROANILINE		20	U		20	U		20	U		21	U	
4-CHLOROPHENYL PHENYL ETHER		15	U		15	U		16	U		16	U	
4-NITROANILINE		31	U		31	U		31	U		32	U	
4-NITROPHENOL		20	U		20	U		20	U		21	U	
ACENAPHTHENE		0.89	U		0.89	U		0.91	U		0.95	U	
ACENAPHTHYLENE		0.41	U		0.41	U		0.42	U		0.44	U	
ACETOPHENONE		11	U		11	U		11	U		11	U	
ANTHRACENE		0.92	U		0.92	U		0.94	U		0.97	U	
ATRAZINE		11	U		11	U		11	U		11	U	
BENZALDEHYDE		14	U		14	U		14	U		15	U	
BENZO(A)ANTHRACENE		0.74	U		0.74	U		0.76	U		0.78	U	
BENZO(A)PYRENE		0.75	U		0.75	U		0.77	U		0.8	U	
BENZO(B)FLUORANTHENE		0.69	U		0.69	U		0.71	U		0.73	U	

PROJ_NO: 08109	NSAMPLE	SB-~~117A~~ 33-35'			SB-117B-47-50'			SB-119A-10-12.5'			SB-119B-56-58'		
SDG: 240-84819-1	LAB_ID	240-84819-3			240-84819-4			240-84819-1			240-84819-2		
FRACTION: OS	SAMP_DATE	9/10/2017			9/10/2017			9/9/2017			9/9/2017		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.1			85.4			82.8			79.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.41	U		0.41	U		0.42	U		0.44	U	
BENZO(K)FLUORANTHENE		0.8	U		0.8	U		0.82	U		0.85	U	
BIS(2-CHLOROETHOXY)METHANE		26	U		26	U		26	U		27	U	
BIS(2-CHLOROETHYL)ETHER		2.3	U		2.3	U		2.4	U		2.5	U	
BIS(2-ETHYLHEXYL)PHTHALATE		22	U		22	U		23	U		24	U	
BUTYL BENZYL PHTHALATE		12	U		12	U		12	U		12	U	
CAPROLACTAM		43	U		43	U		44	U		46	U	
CARBAZOLE		32	U		32	U		32	U		34	U	
CHRYSENE		1.3	U		1.3	U		1.3	U		1.4	U	
DIBENZO(A,H)ANTHRACENE		0.77	U		0.78	U		0.79	U		0.82	U	
DIBENZOFURAN		0.77	U		0.78	U		0.79	U		0.82	U	
DIETHYL PHTHALATE		19	U		19	U		19	U		20	U	
DIMETHYL PHTHALATE		20	U		20	U		20	U		21	U	
DI-N-BUTYL PHTHALATE		18	U		18	U		18	U		19	U	
DI-N-OCTYL PHTHALATE		9.3	U		9.3	U		9.5	U		9.8	U	
FLUORANTHENE		0.65	U		0.65	U		0.66	U		0.69	U	
FLUORENE		0.62	U		0.62	U		0.64	U		0.66	U	
HEXACHLOROBENZENE		2.5	U		2.5	U		2.5	U		2.6	U	
HEXACHLOROBUTADIENE		6.6	U		6.6	U		6.7	U		7	U	
HEXACHLOROCYCLOPENTADIENE		9.5	U		9.5	U		9.7	U		10	U	
HEXACHLOROETHANE		11	U		11	U		11	U		11	U	
INDENO(1,2,3-CD)PYRENE		0.41	U		0.41	U		0.42	U		0.44	U	
ISOPHORONE		15	U		15	U		16	U		16	U	
NAPHTHALENE		0.96	U		0.96	U		0.99	U		1	U	
NITROBENZENE		2.6	U		2.6	U		2.6	U		2.7	U	
N-NITROSODIMETHYLAMINE		19	U		19	U		19	U		20	U	
N-NITROSO-DI-N-PROPYLAMINE		7.4	U		7.4	U		7.6	U		7.8	U	
N-NITROSODIPHENYLAMINE		25	U		25	U		25	U		26	U	
PENTACHLOROPHENOL		11	U		11	U		11	U		11	U	
PHENANTHRENE		0.86	U		0.86	U		0.88	U		0.91	U	
PHENOL		8.6	U		8.6	U		8.8	U		9.1	U	
PYRENE		0.52	U		0.52	U		0.53	U		0.55	U	

131B

PROJ_NO: 08109	NSAMPLE	SB-~~117A~~-33-35'						SB-117B-47-50'					
SDG: 240-84819-1	LAB_ID	240-84819-3						240-84819-4					
FRACTION: PET	SAMP_DATE	9/10/2017						9/10/2017					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	84.1			84.1			85.4			85.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					31	J	P				14	U	
TPH (C10-C32)		18	U					18	U				

PROJ_NO: 08109	NSAMPLE	SB-119A-10-12.5'						SB-119B-56-58'					
SDG: 240-84819-1	LAB_ID	240-84819-1						240-84819-2					
FRACTION: PET	SAMP_DATE	9/9/2017						9/9/2017					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	82.8			82.8			79.3			79.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					140						67	J	P
TPH (C10-C32)		25	J	P				29	J	P			

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: 1410637.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:40

Sample wt/vol: 5.1528(g) | Date Analyzed: 09/13/2017 15:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.6 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.41	U	5.7	0.41
71-55-6	1,1,1-Trichloroethane	0.26	U	5.7	0.26
79-34-5	1,1,2,2-Tetrachloroethane	0.30	U	5.7	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.56	U	5.7	0.56
75-34-3	1,1-Dichloroethane	0.38	U	5.7	0.38
75-35-4	1,1-Dichloroethene	0.61	U	5.7	0.61
563-58-6	1,1-Dichloropropene	0.22	U	5.7	0.22
87-61-6	1,2,3-Trichlorobenzene	0.40	U	5.7	0.40
96-18-4	1,2,3-Trichloropropane	0.44	U	5.7	0.44
526-73-8	1,2,3-Trimethylbenzene	0.11	U	5.7	0.11
120-82-1	1,2,4-Trichlorobenzene	0.27	U	5.7	0.27
95-63-6	1,2,4-Trimethylbenzene	0.28	U	5.7	0.28
96-12-8	1,2-Dibromo-3-Chloropropane	0.77	U	11	0.77
95-50-1	1,2-Dichlorobenzene	0.25	U	5.7	0.25
107-06-2	1,2-Dichloroethane	0.33	U	5.7	0.33
78-87-5	1,2-Dichloropropane	0.35	U	5.7	0.35
541-73-1	1,3-Dichlorobenzene	0.33	U	5.7	0.33
142-28-9	1,3-Dichloropropane	0.26	U	5.7	0.26
106-46-7	1,4-Dichlorobenzene	0.40	U	5.7	0.40
594-20-7	2,2-Dichloropropane	0.34	U	5.7	0.34
78-93-3	2-Butanone (MEK)	1.4	U	23	1.4
110-75-8	2-Chloroethyl vinyl ether	3.2	U	57	3.2
95-49-8	2-Chlorotoluene	0.42	U	5.7	0.42
591-78-6	2-Hexanone	0.66	U	23	0.66
106-43-4	4-Chlorotoluene	0.27	U	5.7	0.27
99-87-6	p-Isopropyltoluene	0.20	U	5.7	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	23	1.0
67-64-1	Acetone	3.5	U	23	3.5
71-43-2	Benzene	0.36	U	5.7	0.36
108-86-1	Bromobenzene	0.31	U	5.7	0.31
75-25-2	Bromoform	0.45	U	5.7	0.45
74-83-9	Bromomethane	0.67	U	5.7	0.67
75-15-0	Carbon disulfide	0.24	U	5.7	0.24
56-23-5	Carbon tetrachloride	0.28	U	5.7	0.28
108-90-7	Chlorobenzene	0.38	U	5.7	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: 1410637.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:40

Sample wt/vol: 5.1528(g) | Date Analyzed: 09/13/2017 15:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.6 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.34	U	5.7	0.34
75-00-3	Chloroethane	0.43	U	5.7	0.43
67-66-3	Chloroform	0.26	U	5.7	0.26
74-87-3	Chloromethane	0.43	U	5.7	0.43
156-59-2	cis-1,2-Dichloroethene	0.32	U	5.7	0.32
10061-01-5	cis-1,3-Dichloropropene	0.30	U	5.7	0.30
74-95-3	Dibromomethane	0.43	U	5.7	0.43
74-97-5	Bromochloromethane	0.41	U	5.7	0.41
75-71-8	Dichlorodifluoromethane	0.40	U	5.7	0.40
75-27-4	Bromodichloromethane	0.38	U	5.7	0.38
75-65-0	tert-Butyl alcohol	2.7	U	230	2.7
100-41-4	Ethylbenzene	0.31	U	5.7	0.31
87-68-3	Hexachlorobutadiene	0.50	U	5.7	0.50
108-20-3	Diisopropyl ether	0.27	U *	11	0.27
98-82-8	Isopropylbenzene	0.23	U	5.7	0.23
1634-04-4	Methyl tert-butyl ether	0.31	U	5.7	0.31
75-09-2	Methylene Chloride	0.27	U	5.7	0.27
179601-23-1	m-Xylene & p-Xylene	0.45	U	11	0.45
91-20-3	Naphthalene	0.38	U	5.7	0.38
104-51-8	n-Butylbenzene	0.28	U	5.7	0.28
103-65-1	N-Propylbenzene	0.32	U	5.7	0.32
95-47-6	o-Xylene	0.25	U	5.7	0.25
135-98-8	sec-Butylbenzene	0.22	U	5.7	0.22
100-42-5	Styrene	0.31	U	5.7	0.31
994-05-8	Tert-amyl methyl ether	0.24	U	5.7	0.24
637-92-3	Ethyl tert-butyl ether	0.15	U	5.7	0.15
127-18-4	Tetrachloroethene	0.42	U	5.7	0.42
108-88-3	Toluene	0.39	U	5.7	0.39
156-60-5	trans-1,2-Dichloroethene	0.43	U	5.7	0.43
10061-02-6	trans-1,3-Dichloropropene	0.24	U	5.7	0.24
79-01-6	Trichloroethene	0.47	U	5.7	0.47
75-69-4	Trichlorofluoromethane	0.27	U	5.7	0.27
108-05-4	Vinyl acetate	0.99	U	11	0.99
75-01-4	Vinyl chloride	0.32	U	5.7	0.32
1330-20-7	Xylenes, Total	0.45	U	11	0.45
98-06-6	tert-Butylbenzene	0.24	U	5.7	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: 1410637.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:40

Sample wt/vol: 5.1528(g) | Date Analyzed: 09/13/2017 15:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.6 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.40	U	5.7	0.40

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		66-125
1868-53-7	Dibromofluoromethane (Surr)	84		43-131
460-00-4	4-Bromofluorobenzene (Surr)	79		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		61-127

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' Lab Sample ID: 240-84819-4

Matrix: Solid Lab File ID: 1410637.D

Analysis Method: 8260C Date Collected: 09/10/2017 13:40

Sample wt/vol: 5.1528(g) Date Analyzed: 09/13/2017 15:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.6 Level: (low/med) Low

Analysis Batch No.: 294629 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 1410634.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:20

Sample wt/vol: 5.4145(g) | Date Analyzed: 09/13/2017 14:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.40	U	5.6	0.40
71-55-6	1,1,1-Trichloroethane	0.26	U	5.6	0.26
79-34-5	1,1,2,2-Tetrachloroethane	0.29	U	5.6	0.29
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	U	5.6	0.55
75-34-3	1,1-Dichloroethane	0.37	U	5.6	0.37
75-35-4	1,1-Dichloroethene	0.60	U	5.6	0.60
563-58-6	1,1-Dichloropropene	0.21	U	5.6	0.21
87-61-6	1,2,3-Trichlorobenzene	0.39	U	5.6	0.39
96-18-4	1,2,3-Trichloropropane	0.43	U	5.6	0.43
526-73-8	1,2,3-Trimethylbenzene	0.11	U	5.6	0.11
120-82-1	1,2,4-Trichlorobenzene	0.27	U	5.6	0.27
95-63-6	1,2,4-Trimethylbenzene	0.28	U	5.6	0.28
96-12-8	1,2-Dibromo-3-Chloropropane	0.76	U	11	0.76
95-50-1	1,2-Dichlorobenzene	0.25	U	5.6	0.25
107-06-2	1,2-Dichloroethane	0.32	U	5.6	0.32
78-87-5	1,2-Dichloropropane	0.35	U	5.6	0.35
541-73-1	1,3-Dichlorobenzene	0.32	U	5.6	0.32
142-28-9	1,3-Dichloropropane	0.26	U	5.6	0.26
106-46-7	1,4-Dichlorobenzene	0.39	U	5.6	0.39
594-20-7	2,2-Dichloropropane	0.33	U	5.6	0.33
78-93-3	2-Butanone (MEK)	1.8	J	22	1.4
110-75-8	2-Chloroethyl vinyl ether	3.1	U	56	3.1
95-49-8	2-Chlorotoluene	0.41	U	5.6	0.41
591-78-6	2-Hexanone	0.65	U	22	0.65
106-43-4	4-Chlorotoluene	0.27	U	5.6	0.27
99-87-6	p-Isopropyltoluene	0.37	J	5.6	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	0.99	U	22	0.99
67-64-1	Acetone	19	J B	22	3.4
71-43-2	Benzene	0.36	U	5.6	0.36
108-86-1	Bromobenzene	0.30	U	5.6	0.30
75-25-2	Bromoform	0.45	U	5.6	0.45
74-83-9	Bromomethane	0.66	U	5.6	0.66
75-15-0	Carbon disulfide	0.23	U	5.6	0.23
56-23-5	Carbon tetrachloride	0.28	U	5.6	0.28
108-90-7	Chlorobenzene	0.37	U	5.6	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 1410634.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:20

Sample wt/vol: 5.4145(g) | Date Analyzed: 09/13/2017 14:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.33	U	5.6	0.33
75-00-3	Chloroethane	0.42	U	5.6	0.42
67-66-3	Chloroform	0.26	U	5.6	0.26
74-87-3	Chloromethane	0.42	U	5.6	0.42
156-59-2	cis-1,2-Dichloroethene	0.31	U	5.6	0.31
10061-01-5	cis-1,3-Dichloropropene	0.29	U	5.6	0.29
74-95-3	Dibromomethane	0.42	U	5.6	0.42
74-97-5	Bromochloromethane	0.40	U	5.6	0.40
75-71-8	Dichlorodifluoromethane	0.39	U	5.6	0.39
75-27-4	Bromodichloromethane	0.37	U	5.6	0.37
75-65-0	tert-Butyl alcohol	2.7	U	220	2.7
100-41-4	Ethylbenzene	0.30	U	5.6	0.30
87-68-3	Hexachlorobutadiene	0.49	U	5.6	0.49
108-20-3	Diisopropyl ether	0.27	U *	11	0.27
98-82-8	Isopropylbenzene	0.22	U	5.6	0.22
1634-04-4	Methyl tert-butyl ether	0.30	U	5.6	0.30
75-09-2	Methylene Chloride	0.27	U	5.6	0.27
179601-23-1	m-Xylene & p-Xylene	0.45	U	11	0.45
91-20-3	Naphthalene	0.37	U	5.6	0.37
104-51-8	n-Butylbenzene	0.28	U	5.6	0.28
103-65-1	N-Propylbenzene	0.31	U	5.6	0.31
95-47-6	o-Xylene	0.25	U	5.6	0.25
135-98-8	sec-Butylbenzene	0.21	U	5.6	0.21
100-42-5	Styrene	0.30	U	5.6	0.30
994-05-8	Tert-amyl methyl ether	0.23	U	5.6	0.23
637-92-3	Ethyl tert-butyl ether	0.14	U	5.6	0.14
127-18-4	Tetrachloroethene	0.41	U	5.6	0.41
108-88-3	Toluene	0.38	U	5.6	0.38
156-60-5	trans-1,2-Dichloroethene	0.42	U	5.6	0.42
10061-02-6	trans-1,3-Dichloropropene	0.23	U	5.6	0.23
79-01-6	Trichloroethene	0.46	U	5.6	0.46
75-69-4	Trichlorofluoromethane	0.27	U	5.6	0.27
108-05-4	Vinyl acetate	0.97	U	11	0.97
75-01-4	Vinyl chloride	0.31	U	5.6	0.31
1330-20-7	Xylenes, Total	0.45	U	11	0.45
98-06-6	tert-Butylbenzene	0.23	U	5.6	0.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 1410634.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:20

Sample wt/vol: 5.4145(g) | Date Analyzed: 09/13/2017 14:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.39	U	5.6	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		66-125
1868-53-7	Dibromofluoromethane (Surr)	84		43-131
460-00-4	4-Bromofluorobenzene (Surr)	80		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		61-127

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 1410634.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:20

Sample wt/vol: 5.4145(g) | Date Analyzed: 09/13/2017 14:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 67

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
99-82-1	1-Methyl-4-(1-methylethyl)-cyclohexane	10.66	55	T J N	96%
473-19-8	Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-	10.76	12	T J N	96%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.40	U	5.6	0.40
71-55-6	1,1,1-Trichloroethane	0.26	U	5.6	0.26
79-34-5	1,1,2,2-Tetrachloroethane	0.29	U	5.6	0.29
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	U	5.6	0.55
75-34-3	1,1-Dichloroethane	0.37	U	5.6	0.37
75-35-4	1,1-Dichloroethene	0.61	U	5.6	0.61
563-58-6	1,1-Dichloropropene	0.21	U	5.6	0.21
87-61-6	1,2,3-Trichlorobenzene	0.39	U	5.6	0.39
96-18-4	1,2,3-Trichloropropane	0.44	U	5.6	0.44
526-73-8	1,2,3-Trimethylbenzene	0.11	U	5.6	0.11
120-82-1	1,2,4-Trichlorobenzene	0.27	U	5.6	0.27
95-63-6	1,2,4-Trimethylbenzene	0.28	U	5.6	0.28
96-12-8	1,2-Dibromo-3-Chloropropane	0.76	U	11	0.76
95-50-1	1,2-Dichlorobenzene	0.25	U	5.6	0.25
107-06-2	1,2-Dichloroethane	0.33	U	5.6	0.33
78-87-5	1,2-Dichloropropane	0.35	U	5.6	0.35
541-73-1	1,3-Dichlorobenzene	0.33	U	5.6	0.33
142-28-9	1,3-Dichloropropane	0.26	U	5.6	0.26
106-46-7	1,4-Dichlorobenzene	0.39	U	5.6	0.39
594-20-7	2,2-Dichloropropane	0.34	U	5.6	0.34
78-93-3	2-Butanone (MEK)	1.4	U	22	1.4
110-75-8	2-Chloroethyl vinyl ether	3.2	U	56	3.2
95-49-8	2-Chlorotoluene	0.42	U	5.6	0.42
591-78-6	2-Hexanone	0.65	U	22	0.65
106-43-4	4-Chlorotoluene	0.27	U	5.6	0.27
99-87-6	p-Isopropyltoluene	0.20	U	5.6	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	22	1.0
67-64-1	Acetone	3.4	U	22	3.4
71-43-2	Benzene	14		5.6	0.36
108-86-1	Bromobenzene	0.30	U	5.6	0.30
75-25-2	Bromoform	0.45	U	5.6	0.45
74-83-9	Bromomethane	0.66	U	5.6	0.66
75-15-0	Carbon disulfide	0.24	U	5.6	0.24
56-23-5	Carbon tetrachloride	0.28	U	5.6	0.28
108-90-7	Chlorobenzene	0.37	U	5.6	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.34	U	5.6	0.34
75-00-3	Chloroethane	0.43	U	5.6	0.43
67-66-3	Chloroform	0.26	U	5.6	0.26
74-87-3	Chloromethane	0.43	U	5.6	0.43
156-59-2	cis-1,2-Dichloroethene	18		5.6	0.31
10061-01-5	cis-1,3-Dichloropropene	0.29	U	5.6	0.29
74-95-3	Dibromomethane	0.43	U	5.6	0.43
74-97-5	Bromochloromethane	0.40	U	5.6	0.40
75-71-8	Dichlorodifluoromethane	0.39	U	5.6	0.39
75-27-4	Bromodichloromethane	0.37	U	5.6	0.37
75-65-0	tert-Butyl alcohol	2.7	U	220	2.7
100-41-4	Ethylbenzene	0.30	U	5.6	0.30
87-68-3	Hexachlorobutadiene	0.49	U	5.6	0.49
108-20-3	Diisopropyl ether	0.27	U *	11	0.27
98-82-8	Isopropylbenzene	0.22	U	5.6	0.22
1634-04-4	Methyl tert-butyl ether	1.7	J	5.6	0.30
75-09-2	Methylene Chloride	0.27	U	5.6	0.27
179601-23-1	m-Xylene & p-Xylene	0.45	U	11	0.45
91-20-3	Naphthalene	0.37	U	5.6	0.37
104-51-8	n-Butylbenzene	0.28	U	5.6	0.28
103-65-1	N-Propylbenzene	0.31	U	5.6	0.31
95-47-6	o-Xylene	0.53	J	5.6	0.25
135-98-8	sec-Butylbenzene	0.21	U	5.6	0.21
100-42-5	Styrene	0.30	U	5.6	0.30
994-05-8	Tert-amyl methyl ether	0.24	U	5.6	0.24
637-92-3	Ethyl tert-butyl ether	0.15	U	5.6	0.15
127-18-4	Tetrachloroethene	0.42	U	5.6	0.42
108-88-3	Toluene	0.38	U	5.6	0.38
156-60-5	trans-1,2-Dichloroethene	1.3	J	5.6	0.43
10061-02-6	trans-1,3-Dichloropropene	0.24	U	5.6	0.24
79-01-6	Trichloroethene	13		5.6	0.46
75-69-4	Trichlorofluoromethane	0.27	U	5.6	0.27
108-05-4	Vinyl acetate	0.98	U	11	0.98
75-01-4	Vinyl chloride	0.72	J	5.6	0.31
1330-20-7	Xylenes, Total	0.53	J	11	0.45
98-06-6	tert-Butylbenzene	0.24	U	5.6	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.39	U	5.6	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		66-125
1868-53-7	Dibromofluoromethane (Surr)	85		43-131
460-00-4	4-Bromofluorobenzene (Surr)	79		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		61-127

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

Number TICs Found: 1 | TIC Result Total: 9.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
78-78-4	Butane, 2-methyl-	1.70	9.5	T J N	91%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 1410636.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:30

Sample wt/vol: 5.3395(g) | Date Analyzed: 09/13/2017 15:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.40	U	5.6	0.40
71-55-6	1,1,1-Trichloroethane	0.26	U	5.6	0.26
79-34-5	1,1,2,2-Tetrachloroethane	0.29	U	5.6	0.29
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	U	5.6	0.55
75-34-3	1,1-Dichloroethane	0.37	U	5.6	0.37
75-35-4	1,1-Dichloroethene	1.4	J	5.6	0.60
563-58-6	1,1-Dichloropropene	0.21	U	5.6	0.21
87-61-6	1,2,3-Trichlorobenzene	0.39	U	5.6	0.39
96-18-4	1,2,3-Trichloropropane	0.43	U	5.6	0.43
526-73-8	1,2,3-Trimethylbenzene	0.11	U	5.6	0.11
120-82-1	1,2,4-Trichlorobenzene	0.27	U	5.6	0.27
95-63-6	1,2,4-Trimethylbenzene	0.28	U	5.6	0.28
96-12-8	1,2-Dibromo-3-Chloropropane	0.76	U	11	0.76
95-50-1	1,2-Dichlorobenzene	0.24	U	5.6	0.24
107-06-2	1,2-Dichloroethane	0.32	U	5.6	0.32
78-87-5	1,2-Dichloropropane	0.34	U	5.6	0.34
541-73-1	1,3-Dichlorobenzene	0.32	U	5.6	0.32
142-28-9	1,3-Dichloropropane	0.26	U	5.6	0.26
106-46-7	1,4-Dichlorobenzene	0.39	U	5.6	0.39
594-20-7	2,2-Dichloropropane	0.33	U	5.6	0.33
78-93-3	2-Butanone (MEK)	1.4	U	22	1.4
110-75-8	2-Chloroethyl vinyl ether	3.1	U	56	3.1
95-49-8	2-Chlorotoluene	0.41	U	5.6	0.41
591-78-6	2-Hexanone	0.65	U	22	0.65
106-43-4	4-Chlorotoluene	0.27	U	5.6	0.27
99-87-6	p-Isopropyltoluene	0.20	U	5.6	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	0.99	U	22	0.99
67-64-1	Acetone	3.4	U	22	3.4
71-43-2	Benzene	0.36	U	5.6	0.36
108-86-1	Bromobenzene	0.30	U	5.6	0.30
75-25-2	Bromoform	0.45	U	5.6	0.45
74-83-9	Bromomethane	0.66	U	5.6	0.66
75-15-0	Carbon disulfide	0.23	U	5.6	0.23
56-23-5	Carbon tetrachloride	0.28	U	5.6	0.28
108-90-7	Chlorobenzene	0.37	U	5.6	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 1410636.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:30

Sample wt/vol: 5.3395(g) | Date Analyzed: 09/13/2017 15:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.33	U	5.6	0.33
75-00-3	Chloroethane	0.42	U	5.6	0.42
67-66-3	Chloroform	0.26	U	5.6	0.26
74-87-3	Chloromethane	0.42	U	5.6	0.42
156-59-2	cis-1,2-Dichloroethene	47		5.6	0.31
10061-01-5	cis-1,3-Dichloropropene	0.29	U	5.6	0.29
74-95-3	Dibromomethane	0.42	U	5.6	0.42
74-97-5	Bromochloromethane	0.40	U	5.6	0.40
75-71-8	Dichlorodifluoromethane	0.39	U	5.6	0.39
75-27-4	Bromodichloromethane	0.37	U	5.6	0.37
75-65-0	tert-Butyl alcohol	2.6	U	220	2.6
100-41-4	Ethylbenzene	0.30	U	5.6	0.30
87-68-3	Hexachlorobutadiene	0.49	U	5.6	0.49
108-20-3	Diisopropyl ether	0.27	U *	11	0.27
98-82-8	Isopropylbenzene	0.22	U	5.6	0.22
1634-04-4	Methyl tert-butyl ether	0.30	U	5.6	0.30
75-09-2	Methylene Chloride	0.27	U	5.6	0.27
179601-23-1	m-Xylene & p-Xylene	0.45	U	11	0.45
91-20-3	Naphthalene	0.37	U	5.6	0.37
104-51-8	n-Butylbenzene	0.28	U	5.6	0.28
103-65-1	N-Propylbenzene	0.31	U	5.6	0.31
95-47-6	o-Xylene	0.24	U	5.6	0.24
135-98-8	sec-Butylbenzene	0.21	U	5.6	0.21
100-42-5	Styrene	0.30	U	5.6	0.30
994-05-8	Tert-amyl methyl ether	0.23	U	5.6	0.23
637-92-3	Ethyl tert-butyl ether	0.14	U	5.6	0.14
127-18-4	Tetrachloroethene	0.41	U	5.6	0.41
108-88-3	Toluene	0.38	U	5.6	0.38
156-60-5	trans-1,2-Dichloroethene	1.9	J	5.6	0.42
10061-02-6	trans-1,3-Dichloropropene	0.23	U	5.6	0.23
79-01-6	Trichloroethene	8.9		5.6	0.46
75-69-4	Trichlorofluoromethane	0.27	U	5.6	0.27
108-05-4	Vinyl acetate	0.97	U	11	0.97
75-01-4	Vinyl chloride	2.1	J	5.6	0.31
1330-20-7	Xylenes, Total	0.45	U	11	0.45
98-06-6	tert-Butylbenzene	0.23	U	5.6	0.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 1410636.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:30

Sample wt/vol: 5.3395(g) | Date Analyzed: 09/13/2017 15:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.39	U	5.6	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	74		66-125
1868-53-7	Dibromofluoromethane (Surr)	86		43-131
460-00-4	4-Bromofluorobenzene (Surr)	81		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		61-127

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 1410636.D

Analysis Method: 8260C | Date Collected: 09/10/2017 13:30

Sample wt/vol: 5.3395(g) | Date Analyzed: 09/13/2017 15:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: 70918131.D

Analysis Method: 8270D | Date Collected: 09/10/2017 13:40

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 29.92(g) | Date Analyzed: 09/18/2017 22:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.1	U	59	4.1
108-60-1	2,2'-oxybis[1-chloropropane]	11	U	120	11
95-95-4	2,4,5-Trichlorophenol	29	U	180	29
88-06-2	2,4,6-Trichlorophenol	10	U	180	10
120-83-2	2,4-Dichlorophenol	23	U	180	23
105-67-9	2,4-Dimethylphenol	23	U	180	23
51-28-5	2,4-Dinitrophenol	25	U	390	25
121-14-2	2,4-Dinitrotoluene	20	U	230	20
606-20-2	2,6-Dinitrotoluene	25	U	230	25
91-58-7	2-Chloronaphthalene	0.53	U	59	0.53
95-57-8	2-Chlorophenol	9.6	U	59	9.6
91-57-6	2-Methylnaphthalene	0.59	U	7.8	0.59
95-48-7	2-Methylphenol	13	U	230	13
88-74-4	2-Nitroaniline	11	U	230	11
88-75-5	2-Nitrophenol	9.7	U	59	9.7
91-94-1	3,3'-Dichlorobenzidine	21	U	120	21
99-09-2	3-Nitroaniline	19	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	11	U	180	11
101-55-3	4-Bromophenyl phenyl ether	15	U	59	15
123-91-1	1,4-Dioxane	26	U	120	26
59-50-7	4-Chloro-3-methylphenol	25	U	180	25
106-47-8	4-Chloroaniline	20	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	15	U	59	15
100-01-6	4-Nitroaniline	31	U	230	31
100-02-7	4-Nitrophenol	20	U	390	20
83-32-9	Acenaphthene	0.89	U	7.8	0.89
208-96-8	Acenaphthylene	0.41	U	7.8	0.41
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.92	U	7.8	0.92
1912-24-9	Atrazine	11	U	230	11
100-52-7	Benzaldehyde	14	U	120	14
56-55-3	Benzo[a]anthracene	0.74	U	7.8	0.74
50-32-8	Benzo[a]pyrene	0.75	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	0.69	U	7.8	0.69

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: 70918131.D

Analysis Method: 8270D | Date Collected: 09/10/2017 13:40

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 29.92(g) | Date Analyzed: 09/18/2017 22:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	0.41	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	0.80	U	7.8	0.80
111-91-1	Bis(2-chloroethoxy)methane	26	U	120	26
111-44-4	Bis(2-chloroethyl)ether	2.3	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	22	U	82	22
85-68-7	Butyl benzyl phthalate	12	U	82	12
105-60-2	Caprolactam	43	U	390	43
86-74-8	Carbazole	32	U	59	32
218-01-9	Chrysene	1.3	U	7.8	1.3
53-70-3	Dibenz(a,h)anthracene	0.78	U	7.8	0.78
132-64-9	Dibenzofuran	0.78	U	59	0.78
84-66-2	Diethyl phthalate	19	U	82	19
131-11-3	Dimethyl phthalate	20	U	82	20
84-74-2	Di-n-butyl phthalate	18	U	82	18
117-84-0	Di-n-octyl phthalate	9.3	U	82	9.3
206-44-0	Fluoranthene	0.65	U	7.8	0.65
86-73-7	Fluorene	0.62	U	7.8	0.62
118-74-1	Hexachlorobenzene	2.5	U	7.8	2.5
87-68-3	Hexachlorobutadiene	6.6	U	59	6.6
77-47-4	Hexachlorocyclopentadiene	9.5	U	390	9.5
67-72-1	Hexachloroethane	11	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.41	U	7.8	0.41
78-59-1	Isophorone	15	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	7.4	U	59	7.4
86-30-6	N-Nitrosodiphenylamine	25	U	59	25
91-20-3	Naphthalene	0.96	U	7.8	0.96
98-95-3	Nitrobenzene	2.6	U	120	2.6
87-86-5	Pentachlorophenol	11	U	180	11
85-01-8	Phenanthrene	0.86	U	7.8	0.86
108-95-2	Phenol	8.6	U	59	8.6
129-00-0	Pyrene	0.52	U	7.8	0.52
15831-10-4	3 & 4 Methylphenol	23	U	470	23
62-75-9	N-Nitrosodimethylamine	19	U	120	19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: 70918131.D

Analysis Method: 8270D | Date Collected: 09/10/2017 13:40

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 29.92(g) | Date Analyzed: 09/18/2017 22:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	110		41-120
4165-62-2	Phenol-d5 (Surr)	78		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	73		30-120
367-12-4	2-Fluorophenol (Surr)	83		29-120
321-60-8	2-Fluorobiphenyl (Surr)	86		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	59		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 70918128.D

Analysis Method: 8270D | Date Collected: 09/09/2017 14:20

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.16(g) | Date Analyzed: 09/18/2017 21:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.2	U	60	4.2
108-60-1	2,2'-oxybis[1-chloropropane]	11	U	120	11
95-95-4	2,4,5-Trichlorophenol	30	U	180	30
88-06-2	2,4,6-Trichlorophenol	11	U	180	11
120-83-2	2,4-Dichlorophenol	24	U	180	24
105-67-9	2,4-Dimethylphenol	24	U	180	24
51-28-5	2,4-Dinitrophenol	25	U	400	25
121-14-2	2,4-Dinitrotoluene	20	U	240	20
606-20-2	2,6-Dinitrotoluene	25	U	240	25
91-58-7	2-Chloronaphthalene	0.54	U	60	0.54
95-57-8	2-Chlorophenol	9.9	U	60	9.9
91-57-6	2-Methylnaphthalene	0.60	U	8.0	0.60
95-48-7	2-Methylphenol	13	U	240	13
88-74-4	2-Nitroaniline	11	U	240	11
88-75-5	2-Nitrophenol	10	U	60	10
91-94-1	3,3'-Dichlorobenzidine	22	U	120	22
99-09-2	3-Nitroaniline	19	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	11	U	180	11
101-55-3	4-Bromophenyl phenyl ether	16	U	60	16
123-91-1	1,4-Dioxane	26	U	120	26
59-50-7	4-Chloro-3-methylphenol	25	U	180	25
106-47-8	4-Chloroaniline	20	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	16	U	60	16
100-01-6	4-Nitroaniline	31	U	240	31
100-02-7	4-Nitrophenol	20	U	400	20
83-32-9	Acenaphthene	0.91	U	8.0	0.91
208-96-8	Acenaphthylene	0.42	U	8.0	0.42
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.94	U	8.0	0.94
1912-24-9	Atrazine	11	U	240	11
100-52-7	Benzaldehyde	14	U	120	14
56-55-3	Benzo[a]anthracene	0.76	U	8.0	0.76
50-32-8	Benzo[a]pyrene	0.77	U	8.0	0.77
205-99-2	Benzo[b]fluoranthene	0.71	U	8.0	0.71

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 70918128.D

Analysis Method: 8270D | Date Collected: 09/09/2017 14:20

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.16(g) | Date Analyzed: 09/18/2017 21:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	0.42	U	8.0	0.42
207-08-9	Benzo[k]fluoranthene	0.82	U	8.0	0.82
111-91-1	Bis(2-chloroethoxy)methane	26	U	120	26
111-44-4	Bis(2-chloroethyl)ether	2.4	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	23	U	84	23
85-68-7	Butyl benzyl phthalate	12	U	84	12
105-60-2	Caprolactam	44	U	400	44
86-74-8	Carbazole	32	U	60	32
218-01-9	Chrysene	1.3	U	8.0	1.3
53-70-3	Dibenz(a,h)anthracene	0.79	U	8.0	0.79
132-64-9	Dibenzofuran	0.79	U	60	0.79
84-66-2	Diethyl phthalate	19	U	84	19
131-11-3	Dimethyl phthalate	20	U	84	20
84-74-2	Di-n-butyl phthalate	18	U	84	18
117-84-0	Di-n-octyl phthalate	9.5	U	84	9.5
206-44-0	Fluoranthene	0.66	U	8.0	0.66
86-73-7	Fluorene	0.64	U	8.0	0.64
118-74-1	Hexachlorobenzene	2.5	U	8.0	2.5
87-68-3	Hexachlorobutadiene	6.7	U	60	6.7
77-47-4	Hexachlorocyclopentadiene	9.7	U	400	9.7
67-72-1	Hexachloroethane	11	U	60	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.42	U	8.0	0.42
78-59-1	Isophorone	16	U	60	16
621-64-7	N-Nitrosodi-n-propylamine	7.6	U	60	7.6
86-30-6	N-Nitrosodiphenylamine	25	U	60	25
91-20-3	Naphthalene	0.99	U	8.0	0.99
98-95-3	Nitrobenzene	2.6	U	120	2.6
87-86-5	Pentachlorophenol	11	U	180	11
85-01-8	Phenanthrene	0.88	U	8.0	0.88
108-95-2	Phenol	8.8	U	60	8.8
129-00-0	Pyrene	0.53	U	8.0	0.53
15831-10-4	3 & 4 Methylphenol	24	U	480	24
62-75-9	N-Nitrosodimethylamine	19	U	120	19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: 70918128.D

Analysis Method: 8270D | Date Collected: 09/09/2017 14:20

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.16(g) | Date Analyzed: 09/18/2017 21:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	114		41-120
4165-62-2	Phenol-d5 (Surr)	79		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	66		30-120
367-12-4	2-Fluorophenol (Surr)	81		29-120
321-60-8	2-Fluorobiphenyl (Surr)	85		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	81		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 70918129.D

Analysis Method: 8270D | Date Collected: 09/09/2017 14:40

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.39(g) | Date Analyzed: 09/18/2017 22:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.4	U	62	4.4
108-60-1	2,2'-oxybis[1-chloropropane]	12	U	120	12
95-95-4	2,4,5-Trichlorophenol	31	U	190	31
88-06-2	2,4,6-Trichlorophenol	11	U	190	11
120-83-2	2,4-Dichlorophenol	25	U	190	25
105-67-9	2,4-Dimethylphenol	25	U	190	25
51-28-5	2,4-Dinitrophenol	26	U	410	26
121-14-2	2,4-Dinitrotoluene	21	U	250	21
606-20-2	2,6-Dinitrotoluene	26	U	250	26
91-58-7	2-Chloronaphthalene	0.56	U	62	0.56
95-57-8	2-Chlorophenol	10	U	62	10
91-57-6	2-Methylnaphthalene	0.62	U	8.3	0.62
95-48-7	2-Methylphenol	14	U	250	14
88-74-4	2-Nitroaniline	11	U	250	11
88-75-5	2-Nitrophenol	10	U	62	10
91-94-1	3,3'-Dichlorobenzidine	22	U	120	22
99-09-2	3-Nitroaniline	20	U	250	20
534-52-1	4,6-Dinitro-2-methylphenol	11	U	190	11
101-55-3	4-Bromophenyl phenyl ether	16	U	62	16
123-91-1	1,4-Dioxane	27	U	120	27
59-50-7	4-Chloro-3-methylphenol	26	U	190	26
106-47-8	4-Chloroaniline	21	U	190	21
7005-72-3	4-Chlorophenyl phenyl ether	16	U	62	16
100-01-6	4-Nitroaniline	32	U	250	32
100-02-7	4-Nitrophenol	21	U	410	21
83-32-9	Acenaphthene	0.95	U	8.3	0.95
208-96-8	Acenaphthylene	0.44	U	8.3	0.44
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.97	U	8.3	0.97
1912-24-9	Atrazine	11	U	250	11
100-52-7	Benzaldehyde	15	U	120	15
56-55-3	Benzo[a]anthracene	0.78	U	8.3	0.78
50-32-8	Benzo[a]pyrene	0.80	U	8.3	0.80
205-99-2	Benzo[b]fluoranthene	0.73	U	8.3	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 70918129.D

Analysis Method: 8270D | Date Collected: 09/09/2017 14:40

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.39(g) | Date Analyzed: 09/18/2017 22:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	0.44	U	8.3	0.44
207-08-9	Benzo[k]fluoranthene	0.85	U	8.3	0.85
111-91-1	Bis(2-chloroethoxy)methane	27	U	120	27
111-44-4	Bis(2-chloroethyl)ether	2.5	U	120	2.5
117-81-7	Bis(2-ethylhexyl) phthalate	24	U	87	24
85-68-7	Butyl benzyl phthalate	12	U	87	12
105-60-2	Caprolactam	46	U	410	46
86-74-8	Carbazole	34	U	62	34
218-01-9	Chrysene	1.4	U	8.3	1.4
53-70-3	Dibenz(a,h)anthracene	0.82	U	8.3	0.82
132-64-9	Dibenzofuran	0.82	U	62	0.82
84-66-2	Diethyl phthalate	20	U	87	20
131-11-3	Dimethyl phthalate	21	U	87	21
84-74-2	Di-n-butyl phthalate	19	U	87	19
117-84-0	Di-n-octyl phthalate	9.8	U	87	9.8
206-44-0	Fluoranthene	0.69	U	8.3	0.69
86-73-7	Fluorene	0.66	U	8.3	0.66
118-74-1	Hexachlorobenzene	2.6	U	8.3	2.6
87-68-3	Hexachlorobutadiene	7.0	U	62	7.0
77-47-4	Hexachlorocyclopentadiene	10	U	410	10
67-72-1	Hexachloroethane	11	U	62	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.44	U	8.3	0.44
78-59-1	Isophorone	16	U	62	16
621-64-7	N-Nitrosodi-n-propylamine	7.8	U	62	7.8
86-30-6	N-Nitrosodiphenylamine	26	U	62	26
91-20-3	Naphthalene	1.0	U	8.3	1.0
98-95-3	Nitrobenzene	2.7	U	120	2.7
87-86-5	Pentachlorophenol	11	U	190	11
85-01-8	Phenanthrene	0.91	U	8.3	0.91
108-95-2	Phenol	9.1	U	62	9.1
129-00-0	Pyrene	0.55	U	8.3	0.55
15831-10-4	3 & 4 Methylphenol	25	U	500	25
62-75-9	N-Nitrosodimethylamine	20	U	120	20

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 70918129.D

Analysis Method: 8270D | Date Collected: 09/09/2017 14:40

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.39(g) | Date Analyzed: 09/18/2017 22:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	109		41-120
4165-62-2	Phenol-d5 (Surr)	74		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	65		30-120
367-12-4	2-Fluorophenol (Surr)	77		29-120
321-60-8	2-Fluorobiphenyl (Surr)	93		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	69		10-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 70918130.D

Analysis Method: 8270D | Date Collected: 09/10/2017 13:30

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.38(g) | Date Analyzed: 09/18/2017 22:28

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	4.1	U	59	4.1
108-60-1	2,2'-oxybis[1-chloropropane]	11	U	120	11
95-95-4	2,4,5-Trichlorophenol	29	U	180	29
88-06-2	2,4,6-Trichlorophenol	10	U	180	10
120-83-2	2,4-Dichlorophenol	23	U	180	23
105-67-9	2,4-Dimethylphenol	23	U	180	23
51-28-5	2,4-Dinitrophenol	25	U	390	25
121-14-2	2,4-Dinitrotoluene	20	U	230	20
606-20-2	2,6-Dinitrotoluene	25	U	230	25
91-58-7	2-Chloronaphthalene	0.53	U	59	0.53
95-57-8	2-Chlorophenol	9.6	U	59	9.6
91-57-6	2-Methylnaphthalene	0.59	U	7.8	0.59
95-48-7	2-Methylphenol	13	U	230	13
88-74-4	2-Nitroaniline	11	U	230	11
88-75-5	2-Nitrophenol	9.7	U	59	9.7
91-94-1	3,3'-Dichlorobenzidine	21	U	120	21
99-09-2	3-Nitroaniline	19	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	11	U	180	11
101-55-3	4-Bromophenyl phenyl ether	15	U	59	15
123-91-1	1,4-Dioxane	26	U	120	26
59-50-7	4-Chloro-3-methylphenol	25	U	180	25
106-47-8	4-Chloroaniline	20	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	15	U	59	15
100-01-6	4-Nitroaniline	31	U	230	31
100-02-7	4-Nitrophenol	20	U	390	20
83-32-9	Acenaphthene	0.89	U	7.8	0.89
208-96-8	Acenaphthylene	0.41	U	7.8	0.41
98-86-2	Acetophenone	11	U	120	11
120-12-7	Anthracene	0.92	U	7.8	0.92
1912-24-9	Atrazine	11	U	230	11
100-52-7	Benzaldehyde	14	U	120	14
56-55-3	Benzo[a]anthracene	0.74	U	7.8	0.74
50-32-8	Benzo[a]pyrene	0.75	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	0.69	U	7.8	0.69

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 70918130.D

Analysis Method: 8270D | Date Collected: 09/10/2017 13:30

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.38(g) | Date Analyzed: 09/18/2017 22:28

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	0.41	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	0.80	U	7.8	0.80
111-91-1	Bis(2-chloroethoxy)methane	26	U	120	26
111-44-4	Bis(2-chloroethyl)ether	2.3	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	22	U	82	22
85-68-7	Butyl benzyl phthalate	12	U	82	12
105-60-2	Caprolactam	43	U	390	43
86-74-8	Carbazole	32	U	59	32
218-01-9	Chrysene	1.3	U	7.8	1.3
53-70-3	Dibenz(a,h)anthracene	0.77	U	7.8	0.77
132-64-9	Dibenzofuran	0.77	U	59	0.77
84-66-2	Diethyl phthalate	19	U	82	19
131-11-3	Dimethyl phthalate	20	U	82	20
84-74-2	Di-n-butyl phthalate	18	U	82	18
117-84-0	Di-n-octyl phthalate	9.3	U	82	9.3
206-44-0	Fluoranthene	0.65	U	7.8	0.65
86-73-7	Fluorene	0.62	U	7.8	0.62
118-74-1	Hexachlorobenzene	2.5	U	7.8	2.5
87-68-3	Hexachlorobutadiene	6.6	U	59	6.6
77-47-4	Hexachlorocyclopentadiene	9.5	U	390	9.5
67-72-1	Hexachloroethane	11	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	0.41	U	7.8	0.41
78-59-1	Isophorone	15	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	7.4	U	59	7.4
86-30-6	N-Nitrosodiphenylamine	25	U	59	25
91-20-3	Naphthalene	0.96	U	7.8	0.96
98-95-3	Nitrobenzene	2.6	U	120	2.6
87-86-5	Pentachlorophenol	11	U	180	11
85-01-8	Phenanthrene	0.86	U	7.8	0.86
108-95-2	Phenol	8.6	U	59	8.6
129-00-0	Pyrene	0.52	U	7.8	0.52
15831-10-4	3 & 4 Methylphenol	23	U	470	23
62-75-9	N-Nitrosodimethylamine	19	U	120	19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: 70918130.D

Analysis Method: 8270D | Date Collected: 09/10/2017 13:30

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30.38(g) | Date Analyzed: 09/18/2017 22:28

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295228 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	115		41-120
4165-62-2	Phenol-d5 (Surr)	77		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	72		30-120
367-12-4	2-Fluorophenol (Surr)	80		29-120
321-60-8	2-Fluorobiphenyl (Surr)	85		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	70		10-120

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: P5R092222.D

Analysis Method: 8015D | Date Collected: 09/10/2017 13:40

Extraction Method: 3546 | Date Extracted: 09/21/2017 14:40

Sample wt/vol: 9.94(g) | Date Analyzed: 09/23/2017 00:12

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 14.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295958 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	18	U	59	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	73		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: P5R092219.D

Analysis Method: 8015D | Date Collected: 09/09/2017 14:20

Extraction Method: 3546 | Date Extracted: 09/21/2017 14:40

Sample wt/vol: 10.02(g) | Date Analyzed: 09/22/2017 22:50

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295958 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	25	J	60	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	70		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: P5R092220.D

Analysis Method: 8015D | Date Collected: 09/09/2017 14:40

Extraction Method: 3546 | Date Extracted: 09/21/2017 14:40

Sample wt/vol: 9.98(g) | Date Analyzed: 09/22/2017 23:17

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 20.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295958 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	29	J	63	19

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	63		26-125

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: P5R092221.D

Analysis Method: 8015D | Date Collected: 09/10/2017 13:30

Extraction Method: 3546 | Date Extracted: 09/21/2017 14:40

Sample wt/vol: 9.93(g) | Date Analyzed: 09/22/2017 23:44

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295958 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	18	U	60	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	71		26-125

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-117B-47-50' | Lab Sample ID: 240-84819-4

Matrix: Solid | Lab File ID: Y0913012.D

Analysis Method: 8015D | Date Collected: 09/10/2017 13:40

Sample wt/vol: 4.99(g) | Date Analyzed: 09/13/2017 13:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.6 | Level: (low/med) Low

Analysis Batch No.: 294581 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	14	U	120	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	46		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: Y0913009.D

Analysis Method: 8015D | Date Collected: 09/09/2017 14:20

Sample wt/vol: 4.97(g) | Date Analyzed: 09/13/2017 11:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 294581 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	140		120	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	80		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: Y0913010.D

Analysis Method: 8015D | Date Collected: 09/09/2017 14:40

Sample wt/vol: 4.95(g) | Date Analyzed: 09/13/2017 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294581 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	67	J	130	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	74		43-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-131B-33-35' | Lab Sample ID: 240-84819-3

Matrix: Solid | Lab File ID: Y0915008.D

Analysis Method: 8015D | Date Collected: 09/10/2017 13:30

Sample wt/vol: 5.06(g) | Date Analyzed: 09/15/2017 16:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 294931 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	31	J	120	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		43-120

APPENDIX C

SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: LM MRC

Report Number: 240-84819-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 9/12/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3) and SB-117B-47-50' (240-84819-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were prepared and analyzed on 09/13/2017.

Acetone was detected in method blank MB 240-294629/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The continuing calibration verification (CCV) analyzed in batch 240-294629 was outside the method criteria for the following analytes: Pentachloroethane and Acetonitrile. An MRL standard at or below the reporting limit (RL) was analyzed with the affected samples SB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3), SB-117B-47-50' (240-84819-4), (CCV 240-294629/4), (CCVIS 240-294629/3), (LCS 240-294629/5), (LCS 240-294629/6) and (MB 240-294629/7) and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) for preparation batch 240-294658 and analytical batch 240-294629 recovered outside control limits for the following analytes: Isopropyl Ether. These analytes were biased high in the LCS and were not detected in the associated samplesSB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3), SB-117B-47-50' (240-84819-4), (LCS 240-294629/5), (LCS 240-294629/6) and (MB 240-294629/7) ; therefore, the data have been reported.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3) and SB-117B-47-50' (240-84819-4) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/14/2017 and analyzed on 09/18/2017.

The continuing calibration verification (CCV) associated with batch 240-295100 recovered above the upper control limit for Dibenz(a,h)anthracene. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. The following sample is impacted: (MB 240-294797/23-A).

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

GASOLINE RANGE ORGANICS (GRO)

Samples SB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3) and SB-117B-47-50' (240-84819-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were prepared and analyzed on 09/13/2017 and 09/15/2017.

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

DEISEL RANGE ORGANICS

Samples SB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3) and SB-117B-47-50' (240-84819-4) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015D-DRO. The samples were prepared on 09/21/2017 and analyzed on 09/22/2017 and 09/23/2017.

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

PERCENT SOLIDS

Samples SB-119A-10-12.5' (240-84819-1), SB-119B-56-58' (240-84819-2), SB-117A-33-35' (240-84819-3) and SB-117B-47-50' (240-84819-4) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 09/13/2017.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	LCS or LCSD is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Tetra Tech, Inc.
Project/Site: LM MRC

TestAmerica Job ID: 240-84819-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015D	Gasoline Range Organics (GRO) (GC)	SW846	TAL CAN
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: LM MRC

TestAmerica Job ID: 240-84819-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-84819-1	SB-119A-10-12.5'	Solid	09/09/17 14:20	09/12/17 09:30
240-84819-2	SB-119B-56-58'	Solid	09/09/17 14:40	09/12/17 09:30
240-84819-3	~~SB-117A-33-35'~~ SB-131B-33-35'	Solid	09/10/17 13:30	09/12/17 09:30
240-84819-4	SB-117B-47-50'	Solid	09/10/17 13:40	09/12/17 09:30

JAS 2/13/18

TestAmerica Canton
4101 Shuffel Street, N. H.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

180325 1.4/1.4

Chain of Custody Record

162561

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

BALTIMORE

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tony Apanavage	Site Contact: Walter O'Neill	Date:	COC No:
Company Name: Tetra Tech	Tel/Fax: 301-233-8230	Lab Contact: Ken Ivy	Carrier:	1 of 1 COCs
Address: 20251 Century Blvd # 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown, MD 20874	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-5552	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: MRC	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO# 112IC08109	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs 8260C	SVOCs including 8270D SIM	TPH-DRO/GRO 8015D	Sample Specific Notes:
SB-119A-10-12.5'	09/09/17	1420	G	S	3	N	N	X	X	X	
SB-119B-56-58'	09/09/17	1440	"	"	"	N	N	X	X	X	
SB-117A-33-35'	09/10/17	1330	"	"	"	N	N	X	X	X	
SB-117B-47-50'	09/10/17	1346	"	"	"	N	N	X	X	X	
SB-122A-13-15'	09/10/17	1350	"	"	"	N	N	X	X	X	HOLD SB-122A-13-15' Call Tony Apanavage before analyzing

240-84819 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Walter O'Neill	Tetratech	9/10/17 1525		TAKA	9/11/17 1525
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	9-10-2017/1610		TH	9/12/17 930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 64819**

Canton Facility

Client TetraTech Site Name _____ Cooler unpacked by:

Cooler Received on 9/12/17 Opened on 9/12/17

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **+0** °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C

IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No) NA
-Were tamper/custody seals intact and uncompromised?	Yes	No (NA)
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels be reconciled with the COC?	(Yes)	No
9. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
10. Sufficient quantity received to perform indicated analyses?	(Yes)	No
11. Are these work share samples?	Yes	(No)
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	Yes	(No)
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No (NA)
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	(No)
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

_____

_____

_____

_____

_____

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: BFB14504.D BFB Injection Date: 02/16/2017

Instrument ID: A3UX14 BFB Injection Time: 12:47

Analysis Batch No.: 267227

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.3	
75	30.0 - 60.0 % of mass 95	56.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	72.6	
175	5.0 - 9.0 % of mass 174	5.5	(7.6) 1
176	95.0 - 101.0 % of mass 174	72.5	(99.8) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-267227/4	1406885.D	02/16/2017	13:51
	IC 240-267227/5	1406886.D	02/16/2017	14:12
	IC 240-267227/6	1406887.D	02/16/2017	14:34
	IC 240-267227/7	1406888.D	02/16/2017	14:56
	IC 240-267227/8	1406889.D	02/16/2017	15:17
	IC 240-267227/9	1406890.D	02/16/2017	15:39
	IC 240-267227/10	1406891.D	02/16/2017	16:00
	IC 240-267227/11	1406892.D	02/16/2017	16:22
	IC 240-267227/12	1406893.D	02/16/2017	16:43

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 267227

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/16/2017 13:51 Calibration End Date: 02/16/2017 16:43 Calibration ID: 38384

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-267227/12	1406893.D
Level 2	IC 240-267227/11	1406892.D
Level 3	IC 240-267227/10	1406891.D
Level 4	IC 240-267227/9	1406890.D
Level 5	IC 240-267227/8	1406889.D
Level 6	IC 240-267227/7	1406888.D
Level 7	IC 240-267227/6	1406887.D
Level 8	IC 240-267227/5	1406886.D
Level 9	IC 240-267227/4	1406885.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Acetonitrile	0.0408 0.0376	0.0330 0.0364	0.0328 0.0348	0.0425 0.0347	0.0372	Ave		0.0366				9.0		20.0			
2-Chloro-1,3-butadiene	0.3511 0.5028	0.3391 0.5270	0.4230 0.5162	0.4229 0.5481	0.4572	Ave		0.4541				16.7		20.0			
Diisopropyl ether	0.2213 0.2567	0.2094 0.2605	0.2415 0.2570	0.2381 0.2636	0.2438	Ave		0.2435				7.6		20.0			
Ethyl tert-butyl ether	0.7877 0.9542	0.7496 0.9620	0.8456 0.9383	0.8677 0.9693	0.9053	Ave		0.8866				9.0		20.0			
Propionitrile	0.0387 0.0393	0.0342 0.0392	0.0380 0.0407	0.0388 0.0388	0.0376	Ave		0.0384				4.6		20.0			
Ethyl acetate	0.3292 0.3021	0.2910 0.3081	0.2890 0.3305	0.2935 0.3129	0.2988	Ave		0.3061				5.1		20.0			
Methacrylonitrile	0.1908 0.2021	0.1780 0.2042	0.1907 0.2048	0.1958 0.1954	0.1959	Ave		0.1953				4.3		20.0			
Tert-amyl methyl ether	0.7448 0.9432	0.6776 0.9505	0.7957 0.9576	0.8199 0.9627	0.8630	Ave		0.8572				12.2		20.0			
n-Butanol	0.0107 0.0111	0.0077 0.0119	0.0080 0.0131	0.0086 0.0125	0.0094	Ave		0.0103				19.4		20.0			
Ethyl acrylate	0.2887 0.3411	0.2657 0.3581	0.2920 0.4011	0.2996 0.3723	0.3282	Ave		0.3274				13.6		20.0			
Methyl methacrylate	0.2518 0.2806	0.2083 0.2899	0.2389 0.3100	0.2553 0.2892	0.2670	Ave		0.2657				11.6		20.0			
2-Nitropropane	+++++ 0.0653	+++++ 0.0747	0.0431 0.0896	0.0540 +++++	0.0506	Qua	-0.290	0.0612	0.0000729						1.0000		0.9900
n-Butyl acetate	+++++ 0.6727	0.7146 0.6926	0.5851 0.7420	0.6063 0.7199	0.6308	Ave		0.6705				8.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 267227

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/16/2017 13:51 Calibration End Date: 02/16/2017 16:43 Calibration ID: 38384

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Chlorohexane	0.4503 0.4844	0.3680 0.5115	0.4245 0.5150	0.4284 0.5292	0.4545	Ave		0.4629				11.3		20.0			
Cyclohexanone	+++++ 0.0135	0.0122 0.0138	0.0118 0.0151	0.0132 0.0149	0.0123	Ave		0.0134				9.2		20.0			
Pentachloroethane	+++++ 0.3428	0.1906 0.4216	0.2222 +++++	0.2390 +++++	0.2364	Qua	-0.737	0.2577	0.0008416						0.9990		0.9900
1,2,3-Trimethylbenzene	+++++ 2.9632	+++++ 3.1741	2.5199 3.1045	2.6360 3.2332	2.8428	Ave		2.9248				9.3		20.0			
Benzyl chloride	+++++ 0.1740	0.0656 0.2430	0.0856 +++++	0.0828 +++++	0.1111	Qua	-0.221	0.1049	0.0014059						1.0000		0.9900
1,3,5-Trichlorobenzene	1.1452 1.3471	1.1543 1.4499	1.2758 1.4330	1.2631 1.5669	1.3243	Ave		1.3288				10.4		20.0			
2-Methylnaphthalene	+++++ 2.3641	+++++ 2.4762	1.6102 2.4541	1.8350 +++++	2.0965	Ave		2.1394				16.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 267227

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/16/2017 13:51 Calibration End Date: 02/16/2017 16:43 Calibration ID: 38384

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-267227/12	1406893.D
Level 2	IC 240-267227/11	1406892.D
Level 3	IC 240-267227/10	1406891.D
Level 4	IC 240-267227/9	1406890.D
Level 5	IC 240-267227/8	1406889.D
Level 6	IC 240-267227/7	1406888.D
Level 7	IC 240-267227/6	1406887.D
Level 8	IC 240-267227/5	1406886.D
Level 9	IC 240-267227/4	1406885.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Acetonitrile	FB	Ave	10402 545583	18214 1096684	43915 2046964	105942 2632545	204166	10.0 500	20.0 1000	50.0 2000	100 2500	200
2-Chloro-1,3-butadiene	FB	Ave	8958 728786	18722 1586106	56687 3038935	105542 4160939	250879	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Diisopropyl ether	FB	Ave	5646 372074	11563 783930	32360 1512864	59421 2001354	133788	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl tert-butyl ether	FB	Ave	20099 1383237	41390 2895506	113317 5523771	216549 7357988	496755	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Propionitrile	FB	Ave	9870 569787	18902 1180485	50925 2395449	96859 2946604	206339	10.0 500	20.0 1000	50.0 2000	100 2500	200
Ethyl acetate	FB	Ave	16798 875805	32137 1854737	77456 3891358	146497 4750772	327951	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Methacrylonitrile	FB	Ave	48694 2929941	98311 6145785	255567 12058250	488530 14832171	1075053	10.0 500	20.0 1000	50.0 2000	100 2500	200
Tert-amyl methyl ether	FB	Ave	19004 1367208	37417 2860918	106639 5636977	204613 7307934	473556	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butanol	CBNZ d5	Ave	4092 228051	6061 513814	15149 1171051	31674 1341988	73970	25.0 1250	50.0 2500	125 5000	250 6250	500
Ethyl acrylate	FB	Ave	7367 494445	14673 1077971	39136 2361355	74774 2826252	180114	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl methacrylate	FB	Ave	12851 813502	23001 1745233	64025 3649311	127439 4390649	293032	2.00 100	4.00 200	10.0 400	20.0 500	40.0
2-Nitropropane	FB	Qua	+++++ 189297	+++++ 449951	11560 1054801	26944 +++++	55481	+++++ 100	+++++ 200	10.0 400	20.0 +++++	40.0
n-Butyl acetate	CBNZ d5	Ave	+++++ 551362	22520 1192733	44431 2652332	89688 3089583	198099	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
1-Chlorohexane	CBNZ d5	Ave	6912 397029	11599 880936	32235 1840998	63368 2271268	142748	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 267227

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/16/2017 13:51 Calibration End Date: 02/16/2017 16:43 Calibration ID: 38384

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Cyclohexanone	CBNZ d5	Ave	+++++ 110920	3850 236915	8984 540032	19535 640768	38518	+++++ 500	20.0 1000	50.0 2000	100 2500	200
Pentachloroethane	DCBd 4	Qua	+++++ 274529	5593 692211	15547 +++++	35685 +++++	72409	+++++ 100	4.00 200	10.0 +++++	20.0 +++++	40.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	+++++ 1186480	+++++ 2605913	88161 5517344	196801 6849860	435361	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Benzyl chloride	DCBd 4	Qua	+++++ 69689	963 199498	2995 +++++	6184 +++++	17008	+++++ 50.0	2.00 100	5.00 +++++	10.0 +++++	20.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	8428 539393	16939 1190330	44633 2546618	94303 3319558	202815	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Methylnaphthalene	DCBd 4	Ave	+++++ 1893259	+++++ 4065917	112670 8722601	273994 +++++	642125	+++++ 100	+++++ 200	10.0 400	20.0 +++++	40.0

Curve Type Legend:
Ave = Average ISTD
Qua = Quadratic ISTD

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: BFB14556.D BFB Injection Date: 08/29/2017

Instrument ID: A3UX14 BFB Injection Time: 14:00

Analysis Batch No.: 292967

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.6	
75	30.0 - 60.0 % of mass 95	50.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	67.8	
175	5.0 - 9.0 % of mass 174	4.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	65.0	(96.0) 1
177	5.0 - 9.0 % of mass 176	4.4	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-292967/3	1410322.D	08/29/2017	14:43
	IC 240-292967/4	1410323.D	08/29/2017	15:04
	IC 240-292967/5	1410324.D	08/29/2017	15:26
	ICIS 240-292967/6	1410325.D	08/29/2017	15:47
	IC 240-292967/7	1410326.D	08/29/2017	16:09
	IC 240-292967/8	1410327.D	08/29/2017	16:30
	IC 240-292967/9	1410328.D	08/29/2017	16:52
	IC 240-292967/10	1410329.D	08/29/2017	17:13
	IC 240-292967/11	1410330.D	08/29/2017	17:34
	ICV 240-292967/13	1410332.D	08/29/2017	18:18

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-292967/11	1410330.D
Level 2	IC 240-292967/10	1410329.D
Level 3	IC 240-292967/9	1410328.D
Level 4	IC 240-292967/8	1410327.D
Level 5	IC 240-292967/7	1410326.D
Level 6	ICIS 240-292967/6	1410325.D
Level 7	IC 240-292967/5	1410324.D
Level 8	IC 240-292967/4	1410323.D
Level 9	IC 240-292967/3	1410322.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2176	0.1781 0.2297	0.2050 0.2170	0.2276 0.2027	0.2207	Ave		0.2123			0.1000	7.9		20.0			
Chloromethane	0.2752 0.2759	0.3480 0.2774	0.2756 0.2570	0.2995 0.2426	0.2787	Ave		0.2811			0.1000	10.5		20.0			
Vinyl chloride	0.2373 0.2771	0.2952 0.2772	0.2769 0.2621	0.2859 0.2410	0.2891	Ave		0.2713			0.1000	7.6		20.0			
Butadiene	0.2340 0.3049	0.2880 0.3116	0.3064 0.2913	0.3131 0.2697	0.3098	Ave		0.2921				8.9		20.0			
Bromomethane	0.2017 0.1571	0.2365 +++++	0.1778 +++++	0.1890 +++++	0.1794	Ave		0.1902			0.0500	14.2		20.0			
Chloroethane	0.1741 0.1815	0.2072 0.1591	0.1704 +++++	0.1918 +++++	0.1809	Ave		0.1807			0.0500	8.6		20.0			
Dichlorofluoromethane	0.4469 0.4580	0.5349 0.4586	0.4523 0.3897	0.4592 0.3786	0.4690	Ave		0.4497				10.1		20.0			
Trichlorofluoromethane	+++++ 0.4040	0.3424 0.4214	0.3685 0.3936	0.3717 0.3828	0.3934	Ave		0.3847			0.1000	6.3		20.0			
Ethyl ether	0.3552 0.3163	0.3249 0.3219	0.2916 0.3114	0.3222 0.2918	0.3264	Ave		0.3180				6.0		20.0			
Acrolein	0.0390 0.0328	0.0415 0.0345	0.0257 0.0335	0.0334 +++++	0.0343	Ave		0.0343				13.6		20.0			
1,1-Dichloroethene	0.2499 0.2870	0.2411 0.2862	0.2408 0.2973	0.2731 0.2860	0.2828	Ave		0.2716			0.1000	8.0		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.1608	+++++ 0.1679	0.1349 0.1711	0.1688 0.1765	0.1642	Ave		0.1635			0.0500	8.3		20.0			
Acetone	+++++ 0.1007	+++++ 0.1005	0.1638 0.0992	0.1310 0.0883	0.1193	Lin1	0.8000	0.0925			0.0100	6.8			0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Iodomethane	0.4709 0.4943	0.4665 0.4839	0.4238 0.4936	0.4705 0.4882	0.4938	Ave		0.4762				4.7		20.0			
Carbon disulfide	0.7818 0.9570	0.7559 0.9705	0.7436 0.9836	0.8496 0.9367	0.9331	Ave		0.8791			0.1000	11.0		20.0			
3-Chloro-1-propene	+++++ 0.1747	0.1839 0.2036	0.1503 0.1793	0.1785 0.1917	0.1674	Ave		0.1787				8.9		20.0			
Methyl acetate	+++++ 0.2475	+++++ 0.2860	0.2594 0.2480	0.2580 0.2281	0.2587	Ave		0.2551			0.1000	6.8		20.0			
Methylene Chloride	+++++ 0.3403	+++++ 0.3234	0.4584 0.3202	0.3975 0.3057	0.3717	Lin1	0.8776	0.3108			0.1000	5.2			0.9990		0.9900
tert-Butyl alcohol	0.0233 0.0223	0.0253 0.0232	0.0227 0.0258	0.0244 0.0230	0.0233	Ave		0.0237				5.1		20.0			
trans-1,2-Dichloroethene	0.2839 0.2910	0.2854 0.2919	0.2660 0.2984	0.2928 0.2900	0.2966	Ave		0.2884			0.1000	3.3		20.0			
Methyl tert-butyl ether	0.8172 0.8614	0.8894 0.8614	0.8060 0.9003	0.8364 0.8307	0.8617	Ave		0.8516			0.1000	3.7		20.0			
Acrylonitrile	0.1191 0.1108	0.1304 0.1138	0.1100 0.1140	0.1157 0.1046	0.1161	Ave		0.1149				6.2		20.0			
Hexane	+++++ 0.0705	0.0661 0.0723	0.0737 0.0758	0.0761 0.0748	0.0740	Ave		0.0729				4.5		20.0			
1,1-Dichloroethane	0.5227 0.5385	0.5727 0.5363	0.5059 0.5433	0.5589 0.5257	0.5577	Ave		0.5402			0.2000	3.8		20.0			
Vinyl acetate	0.0411 0.0489	0.0454 0.0525	0.0343 0.0529	0.0509 0.0513	0.0501	Ave		0.0475				13.0		20.0			
2,2-Dichloropropane	0.2485 0.3249	0.2712 0.3268	0.2741 0.3179	0.3137 0.2975	0.3249	Ave		0.2999				9.6		20.0			
cis-1,2-Dichloroethene	0.3565 0.3282	0.3333 0.3329	0.3077 0.3347	0.3342 0.3209	0.3418	Ave		0.3322			0.1000	4.0		20.0			
2-Butanone (MEK)	0.1506 0.1284	0.1553 0.1385	0.1328 0.1333	0.1354 0.1221	0.1383	Ave		0.1372			0.0100	7.5		20.0			
Bromochloromethane	0.1533 0.1461	0.1586 0.1471	0.1319 0.1465	0.1490 0.1401	0.1490	Ave		0.1468				5.2		20.0			
Tetrahydrofuran	0.0969 0.0906	0.0980 0.0953	0.0871 0.0932	0.0911 0.0848	0.0936	Ave		0.0923				4.7		20.0			
Chloroform	0.5464 0.4954	0.5311 0.4989	0.4694 0.4997	0.5084 0.4841	0.5168	Ave		0.5056			0.2000	4.6		20.0			
1,1,1-Trichloroethane	0.2985 0.3773	0.2954 0.3822	0.3251 0.3882	0.3587 0.3735	0.3754	Ave		0.3527			0.1000	10.4		20.0			
Cyclohexane	+++++ 0.4978	+++++ 0.5121	0.4318 0.5160	0.4935 0.4928	0.5094	Ave		0.4934			0.1000	5.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2599 0.3109	0.2458 0.3240	0.2565 0.3367	0.2979 0.3224	0.3097	Ave		0.2960			0.1000	11.3		20.0			
1,1-Dichloropropene	0.2891 0.3743	0.3224 0.3873	0.3296 0.3917	0.3754 0.3827	0.3841	Ave		0.3596				10.1		20.0			
Benzene	1.2584 1.1887	1.1978 1.2032	1.1492 1.1879	1.2480 1.1393	1.2576	Ave		1.2033			0.5000	3.7		20.0			
1,2-Dichloroethane	0.4195 0.3770	0.4074 0.3866	0.3716 0.3802	0.3904 0.3624	0.3975	Ave		0.3881			0.1000	4.6		20.0			
Isobutyl alcohol	0.0086 0.0084	0.0101 0.0089	0.0086 0.0087	0.0089 0.0082	0.0088	Ave		0.0088				6.3		20.0			
n-Heptane	+++++ 0.0733	+++++ 0.0773	0.0652 0.0779	0.0803 0.0810	0.0734	Ave		0.0755				7.2		20.0			
Trichloroethene	0.2680 0.2681	0.2602 0.2811	0.2499 0.2858	0.2794 0.2739	0.2748	Ave		0.2712			0.1500	4.1		20.0			
Methylcyclohexane	+++++ 0.4862	+++++ 0.4978	0.4111 0.5021	0.4681 0.4758	0.4884	Ave		0.4756			0.1000	6.5		20.0			
1,2-Dichloropropane	0.3098 0.2998	0.2860 0.3056	0.2762 0.2998	0.3106 0.2928	0.3115	Ave		0.2991			0.1000	4.1		20.0			
Dibromomethane	0.1583 0.1668	0.1622 0.1708	0.1507 0.1701	0.1719 0.1613	0.1729	Ave		0.1650				4.5		20.0			
1,4-Dioxane	0.0019 0.0023	0.0025 0.0024	0.0023 0.0023	0.0025 0.0022	0.0025	Ave		0.0023				8.2		20.0			
Bromodichloromethane	0.3186 0.3536	0.2761 0.3712	0.2814 0.3774	0.3262 0.3636	0.3385	Ave		0.3341			0.1500	11.1		20.0			
2-Chloroethyl vinyl ether	+++++ 0.1663	+++++ 0.1816	0.1278 0.1739	0.1649 0.1752	0.1683	Ave		0.1654				10.6		20.0			
cis-1,3-Dichloropropene	+++++ 0.4284	+++++ 0.4597	0.3330 0.4471	0.3944 0.4408	0.4338	Ave		0.4196			0.1500	10.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.3723 0.4407	0.3915 0.4638	0.3781 0.4545	0.4226 0.4269	0.4455	Ave		0.4218			0.0500	8.0		20.0			
Toluene	1.7939 1.7952	1.6790 1.8626	1.6471 1.8632	1.8199 1.8586	1.8293	Ave		1.7943			0.4000	4.4		20.0			
trans-1,3-Dichloropropene	+++++ 0.5762	+++++ 0.6268	0.4187 0.6509	0.5195 0.6554	0.5609	Ave		0.5726			0.1000	14.7		20.0			
Ethyl methacrylate	+++++ 0.5089	+++++ 0.5530	0.3757 0.5387	0.4665 0.5526	0.4879	Ave		0.4976				12.7		20.0			
1,1,2-Trichloroethane	0.3263 0.3453	0.3465 0.3630	0.3125 0.3632	0.3708 0.3617	0.3615	Ave		0.3501			0.1000	5.6		20.0			
Tetrachloroethene	0.2566 0.3075	0.2600 0.3240	0.2601 0.3383	0.3108 0.3475	0.3072	Ave		0.3013			0.1500	11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,3-Dichloropropane	0.6200 0.6357	0.6278 0.6595	0.5833 0.6505	0.6710 0.6560	0.6618	Ave		0.6406				4.3		20.0			
2-Hexanone	0.2377 0.2647	0.2242 0.2844	0.2320 0.2687	0.2660 0.2703	0.2717	Ave		0.2577			0.0500	8.1		20.0			
Dibromochloromethane	+++++ 0.3587	+++++ 0.3827	0.2591 0.4011	0.3119 0.3961	0.3345	Ave		0.3492				14.7		20.0			
1,2-Dibromoethane	0.2985 0.3407	0.2715 0.3543	0.3016 0.3544	0.3399 0.3471	0.3492	Ave		0.3286				9.2		20.0			
Chlorobenzene	1.1789 1.0673	1.1166 1.0955	1.0290 1.1063	1.1263 1.1012	1.1086	Ave		1.1033			0.3000	3.7		20.0			
1,1,1,2-Tetrachloroethane	0.2978 0.3840	0.3125 0.3895	0.2992 0.3921	0.3464 0.3892	0.3723	Ave		0.3537				11.5		20.0			
Ethylbenzene	0.5711 0.6020	0.5288 0.6195	0.5473 0.6252	0.6024 0.6418	0.6085	Ave		0.5941				6.3		20.0			
m-Xylene & p-Xylene	0.6497 0.7127	0.6378 0.7278	0.6320 0.7232	0.7204 0.7468	0.7419	Ave		0.6991				6.6		20.0			
o-Xylene	0.6361 0.7295	0.6249 0.7332	0.6141 0.7289	0.7093 0.7403	0.7406	Ave		0.6952				7.7		20.0			
Styrene	0.9005 1.1785	0.8944 1.2370	0.9304 1.2106	1.1368 1.2614	1.1748	Ave		1.1027			0.3000	13.6		20.0			
Bromoform	+++++ 0.1949	+++++ 0.2146	0.1259 0.2220	0.1613 0.2235	0.1766	Lin1	-0.623	0.2230			0.1000	7.1			0.9990		0.9900
Isopropylbenzene	1.3165 1.7570	1.4026 1.7528	1.4569 1.6534	1.7378 1.6808	1.7828	Ave		1.6156			0.1000	10.9		20.0			
Bromobenzene	0.9589 0.9504	0.8033 0.9764	0.8337 0.9624	0.9626 0.9356	0.9614	Ave		0.9272				6.8		20.0			
1,1,2,2-Tetrachloroethane	0.8723 0.9211	0.8584 0.9377	0.8017 0.9014	0.9032 0.8486	0.9130	Ave		0.8842			0.3000	4.8		20.0			
1,2,3-Trichloropropane	0.2771 0.2747	0.2813 0.2770	0.2568 0.2657	0.2747 0.2480	0.2769	Ave		0.2702				4.1		20.0			
trans-1,4-Dichloro-2-butene	0.2293 0.2788	0.1913 0.2980	0.2302 0.2873	0.2671 0.2865	0.2732	Ave		0.2602				13.6		20.0			
N-Propylbenzene	0.7170 1.0489	0.7838 1.0692	0.8394 1.0543	0.9810 1.0407	1.0088	Ave		0.9492				14.0		20.0			
2-Chlorotoluene	0.7552 0.9180	0.8238 0.9125	0.7888 0.9085	0.8873 0.8802	0.9004	Ave		0.8639				6.9		20.0			
1,3,5-Trimethylbenzene	2.1339 3.1122	2.1504 3.1348	2.4133 3.1617	2.8628 3.1061	3.0492	Ave		2.7916				15.6		20.0			
4-Chlorotoluene	0.8037 0.9212	0.7969 0.9499	0.8144 0.9737	0.9174 0.9830	0.9340	Ave		0.8994				8.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
tert-Butylbenzene	+++++ 2.6606	+++++ 2.7059	2.0333 2.6945	2.4105 2.6246	2.5963	Ave		2.5322				9.5		20.0			
1,2,4-Trimethylbenzene	2.3199 3.1733	2.4190 3.1889	2.5231 3.1595	3.0586 3.0942	3.1361	Ave		2.8970				12.5		20.0			
sec-Butylbenzene	+++++ 3.8447	+++++ 3.9304	3.0573 3.8566	3.6696 3.7668	3.7817	Ave		3.7010				8.0		20.0			
1,3-Dichlorobenzene	1.6900 1.6509	1.6670 1.7154	1.4573 1.7105	1.7231 1.7176	1.6836	Ave		1.6684			0.6000	5.0		20.0			
p-Isopropyltoluene	+++++ 3.1700	+++++ 3.2657	2.3927 3.2725	2.9786 3.2139	3.1055	Ave		3.0570				10.1		20.0			
1,4-Dichlorobenzene	1.8997 1.6763	1.8040 1.7355	1.5573 1.7432	1.7761 1.7484	1.7350	Ave		1.7417			0.5000	5.3		20.0			
n-Butylbenzene	+++++ 2.8287	+++++ 3.0799	2.1534 3.2036	2.6589 3.2069	2.8800	Ave		2.8588				13.0		20.0			
1,2-Dichlorobenzene	1.6028 1.6220	1.6613 1.6906	1.5052 1.7454	1.7047 1.7629	1.6958	Ave		1.6656			0.4000	4.8		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1343	+++++ 0.1528	0.1053 0.1671	0.1171 0.1567	0.1234	Lin1	-0.423	0.1602			0.0500	10.9			0.9970		0.9900
1,2,4-Trichlorobenzene	0.9989 1.0799	1.0365 1.2547	0.8589 1.3712	1.0209 1.3500	1.0462	Ave		1.1130			0.2000	15.6		20.0			
Hexachlorobutadiene	0.4360 0.5264	0.4758 0.6309	0.3951 0.6948	0.5206 0.6622	0.5401	Ave		0.5424				18.8		20.0			
Naphthalene	2.0997 2.7680	2.3949 3.0666	2.0992 3.2045	2.5300 2.9004	2.7044	Ave		2.6409				14.9		20.0			
1,2,3-Trichlorobenzene	1.0292 1.0844	1.0668 1.2205	0.8950 1.3196	1.0900 1.2725	1.0705	Ave		1.1165				11.8		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2105	0.3321 0.2372	0.3140 0.2576	0.2863 0.2556	0.2785	Qua	0.3519	0.2218	0.0001403			17.3			0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2431	0.5479 0.2845	0.4245 0.3090	0.3707 0.3065	0.3480	Qua	0.6886	0.2594	0.0001917			16.5			0.9990		0.9900
Toluene-d8 (Surr)	+++++ 1.2771	+++++ 1.4007	1.8138 1.5163	1.6612 1.5707	1.5651	Qua	3.6539	1.2179	0.0013666			8.8			1.0000		0.9900
4-Bromofluorobenzene (Surr)	+++++ 0.9229	1.3565 1.0340	1.3589 1.0884	1.2518 1.0694	1.1660	Qua	1.1119	0.9941	0.0003269			14.3			0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-292967/11	1410330.D
Level 2	IC 240-292967/10	1410329.D
Level 3	IC 240-292967/9	1410328.D
Level 4	IC 240-292967/8	1410327.D
Level 5	IC 240-292967/7	1410326.D
Level 6	ICIS 240-292967/6	1410325.D
Level 7	IC 240-292967/5	1410324.D
Level 8	IC 240-292967/4	1410323.D
Level 9	IC 240-292967/3	1410322.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 431321	10225 917465	36138 1806890	77144 2035181	159720	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
Chloromethane	FB	Ave	8978 546971	19978 1107693	48586 2140079	101499 2435911	201650	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl chloride	FB	Ave	7742 549256	16948 1107018	48818 2182714	96877 2419396	209208	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Butadiene	FB	Ave	7633 604423	16536 1244397	54018 2425500	106089 2707175	224194	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromomethane	FB	Ave	6579 311368	13580 +++++	31344 +++++	64036 +++++	129822	1.00 50.0	2.00 +++++	5.00 +++++	10.0 +++++	20.0
Chloroethane	FB	Ave	5679 359766	11898 635317	30041 +++++	64988 +++++	130892	1.00 50.0	2.00 100	5.00 +++++	10.0 +++++	20.0
Dichlorofluoromethane	FB	Ave	14582 907944	30708 1831598	79739 3244919	155611 3801060	339389	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichlorofluoromethane	FB	Ave	+++++ 800957	19657 1683018	64953 3277041	125980 3843574	284645	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl ether	FB	Ave	11587 626934	18653 1285450	51411 2592889	109185 2930036	236155	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrolein	FB	Ave	6363 324712	11919 687999	22621 1396140	56511 +++++	124195	5.00 250	10.0 500	25.0 1000	50.0 +++++	100
1,1-Dichloroethene	FB	Ave	8154 568953	13839 1142994	42451 2475248	92542 2871698	204640	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	+++++ 318805	+++++ 670522	23784 1424345	57188 1772444	118826	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Acetone	FB	Lin1	+++++ 399253	+++++ 803051	57743 1652052	88808 1772015	172604	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
Iodomethane	FB	Ave	15363 979968	26783 1932396	74711 4110008	159443 4901712	357297	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Carbon disulfide	FB	Ave	25507 1897100	43395 3875651	131088 8190029	287934 9404389	675187	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
3-Chloro-1-propene	FB	Ave	+++++ 346402	10557 813022	26498 1492592	60482 1924913	121115	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl acetate	FB	Ave	+++++ 981101	+++++ 2284189	91446 4130276	174869 4580501	374431	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
Methylene Chloride	FB	Lin1	+++++ 674597	+++++ 1291364	80800 2666519	134714 3068735	268980	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
tert-Butyl alcohol	FB	Ave	7591 441206	14520 927080	40090 2147431	82802 2313857	168454	10.0 500	20.0 1000	50.0 2000	100 2500	200
trans-1,2-Dichloroethene	FB	Ave	9263 576776	16387 1165845	46888 2484912	99230 2911269	214620	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl tert-butyl ether	FB	Ave	26663 1707590	51058 3439873	142081 7496268	283438 8339398	623533	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrylonitrile	FB	Ave	38856 2197342	74885 4545728	193902 9491085	392057 10496424	840041	10.0 500	20.0 1000	50.0 2000	100 2500	200
Hexane	FB	Ave	+++++ 139853	3796 288785	13000 630907	25797 750611	53540	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloroethane	FB	Ave	17052 1067497	32878 2141708	89185 4523482	189417 5277617	403558	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl acetate	FB	Ave	1342 96963	2604 209509	6055 440615	17259 515088	36249	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2,2-Dichloropropane	FB	Ave	8107 643993	15570 1305139	48328 2647307	106303 2986456	235083	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
cis-1,2-Dichloroethene	FB	Ave	11631 650691	19132 1329320	54250 2787331	113250 3221700	247308	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Butanone (MEK)	FB	Ave	9829 509104	17833 1106273	46804 2220334	91774 2451467	200114	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Bromochloromethane	FB	Ave	5001 289559	9104 587275	23252 1220050	50496 1406976	107853	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrahydrofuran	FB	Ave	6322 359212	11249 761138	30711 1552362	61774 1701711	135435	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Chloroform	FB	Ave	17827 982014	30492 1992309	82752 4160405	172291 4860333	373957	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1-Trichloroethane	FB	Ave	9738 747902	16958 1526392	57311 3232055	121553 3749578	271633	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Cyclohexane	FB	Ave	+++++ 986820	+++++ 2045222	76117 4296826	167253 4947520	368611	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Carbon tetrachloride	FB	Ave	8478 616274	14109 1293777	45210 2803853	100941 3236934	224133	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloropropene	FB	Ave	9432 742091	18511 1546756	58105 3261493	127233 3841914	277912	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzene	FB	Ave	41057 2356560	68763 4804999	202592 9891239	422919 11437991	910039	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane	FB	Ave	13687 747396	23386 1544042	65513 3165932	132297 3638084	287634	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Isobutyl alcohol	FB	Ave	6988 418474	14549 887293	38018 1811941	75545 2049344	158453	25.0 1250	50.0 2500	125 5000	250 6250	500
n-Heptane	FB	Ave	+++++ 145239	+++++ 308549	11489 648287	27215 813507	53149	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Trichloroethene	FB	Ave	8745 531526	14936 1122648	44059 2379457	94681 2749483	198884	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methylcyclohexane	FB	Ave	+++++ 963866	+++++ 1987816	72465 4180576	158643 4776682	353440	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2-Dichloropropane	FB	Ave	10107 594265	16417 1220406	48693 2496331	105266 2939848	225435	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromomethane	FB	Ave	5163 330627	9310 681951	26572 1416222	58268 1619771	125126	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dioxane	FB	Ave	1241 91574	2864 194694	8121 386463	16918 436060	35571	20.0 1000	40.0 2000	100 4000	200 5000	400
Bromodichloromethane	FB	Ave	10393 701034	15851 1482609	49601 3142137	110551 3650643	244941	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 659180	+++++ 1450630	45054 2896667	111747 3518050	243512	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
cis-1,3-Dichloropropene	FB	Ave	+++++ 849248	+++++ 1835728	58694 3723151	133641 4425214	313884	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	15469 1115635	27644 2331645	86302 4504961	189511 4975615	419952	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Toluene	CBNZ d5	Ave	37272 2272486	59275 4681996	187982 9234127	408084 10831497	862160	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 729378	+++++ 1575635	47788 3225842	116493 3819291	264370	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 644218	+++++ 1390079	42880 2669673	104606 3220462	229963	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	6780 437036	12233 912603	35671 1800161	83148 2108091	170384	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrachloroethene	CBNZ d5	Ave	5331 389293	9178 814343	29691 1676597	69701 2024855	144769	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichloropropane	CBNZ d5	Ave	12881 804666	22163 1657779	66576 3223789	150463 3822773	311903	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Hexanone	CBNZ d5	Ave	9879 670228	15828 1429984	52947 2663051	119279 3150690	256151	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Dibromochloromethane	CBNZ d5	Ave	+++++ 454109	+++++ 962083	29571 1987744	69935 2308277	157655	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2-Dibromoethane	CBNZ d5	Ave	6203 431309	9584 890628	34425 1756350	76213 2023001	164578	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chlorobenzene	CBNZ d5	Ave	24494 1351004	39420 2753887	117435 5482589	252551 6417616	522502	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6187 486109	11033 979140	34150 1942984	77680 2268092	175454	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethylbenzene	CBNZ d5	Ave	11866 761978	18668 1557208	62467 3098650	135078 3740056	286794	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	13500 902196	22517 1829387	72132 3584046	161537 4351956	349657	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
o-Xylene	CBNZ d5	Ave	13217 923424	22060 1843138	70092 3612577	159046 4314305	349054	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Styrene	CBNZ d5	Ave	18711 1491819	31575 3109488	106192 5999750	254911 7351054	553689	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromoform	CBNZ d5	Lin1	+++++ 246736	+++++ 539476	14374 1100418	36178 1302548	83224	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Isopropylbenzene	CBNZ d5	Ave	27353 2224049	49518 4406124	166276 8194185	389675 9795322	840276	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromobenzene	DCBd 4	Ave	9281 542084	14181 1090298	45135 2112702	103106 2585163	215011	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8443 525404	15154 1047174	43402 1978926	96747 2344883	204195	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	2682 156705	4966 309383	13901 583343	29424 685266	61923	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2219 159039	3378 332732	12464 630660	28612 791627	61112	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
N-Propylbenzene	DCBd 4	Ave	6940 598308	13838 1194030	45442 2314535	105079 2875660	225617	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chlorotoluene	DCBd 4	Ave	7309 523656	14544 1019050	42701 1994314	95044 2432242	201384	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	20654 1775198	37964 3500637	130649 6940818	306644 8582768	681961	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Chlorotoluene	DCBd 4	Ave	7779 525448	14068 1060723	44090 2137598	98268 2716103	208893	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 1517629	+++++ 3021680	110076 5915081	258201 7252264	580669	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	22454 1810064	42705 3561112	136591 6935887	327621 8549995	701405	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 2193035	+++++ 4389134	165511 8466368	393064 10408412	845786	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	16357 941682	29430 1915570	78892 3755057	184564 4746196	376534	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
p-Isopropyltoluene	DCBd 4	Ave	+++++ 1808154	+++++ 3646796	129535 7184108	319055 8880566	694545	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	18387 956151	31847 1938000	84307 3826755	190249 4831047	388036	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butylbenzene	DCBd 4	Ave	+++++ 1613506	+++++ 3439377	116577 7032827	284811 8861320	644125	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	15513 925192	29329 1887852	81488 3831685	182599 4871148	379276	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	+++++ 76630	+++++ 170644	5701 366821	12545 432881	27593	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	9668 615989	18298 1401126	46496 3010100	109350 3730379	233977	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Hexachlorobutadiene	DCBd 4	Ave	4220 300277	8400 704560	21387 1525276	55762 1829923	120784	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Naphthalene	DCBd 4	Ave	20323 1578881	42280 3424437	113644 7034688	270996 8014498	604849	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	9961 618570	18834 1362891	48455 2896832	116753 3516084	239418	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromofluoromethane (Surr)	FB	Qua	+++++ 417299	19067 947443	55351 2144578	97024 2566097	201494	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Qua	+++++ 481996	31452 1136306	74831 2572825	125639 3076988	251792	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
Toluene-d8 (Surr)	CBNZ d5	Qua	+++++ 1616625	+++++ 3520997	207007 7514461	372504 9153591	737657	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Qua	+++++ 526432	23947 1154655	73566 2389403	134083 2955096	260787	+++++ 50.0	2.00 100	5.00 200	10.0 250	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-292967/13 Calibration Date: 08/29/2017 18:18

Instrument ID: A3UX14 Calib Start Date: 08/29/2017 14:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/29/2017 17:34

Lab File ID: 1410332.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2123	0.2412	0.1000	0.0227	0.0200	13.6	30.0
Chloromethane	Ave	0.2811	0.2997	0.1000	0.0213	0.0200	6.6	30.0
Vinyl chloride	Ave	0.2713	0.3011	0.1000	0.0222	0.0200	11.0	30.0
Butadiene	Ave	0.2921	0.2923		0.0200	0.0200	0.0	30.0
Bromomethane	Ave	0.1902	0.1953	0.0500	0.0205	0.0200	2.7	30.0
Chloroethane	Ave	0.1807	0.2024	0.0500	0.0224	0.0200	12.0	30.0
Dichlorofluoromethane	Ave	0.4497	0.5111		0.0227	0.0200	13.7	30.0
Trichlorofluoromethane	Ave	0.3847	0.4471	0.1000	0.0232	0.0200	16.2	30.0
Ethyl ether	Ave	0.3180	0.3418		0.0538	0.0500	7.5	30.0
Acrolein	Ave	0.0343	0.0452		0.329	0.250	31.7	50.0
1,1-Dichloroethene	Ave	0.2716	0.2902	0.1000	0.0534	0.0500	6.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1635	0.1685	0.0500	0.0515	0.0500	3.1	30.0
Acetone	Lin1		0.1075	0.0100	0.108	0.100	7.6	50.0
Iodomethane	Ave	0.4762	0.4928		0.0517	0.0500	3.5	30.0
Carbon disulfide	Ave	0.8791	0.9073	0.1000	0.0516	0.0500	3.2	30.0
3-Chloro-1-propene	Ave	0.1787	0.1772		0.0496	0.0500	-0.8	30.0
Methyl acetate	Ave	0.2551	0.2591	0.1000	0.102	0.100	1.6	30.0
Methylene Chloride	Lin1		0.3435	0.1000	0.0524	0.0500	4.9	50.0
tert-Butyl alcohol	Ave	0.0237	0.0244		0.515	0.500	2.9	50.0
trans-1,2-Dichloroethene	Ave	0.2884	0.2969	0.1000	0.0515	0.0500	2.9	30.0
Methyl tert-butyl ether	Ave	0.8516	0.9042	0.1000	0.0531	0.0500	6.2	30.0
Acrylonitrile	Ave	0.1149	0.1206		0.525	0.500	4.9	30.0
Hexane	Ave	0.0729	0.0668		0.0458	0.0500	-8.3	30.0
1,1-Dichloroethane	Ave	0.5402	0.5437	0.2000	0.0503	0.0500	0.7	30.0
Vinyl acetate	Ave	0.0475	0.0566		0.0595	0.0500	19.1	50.0
2,2-Dichloropropane	Ave	0.2999	0.3194		0.0533	0.0500	6.5	30.0
cis-1,2-Dichloroethene	Ave	0.3322	0.3376	0.1000	0.0508	0.0500	1.6	30.0
2-Butanone (MEK)	Ave	0.1372	0.1398	0.0100	0.102	0.100	1.9	30.0
Bromochloromethane	Ave	0.1468	0.1510		0.0514	0.0500	2.8	30.0
Tetrahydrofuran	Ave	0.0923	0.1015		0.110	0.100	10.0	30.0
Chloroform	Ave	0.5056	0.5088	0.2000	0.0503	0.0500	0.6	30.0
1,1,1-Trichloroethane	Ave	0.3527	0.3771	0.1000	0.0535	0.0500	6.9	30.0
Cyclohexane	Ave	0.4934	0.5053	0.1000	0.0512	0.0500	2.4	30.0
Carbon tetrachloride	Ave	0.2960	0.3065	0.1000	0.0518	0.0500	3.6	30.0
1,1-Dichloropropene	Ave	0.3596	0.3772		0.0524	0.0500	4.9	30.0
Benzene	Ave	1.203	1.202	0.5000	0.0499	0.0500	-0.1	30.0
1,2-Dichloroethane	Ave	0.3881	0.3885	0.1000	0.0501	0.0500	0.1	30.0
Isobutyl alcohol	Ave	0.0088	0.0099		1.40	1.25	12.0	30.0
n-Heptane	Ave	0.0755	0.0702		0.0465	0.0500	-7.0	30.0
Trichloroethene	Ave	0.2712	0.2702	0.1500	0.0498	0.0500	-0.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-292967/13 Calibration Date: 08/29/2017 18:18

Instrument ID: A3UX14 Calib Start Date: 08/29/2017 14:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/29/2017 17:34

Lab File ID: 1410332.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4756	0.4682	0.1000	0.0492	0.0500	-1.6	30.0
1,2-Dichloropropane	Ave	0.2991	0.3131	0.1000	0.0523	0.0500	4.7	30.0
Dibromomethane	Ave	0.1650	0.1707		0.0517	0.0500	3.5	30.0
1,4-Dioxane	Ave	0.0023	0.0028		1.19	1.00	18.5	50.0
Bromodichloromethane	Ave	0.3341	0.3600	0.1500	0.0539	0.0500	7.8	30.0
2-Chloroethyl vinyl ether	Ave	0.1654	0.1640		0.0496	0.0500	-0.9	30.0
cis-1,3-Dichloropropene	Ave	0.4196	0.4453	0.1500	0.0531	0.0500	6.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4218	0.4616	0.0500	0.109	0.100	9.4	30.0
Toluene	Ave	1.794	1.800	0.4000	0.0502	0.0500	0.3	30.0
trans-1,3-Dichloropropene	Ave	0.5726	0.5627	0.1000	0.0491	0.0500	-1.7	30.0
Ethyl methacrylate	Ave	0.4976	0.5206		0.0523	0.0500	4.6	30.0
1,1,2-Trichloroethane	Ave	0.3501	0.3691	0.1000	0.0527	0.0500	5.4	30.0
Tetrachloroethene	Ave	0.3013	0.3000	0.1500	0.0498	0.0500	-0.5	30.0
1,3-Dichloropropane	Ave	0.6406	0.6407		0.0500	0.0500	0.0	30.0
2-Hexanone	Ave	0.2577	0.2751	0.0500	0.107	0.100	6.7	30.0
Dibromochloromethane	Ave	0.3492	0.3652		0.0523	0.0500	4.6	30.0
1,2-Dibromoethane	Ave	0.3286	0.3489		0.0531	0.0500	6.2	30.0
Chlorobenzene	Ave	1.103	1.077	0.3000	0.0488	0.0500	-2.4	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3537	0.3857		0.0545	0.0500	9.1	30.0
Ethylbenzene	Ave	0.5941	0.5866		0.0494	0.0500	-1.3	30.0
m-Xylene & p-Xylene	Ave	0.6991	0.7035		0.0503	0.0500	0.6	30.0
o-Xylene	Ave	0.6952	0.7444		0.0535	0.0500	7.1	30.0
Styrene	Ave	1.103	1.167	0.3000	0.0529	0.0500	5.9	30.0
Bromoform	Lin1		0.2090	0.1000	0.0497	0.0500	-0.7	30.0
Isopropylbenzene	Ave	1.616	1.789	0.1000	0.0554	0.0500	10.8	30.0
Bromobenzene	Ave	0.9272	0.9237		0.0498	0.0500	-0.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8842	0.9709	0.3000	0.0549	0.0500	9.8	30.0
1,2,3-Trichloropropane	Ave	0.2702	0.2887		0.0534	0.0500	6.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2602	0.2813		0.0541	0.0500	8.1	30.0
N-Propylbenzene	Ave	0.9492	0.996		0.0525	0.0500	4.9	30.0
2-Chlorotoluene	Ave	0.8639	0.8861		0.0513	0.0500	2.6	30.0
1,3,5-Trimethylbenzene	Ave	2.792	3.018		0.0541	0.0500	8.1	30.0
4-Chlorotoluene	Ave	0.8994	0.8662		0.0482	0.0500	-3.7	30.0
tert-Butylbenzene	Ave	2.532	2.643		0.0522	0.0500	4.4	30.0
1,2,4-Trimethylbenzene	Ave	2.897	3.038		0.0524	0.0500	4.9	30.0
sec-Butylbenzene	Ave	3.701	3.815		0.0515	0.0500	3.1	30.0
1,3-Dichlorobenzene	Ave	1.668	1.597	0.6000	0.0479	0.0500	-4.3	30.0
p-Isopropyltoluene	Ave	3.057	3.093		0.0506	0.0500	1.2	30.0
1,4-Dichlorobenzene	Ave	1.742	1.612	0.5000	0.0463	0.0500	-7.4	30.0
n-Butylbenzene	Ave	2.859	2.716		0.0475	0.0500	-5.0	30.0
1,2-Dichlorobenzene	Ave	1.666	1.669	0.4000	0.0501	0.0500	0.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-292967/13 Calibration Date: 08/29/2017 18:18

Instrument ID: A3UX14 Calib Start Date: 08/29/2017 14:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/29/2017 17:34

Lab File ID: 1410332.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1459	0.0500	0.0482	0.0500	-3.6	50.0
1,2,4-Trichlorobenzene	Ave	1.113	1.040	0.2000	0.0467	0.0500	-6.6	50.0
Hexachlorobutadiene	Ave	0.5424	0.5378		0.0496	0.0500	-0.9	30.0
Naphthalene	Ave	2.641	2.845		0.0539	0.0500	7.7	50.0
1,2,3-Trichlorobenzene	Ave	1.116	1.100		0.0492	0.0500	-1.5	30.0
Dibromofluoromethane (Surr)	Qua		0.2125		0.0450	0.0500	-9.9	30.0
1,2-Dichloroethane-d4 (Surr)	Qua		0.2437		0.0429	0.0500	-14.1	30.0
Toluene-d8 (Surr)	Qua		1.269		0.0466	0.0500	-6.7	30.0
4-Bromofluorobenzene (Surr)	Qua		0.8703		0.0421	0.0500	-15.9	30.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: BFB14565.D BFB Injection Date: 09/13/2017

Instrument ID: A3UX14 BFB Injection Time: 08:47

Analysis Batch No.: 294629

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.2	
75	30.0 - 60.0 % of mass 95	54.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.1	(0.2) 1
174	50.0 - 120.00 % of mass 95	74.0	
175	5.0 - 9.0 % of mass 174	5.2	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.6	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-294629/3	1410619.D	09/13/2017	09:29
	CCV 240-294629/4	1410620.D	09/13/2017	09:51
	LCS 240-294629/5	1410621.D	09/13/2017	10:12
	LCS 240-294629/6	1410622.D	09/13/2017	10:34
	MB 240-294629/7	1410623.D	09/13/2017	10:55
SB-119A-10-12.5'	240-84819-1	1410634.D	09/13/2017	14:52
SB-119B-56-58'	240-84819-2	1410635.D	09/13/2017	15:13
SB-117A-33-35'	240-84819-3	1410636.D	09/13/2017	15:35
SB-117B-47-50'	240-84819-4	1410637.D	09/13/2017	15:56

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVIS 240-294629/3 Calibration Date: 09/13/2017 09:29

Instrument ID: A3UX14 Calib Start Date: 08/29/2017 14:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/29/2017 17:34

Lab File ID: 1410619.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2123	0.2364	0.1000	0.0223	0.0200	11.4	20.0
Chloromethane	Ave	0.2811	0.2943	0.1000	0.0209	0.0200	4.7	20.0
Vinyl chloride	Ave	0.2713	0.2773	0.1000	0.0204	0.0200	2.2	20.0
Butadiene	Ave	0.2921	0.3001		0.0205	0.0200	2.7	20.0
Bromomethane	Ave	0.1902	0.1885	0.0500	0.0198	0.0200	-0.9	20.0
Chloroethane	Ave	0.1807	0.1907	0.0500	0.0211	0.0200	5.5	20.0
Dichlorofluoromethane	Ave	0.4497	0.4976		0.0221	0.0200	10.7	20.0
Trichlorofluoromethane	Ave	0.3847	0.4184	0.1000	0.0217	0.0200	8.7	20.0
Ethyl ether	Ave	0.3180	0.2904		0.0457	0.0500	-8.7	20.0
Acrolein	Ave	0.0343	0.0256		0.187	0.250	-25.3	50.0
1,1-Dichloroethene	Ave	0.2716	0.2555	0.1000	0.0470	0.0500	-5.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1635	0.1559	0.0500	0.0477	0.0500	-4.6	20.0
Acetone	Lin1		0.0952	0.0100	0.0943	0.100	-5.7	50.0
Iodomethane	Ave	0.4762	0.4255		0.0447	0.0500	-10.7	20.0
Carbon disulfide	Ave	0.8791	0.8426	0.1000	0.0479	0.0500	-4.2	20.0
3-Chloro-1-propene	Ave	0.1787	0.1784		0.0499	0.0500	-0.1	20.0
Methyl acetate	Ave	0.2551	0.2685	0.1000	0.105	0.100	5.2	20.0
Methylene Chloride	Lin1		0.2384	0.1000	0.0355	0.0500	-29.0	50.0
tert-Butyl alcohol	Ave	0.0237	0.0205		0.433	0.500	-13.4	50.0
trans-1,2-Dichloroethene	Ave	0.2884	0.2607	0.1000	0.0452	0.0500	-9.6	20.0
Methyl tert-butyl ether	Ave	0.8516	0.7501	0.1000	0.0440	0.0500	-11.9	20.0
Acrylonitrile	Ave	0.1149	0.1027		0.447	0.500	-10.6	20.0
Hexane	Ave	0.0729	0.0748		0.0513	0.0500	2.6	20.0
1,1-Dichloroethane	Ave	0.5402	0.5254	0.2000	0.0486	0.0500	-2.7	20.0
Vinyl acetate	Ave	0.0475	0.0464		0.0489	0.0500	-2.2	50.0
2,2-Dichloropropane	Ave	0.2999	0.3245		0.0541	0.0500	8.2	20.0
cis-1,2-Dichloroethene	Ave	0.3322	0.3240	0.1000	0.0488	0.0500	-2.5	20.0
2-Butanone (MEK)	Ave	0.1372	0.1293	0.0100	0.0942	0.100	-5.8	20.0
Bromochloromethane	Ave	0.1468	0.1437		0.0489	0.0500	-2.1	20.0
Tetrahydrofuran	Ave	0.0923	0.0868		0.0941	0.100	-5.9	20.0
Chloroform	Ave	0.5056	0.4933	0.2000	0.0488	0.0500	-2.4	20.0
1,1,1-Trichloroethane	Ave	0.3527	0.3751	0.1000	0.0532	0.0500	6.3	20.0
Cyclohexane	Ave	0.4934	0.4996	0.1000	0.0506	0.0500	1.3	20.0
Carbon tetrachloride	Ave	0.2960	0.3220	0.1000	0.0544	0.0500	8.8	20.0
1,1-Dichloropropene	Ave	0.3596	0.3868		0.0538	0.0500	7.6	20.0
Benzene	Ave	1.203	1.211	0.5000	0.0503	0.0500	0.6	20.0
1,2-Dichloroethane	Ave	0.3881	0.3805	0.1000	0.0490	0.0500	-2.0	20.0
Isobutyl alcohol	Ave	0.0088	0.0091		1.29	1.25	3.2	20.0
n-Heptane	Ave	0.0755	0.0864		0.0572	0.0500	14.5	20.0
Trichloroethene	Ave	0.2712	0.2787	0.1500	0.0514	0.0500	2.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVIS 240-294629/3 Calibration Date: 09/13/2017 09:29

Instrument ID: A3UX14 Calib Start Date: 08/29/2017 14:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/29/2017 17:34

Lab File ID: 1410619.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4756	0.5028	0.1000	0.0529	0.0500	5.7	20.0
1,2-Dichloropropane	Ave	0.2991	0.3035	0.1000	0.0507	0.0500	1.5	20.0
Dibromomethane	Ave	0.1650	0.1687		0.0511	0.0500	2.3	20.0
1,4-Dioxane	Ave	0.0023	0.0024		1.04	1.00	4.4	50.0
Bromodichloromethane	Ave	0.3341	0.3615	0.1500	0.0541	0.0500	8.2	20.0
2-Chloroethyl vinyl ether	Ave	0.1654	0.1718		0.104	0.100	3.8	20.0
cis-1,3-Dichloropropene	Ave	0.4196	0.4401	0.1500	0.0524	0.0500	4.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4218	0.4264	0.0500	0.101	0.100	1.1	20.0
Toluene	Ave	1.794	1.839	0.4000	0.0512	0.0500	2.5	20.0
trans-1,3-Dichloropropene	Ave	0.5726	0.5795	0.1000	0.0506	0.0500	1.2	20.0
Ethyl methacrylate	Ave	0.4976	0.5176		0.0520	0.0500	4.0	20.0
1,1,2-Trichloroethane	Ave	0.3501	0.3505	0.1000	0.0501	0.0500	0.1	20.0
Tetrachloroethene	Ave	0.3013	0.3303	0.1500	0.0548	0.0500	9.6	20.0
1,3-Dichloropropane	Ave	0.6406	0.6333		0.0494	0.0500	-1.1	20.0
2-Hexanone	Ave	0.2577	0.2656	0.0500	0.103	0.100	3.1	20.0
Dibromochloromethane	Ave	0.3492	0.3661		0.0524	0.0500	4.8	20.0
1,2-Dibromoethane	Ave	0.3286	0.3427		0.0522	0.0500	4.3	20.0
Chlorobenzene	Ave	1.103	1.142	0.3000	0.0518	0.0500	3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3537	0.3867		0.0547	0.0500	9.4	20.0
Ethylbenzene	Ave	0.5941	0.6326		0.0532	0.0500	6.5	20.0
m-Xylene & p-Xylene	Ave	0.6991	0.7633		0.0546	0.0500	9.2	20.0
o-Xylene	Ave	0.6952	0.7629		0.0549	0.0500	9.7	20.0
Styrene	Ave	1.103	1.262	0.3000	0.0572	0.0500	14.5	20.0
Bromoform	Lin1		0.2029	0.1000	0.0483	0.0500	-3.5	20.0
Isopropylbenzene	Ave	1.616	1.853	0.1000	0.0574	0.0500	14.7	20.0
Bromobenzene	Ave	0.9272	0.9659		0.0521	0.0500	4.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8842	0.9004	0.3000	0.0509	0.0500	1.8	20.0
1,2,3-Trichloropropane	Ave	0.2702	0.2704		0.0500	0.0500	0.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2602	0.2820		0.0542	0.0500	8.4	20.0
N-Propylbenzene	Ave	0.9492	1.114		0.0587	0.0500	17.3	20.0
2-Chlorotoluene	Ave	0.8639	0.9425		0.0546	0.0500	9.1	20.0
1,3,5-Trimethylbenzene	Ave	2.792	3.303		0.0592	0.0500	18.3	20.0
4-Chlorotoluene	Ave	0.8994	0.9621		0.0535	0.0500	7.0	20.0
tert-Butylbenzene	Ave	2.532	2.776		0.0548	0.0500	9.6	20.0
1,2,4-Trimethylbenzene	Ave	2.897	3.317		0.0572	0.0500	14.5	20.0
sec-Butylbenzene	Ave	3.701	4.060		0.0548	0.0500	9.7	20.0
1,3-Dichlorobenzene	Ave	1.668	1.798	0.6000	0.0539	0.0500	7.8	20.0
p-Isopropyltoluene	Ave	3.057	3.390		0.0555	0.0500	10.9	20.0
1,4-Dichlorobenzene	Ave	1.742	1.787	0.5000	0.0513	0.0500	2.6	20.0
n-Butylbenzene	Ave	2.859	3.242		0.0567	0.0500	13.4	20.0
1,2-Dichlorobenzene	Ave	1.666	1.745	0.4000	0.0524	0.0500	4.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVIS 240-294629/3 Calibration Date: 09/13/2017 09:29

Instrument ID: A3UX14 Calib Start Date: 08/29/2017 14:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/29/2017 17:34

Lab File ID: 1410619.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1271	0.0500	0.0423	0.0500	-15.4	50.0
1,2,4-Trichlorobenzene	Ave	1.113	1.225	0.2000	0.0550	0.0500	10.0	50.0
Hexachlorobutadiene	Ave	0.5424	0.6038		0.0557	0.0500	11.3	20.0
Naphthalene	Ave	2.641	2.840		0.0538	0.0500	7.6	50.0
1,2,3-Trichlorobenzene	Ave	1.116	1.178		0.0527	0.0500	5.5	20.0
Dibromofluoromethane (Surr)	Qua		0.2096		0.0444	0.0500	-11.2	20.0
1,2-Dichloroethane-d4 (Surr)	Qua		0.2551		0.0450	0.0500	-10.0	20.0
Toluene-d8 (Surr)	Qua		1.242		0.0457	0.0500	-8.7	20.0
4-Bromofluorobenzene (Surr)	Qua		0.8579		0.0415	0.0500	-17.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294629/4 Calibration Date: 09/13/2017 09:51

Instrument ID: A3UX14 Calib Start Date: 02/16/2017 13:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/16/2017 16:43

Lab File ID: 1410620.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0366	0.0463		0.632	0.500	26.4*	20.0
2-Chloro-1,3-butadiene	Ave	0.4541	0.4707		0.0518	0.0500	3.6	20.0
Diisopropyl ether	Ave	0.2435	0.2596		0.0533	0.0500	6.6	20.0
Ethyl tert-butyl ether	Ave	0.8866	0.9187		0.0518	0.0500	3.6	20.0
Ethyl acetate	Ave	0.3061	0.2805		0.0916	0.100	-8.4	50.0
Propionitrile	Ave	0.0384	0.0431		0.562	0.500	12.4	20.0
Methacrylonitrile	Ave	0.1953	0.2072		0.530	0.500	6.1	20.0
Tert-amyl methyl ether	Ave	0.8572	0.9814		0.0572	0.0500	14.5	20.0
n-Butanol	Ave	0.0103	0.0117		1.41	1.25	12.9	20.0
Ethyl acrylate	Ave	0.3274	0.3277		0.0500	0.0500	0.0	20.0
Methyl methacrylate	Ave	0.2657	0.2603		0.0980	0.100	-2.0	20.0
2-Nitropropane	Qua		0.0627		0.0962	0.100	-3.8	20.0
n-Butyl acetate	Ave	0.6705	0.6281		0.0468	0.0500	-6.3	20.0
1-Chlorohexane	Ave	0.4629	0.5323		0.0575	0.0500	15.0	20.0
Cyclohexanone	Ave	0.0134	0.0130		0.487	0.500	-2.5	20.0
Pentachloroethane	Qua		0.5632		0.149	0.100	48.9*	20.0
1,2,3-Trimethylbenzene	Ave	2.925	3.493		0.0597	0.0500	19.4	20.0
Benzyl chloride	Qua		0.3177		0.0760	0.0500	52.1*	20.0
1,3,5-Trichlorobenzene	Ave	1.329	1.397		0.0526	0.0500	5.1	20.0
2-Methylnaphthalene	Ave	2.139	2.258		0.106	0.100	5.5	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: 1410623.D Lab Sample ID: MB 240-294629/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX14 Date Analyzed: 09/13/2017 10:55

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-294629/5	1410621.D	09/13/2017 10:12
	LCS 240-294629/6	1410622.D	09/13/2017 10:34
SB-119A-10-12.5'	240-84819-1	1410634.D	09/13/2017 14:52
SB-119B-56-58'	240-84819-2	1410635.D	09/13/2017 15:13
SB-117A-33-35'	240-84819-3	1410636.D	09/13/2017 15:35
SB-117B-47-50'	240-84819-4	1410637.D	09/13/2017 15:56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294629/7

Matrix: Solid | Lab File ID: 1410623.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.36	U	5.0	0.36
71-55-6	1,1,1-Trichloroethane	0.23	U	5.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	5.0	0.26
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	U	5.0	0.49
75-34-3	1,1-Dichloroethane	0.33	U	5.0	0.33
75-35-4	1,1-Dichloroethene	0.54	U	5.0	0.54
563-58-6	1,1-Dichloropropene	0.19	U	5.0	0.19
87-61-6	1,2,3-Trichlorobenzene	0.35	U	5.0	0.35
96-18-4	1,2,3-Trichloropropane	0.39	U	5.0	0.39
526-73-8	1,2,3-Trimethylbenzene	0.10	U	5.0	0.10
120-82-1	1,2,4-Trichlorobenzene	0.24	U	5.0	0.24
95-63-6	1,2,4-Trimethylbenzene	0.25	U	5.0	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	0.68	U	10	0.68
95-50-1	1,2-Dichlorobenzene	0.22	U	5.0	0.22
107-06-2	1,2-Dichloroethane	0.29	U	5.0	0.29
78-87-5	1,2-Dichloropropane	0.31	U	5.0	0.31
541-73-1	1,3-Dichlorobenzene	0.29	U	5.0	0.29
142-28-9	1,3-Dichloropropane	0.23	U	5.0	0.23
106-46-7	1,4-Dichlorobenzene	0.35	U	5.0	0.35
594-20-7	2,2-Dichloropropane	0.30	U	5.0	0.30
78-93-3	2-Butanone (MEK)	1.3	U	20	1.3
110-75-8	2-Chloroethyl vinyl ether	2.8	U	50	2.8
95-49-8	2-Chlorotoluene	0.37	U	5.0	0.37
591-78-6	2-Hexanone	0.58	U	20	0.58
106-43-4	4-Chlorotoluene	0.24	U	5.0	0.24
99-87-6	p-Isopropyltoluene	0.18	U	5.0	0.18
108-10-1	4-Methyl-2-pentanone (MIBK)	0.89	U	20	0.89
67-64-1	Acetone	5.29	J	20	3.1
71-43-2	Benzene	0.32	U	5.0	0.32
108-86-1	Bromobenzene	0.27	U	5.0	0.27
75-25-2	Bromoform	0.40	U	5.0	0.40
74-83-9	Bromomethane	0.59	U	5.0	0.59
75-15-0	Carbon disulfide	0.21	U	5.0	0.21
56-23-5	Carbon tetrachloride	0.25	U	5.0	0.25
108-90-7	Chlorobenzene	0.33	U	5.0	0.33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294629/7

Matrix: Solid | Lab File ID: 1410623.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.30	U	5.0	0.30
75-00-3	Chloroethane	0.38	U	5.0	0.38
67-66-3	Chloroform	0.23	U	5.0	0.23
74-87-3	Chloromethane	0.38	U	5.0	0.38
156-59-2	cis-1,2-Dichloroethene	0.28	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	0.26	U	5.0	0.26
74-95-3	Dibromomethane	0.38	U	5.0	0.38
74-97-5	Bromochloromethane	0.36	U	5.0	0.36
75-71-8	Dichlorodifluoromethane	0.35	U	5.0	0.35
75-27-4	Bromodichloromethane	0.33	U	5.0	0.33
75-65-0	tert-Butyl alcohol	2.4	U	200	2.4
100-41-4	Ethylbenzene	0.27	U	5.0	0.27
87-68-3	Hexachlorobutadiene	0.44	U	5.0	0.44
108-20-3	Diisopropyl ether	0.24	U	10	0.24
98-82-8	Isopropylbenzene	0.20	U	5.0	0.20
1634-04-4	Methyl tert-butyl ether	0.27	U	5.0	0.27
75-09-2	Methylene Chloride	0.24	U	5.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.40	U	10	0.40
91-20-3	Naphthalene	0.33	U	5.0	0.33
104-51-8	n-Butylbenzene	0.25	U	5.0	0.25
103-65-1	N-Propylbenzene	0.28	U	5.0	0.28
95-47-6	o-Xylene	0.22	U	5.0	0.22
135-98-8	sec-Butylbenzene	0.19	U	5.0	0.19
100-42-5	Styrene	0.27	U	5.0	0.27
994-05-8	Tert-amyl methyl ether	0.21	U	5.0	0.21
637-92-3	Ethyl tert-butyl ether	0.13	U	5.0	0.13
127-18-4	Tetrachloroethene	0.37	U	5.0	0.37
108-88-3	Toluene	0.34	U	5.0	0.34
156-60-5	trans-1,2-Dichloroethene	0.38	U	5.0	0.38
10061-02-6	trans-1,3-Dichloropropene	0.21	U	5.0	0.21
79-01-6	Trichloroethene	0.41	U	5.0	0.41
75-69-4	Trichlorofluoromethane	0.24	U	5.0	0.24
108-05-4	Vinyl acetate	0.87	U	10	0.87
75-01-4	Vinyl chloride	0.28	U	5.0	0.28
1330-20-7	Xylenes, Total	0.40	U	10	0.40
98-06-6	tert-Butylbenzene	0.21	U	5.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294629/7

Matrix: Solid | Lab File ID: 1410623.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.35	U	5.0	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		66-125
1868-53-7	Dibromofluoromethane (Surr)	88		43-131
460-00-4	4-Bromofluorobenzene (Surr)	82		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		61-127

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294629/7

Matrix: Solid | Lab File ID: 1410623.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

Number TICs Found: 3 | TIC Result Total: 9.734

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
75-05-8	Acetonitrile	2.77	7.08	J	91%
110-54-3	Hexane	3.61	0.504	J	93%
91-57-6	2-Methylnaphthalene	14.14	2.15	J	92%

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 1410621.D

Lab ID: LCS 240-294629/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	57.0	114	64-130	
1,1,1-Trichloroethane	50.0	57.2	114	60-136	
1,1,2,2-Tetrachloroethane	50.0	53.7	107	78-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.0	110	64-125	
1,1-Dichloroethane	50.0	52.2	104	72-120	
1,1-Dichloroethene	50.0	58.5	117	58-130	
1,1-Dichloropropene	50.0	54.4	109	70-126	
1,2,3-Trichlorobenzene	50.0	56.0	112	59-121	
1,2,3-Trichloropropane	50.0	53.5	107	79-120	
1,2,4-Trichlorobenzene	50.0	55.8	112	60-124	
1,2,4-Trimethylbenzene	50.0	57.3	115	78-122	
1,2-Dibromo-3-Chloropropane	50.0	47.6	95	40-133	
1,2-Dichlorobenzene	50.0	51.7	103	75-120	
1,2-Dichloroethane	50.0	49.1	98	71-120	
1,2-Dichloropropane	50.0	51.1	102	78-122	
1,3-Dichlorobenzene	50.0	51.8	104	72-120	
1,3-Dichloropropane	50.0	49.0	98	78-120	
1,4-Dichlorobenzene	50.0	50.3	101	71-120	
2,2-Dichloropropane	50.0	59.9	120	40-150	
2-Butanone (MEK)	100	94.8	95	51-120	
2-Chloroethyl vinyl ether	50.0	47.0 J	94	61-143	
2-Chlorotoluene	50.0	55.0	110	78-120	
2-Hexanone	100	101	101	52-129	
4-Chlorotoluene	50.0	52.9	106	75-120	
p-Isopropyltoluene	50.0	56.2	112	76-126	
4-Methyl-2-pentanone (MIBK)	100	106	106	65-131	
Acetone	100	108	108	24-125	
Benzene	50.0	51.2	102	77-120	
Bromobenzene	50.0	52.8	106	75-120	
Bromoform	50.0	49.6	99	40-140	
Bromomethane	20.0	20.4	102	10-153	
Carbon disulfide	50.0	59.1	118	17-163	
Carbon tetrachloride	50.0	56.1	112	43-144	
Chlorobenzene	50.0	51.4	103	76-120	
Chloroethane	20.0	22.3	111	10-166	
Chloroform	50.0	51.7	103	74-120	
Chloromethane	20.0	21.8	109	41-124	
cis-1,2-Dichloroethene	50.0	51.4	103	78-120	
cis-1,3-Dichloropropene	50.0	52.3	105	66-126	
Dibromomethane	50.0	51.4	103	76-120	
Bromochloromethane	50.0	52.9	106	76-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 1410621.D

Lab ID: LCS 240-294629/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	21.0	105	15-127	
Bromodichloromethane	50.0	53.2	106	61-132	
tert-Butyl alcohol	500	487	97	39-141	
Ethylbenzene	50.0	52.6	105	76-120	
Hexachlorobutadiene	50.0	56.3	113	62-133	
Isopropylbenzene	50.0	59.1	118	76-124	
Methyl tert-butyl ether	50.0	52.6	105	68-129	
Methylene Chloride	50.0	50.3	101	64-126	
m-Xylene & p-Xylene	50.0	54.0	108	78-120	
Naphthalene	50.0	57.4	115	68-123	
n-Butylbenzene	50.0	55.2	110	72-130	
N-Propylbenzene	50.0	59.1	118	77-126	
o-Xylene	50.0	55.2	110	77-120	
sec-Butylbenzene	50.0	56.0	112	78-125	
Styrene	50.0	53.6	107	80-120	
Tetrachloroethene	50.0	55.6	111	68-122	
Toluene	50.0	51.8	104	74-120	
trans-1,2-Dichloroethene	50.0	56.1	112	74-124	
trans-1,3-Dichloropropene	50.0	49.1	98	55-121	
Trichloroethene	50.0	52.1	104	73-123	
Trichlorofluoromethane	20.0	23.7	118	28-152	
Vinyl acetate	50.0	48.2	96	36-132	
Vinyl chloride	20.0	20.9	105	49-131	
Xylenes, Total	100	109	109	78-120	
tert-Butylbenzene	50.0	55.3	111	75-125	
1,2-Dibromoethane	50.0	53.5	107	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-294629/5

Matrix: Solid | Lab File ID: 1410621.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	57.0		5.0	0.36
71-55-6	1,1,1-Trichloroethane	57.2		5.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	53.7		5.0	0.26
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	55.0		5.0	0.49
75-34-3	1,1-Dichloroethane	52.2		5.0	0.33
75-35-4	1,1-Dichloroethene	58.5		5.0	0.54
563-58-6	1,1-Dichloropropene	54.4		5.0	0.19
87-61-6	1,2,3-Trichlorobenzene	56.0		5.0	0.35
96-18-4	1,2,3-Trichloropropane	53.5		5.0	0.39
120-82-1	1,2,4-Trichlorobenzene	55.8		5.0	0.24
95-63-6	1,2,4-Trimethylbenzene	57.3		5.0	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	47.6		10	0.68
95-50-1	1,2-Dichlorobenzene	51.7		5.0	0.22
107-06-2	1,2-Dichloroethane	49.1		5.0	0.29
78-87-5	1,2-Dichloropropane	51.1		5.0	0.31
541-73-1	1,3-Dichlorobenzene	51.8		5.0	0.29
142-28-9	1,3-Dichloropropane	49.0		5.0	0.23
106-46-7	1,4-Dichlorobenzene	50.3		5.0	0.35
594-20-7	2,2-Dichloropropane	59.9		5.0	0.30
78-93-3	2-Butanone (MEK)	94.8		20	1.3
110-75-8	2-Chloroethyl vinyl ether	47.0	J	50	2.8
95-49-8	2-Chlorotoluene	55.0		5.0	0.37
591-78-6	2-Hexanone	101		20	0.58
106-43-4	4-Chlorotoluene	52.9		5.0	0.24
99-87-6	p-Isopropyltoluene	56.2		5.0	0.18
108-10-1	4-Methyl-2-pentanone (MIBK)	106		20	0.89
67-64-1	Acetone	108		20	3.1
71-43-2	Benzene	51.2		5.0	0.32
108-86-1	Bromobenzene	52.8		5.0	0.27
75-25-2	Bromoform	49.6		5.0	0.40
74-83-9	Bromomethane	20.4		5.0	0.59
75-15-0	Carbon disulfide	59.1		5.0	0.21
56-23-5	Carbon tetrachloride	56.1		5.0	0.25
108-90-7	Chlorobenzene	51.4		5.0	0.33
124-48-1	Dibromochloromethane	53.6		5.0	0.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-294629/5

Matrix: Solid | Lab File ID: 1410621.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	22.3		5.0	0.38
67-66-3	Chloroform	51.7		5.0	0.23
74-87-3	Chloromethane	21.8		5.0	0.38
156-59-2	cis-1,2-Dichloroethene	51.4		5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	52.3		5.0	0.26
74-95-3	Dibromomethane	51.4		5.0	0.38
74-97-5	Bromochloromethane	52.9		5.0	0.36
75-71-8	Dichlorodifluoromethane	21.0		5.0	0.35
75-27-4	Bromodichloromethane	53.2		5.0	0.33
75-65-0	tert-Butyl alcohol	487		200	2.4
100-41-4	Ethylbenzene	52.6		5.0	0.27
87-68-3	Hexachlorobutadiene	56.3		5.0	0.44
98-82-8	Isopropylbenzene	59.1		5.0	0.20
1634-04-4	Methyl tert-butyl ether	52.6		5.0	0.27
75-09-2	Methylene Chloride	50.3		5.0	0.24
179601-23-1	m-Xylene & p-Xylene	54.0		10	0.40
91-20-3	Naphthalene	57.4		5.0	0.33
104-51-8	n-Butylbenzene	55.2		5.0	0.25
103-65-1	N-Propylbenzene	59.1		5.0	0.28
95-47-6	o-Xylene	55.2		5.0	0.22
135-98-8	sec-Butylbenzene	56.0		5.0	0.19
100-42-5	Styrene	53.6		5.0	0.27
127-18-4	Tetrachloroethene	55.6		5.0	0.37
108-88-3	Toluene	51.8		5.0	0.34
156-60-5	trans-1,2-Dichloroethene	56.1		5.0	0.38
10061-02-6	trans-1,3-Dichloropropene	49.1		5.0	0.21
79-01-6	Trichloroethene	52.1		5.0	0.41
75-69-4	Trichlorofluoromethane	23.7		5.0	0.24
108-05-4	Vinyl acetate	48.2		10	0.87
75-01-4	Vinyl chloride	20.9		5.0	0.28
1330-20-7	Xylenes, Total	109		10	0.40
98-06-6	tert-Butylbenzene	55.3		5.0	0.21
106-93-4	1,2-Dibromoethane	53.5		5.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-294629/5

Matrix: Solid Lab File ID: 1410621.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/13/2017 10:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 294629 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		66-125
1868-53-7	Dibromofluoromethane (Surr)	89		43-131
460-00-4	4-Bromofluorobenzene (Surr)	82		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		61-127

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-294629/6

Matrix: Solid | Lab File ID: 1410622.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 10:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
526-73-8	1,2,3-Trimethylbenzene	60.2		5.0	0.10
108-20-3	Diisopropyl ether	65.2		10	0.24
994-05-8	Tert-amyl methyl ether	60.8		5.0	0.21
637-92-3	Ethyl tert-butyl ether	62.4		5.0	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	75		66-125
1868-53-7	Dibromofluoromethane (Surr)	105		43-131
460-00-4	4-Bromofluorobenzene (Surr)	88		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		61-127

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB-119A-10-12.5'	240-84819-1	84	89	90	80
SB-119B-56-58'	240-84819-2	85	90	90	79
SB-117A-33-35'	240-84819-3	86	100	74	81
SB-117B-47-50'	240-84819-4	84	88	88	79
	MB 240-294629/7	88	93	89	82
	LCS 240-294629/5	89	86	92	82
	LCS 240-294629/6	105	99	75	88

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	43-131
DCA = 1,2-Dichloroethane-d4 (Surr)	61-127
TOL = Toluene-d8 (Surr)	66-125
BFB = 4-Bromofluorobenzene (Surr)	61-132

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: ICIS 240-292967/6 Date Analyzed: 08/29/2017 15:47

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 1410325.D Heated Purge: (Y/N) Y

Calibration ID: 41288

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1982385	6.41	1265843	9.36	570403	11.36
UPPER LIMIT		3964770	6.91	2531686	9.86	1140806	11.86
LOWER LIMIT		991193	5.91	632922	8.86	285202	10.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-292967/13		1692105	6.41	1085431	9.36	509711	11.36
CCVIS 240-294629/3		1644071	6.41	1070770	9.36	502558	11.36

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCVIS 240-294629/3 Date Analyzed: 09/13/2017 09:29

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 1410619.D Heated Purge: (Y/N) Y

Calibration ID: 41288

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1644071	6.41	1070770	9.36	502558	11.36
UPPER LIMIT		3288142	6.91	2141540	9.86	1005116	11.86
LOWER LIMIT		822036	5.91	535385	8.86	251279	10.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-294629/4		1589106	6.41	1030400	9.36	464414	11.36
LCS 240-294629/5		1635312	6.41	1021663	9.36	471793	11.36
LCS 240-294629/6		1383367	6.41	1041547	9.36	463306	11.36
MB 240-294629/7		1407101	6.41	901306	9.36	423296	11.36
240-84819-1	SB-119A-10-12.5'	1470894	6.41	908077	9.36	418858	11.36
240-84819-2	SB-119B-56-58'	1451165	6.41	904479	9.36	420004	11.36
240-84819-3	SB-117A-33-35'	997699	6.41	810219	9.36	381403	11.36
240-84819-4	SB-117B-47-50'	1361512	6.41	842857	9.36	385409	11.36

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

SAMPLE CALCULATION - VOC	SOIL	
SAMPLE IDENTIFICATION	SB-119B-56-58'	
COMPOUND	TRICHLOROETHENE	
COMPOUND AREA	89385	
INTERNAL STANDARD AMOUNT (ng)	50	
INTERNAL STANDARD AREA	1451165	
AVERAGE RRF	0.2712	
89385 x 50 x 1 / 1451165 x 0.2712	11.3561	ug/L
PERCENT SOLIDS	0.793	
FINAL AMOUNT	5	mL
INITIAL WEIGHT	5.6113	g
11.3560728092464 x 5 / 5.6113 / 0.793	12.76	µg/kg

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.40	U	5.6	0.40
71-55-6	1,1,1-Trichloroethane	0.26	U	5.6	0.26
79-34-5	1,1,2,2-Tetrachloroethane	0.29	U	5.6	0.29
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	U	5.6	0.55
75-34-3	1,1-Dichloroethane	0.37	U	5.6	0.37
75-35-4	1,1-Dichloroethene	0.61	U	5.6	0.61
563-58-6	1,1-Dichloropropene	0.21	U	5.6	0.21
87-61-6	1,2,3-Trichlorobenzene	0.39	U	5.6	0.39
96-18-4	1,2,3-Trichloropropane	0.44	U	5.6	0.44
526-73-8	1,2,3-Trimethylbenzene	0.11	U	5.6	0.11
120-82-1	1,2,4-Trichlorobenzene	0.27	U	5.6	0.27
95-63-6	1,2,4-Trimethylbenzene	0.28	U	5.6	0.28
96-12-8	1,2-Dibromo-3-Chloropropane	0.76	U	11	0.76
95-50-1	1,2-Dichlorobenzene	0.25	U	5.6	0.25
107-06-2	1,2-Dichloroethane	0.33	U	5.6	0.33
78-87-5	1,2-Dichloropropane	0.35	U	5.6	0.35
541-73-1	1,3-Dichlorobenzene	0.33	U	5.6	0.33
142-28-9	1,3-Dichloropropane	0.26	U	5.6	0.26
106-46-7	1,4-Dichlorobenzene	0.39	U	5.6	0.39
594-20-7	2,2-Dichloropropane	0.34	U	5.6	0.34
78-93-3	2-Butanone (MEK)	1.4	U	22	1.4
110-75-8	2-Chloroethyl vinyl ether	3.2	U	56	3.2
95-49-8	2-Chlorotoluene	0.42	U	5.6	0.42
591-78-6	2-Hexanone	0.65	U	22	0.65
106-43-4	4-Chlorotoluene	0.27	U	5.6	0.27
99-87-6	p-Isopropyltoluene	0.20	U	5.6	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	22	1.0
67-64-1	Acetone	3.4	U	22	3.4
71-43-2	Benzene	14		5.6	0.36
108-86-1	Bromobenzene	0.30	U	5.6	0.30
75-25-2	Bromoform	0.45	U	5.6	0.45
74-83-9	Bromomethane	0.66	U	5.6	0.66
75-15-0	Carbon disulfide	0.24	U	5.6	0.24
56-23-5	Carbon tetrachloride	0.28	U	5.6	0.28
108-90-7	Chlorobenzene	0.37	U	5.6	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.34	U	5.6	0.34
75-00-3	Chloroethane	0.43	U	5.6	0.43
67-66-3	Chloroform	0.26	U	5.6	0.26
74-87-3	Chloromethane	0.43	U	5.6	0.43
156-59-2	cis-1,2-Dichloroethene	18		5.6	0.31
10061-01-5	cis-1,3-Dichloropropene	0.29	U	5.6	0.29
74-95-3	Dibromomethane	0.43	U	5.6	0.43
74-97-5	Bromochloromethane	0.40	U	5.6	0.40
75-71-8	Dichlorodifluoromethane	0.39	U	5.6	0.39
75-27-4	Bromodichloromethane	0.37	U	5.6	0.37
75-65-0	tert-Butyl alcohol	2.7	U	220	2.7
100-41-4	Ethylbenzene	0.30	U	5.6	0.30
87-68-3	Hexachlorobutadiene	0.49	U	5.6	0.49
108-20-3	Diisopropyl ether	0.27	U *	11	0.27
98-82-8	Isopropylbenzene	0.22	U	5.6	0.22
1634-04-4	Methyl tert-butyl ether	1.7	J	5.6	0.30
75-09-2	Methylene Chloride	0.27	U	5.6	0.27
179601-23-1	m-Xylene & p-Xylene	0.45	U	11	0.45
91-20-3	Naphthalene	0.37	U	5.6	0.37
104-51-8	n-Butylbenzene	0.28	U	5.6	0.28
103-65-1	N-Propylbenzene	0.31	U	5.6	0.31
95-47-6	o-Xylene	0.53	J	5.6	0.25
135-98-8	sec-Butylbenzene	0.21	U	5.6	0.21
100-42-5	Styrene	0.30	U	5.6	0.30
994-05-8	Tert-amyl methyl ether	0.24	U	5.6	0.24
637-92-3	Ethyl tert-butyl ether	0.15	U	5.6	0.15
127-18-4	Tetrachloroethene	0.42	U	5.6	0.42
108-88-3	Toluene	0.38	U	5.6	0.38
156-60-5	trans-1,2-Dichloroethene	1.3	J	5.6	0.43
10061-02-6	trans-1,3-Dichloropropene	0.24	U	5.6	0.24
79-01-6	Trichloroethene	13		5.6	0.46
75-69-4	Trichlorofluoromethane	0.27	U	5.6	0.27
108-05-4	Vinyl acetate	0.98	U	11	0.98
75-01-4	Vinyl chloride	0.72	J	5.6	0.31
1330-20-7	Xylenes, Total	0.53	J	11	0.45
98-06-6	tert-Butylbenzene	0.24	U	5.6	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119B-56-58' | Lab Sample ID: 240-84819-2

Matrix: Solid | Lab File ID: 1410635.D

Analysis Method: 8260C | Date Collected: 09/09/2017 14:40

Sample wt/vol: 5.6113(g) | Date Analyzed: 09/13/2017 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.7 | Level: (low/med) Low

Analysis Batch No.: 294629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	1,2-Dibromoethane	0.39	U	5.6	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		66-125
1868-53-7	Dibromofluoromethane (Surr)	85		43-131
460-00-4	4-Bromofluorobenzene (Surr)	79		61-132
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		61-127

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX14\20170913-68667.b\1410635.D
Lims ID: 240-84819-B-2-A
Client ID: SB-119B-56-58'
Sample Type: Client
Inject. Date: 13-Sep-2017 15:13:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-84819-b-2-a
Misc. Info.: 240-0068667-019
Operator ID: 002808 Instrument ID: A3UX14

Method: \\ChromNA\Canton\ChromData\A3UX14\20170913-68667.b\8260_14.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Sep-2017 09:45:44 Calib Date: 29-Aug-2017 17:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX14\20170829-68279.b\1410330.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: macenczaks Date: 13-Sep-2017 15:55:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.409	6.409	0.000	99	1451165	50.0	
* 2 Chlorobenzene-d5	117	9.356	9.356	0.000	96	904479	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.355	11.355	0.000	98	420004	50.0	
$ 4 Dibromofluoromethane (Surr	113	5.605	5.605	0.000	93	289607	42.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.019	6.019	0.000	95	368326	44.8	
$ 6 Toluene-d8 (Surr)	98	8.042	8.054	-0.012	95	1104921	44.9	
$ 7 4-Bromofluorobenzene (Surr	95	10.373	10.373	0.000	89	341761	39.3	
9 Dichlorodifluoromethane	85		1.096				ND	
10 Chloromethane	50		1.215				ND	
11 Vinyl chloride	62	1.297	1.309	-0.012	88	5028	0.6385	
13 Bromomethane	94		1.570				ND	
15 Chloroethane	64		1.664				ND	
17 Trichlorofluoromethane	101		1.865				ND	
21 1,1-Dichloroethene	96		2.339				ND	
22 1,1,2-Trichloro-1,2,2-trif	151		2.374				ND	
24 Acetone	43	2.445	2.445	0.000	97	26401	1.19	
26 Carbon disulfide	76		2.540				ND	
30 Methylene Chloride	84		2.907				ND	
31 2-Methyl-2-propanol	59		3.143				ND	
32 trans-1,2-Dichloroethene	96	3.226	3.238	-0.012	95	9861	1.18	
33 Methyl tert-butyl ether	73	3.250	3.250	0.000	90	37322	1.51	
36 1,1-Dichloroethane	63		3.842				ND	
38 Isopropyl ether	87		3.995				ND	
39 Vinyl acetate	86		4.007				ND	
40 Tert-butyl ethyl ether	59		4.634				ND	
41 2,2-Dichloropropane	77		4.812				ND	
42 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	83	151512	15.7	
43 2-Butanone (MEK)	43		4.954				ND	
46 Chlorobromomethane	128		5.214				ND	
49 Chloroform	83	5.380	5.380	0.000	87	1555	0.1060	
50 1,1,1-Trichloroethane	97		5.557				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117	5.758	5.759	0.000	89	1806	0.2102	
53 1,1-Dichloropropene	75		5.782				ND	
54 Benzene	78	6.042	6.043	0.000	97	432911	12.4	
56 1,2-Dichloroethane	62	6.102	6.113	-0.011	88	2095	0.1860	
57 Tert-amyl methyl ether	73		6.232				ND	
59 Trichloroethene	130	6.812	6.812	0.000	97	89385	11.4	
63 1,2-Dichloropropane	63		7.060				ND	
65 Dibromomethane	93		7.190				ND	
68 Dichlorobromomethane	83		7.380				ND	
70 2-Chloroethyl vinyl ether	63		7.711				ND	
71 cis-1,3-Dichloropropene	75		7.817				ND	
73 4-Methyl-2-pentanone (MIBK	43		7.995				ND	
74 Toluene	91		8.113				ND	
75 trans-1,3-Dichloropropene	75		8.362				ND	
78 Tetrachloroethene	164		8.598				ND	
79 1,3-Dichloropropane	76		8.669				ND	
80 2-Hexanone	43		8.764				ND	
82 Chlorodibromomethane	129		8.859				ND	
83 Ethylene Dibromide	107		8.942				ND	
85 Chlorobenzene	112		9.379				ND	
86 1,1,1,2-Tetrachloroethane	131		9.462				ND	
87 Ethylbenzene	106	9.486	9.486	0.000	1	488	0.0454	7
88 m-Xylene & p-Xylene	106	9.580	9.581	-0.001	91	1513	0.1196	
89 o-Xylene	106	9.924	9.924	0.000	98	5880	0.4675	
90 Styrene	104		9.947				ND	
91 Bromoform	173		10.113				ND	
92 Isopropylbenzene	105		10.243				ND	
94 Bromobenzene	156		10.504				ND	
95 1,1,2,2-Tetrachloroethane	83		10.527				ND	
96 1,2,3-Trichloropropane	110		10.563				ND	
98 N-Propylbenzene	120		10.598				ND	
99 2-Chlorotoluene	126		10.669				ND	
101 4-Chlorotoluene	126		10.764				ND	
103 tert-Butylbenzene	119		11.024				ND	
105 1,2,4-Trimethylbenzene	105		11.060				ND	
107 sec-Butylbenzene	105		11.202				ND	
108 1,3-Dichlorobenzene	146		11.296				ND	
109 4-Isopropyltoluene	119		11.332				ND	
110 1,4-Dichlorobenzene	146		11.379				ND	
111 1,2,3-Trimethylbenzene	105		11.415				ND	
113 n-Butylbenzene	91		11.675				ND	
114 1,2-Dichlorobenzene	146		11.687				ND	
115 1,2-Dibromo-3-Chloropropan	157		12.349				ND	
117 1,2,4-Trichlorobenzene	180		13.036				ND	
118 Hexachlorobutadiene	225		13.178				ND	
119 Naphthalene	128		13.237				ND	
120 1,2,3-Trichlorobenzene	180		13.438				ND	
S 134 Xylenes, Total	106				0		0.5872	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 292967

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/29/2017 14:43 Calibration End Date: 08/29/2017 17:34 Calibration ID: 41288

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2599 0.3109	0.2458 0.3240	0.2565 0.3367	0.2979 0.3224	0.3097	Ave		0.2960			0.1000	11.3		20.0			
1,1-Dichloropropene	0.2891 0.3743	0.3224 0.3873	0.3296 0.3917	0.3754 0.3827	0.3841	Ave		0.3596				10.1		20.0			
Benzene	1.2584 1.1887	1.1978 1.2032	1.1492 1.1879	1.2480 1.1393	1.2576	Ave		1.2033			0.5000	3.7		20.0			
1,2-Dichloroethane	0.4195 0.3770	0.4074 0.3866	0.3716 0.3802	0.3904 0.3624	0.3975	Ave		0.3881			0.1000	4.6		20.0			
Isobutyl alcohol	0.0086 0.0084	0.0101 0.0089	0.0086 0.0087	0.0089 0.0082	0.0088	Ave		0.0088				6.3		20.0			
n-Heptane	+++++ 0.0733	+++++ 0.0773	0.0652 0.0779	0.0803 0.0810	0.0734	Ave		0.0755				7.2		20.0			
Trichloroethene	0.2680 0.2681	0.2602 0.2811	0.2499 0.2858	0.2794 0.2739	0.2748	Ave		0.2712			0.1500	4.1		20.0			
Methylcyclohexane	+++++ 0.4862	+++++ 0.4978	0.4111 0.5021	0.4681 0.4758	0.4884	Ave		0.4756			0.1000	6.5		20.0			
1,2-Dichloropropane	0.3098 0.2998	0.2860 0.3056	0.2762 0.2998	0.3106 0.2928	0.3115	Ave		0.2991			0.1000	4.1		20.0			
Dibromomethane	0.1583 0.1668	0.1622 0.1708	0.1507 0.1701	0.1719 0.1613	0.1729	Ave		0.1650				4.5		20.0			
1,4-Dioxane	0.0019 0.0023	0.0025 0.0024	0.0023 0.0023	0.0025 0.0022	0.0025	Ave		0.0023				8.2		20.0			
Bromodichloromethane	0.3186 0.3536	0.2761 0.3712	0.2814 0.3774	0.3262 0.3636	0.3385	Ave		0.3341			0.1500	11.1		20.0			
2-Chloroethyl vinyl ether	+++++ 0.1663	+++++ 0.1816	0.1278 0.1739	0.1649 0.1752	0.1683	Ave		0.1654				10.6		20.0			
cis-1,3-Dichloropropene	+++++ 0.4284	+++++ 0.4597	0.3330 0.4471	0.3944 0.4408	0.4338	Ave		0.4196			0.1500	10.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.3723 0.4407	0.3915 0.4638	0.3781 0.4545	0.4226 0.4269	0.4455	Ave		0.4218			0.0500	8.0		20.0			
Toluene	1.7939 1.7952	1.6790 1.8626	1.6471 1.8632	1.8199 1.8586	1.8293	Ave		1.7943			0.4000	4.4		20.0			
trans-1,3-Dichloropropene	+++++ 0.5762	+++++ 0.6268	0.4187 0.6509	0.5195 0.6554	0.5609	Ave		0.5726			0.1000	14.7		20.0			
Ethyl methacrylate	+++++ 0.5089	+++++ 0.5530	0.3757 0.5387	0.4665 0.5526	0.4879	Ave		0.4976				12.7		20.0			
1,1,2-Trichloroethane	0.3263 0.3453	0.3465 0.3630	0.3125 0.3632	0.3708 0.3617	0.3615	Ave		0.3501			0.1000	5.6		20.0			
Tetrachloroethene	0.2566 0.3075	0.2600 0.3240	0.2601 0.3383	0.3108 0.3475	0.3072	Ave		0.3013			0.1500	11.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Batch Number: 294658 Batch Start Date: 09/13/17 09:56 Batch Analyst: Macenczak, Steven

Batch Method: 5030C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
240-84790-B-4 MS		5030C, 8260C	T	5.8379 g	5 mL				
240-84790-B-4 MSD		5030C, 8260C	T	5.6076 g	5 mL				
240-84819-B-1	SB-119A-10-12.5'	5030C, 8260C	T	5.4145 g	5 mL				
240-84819-B-2	SB-119B-56-58'	5030C, 8260C	T	5.6113 g	5 mL				
240-84819-B-3	SB-117A-33-35'	5030C, 8260C	T	5.3395 g	5 mL				
240-84819-B-4	SB-117B-47-50'	5030C, 8260C	T	5.1528 g	5 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: 70909001.D DFTPP Injection Date: 09/09/2017

Instrument ID: A4HP9 DFTPP Injection Time: 12:02

Analysis Batch No.: 294210

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.9	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	56.5	
70	Less than 2.0% of mass 69	0.2	(0.4) 1
127	25.0 - 75.0% of mass 198	54.9	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	24.1	
365	Greater than 0.75% of mass 198	3.0	
441	Present, but less than mass 443	11.2	
442	40.0 - 110.0% of mass 198	67.6	
443	15.0 - 24.0% of mass 442	13.7	(20.3) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-294210/2	70909002.D	09/09/2017	12:29
	STD4 240-294210/3	70909003.D	09/09/2017	12:55
	STD3 240-294210/4	70909004.D	09/09/2017	13:20
	STD2 240-294210/5	70909005.D	09/09/2017	13:45
	STD1 240-294210/6	70909006.D	09/09/2017	14:11
	STD6 240-294210/7	70909007.D	09/09/2017	14:36
	STD7 240-294210/8	70909008.D	09/09/2017	15:01
	STD8 240-294210/9	70909009.D	09/09/2017	15:27
	STD9 240-294210/10	70909010.D	09/09/2017	15:52
	ICV 240-294210/11	70909011.D	09/09/2017	16:18
	ICV 240-294210/20	70909020.D	09/09/2017	20:06

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294210/6	70909006.D
Level 2	STD2 240-294210/5	70909005.D
Level 3	STD3 240-294210/4	70909004.D
Level 4	STD4 240-294210/3	70909003.D
Level 5	STD5 240-294210/2	70909002.D
Level 6	STD6 240-294210/7	70909007.D
Level 7	STD7 240-294210/8	70909008.D
Level 8	STD8 240-294210/9	70909009.D
Level 9	STD9 240-294210/10	70909010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5652	0.6241 0.6488	0.6079 0.6337	0.6008 0.6068	0.5992	Ave		0.6108				4.1		20.0			
N-Nitrosodimethylamine	0.9714	0.8098 0.9963	0.8974 0.9893	0.9601 0.9789	0.9647	Ave		0.9460				6.6		20.0			
Pyridine	1.7470 1.7570	1.6314 1.7409	1.7299 1.7299	1.6293 1.7122	1.7809	Ave		1.7176				3.1		20.0			
Benzaldehyde	1.6670 1.3652	1.3653 1.2968	1.3921 1.2355	1.3851 1.1641	1.3158	Ave		1.3541			0.0100	10.3		20.0			
Phenol	1.8749	1.7930 1.9168	1.9135 1.8969	1.8006 1.8885	1.8921	Ave		1.8720			0.8000	2.6		20.0			
Aniline	2.3083	1.9963 2.3526	2.2966 2.3467	2.2266 2.3041	2.3097	Ave		2.2676				5.1		20.0			
Bis(2-chloroethyl)ether	1.5690	1.3924 1.5636	1.4754 1.5206	1.5244 1.5328	1.5320	Ave		1.5138			0.7000	3.8		20.0			
2-Chlorophenol	1.3755	1.2399 1.3935	1.3304 1.4066	1.3096 1.3943	1.3712	Ave		1.3526			0.8000	4.2		20.0			
n-Decane	1.5944	1.5667 1.6222	1.5953 1.6225	1.6156 1.5920	1.6073	Ave		1.6020				1.2		20.0			
1,3-Dichlorobenzene	1.5031	1.3019 1.5178	1.5213 1.5224	1.4464 1.5114	1.4915	Ave		1.4770				5.1		20.0			
1,4-Dichlorobenzene	1.5322	1.4811 1.5454	1.4809 1.5538	1.5292 1.5474	1.4860	Ave		1.5195				2.1		20.0			
Benzyl alcohol	0.9696	0.8432 1.0017	0.9592 1.0099	0.9180 0.9978	0.9738	Ave		0.9591				5.8		20.0			
1,2-Dichlorobenzene	1.4327	1.3762 1.4585	1.4109 1.4549	1.3956 1.4343	1.4346	Ave		1.4247				2.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	1.3941	1.2139 1.3976	1.3113 1.3837	1.3058 1.3678	1.3365	Ave		1.3388			0.7000	4.6		20.0			
2,2'-oxybis[1-chloropropane]	1.7589	1.6771 1.7675	1.8053 1.7446	1.7191 1.7200	1.7455	Ave		1.7422				2.2		20.0			
Indene	2.8513	2.6805 2.9242	2.8392 2.9322	2.7099 2.9044	2.7412	Ave		2.8229				3.5		20.0			
3 & 4 Methylphenol	1.4330	1.3033 1.4985	1.4018 1.4708	1.3568 1.4756	1.3956	Ave		1.4169				4.7		20.0			
N-Nitrosodi-n-propylamine	1.2830	1.2057 1.3113	1.3042 1.3057	1.2354 1.2982	1.2690	Ave		1.2766			0.5000	3.0		20.0			
Acetophenone	2.2424	2.0970 2.3001	2.2974 2.2778	2.1204 2.2786	2.2033	Ave		2.2271			0.0100	3.6		20.0			
Hexachloroethane	0.6850	0.6512 0.6945	0.6641 0.6927	0.6512 0.6759	0.6551	Ave		0.6712			0.3000	2.7		20.0			
Nitrobenzene	0.4971	0.4538 0.4996	0.4776 0.4982	0.4791 0.4787	0.4849	Ave		0.4836			0.2000	3.1		20.0			
Isophorone	0.8428	0.7520 0.8592	0.7917 0.8796	0.8215 0.8419	0.8312	Ave		0.8275			0.4000	4.8		20.0			
2-Nitrophenol	0.1908	0.1533 0.1991	0.1694 0.2093	0.1842 0.2026	0.1930	Ave		0.1877			0.1000	9.8		20.0			
2,4-Dimethylphenol	0.4310	0.3906 0.4403	0.4051 0.4511	0.4073 0.4380	0.4200	Ave		0.4229			0.2000	4.9		20.0			
Benzoic acid	0.2083	0.1060 0.2147	0.1434 0.2252	0.1619 0.2241	0.1931	Lin1	-0.156	0.2232							0.9990		0.9900
Bis(2-chloroethoxy)methane	0.4553	0.4215 0.4689	0.4349 0.4793	0.4445 0.4610	0.4460	Ave		0.4514			0.3000	4.1		20.0			
2,4-Dichlorophenol	0.2950	0.2619 0.3030	0.2690 0.3108	0.2771 0.3049	0.2894	Ave		0.2889			0.2000	6.2		20.0			
1,2,4-Trichlorobenzene	0.3260	0.2845 0.3308	0.3158 0.3434	0.3128 0.3296	0.3046	Ave		0.3184				5.7		20.0			
Naphthalene	1.0715 1.0181	0.9748 1.0276	1.0175 1.0657	1.0131 1.0389	1.0097	Ave		1.0263			0.7000	2.9		20.0			
4-Chloroaniline	0.4315	0.3775 0.4549	0.4338 0.4700	0.4194 0.4360	0.4355	Ave		0.4323			0.0100	6.3		20.0			
2,6-Dichlorophenol	0.2908	0.2736 0.2954	0.2855 0.3050	0.2818 0.2961	0.2809	Ave		0.2886				3.5		20.0			
Hexachlorobutadiene	0.2005	0.1827 0.2033	0.1914 0.2118	0.1934 0.2040	0.1916	Ave		0.1973			0.0100	4.7		20.0			
Caprolactam	0.0765 0.1054	0.0936 0.1096	0.1031 0.1107	0.1030 0.1081	0.1045	Ave		0.1016			0.0100	10.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3619	0.3024 0.3676	0.3302 0.3768	0.3391 0.3659	0.3496	Ave		0.3492			0.2000	7.0		20.0			
2-Methylnaphthalene	0.6567 0.6879	0.5899 0.7094	0.6458 0.7375	0.6590 0.7209	0.6560	Ave		0.6737			0.4000	6.7		20.0			
1-Methylnaphthalene	0.5688 0.6336	0.5524 0.6444	0.5965 0.6766	0.6027 0.6514	0.6055	Ave		0.6147				6.5		20.0			
Hexachlorocyclopentadiene	0.3826	0.3107 0.4004	0.3340 0.4111	0.3593 0.4037	0.3691	Ave		0.3714			0.0500	9.6		20.0			
1,2,4,5-Tetrachlorobenzene	0.5247	0.4901 0.5543	0.5173 0.5872	0.5059 0.5711	0.5021	Ave		0.5316			0.0100	6.6		20.0			
2,4,6-Trichlorophenol	0.3582	0.2976 0.3771	0.3198 0.3933	0.3445 0.3859	0.3478	Ave		0.3530			0.2000	9.3		20.0			
2,4,5-Trichlorophenol	0.3696	0.3306 0.3773	0.3558 0.3939	0.3561 0.3793	0.3532	Ave		0.3645			0.2000	5.4		20.0			
1,1'-Biphenyl	1.2506 1.3081	1.1792 1.3541	1.2742 1.4591	1.2618 1.4026	1.2606	Ave		1.3056			0.0100	6.6		20.0			
2-Chloronaphthalene	0.9998 1.0624	1.0002 1.1037	1.0274 1.1674	1.0590 1.1466	1.0537	Ave		1.0689			0.8000	5.6		20.0			
2-Nitroaniline	0.4265	0.3521 0.4309	0.3885 0.4379	0.3990 0.4281	0.4060	Ave		0.4086			0.0100	7.0		20.0			
Dimethyl phthalate	1.2794	1.1866 1.2766	1.2630 1.3256	1.2453 1.2637	1.2368	Ave		1.2596			0.0100	3.2		20.0			
1,3-Dinitrobenzene	0.2056	0.1594 0.2124	0.1868 0.2206	0.1885 0.2153	0.2041	Ave		0.1991				10.1		20.0			
2,6-Dinitrotoluene	0.2967	0.2474 0.2983	0.2650 0.3122	0.2822 0.2941	0.2865	Ave		0.2853				7.2		20.0			
Acenaphthylene	1.4365 1.6198	1.4751 1.6928	1.5822 1.7702	1.5971 1.7226	1.5701	Ave		1.6074			0.9000	6.8		20.0			
3-Nitroaniline	0.2730	0.2342 0.2827	0.2640 0.2945	0.2950 0.2923	0.2740	Ave		0.2762			0.0100	7.4		20.0			
2,4-Dinitrophenol	0.1726	+++++ 0.1980	0.1033 0.2156	0.1256 0.2111	0.1717	Lin1	-0.290	0.2117			0.0100				0.9950		0.9900
Acenaphthene	1.0275 1.0824	0.9921 1.1184	1.0485 1.1832	1.0361 1.1521	1.0286	Ave		1.0743			0.9000	6.0		20.0			
4-Nitrophenol	0.2573	0.2122 0.2619	0.2357 0.2720	0.2275 0.2545	0.2334	Ave		0.2443				8.3		20.0			
2,4-Dinitrotoluene	0.3795	0.3309 0.3980	0.3681 0.4247	0.3721 0.4119	0.3782	Ave		0.3829			0.2000	7.6		20.0			
Dibenzofuran	1.4551 1.5279	1.4479 1.6035	1.5127 1.6626	1.4723 1.6154	1.4715	Ave		1.5299			0.8000	5.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.2893	0.2514 0.2965	0.2777 0.3190	0.2959 0.3173	0.2933	Ave		0.2926			0.0100	7.4		20.0			
Diethyl phthalate	1.2326	1.2410 1.2945	1.2942 1.3574	1.2950 1.3149	1.2189	Ave		1.2811			0.0100	3.7		20.0			
Hexadecane	0.8275	0.7408 0.8435	0.7843 0.8727	0.8163 0.8279	0.8016	Ave		0.8143				4.9		20.0			
4-Chlorophenyl phenyl ether	0.6101	0.5710 0.6383	0.5998 0.6547	0.5759 0.6333	0.5820	Ave		0.6081			0.4000	5.2		20.0			
4-Nitroaniline	0.2926	0.2385 0.3062	0.2789 0.3181	0.2432 0.3022	0.2770	Ave		0.2821			0.0100	10.2		20.0			
Fluorene	1.0428 1.2677	1.1723 1.3141	1.2126 1.3547	1.2095 1.3199	1.2064	Ave		1.2333			0.9000	7.7		20.0			
4,6-Dinitro-2-methylphenol	0.1513	0.0691 0.1698	0.1010 0.1719	0.1026 0.1725	0.1361	Lin1	-0.149	0.1711			0.0100				0.9960		0.9900
Diphenylamine	0.6197	0.5453 0.6412	0.6014 0.6424	0.5837 0.6508	0.6675	Ave		0.6190				6.5		20.0			
N-Nitrosodiphenylamine	0.5268	0.4636 0.5451	0.5113 0.5462	0.4963 0.5533	0.5675	Ave		0.5263			0.0100	6.5		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.0373	0.8538 1.0208	0.9278 0.9682	0.8931 0.9240	1.0106	Ave		0.9552				6.7		20.0			
Azobenzene	1.0371	0.8598 1.0210	0.9258 0.9689	0.8952 0.9235	1.0106	Ave		0.9552				6.7		20.0			
4-Bromophenyl phenyl ether	0.2226	0.1759 0.2159	0.1956 0.2146	0.1999 0.2103	0.2135	Ave		0.2060			0.1000	7.3		20.0			
Hexachlorobenzene	0.1876 0.2530	0.2001 0.2537	0.2184 0.2486	0.2229 0.2454	0.2346	Ave		0.2294			0.1000	10.4		20.0			
Atrazine	0.2002 0.2315	0.1832 0.2229	0.1893 0.2189	0.1776 0.2183	0.2150	Ave		0.2063			0.0100	9.3		20.0			
n-Octadecane	0.4588	0.4353 0.4549	0.4605 0.4264	0.4694 0.4128	0.5158	Ave		0.4542				6.9		20.0			
Pentachlorophenol	0.1586	0.0904 0.1732	0.1146 0.1768	0.1205 0.1748	0.1395	Lin1	-0.125	0.1744			0.0500				0.9970		0.9900
Phenanthrene	1.0799 1.0325	0.9658 1.1033	1.0036 1.1214	0.9907 1.1297	0.9957	Ave		1.0470			0.7000	6.0		20.0			
Anthracene	0.9648 1.0613	0.9866 1.1418	1.0057 1.1594	1.0109 1.1631	1.0226	Ave		1.0573			0.7000	7.4		20.0			
Carbazole	0.9164	0.8283 0.9320	0.9042 0.9235	0.7911 0.8858	0.8955	Ave		0.8846			0.0100	5.6		20.0			
Di-n-butyl phthalate	1.3256	0.9695 1.2709	0.9759 1.2694	0.9930 1.2627	1.2222	Ave		1.1612			0.0100	13.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	1.0051 1.2294	0.9394 1.2640	0.9881 1.2585	0.9139 1.2522	1.0906	Ave		1.1046			0.6000	13.3		20.0			
Benzidine	0.4993	+++++ 0.5311	0.2639 0.5279	0.2938 0.5177	0.4188	Lin1	-0.728	0.5379							0.9980		0.9900
Pyrene	0.9240 1.0423	0.9378 1.0401	0.9450 1.0779	0.9125 1.1042	0.9757	Ave		0.9955			0.6000	7.2		20.0			
Butyl benzyl phthalate	0.5165	0.4311 0.5337	0.5264 0.5328	0.5002 0.5372	0.5173	Ave		0.5119			0.0100	6.8		20.0			
Bis(2-ethylhexyl) phthalate	0.6971	0.5807 0.7134	0.6814 0.7212	0.6547 0.7099	0.6888	Ave		0.6809			0.0100	6.7		20.0			
3,3'-Dichlorobenzidine	0.2944	0.2644 0.3240	0.3127 0.3517	0.2967 0.3594	0.2863	Ave		0.3112			0.0100	10.5		20.0			
Benzo[a]anthracene	1.0044 1.0024	0.9522 1.0404	1.0112 1.0586	0.9440 1.0519	0.9750	Ave		1.0045			0.8000	4.1		20.0			
Chrysene	0.9335 0.9647	0.8977 0.9958	0.9769 1.0018	0.9062 1.0087	0.9226	Ave		0.9564			0.7000	4.4		20.0			
Di-n-octyl phthalate	1.4507	0.9881 1.5196	1.3154 1.5772	1.3833 1.5318	1.4439	Ave		1.4012			0.0100	13.3		20.0			
Benzo[b]fluoranthene	0.8543 1.1637	0.9424 1.2590	1.1446 1.2601	1.0805 1.2867	1.1308	Ave		1.1247			0.7000	13.1		20.0			
Benzo[k]fluoranthene	1.1278 1.2378	1.0561 1.2778	1.1807 1.3913	1.1600 1.3063	1.1893	Ave		1.2141			0.7000	8.3		20.0			
Benzo[a]pyrene	0.8291 1.1170	0.9037 1.1728	1.0375 1.2295	1.0357 1.2183	1.0711	Ave		1.0683			0.7000	12.7		20.0			
Dibenz(a,h)anthracene	0.6394 0.9875	0.7514 1.0443	0.9066 +++++	0.9263 +++++	0.9406	Ave		0.8851			0.4000	15.9		20.0			
Indeno[1,2,3-cd]pyrene	0.7835 1.1959	0.9719 1.2563	1.1360 1.3087	1.0983 1.2887	1.1518	Ave		1.1324			0.5000	14.8		20.0			
Benzo[g,h,i]perylene	0.8405 0.9565	0.8654 0.9860	1.0076 1.0162	0.9502 0.9828	0.9512	Ave		0.9507			0.5000	6.4		20.0			
2-Fluorophenol (Surr)	1.3038	1.1294 1.3302	1.3007 1.3303	1.2812 1.3137	1.3491	Ave		1.2923				5.3		20.0			
Phenol-d5 (Surr)	1.7317	1.5944 1.7680	1.7302 1.7779	1.7249 1.7575	1.7511	Ave		1.7295				3.3		20.0			
Nitrobenzene-d5 (Surr)	0.5083 0.5192	0.4726 0.5236	0.5013 0.5409	0.5090 0.5125	0.5092	Ave		0.5107				3.6		20.0			
2-Fluorobiphenyl (Surr)	1.1341 1.1741	1.1137 1.2152	1.1707 1.2971	1.1530 1.2611	1.1516	Ave		1.1856				5.1		20.0			
2,4,6-Tribromophenol (Surr)	0.1491	0.1284 0.1602	0.1558 0.1687	0.1497 0.1661	0.1561	Ave		0.1543				8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Terphenyl-d14 (Surr)	0.5755 0.6860	0.6093 0.7271	0.6639 0.7388	0.6602 0.7436	0.6482	Ave		0.6725				8.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

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Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294210/6	70909006.D
Level 2	STD2 240-294210/5	70909005.D
Level 3	STD3 240-294210/4	70909004.D
Level 4	STD4 240-294210/3	70909003.D
Level 5	STD5 240-294210/2	70909002.D
Level 6	STD6 240-294210/7	70909007.D
Level 7	STD7 240-294210/8	70909008.D
Level 8	STD8 240-294210/9	70909009.D
Level 9	STD9 240-294210/10	70909010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCBd 4	Ave	204819	11068 368117	21917 491376	40711 577462	102921	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCBd 4	Ave	352025	14362 565340	32351 767087	65054 931613	165705	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCBd 4	Ave	11505 1273443	57864 1975616	124726 2682612	220802 3259119	611774	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzaldehyde	DCBd 4	Ave	10978 989467	48424 1471630	100375 1915994	187702 2215737	451996	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCBd 4	Ave	679458	31797 1087648	68983 1470820	122003 1797355	324988	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCBd 4	Ave	836517	35402 1334904	82795 1819613	150872 2192844	396715	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCBd 4	Ave	568578	24693 887198	53191 1179079	103290 1458829	263135	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCBd 4	Ave	498463	21988 790705	47961 1090623	88735 1327005	235524	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
n-Decane	DCBd 4	Ave	577802	27785 920443	57513 1258098	109474 1515112	276068	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	544714	23089 861248	54844 1180427	98005 1438471	256187	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	555247	26266 876884	53388 1204819	103618 1472676	255237	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCBd 4	Ave	351369	14953 568381	34579 783097	62200 949599	167268	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	519196	24405 827572	50863 1128095	94567 1365089	246411	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCBd 4	Ave	505228	21528 793035	47274 1072886	88477 1301734	229551	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

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RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2,2'-oxybis[1-chloropropane]	DCBd 4	Ave	637415	29742 1002918	65081 1352712	116487 1636952	299801	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indene	DCBd 4	Ave	2066552	95073 3318501	204709 4547142	367238 5528378	941664	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
3 & 4 Methylphenol	DCBd 4	Ave	519322	23113 850307	50536 1140447	91935 1404392	239714	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCBd 4	Ave	464934	21383 744064	47017 1012408	83711 1235518	217970	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCBd 4	Ave	812612	37189 1305146	82824 1766195	143678 2168565	378445	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCBd 4	Ave	248222	11548 394056	23942 537127	44125 643290	112524	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	729618	32123 1148531	69363 1512392	126722 1829273	330726	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	1236997	53228 1975341	114982 2670482	217272 3217385	566995	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	280102	10850 457643	24598 635290	48723 774319	131670	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	632579	27650 1012365	58838 1369537	107734 1673917	286489	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Lin1	611394	15002 987161	41653 1367500	85658 1712512	263441	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	668240	29834 1078143	63156 1455238	117576 1761672	304232	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	433057	18539 696528	39066 943625	73283 1165073	197403	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	478512	20139 760494	45857 1042634	82739 1259590	207771	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	14048 1494353	68996 2362530	147767 3235360	267954 3970147	688709	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	633320	26722 1045954	62999 1426864	110931 1666379	297057	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	426829	19363 679115	41456 925984	74533 1131595	191586	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	294283	12931 467478	27790 643133	51152 779492	130711	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	2007 309459	13254 503878	29959 671905	54495 826428	142574	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
4-Chloro-3-methylphenol	NPT	Ave	531165	21408 845143	47954 1144003	89679 1398176	238478	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	8610 1009631	41752 1631002	93792 2239084	174285 2755063	447432	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

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RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1-Methylnaphthalene	NPT	Ave	7458 929933	39098 1481460	86633 2054093	159413 2489499	412982	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorocyclopentadiene	ANT	Ave	 351310	13132 569433	29303 758352	57138 937915	153922	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	 481825	20714 788311	45377 1083158	80452 1327002	209411	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	 328928	12579 536317	28055 725490	54794 896522	145043	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	 339409	13972 536640	31217 726625	56625 881379	147291	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	9885 1201154	49838 1925799	111778 2691638	200676 3258883	525719	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	7903 975534	42271 1569687	90128 2153454	168415 2664213	439445	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	 391596	14883 612842	34085 807781	63448 994587	169330	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	 1174758	50152 1815530	110797 2445361	198046 2936283	515776	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Ave	 188786	6737 302060	16386 406930	29970 500226	85100	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	 272455	10455 424227	23244 575886	44874 683377	119495	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	11355 1487387	62344 2407399	138803 3265525	253987 4002521	654780	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	 250644	9897 402102	23158 543194	46912 679071	114253	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Lin1	 317009	+++++ 563091	18117 795434	39962 980885	143213	 20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	8122 993923	41928 1590555	91983 2182688	164769 2676837	428979	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Ave	 472570	17934 744822	41352 1003606	72356 1182839	194694	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	 348453	13984 565996	32295 783414	59174 957067	157719	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	11502 1402995	61194 2280503	132703 3067040	234139 3753318	613666	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	 265672	10625 421623	24363 588523	47061 737274	122310	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	 1131846	52448 1841002	113534 2504076	205944 3055102	508337	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexadecane	ANT	Ave	 759847	31309 1199630	68802 1609961	129814 1923710	334278	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

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SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Chlorophenyl phenyl ether	ANT	Ave	560192	24133 907710	52622 1207816	91589 1471520	242713	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	268709	10080 435461	24465 586853	38677 702107	115536	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	8243 1164044	49545 1868837	106381 2499059	192348 3066735	503120	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	434192	10095 749392	30510 1045005	56240 1298038	174512	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Diphenylamine	PHN	Ave	755778	33844 1202856	77264 1659779	135988 2081354	363905	8.50	0.425 12.8	0.850 17.0	1.70 21.3	4.25
N-Nitrosodiphenylamine	PHN	Ave	755778	33844 1202856	77264 1659779	135988 2081354	363905	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	1487985	62328 2252406	140199 2942079	244738 3475401	648002	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	1487814	62768 2252771	139888 2944231	245309 3473524	648001	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	319333	12839 476404	29554 652104	54791 791004	136913	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	2543 362911	14609 559812	33002 755392	61088 922923	150425	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	5426 664085	26745 983752	57197 1330472	97354 1642112	275722	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
n-Octadecane	PHN	Ave	658207	31779 1003800	69578 1295701	128620 1552811	330730	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Lin1	455106	13200 764181	34641 1074729	66059 1314994	178917	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	14638 1481228	70503 2434491	151639 3407681	271462 4249277	638509	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	13077 1522509	72021 2519508	151957 3523320	277005 4374771	655707	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	1314587	60465 2056373	136628 2806446	216788 3331912	574247	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	1901608	70770 2804358	147455 3857592	272119 4749570	783735	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	13624 1763646	68579 2788945	149305 3824365	250435 4710072	699320	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Lin1	1750198	+++++ 2872165	83626 3866047	168718 4612042	627051	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	13213 1826841	71183 2812136	149751 3946717	262000 4918972	730424	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	905315	32723 1442986	83418 1950643	143598 2393105	387257	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

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ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bis(2-ethylhexyl) phthalate	CRY	Ave	1221784	44076 1928783	107979 2640524	187965 3162227	515616	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	1031959	40139 1752321	99091 2575464	170393 3202292	428600	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	14363 1756874	72276 2812968	160235 3876142	271028 4685796	729908	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	13349 1690874	68137 2692490	154801 3667863	260173 4493460	690653	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	2012933	63086 3234485	171545 4435229	323720 5369661	868383	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	10357 1614777	60170 2679801	149273 3543454	252864 4510236	680084	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	13673 1717492	67428 2719844	153976 3912437	271473 4579169	715271	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	10052 1549873	57701 2496341	135311 3457379	242366 4270546	644190	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	7752 1370192	47976 2222711	118229 +++++	216769 +++++	565702	0.100 10.0	0.500 15.0	1.00 +++++	2.00 +++++	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	9499 1659400	62056 2674041	148148 3680063	257023 4517486	692739	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	10190 1327202	55253 2098709	131404 2857647	222376 3444939	572079	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCBd 4	Ave	472477	20029 754765	46893 1031457	86815 1250317	231726	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCBd 4	Ave	627537	28276 1003184	62376 1378536	116876 1672600	300772	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	6664 762024	33453 1203740	72801 1642037	134620 1958707	347320	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	8964 1078089	47070 1728202	102702 2392837	183365 2930038	480274	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	136939	5427 227790	13664 311133	23809 386020	65117	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	8229 1202266	46246 1965928	105197 2705014	189537 3312709	485229	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID (1): ICV 240-294210/11 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS/II ID: 0.25(mm) Date Analyzed (1): 09/09/2017 16:18

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	3.19	100.0
N-Nitrosodimethylamine	3.66	100.0
2-Fluorophenol (Surr)	5.22	100.0
Benzaldehyde	6.04	100.0
Phenol-d5 (Surr)	6.07	100.0
Phenol	6.08	100.0
Bis(2-chloroethyl)ether	6.17	100.0
2-Chlorophenol	6.25	100.0
2-Methylphenol	6.61	100.0
2,2'-oxybis[1-chloropropane]	6.65	100.0
3 & 4 Methylphenol	6.74	100.0
N-Nitrosodi-n-propylamine	6.76	100.0
Acetophenone	6.77	100.0
Hexachloroethane	6.89	100.0
Nitrobenzene-d5 (Surr)	6.91	100.0
Nitrobenzene	6.93	100.0
Isophorone	7.12	100.0
2-Nitrophenol	7.20	100.0
2,4-Dimethylphenol	7.21	100.0
Bis(2-chloroethoxy)methane	7.28	100.0
2,4-Dichlorophenol	7.40	100.0
Naphthalene	7.56	100.0
4-Chloroaniline	7.58	100.0
Hexachlorobutadiene	7.66	100.0
Caprolactam	7.87	100.0
4-Chloro-3-methylphenol	7.97	100.0
2-Methylnaphthalene	8.15	100.0
Hexachlorocyclopentadiene	8.29	100.0
2,4,6-Trichlorophenol	8.38	100.0
2,4,5-Trichlorophenol	8.41	100.0
2-Fluorobiphenyl (Surr)	8.44	100.0
1,1'-Biphenyl	8.53	100.0
2-Chloronaphthalene	8.57	100.0
2-Nitroaniline	8.63	100.0
Dimethyl phthalate	8.76	100.0
2,6-Dinitrotoluene	8.82	100.0
Acenaphthylene	8.93	100.0
3-Nitroaniline	8.98	100.0
2,4-Dinitrophenol	9.06	100.0
Acenaphthene	9.08	100.0
4-Nitrophenol	9.08	100.0
2,4-Dinitrotoluene	9.17	100.0
Dibenzofuran	9.22	100.0
Diethyl phthalate	9.35	100.0
4-Chlorophenyl phenyl ether	9.48	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID (1): ICV 240-294210/11 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS/II ID: 0.25(mm) Date Analyzed (1): 09/09/2017 16:18

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.50	100.0
Fluorene	9.51	100.0
4,6-Dinitro-2-methylphenol	9.52	100.0
N-Nitrosodiphenylamine	9.57	100.0
2,4,6-Tribromophenol (Surr)	9.71	100.0
4-Bromophenyl phenyl ether	9.90	100.0
Hexachlorobenzene	9.99	100.0
Atrazine	10.00	100.0
Pentachlorophenol	10.14	100.0
Phenanthrene	10.34	100.0
Anthracene	10.38	100.0
Carbazole	10.49	100.0
Di-n-butyl phthalate	10.72	100.0
Fluoranthene	11.35	100.0
Pyrene	11.55	100.0
Terphenyl-d14 (Surr)	11.63	100.0
Butyl benzyl phthalate	12.00	100.0
Bis(2-ethylhexyl) phthalate	12.49	100.0
3,3'-Dichlorobenzidine	12.53	100.0
Benzo[a]anthracene	12.60	100.0
Chrysene	12.64	100.0
Di-n-octyl phthalate	13.15	100.0
Benzo[b]fluoranthene	13.86	25.50
Benzo[k]fluoranthene	13.90	100.0
Benzo[a]pyrene	14.35	100.0
Indeno[1,2,3-cd]pyrene	16.43	100.0
Dibenz(a,h)anthracene	16.43	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-294210/11 Calibration Date: 09/09/2017 16:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70909011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6108	0.6080		9.95	10.0	-0.5	30.0
N-Nitrosodimethylamine	Ave	0.9460	0.9510		10.1	10.0	0.5	30.0
Pyridine	Ave	1.718	1.647		19.2	20.0	-4.1	30.0
Benzaldehyde	Ave	1.354	1.303	0.0100	19.2	20.0	-3.8	30.0
Phenol	Ave	1.872	1.811	0.8000	9.67	10.0	-3.3	30.0
Aniline	Ave	2.268	2.054		9.06	10.0	-9.4	30.0
Bis(2-chloroethyl)ether	Ave	1.514	1.473	0.7000	9.73	10.0	-2.7	30.0
2-Chlorophenol	Ave	1.353	1.310	0.8000	9.69	10.0	-3.1	30.0
n-Decane	Ave	1.602	1.517		9.47	10.0	-5.3	30.0
1,3-Dichlorobenzene	Ave	1.477	1.427		9.66	10.0	-3.4	30.0
1,4-Dichlorobenzene	Ave	1.520	1.464		9.63	10.0	-3.7	30.0
Benzyl alcohol	Ave	0.9591	0.9618		10.0	10.0	0.3	30.0
1,2-Dichlorobenzene	Ave	1.425	1.380		9.69	10.0	-3.1	30.0
2-Methylphenol	Ave	1.339	1.284	0.7000	9.59	10.0	-4.1	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.742	1.608		9.23	10.0	-7.7	30.0
Indene	Ave	2.823	2.572		18.2	20.0	-8.9	30.0
3 & 4 Methylphenol	Ave	1.417	1.393		9.83	10.0	-1.7	30.0
N-Nitrosodi-n-propylamine	Ave	1.277	1.221	0.5000	9.56	10.0	-4.4	30.0
Acetophenone	Ave	2.227	2.117	0.0100	9.51	10.0	-4.9	30.0
Hexachloroethane	Ave	0.6712	0.6481	0.3000	9.65	10.0	-3.5	30.0
Nitrobenzene	Ave	0.4836	0.4807	0.2000	9.94	10.0	-0.6	30.0
Isophorone	Ave	0.8275	0.8343	0.4000	10.1	10.0	0.8	30.0
2-Nitrophenol	Ave	0.1877	0.1929	0.1000	10.3	10.0	2.8	30.0
2,4-Dimethylphenol	Ave	0.4229	0.3551	0.2000	8.39	10.0	-16.1	30.0
Benzoic acid	Lin1		0.2087		19.4	20.0	-3.0	30.0
Bis(2-chloroethoxy)methane	Ave	0.4514	0.4589	0.3000	10.2	10.0	1.7	30.0
2,4-Dichlorophenol	Ave	0.2889	0.2851	0.2000	9.87	10.0	-1.3	30.0
1,2,4-Trichlorobenzene	Ave	0.3184	0.3147		9.88	10.0	-1.2	30.0
Naphthalene	Ave	1.026	0.9898	0.7000	9.64	10.0	-3.6	30.0
4-Chloroaniline	Ave	0.4323	0.4133	0.0100	9.56	10.0	-4.4	30.0
2,6-Dichlorophenol	Ave	0.2886	0.2843		9.85	10.0	-1.5	30.0
Hexachlorobutadiene	Ave	0.1973	0.2015	0.0100	10.2	10.0	2.1	30.0
Caprolactam	Ave	0.1016	0.1101	0.0100	21.7	20.0	8.4	30.0
4-Chloro-3-methylphenol	Ave	0.3492	0.3596	0.2000	10.3	10.0	3.0	30.0
2-Methylnaphthalene	Ave	0.6737	0.6665	0.4000	9.89	10.0	-1.1	30.0
1-Methylnaphthalene	Ave	0.6147	0.6322		10.3	10.0	2.9	30.0
Hexachlorocyclopentadiene	Ave	0.3714	0.3245	0.0500	8.74	10.0	-12.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5316	0.5130	0.0100	9.65	10.0	-3.5	30.0
2,4,6-Trichlorophenol	Ave	0.3530	0.3598	0.2000	10.2	10.0	1.9	30.0
2,4,5-Trichlorophenol	Ave	0.3645	0.3741	0.2000	10.3	10.0	2.6	30.0
1,1'-Biphenyl	Ave	1.306	1.288	0.0100	9.87	10.0	-1.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-294210/11 Calibration Date: 09/09/2017 16:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70909011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloronaphthalene	Ave	1.069	1.052	0.8000	9.84	10.0	-1.6	30.0
2-Nitroaniline	Ave	0.4086	0.4241	0.0100	10.4	10.0	3.8	30.0
Dimethyl phthalate	Ave	1.260	1.236	0.0100	9.81	10.0	-1.9	30.0
1,3-Dinitrobenzene	Ave	0.1991	0.2062		10.4	10.0	3.6	30.0
2,6-Dinitrotoluene	Ave	0.2853	0.2906		10.2	10.0	1.9	30.0
Acenaphthylene	Ave	1.607	1.636	0.9000	10.2	10.0	1.8	30.0
3-Nitroaniline	Ave	0.2762	0.2671	0.0100	9.67	10.0	-3.3	30.0
2,4-Dinitrophenol	Lin1		0.1713	0.0100	17.6	20.0	-12.2	30.0
Acenaphthene	Ave	1.074	1.058	0.9000	9.84	10.0	-1.6	30.0
4-Nitrophenol	Ave	0.2443	0.2507		20.5	20.0	2.6	30.0
2,4-Dinitrotoluene	Ave	0.3829	0.3832	0.2000	10.0	10.0	0.0	30.0
Dibenzofuran	Ave	1.530	1.511	0.8000	9.88	10.0	-1.2	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.2926	0.2800	0.0100	9.57	10.0	-4.3	30.0
Diethyl phthalate	Ave	1.281	1.229	0.0100	9.59	10.0	-4.1	30.0
Hexadecane	Ave	0.8143	0.8089		9.93	10.0	-0.7	30.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.5919	0.4000	9.73	10.0	-2.7	30.0
4-Nitroaniline	Ave	0.2821	0.2871	0.0100	10.2	10.0	1.8	30.0
Fluorene	Ave	1.233	1.268	0.9000	10.3	10.0	2.8	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1562	0.0100	19.1	20.0	-4.4	30.0
Diphenylamine	Ave	0.6190	0.5990		8.24	8.51	-3.2	30.0
N-Nitrosodiphenylamine	Ave	0.5263	0.5098	0.0100	9.69	10.0	-3.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9544	1.032		10.8	10.0	8.1	30.0
Azobenzene	Ave	0.9552	1.032		10.8	10.0	8.0	30.0
4-Bromophenyl phenyl ether	Ave	0.2060	0.2064	0.1000	10.0	10.0	0.2	30.0
Hexachlorobenzene	Ave	0.2294	0.2521	0.1000	11.0	10.0	9.9	30.0
Atrazine	Ave	0.2063	0.2339	0.0100	22.7	20.0	13.4	30.0
n-Octadecane	Ave	0.4542	0.4461		9.82	10.0	-1.8	30.0
Pentachlorophenol	Lin1		0.1644	0.0500	19.6	20.0	-2.1	30.0
Phenanthrene	Ave	1.047	1.022	0.7000	9.76	10.0	-2.4	30.0
Anthracene	Ave	1.057	1.031	0.7000	9.75	10.0	-2.5	30.0
Carbazole	Ave	0.8846	0.8909	0.0100	10.1	10.0	0.7	30.0
Di-n-butyl phthalate	Ave	1.161	1.273	0.0100	11.0	10.0	9.7	30.0
Fluoranthene	Ave	1.105	1.196	0.6000	10.8	10.0	8.2	30.0
Benzidine	Lin1		0.4532		18.2	20.0	-9.0	30.0
Pyrene	Ave	0.996	1.019	0.6000	10.2	10.0	2.4	30.0
Butyl benzyl phthalate	Ave	0.5119	0.5082	0.0100	9.93	10.0	-0.7	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6809	0.6887	0.0100	10.1	10.0	1.1	30.0
3,3'-Dichlorobenzidine	Ave	0.3112	0.3140	0.0100	20.2	20.0	0.9	30.0
Benzo[a]anthracene	Ave	1.004	0.9816	0.8000	9.77	10.0	-2.3	30.0
Chrysene	Ave	0.9564	0.9482	0.7000	9.91	10.0	-0.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-294210/11 Calibration Date: 09/09/2017 16:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70909011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Ave	1.401	1.386	0.0100	9.89	10.0	-1.1	30.0
Benzo[b]fluoranthene	Ave	1.125	1.111	0.7000	9.87	10.0	-1.3	30.0
Benzo[k]fluoranthene	Ave	1.214	1.238	0.7000	10.2	10.0	2.0	30.0
Benzo[a]pyrene	Ave	1.068	1.045	0.7000	9.78	10.0	-2.2	30.0
Dibenz(a,h)anthracene	Ave	0.8851	0.9690	0.4000	10.9	10.0	9.5	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.132	1.155	0.5000	10.2	10.0	2.0	30.0
Benzo[g,h,i]perylene	Ave	0.9507	0.9113	0.5000	9.58	10.0	-4.2	30.0
2-Fluorophenol (Surr)	Ave	1.292	1.401		10.8	10.0	8.4	30.0
Phenol-d5 (Surr)	Ave	1.729	1.888		10.9	10.0	9.2	30.0
Nitrobenzene-d5 (Surr)	Ave	0.5107	0.5726		11.2	10.0	12.1	30.0
2-Fluorobiphenyl (Surr)	Ave	1.186	1.336		11.3	10.0	12.7	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1543	0.1695		11.0	10.0	9.8	30.0
Terphenyl-d14 (Surr)	Ave	0.6725	0.7757		11.5	10.0	15.4	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: 70916001.D DFTPP Injection Date: 09/16/2017

Instrument ID: A4HP9 DFTPP Injection Time: 10:09

Analysis Batch No.: 295100

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	48.6	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	55.4	
70	Less than 2.0% of mass 69	0.2	(0.4) 1
127	25.0 - 75.0% of mass 198	53.5	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	26.1	
365	Greater than 0.75% of mass 198	3.8	
441	Present, but less than mass 443	13.6	
442	40.0 - 110.0% of mass 198	81.2	
443	15.0 - 24.0% of mass 442	15.5	(19.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-295100/2	70916002.D	09/16/2017	10:30
	CCV 240-295100/3	70916003.D	09/16/2017	11:21
	MB 240-294797/23-A	70916006.D	09/16/2017	12:13
	LCS 240-294797/24-A	70916007.D	09/16/2017	12:38

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID (1): CCV 240-295100/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS/II ID: 0.25(mm) Date Analyzed (1): 09/16/2017 10:30

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	2.75	100.0
N-Nitrosodimethylamine	3.32	100.0
2-Fluorophenol (Surr)	5.06	100.0
Benzaldehyde	5.89	100.0
Phenol-d5 (Surr)	5.93	100.0
Phenol	5.95	100.0
Bis(2-chloroethyl)ether	6.03	100.0
2-Chlorophenol	6.11	100.0
2-Methylphenol	6.49	100.0
2,2'-oxybis[1-chloropropane]	6.51	100.0
3 & 4 Methylphenol	6.62	100.0
N-Nitrosodi-n-propylamine	6.62	100.0
Acetophenone	6.63	100.0
Hexachloroethane	6.75	100.0
Nitrobenzene-d5 (Surr)	6.77	100.0
Nitrobenzene	6.78	100.0
Isophorone	6.99	100.0
2-Nitrophenol	7.06	100.0
2,4-Dimethylphenol	7.07	100.0
Bis(2-chloroethoxy)methane	7.15	100.0
2,4-Dichlorophenol	7.27	100.0
Naphthalene	7.42	100.0
4-Chloroaniline	7.45	100.0
Hexachlorobutadiene	7.52	100.0
Caprolactam	7.74	100.0
4-Chloro-3-methylphenol	7.84	100.0
2-Methylnaphthalene	8.01	100.0
Hexachlorocyclopentadiene	8.15	100.0
2,4,6-Trichlorophenol	8.24	100.0
2,4,5-Trichlorophenol	8.27	100.0
2-Fluorobiphenyl (Surr)	8.30	100.0
1,1'-Biphenyl	8.39	100.0
2-Chloronaphthalene	8.43	100.0
2-Nitroaniline	8.49	100.0
Dimethyl phthalate	8.62	100.0
2,6-Dinitrotoluene	8.68	100.0
Acenaphthylene	8.78	100.0
3-Nitroaniline	8.83	100.0
2,4-Dinitrophenol	8.92	100.0
Acenaphthene	8.93	100.0
4-Nitrophenol	8.95	100.0
2,4-Dinitrotoluene	9.02	100.0
Dibenzofuran	9.07	100.0
Diethyl phthalate	9.21	100.0
4-Chlorophenyl phenyl ether	9.34	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID (1): CCV 240-295100/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS/II ID: 0.25(mm) Date Analyzed (1): 09/16/2017 10:30

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.35	100.0
Fluorene	9.37	100.0
4,6-Dinitro-2-methylphenol	9.38	100.0
N-Nitrosodiphenylamine	9.43	100.0
2,4,6-Tribromophenol (Surr)	9.57	100.0
4-Bromophenyl phenyl ether	9.76	100.0
Hexachlorobenzene	9.85	100.0
Atrazine	9.85	100.0
Pentachlorophenol	10.00	100.0
Phenanthrene	10.18	100.0
Anthracene	10.23	100.0
Carbazole	10.34	100.0
Di-n-butyl phthalate	10.58	100.0
Fluoranthene	11.19	100.0
Pyrene	11.39	100.0
Terphenyl-d14 (Surr)	11.47	100.0
Butyl benzyl phthalate	11.85	100.0
Bis(2-ethylhexyl) phthalate	12.31	100.0
3,3'-Dichlorobenzidine	12.35	100.0
Benzo[a]anthracene	12.41	100.0
Chrysene	12.45	100.0
Di-n-octyl phthalate	12.94	100.0
Benzo[b]fluoranthene	13.59	28.50
Benzo[k]fluoranthene	13.62	100.0
Benzo[a]pyrene	14.04	100.0
Indeno[1,2,3-cd]pyrene	15.96	100.0
Dibenz(a,h)anthracene	15.97	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295100/2 Calibration Date: 09/16/2017 10:30

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70916002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6108	0.6355		10.4	10.0	4.0	20.0
N-Nitrosodimethylamine	Ave	0.9460	0.9635		10.2	10.0	1.9	20.0
Pyridine	Ave	1.718	1.791		20.9	20.0	4.3	20.0
Benzaldehyde	Ave	1.354	1.424	0.0100	21.0	20.0	5.1	20.0
Phenol	Ave	1.872	1.931	0.8000	10.3	10.0	3.2	20.0
Aniline	Ave	2.268	2.400		10.6	10.0	5.9	20.0
Bis(2-chloroethyl)ether	Ave	1.514	1.557	0.7000	10.3	10.0	2.8	20.0
2-Chlorophenol	Ave	1.353	1.398	0.8000	10.3	10.0	3.3	20.0
n-Decane	Ave	1.602	1.658		10.3	10.0	3.5	20.0
1,3-Dichlorobenzene	Ave	1.477	1.492		10.1	10.0	1.0	20.0
1,4-Dichlorobenzene	Ave	1.520	1.513		9.96	10.0	-0.4	20.0
Benzyl alcohol	Ave	0.9591	0.9153		9.54	10.0	-4.6	20.0
1,2-Dichlorobenzene	Ave	1.425	1.450		10.2	10.0	1.8	20.0
2-Methylphenol	Ave	1.339	1.408	0.7000	10.5	10.0	5.1	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.742	1.812		10.4	10.0	4.0	20.0
Indene	Ave	2.823	2.896		20.5	20.0	2.6	20.0
3 & 4 Methylphenol	Ave	1.417	1.469		10.4	10.0	3.7	20.0
N-Nitrosodi-n-propylamine	Ave	1.277	1.330	0.5000	10.4	10.0	4.2	20.0
Acetophenone	Ave	2.227	2.333	0.0100	10.5	10.0	4.8	20.0
Hexachloroethane	Ave	0.6712	0.6826	0.3000	10.2	10.0	1.7	20.0
Nitrobenzene	Ave	0.4836	0.5092	0.2000	10.5	10.0	5.3	20.0
Isophorone	Ave	0.8275	0.8827	0.4000	10.7	10.0	6.7	20.0
2-Nitrophenol	Ave	0.1877	0.1935	0.1000	10.3	10.0	3.1	20.0
2,4-Dimethylphenol	Ave	0.4229	0.4377	0.2000	10.3	10.0	3.5	20.0
Benzoic acid	Lin1		0.2079		19.3	20.0	-3.3	20.0
Bis(2-chloroethoxy)methane	Ave	0.4514	0.4711	0.3000	10.4	10.0	4.4	20.0
2,4-Dichlorophenol	Ave	0.2889	0.2970	0.2000	10.3	10.0	2.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3184	0.3192		10.0	10.0	0.2	20.0
Naphthalene	Ave	1.026	1.029	0.7000	10.0	10.0	0.3	20.0
4-Chloroaniline	Ave	0.4323	0.4383	0.0100	10.1	10.0	1.4	20.0
2,6-Dichlorophenol	Ave	0.2886	0.2944		10.2	10.0	2.0	20.0
Hexachlorobutadiene	Ave	0.1973	0.1957	0.0100	9.92	10.0	-0.8	20.0
Caprolactam	Ave	0.1016	0.1130	0.0100	22.2	20.0	11.2	20.0
4-Chloro-3-methylphenol	Ave	0.3492	0.3641	0.2000	10.4	10.0	4.3	20.0
2-Methylnaphthalene	Ave	0.6737	0.6959	0.4000	10.3	10.0	3.3	20.0
1-Methylnaphthalene	Ave	0.6147	0.6274		10.2	10.0	2.1	20.0
Hexachlorocyclopentadiene	Ave	0.3714	0.3731	0.0500	10.0	10.0	0.5	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5316	0.5273	0.0100	9.92	10.0	-0.8	20.0
2,4,6-Trichlorophenol	Ave	0.3530	0.3538	0.2000	10.0	10.0	0.2	20.0
2,4,5-Trichlorophenol	Ave	0.3645	0.3618	0.2000	9.93	10.0	-0.7	20.0
1,1'-Biphenyl	Ave	1.306	1.321	0.0100	10.1	10.0	1.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295100/2 Calibration Date: 09/16/2017 10:30

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70916002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloronaphthalene	Ave	1.069	1.083	0.8000	10.1	10.0	1.3	20.0
2-Nitroaniline	Ave	0.4086	0.4493	0.0100	11.0	10.0	10.0	20.0
Dimethyl phthalate	Ave	1.260	1.268	0.0100	10.1	10.0	0.7	20.0
1,3-Dinitrobenzene	Ave	0.1991	0.2071		10.4	10.0	4.0	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2964		10.4	10.0	3.9	20.0
Acenaphthylene	Ave	1.607	1.665	0.9000	10.4	10.0	3.6	20.0
3-Nitroaniline	Ave	0.2762	0.3002	0.0100	10.9	10.0	8.7	20.0
2,4-Dinitrophenol	Lin1		0.1877	0.0100	19.1	20.0	-4.5	20.0
Acenaphthene	Ave	1.074	1.064	0.9000	9.90	10.0	-1.0	20.0
4-Nitrophenol	Ave	0.2443	0.2709		22.2	20.0	10.9	20.0
2,4-Dinitrotoluene	Ave	0.3829	0.3976	0.2000	10.4	10.0	3.8	20.0
Dibenzofuran	Ave	1.530	1.527	0.8000	9.98	10.0	-0.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2926	0.3018	0.0100	10.3	10.0	3.2	20.0
Diethyl phthalate	Ave	1.281	1.289	0.0100	10.1	10.0	0.6	20.0
Hexadecane	Ave	0.8143	0.8508		10.4	10.0	4.5	20.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.5894	0.4000	9.69	10.0	-3.1	20.0
4-Nitroaniline	Ave	0.2821	0.3145	0.0100	11.1	10.0	11.5	20.0
Fluorene	Ave	1.233	1.239	0.9000	10.0	10.0	0.5	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1448	0.0100	17.8	20.0	-11.0	20.0
Diphenylamine	Ave	0.6190	0.6031		8.28	8.50	-2.6	20.0
N-Nitrosodiphenylamine	Ave	0.5263	0.5128	0.0100	9.74	10.0	-2.6	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9544	0.9675		10.1	10.0	1.4	20.0
Azobenzene	Ave	0.9552	0.9672		10.1	10.0	1.3	20.0
4-Bromophenyl phenyl ether	Ave	0.2060	0.2046	0.1000	9.93	10.0	-0.7	20.0
Hexachlorobenzene	Ave	0.2294	0.2249	0.1000	9.81	10.0	-1.9	20.0
Atrazine	Ave	0.2063	0.2302	0.0100	22.3	20.0	11.6	20.0
n-Octadecane	Ave	0.4542	0.5239		11.5	10.0	15.3	20.0
Pentachlorophenol	Lin1		0.1436	0.0500	17.2	20.0	-14.1	20.0
Phenanthrene	Ave	1.047	1.050	0.7000	10.0	10.0	0.3	20.0
Anthracene	Ave	1.057	1.080	0.7000	10.2	10.0	2.2	20.0
Carbazole	Ave	0.8846	0.9824	0.0100	11.1	10.0	11.1	20.0
Di-n-butyl phthalate	Ave	1.161	1.268	0.0100	10.9	10.0	9.2	20.0
Fluoranthene	Ave	1.105	1.177	0.6000	10.7	10.0	6.5	20.0
Benzidine	Lin1		0.5116		20.4	20.0	1.9	20.0
Pyrene	Ave	0.996	1.063	0.6000	10.7	10.0	6.8	20.0
Butyl benzyl phthalate	Ave	0.5119	0.5292	0.0100	10.3	10.0	3.4	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6809	0.7155	0.0100	10.5	10.0	5.1	20.0
3,3'-Dichlorobenzidine	Ave	0.3112	0.3385	0.0100	21.8	20.0	8.8	20.0
Benzo[a]anthracene	Ave	1.004	0.998	0.8000	9.94	10.0	-0.6	20.0
Chrysene	Ave	0.9564	0.9489	0.7000	9.92	10.0	-0.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295100/2 Calibration Date: 09/16/2017 10:30

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70916002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Ave	1.401	1.552	0.0100	11.1	10.0	10.8	20.0
Benzo[b]fluoranthene	Ave	1.125	1.243	0.7000	11.1	10.0	10.6	20.0
Benzo[k]fluoranthene	Ave	1.214	1.220	0.7000	10.1	10.0	0.5	20.0
Benzo[a]pyrene	Ave	1.068	1.134	0.7000	10.6	10.0	6.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.132	1.319	0.5000	11.7	10.0	16.5	20.0
Dibenz(a,h)anthracene	Ave	0.8851	1.080	0.4000	12.2	10.0	22.0*	20.0
Benzo[g,h,i]perylene	Ave	0.9507	1.080	0.5000	11.4	10.0	13.6	20.0
2-Fluorophenol (Surr)	Ave	1.292	1.351		10.5	10.0	4.5	20.0
Phenol-d5 (Surr)	Ave	1.729	1.818		10.5	10.0	5.1	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5107	0.5266		10.3	10.0	3.1	20.0
2-Fluorobiphenyl (Surr)	Ave	1.186	1.195		10.1	10.0	0.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1543	0.1661		10.8	10.0	7.7	20.0
Terphenyl-d14 (Surr)	Ave	0.6725	0.7013		10.4	10.0	4.3	20.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: 70918101.D DFTPP Injection Date: 09/18/2017

Instrument ID: A4HP9 DFTPP Injection Time: 10:56

Analysis Batch No.: 295228

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.1	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	53.2	
70	Less than 2.0% of mass 69	0.3	(0.6) 1
127	25.0 - 75.0% of mass 198	52.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.1	
275	10.0- 30.0% of mass 198	25.7	
365	Greater than 0.75% of mass 198	2.9	
441	Present, but less than mass 443	12.4	
442	40.0 - 110.0% of mass 198	75.2	
443	15.0 - 24.0% of mass 442	14.4	(19.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-295228/2	70918102.D	09/18/2017	11:18
SB-119A-10-12.5'	240-84819-1	70918128.D	09/18/2017	21:39
SB-119B-56-58'	240-84819-2	70918129.D	09/18/2017	22:04
SB-117A-33-35'	240-84819-3	70918130.D	09/18/2017	22:28
SB-117B-47-50'	240-84819-4	70918131.D	09/18/2017	22:53

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID (1): CCV 240-295228/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS/II ID: 0.25(mm) Date Analyzed (1): 09/18/2017 11:18

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	2.57	100.0
N-Nitrosodimethylamine	3.16	100.0
2-Fluorophenol (Surr)	4.98	100.0
Benzaldehyde	5.82	100.0
Phenol-d5 (Surr)	5.87	100.0
Phenol	5.88	100.0
Bis(2-chloroethyl)ether	5.96	100.0
2-Chlorophenol	6.04	100.0
2-Methylphenol	6.42	100.0
2,2'-oxybis[1-chloropropane]	6.45	100.0
3 & 4 Methylphenol	6.55	100.0
N-Nitrosodi-n-propylamine	6.56	100.0
Acetophenone	6.57	100.0
Hexachloroethane	6.69	100.0
Nitrobenzene-d5 (Surr)	6.70	100.0
Nitrobenzene	6.72	100.0
Isophorone	6.92	100.0
2-Nitrophenol	7.00	100.0
2,4-Dimethylphenol	7.01	100.0
Bis(2-chloroethoxy)methane	7.08	100.0
2,4-Dichlorophenol	7.20	100.0
Naphthalene	7.36	100.0
4-Chloroaniline	7.38	100.0
Hexachlorobutadiene	7.46	100.0
Caprolactam	7.67	100.0
4-Chloro-3-methylphenol	7.78	100.0
2-Methylnaphthalene	7.95	100.0
Hexachlorocyclopentadiene	8.08	100.0
2,4,6-Trichlorophenol	8.18	100.0
2,4,5-Trichlorophenol	8.21	100.0
2-Fluorobiphenyl (Surr)	8.24	100.0
1,1'-Biphenyl	8.33	100.0
2-Chloronaphthalene	8.36	100.0
2-Nitroaniline	8.43	100.0
Dimethyl phthalate	8.56	100.0
2,6-Dinitrotoluene	8.61	100.0
Acenaphthylene	8.72	100.0
3-Nitroaniline	8.77	100.0
2,4-Dinitrophenol	8.85	100.0
Acenaphthene	8.86	100.0
4-Nitrophenol	8.88	100.0
2,4-Dinitrotoluene	8.96	100.0
Dibenzofuran	9.01	100.0
Diethyl phthalate	9.14	100.0
4-Chlorophenyl phenyl ether	9.27	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID (1): CCV 240-295228/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS/II ID: 0.25(mm) Date Analyzed (1): 09/18/2017 11:18

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.28	100.0
Fluorene	9.30	100.0
4,6-Dinitro-2-methylphenol	9.31	100.0
N-Nitrosodiphenylamine	9.36	100.0
2,4,6-Tribromophenol (Surr)	9.50	100.0
4-Bromophenyl phenyl ether	9.69	100.0
Hexachlorobenzene	9.78	100.0
Atrazine	9.79	100.0
Pentachlorophenol	9.93	100.0
Phenanthrene	10.11	100.0
Anthracene	10.16	100.0
Carbazole	10.27	100.0
Di-n-butyl phthalate	10.51	100.0
Fluoranthene	11.12	100.0
Pyrene	11.32	100.0
Terphenyl-d14 (Surr)	11.41	100.0
Butyl benzyl phthalate	11.78	100.0
Bis(2-ethylhexyl) phthalate	12.24	100.0
3,3'-Dichlorobenzidine	12.27	100.0
Benzo[a]anthracene	12.34	100.0
Chrysene	12.37	100.0
Di-n-octyl phthalate	12.86	100.0
Benzo[b]fluoranthene	13.48	30.00
Benzo[k]fluoranthene	13.51	100.0
Benzo[a]pyrene	13.92	100.0
Indeno[1,2,3-cd]pyrene	15.77	100.0
Dibenz(a,h)anthracene	15.78	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295228/2 Calibration Date: 09/18/2017 11:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70918102.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6108	0.5552		9.09	10.0	-9.1	20.0
N-Nitrosodimethylamine	Ave	0.9460	0.8190		8.66	10.0	-13.4	20.0
Pyridine	Ave	1.718	1.423		16.6	20.0	-17.2	20.0
Benzaldehyde	Ave	1.354	1.311	0.0100	19.4	20.0	-3.2	20.0
Phenol	Ave	1.872	1.835	0.8000	9.80	10.0	-2.0	20.0
Aniline	Ave	2.268	2.322		10.2	10.0	2.4	20.0
Bis(2-chloroethyl)ether	Ave	1.514	1.537	0.7000	10.2	10.0	1.5	20.0
2-Chlorophenol	Ave	1.353	1.356	0.8000	10.0	10.0	0.3	20.0
n-Decane	Ave	1.602	1.579		9.86	10.0	-1.4	20.0
1,3-Dichlorobenzene	Ave	1.477	1.486		10.1	10.0	0.6	20.0
1,4-Dichlorobenzene	Ave	1.520	1.515		9.97	10.0	-0.3	20.0
Benzyl alcohol	Ave	0.9591	0.8207		8.56	10.0	-14.4	20.0
1,2-Dichlorobenzene	Ave	1.425	1.399		9.82	10.0	-1.8	20.0
2-Methylphenol	Ave	1.339	1.324	0.7000	9.89	10.0	-1.1	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.742	1.746		10.0	10.0	0.2	20.0
Indene	Ave	2.823	2.777		19.7	20.0	-1.6	20.0
3 & 4 Methylphenol	Ave	1.417	1.405		9.91	10.0	-0.9	20.0
N-Nitrosodi-n-propylamine	Ave	1.277	1.291	0.5000	10.1	10.0	1.1	20.0
Acetophenone	Ave	2.227	2.194	0.0100	9.85	10.0	-1.5	20.0
Hexachloroethane	Ave	0.6712	0.6309	0.3000	9.40	10.0	-6.0	20.0
Nitrobenzene	Ave	0.4836	0.5075	0.2000	10.5	10.0	4.9	20.0
Isophorone	Ave	0.8275	0.8705	0.4000	10.5	10.0	5.2	20.0
2-Nitrophenol	Ave	0.1877	0.1975	0.1000	10.5	10.0	5.2	20.0
2,4-Dimethylphenol	Ave	0.4229	0.4284	0.2000	10.1	10.0	1.3	20.0
Benzoic acid	Lin1		0.1989		18.5	20.0	-7.4	20.0
Bis(2-chloroethoxy)methane	Ave	0.4514	0.4583	0.3000	10.2	10.0	1.5	20.0
2,4-Dichlorophenol	Ave	0.2889	0.2994	0.2000	10.4	10.0	3.6	20.0
1,2,4-Trichlorobenzene	Ave	0.3184	0.3139		9.86	10.0	-1.4	20.0
Naphthalene	Ave	1.026	1.032	0.7000	10.1	10.0	0.5	20.0
4-Chloroaniline	Ave	0.4323	0.4318	0.0100	9.99	10.0	-0.1	20.0
2,6-Dichlorophenol	Ave	0.2886	0.2961		10.3	10.0	2.6	20.0
Hexachlorobutadiene	Ave	0.1973	0.1938	0.0100	9.82	10.0	-1.8	20.0
Caprolactam	Ave	0.1016	0.1148	0.0100	22.6	20.0	12.9	20.0
4-Chloro-3-methylphenol	Ave	0.3492	0.3740	0.2000	10.7	10.0	7.1	20.0
2-Methylnaphthalene	Ave	0.6737	0.6882	0.4000	10.2	10.0	2.2	20.0
1-Methylnaphthalene	Ave	0.6147	0.6365		10.4	10.0	3.5	20.0
Hexachlorocyclopentadiene	Ave	0.3714	0.3272	0.0500	8.81	10.0	-11.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5316	0.4688	0.0100	8.82	10.0	-11.8	20.0
2,4,6-Trichlorophenol	Ave	0.3530	0.3194	0.2000	9.05	10.0	-9.5	20.0
2,4,5-Trichlorophenol	Ave	0.3645	0.3187	0.2000	8.74	10.0	-12.6	20.0
1,1'-Biphenyl	Ave	1.306	1.221	0.0100	9.35	10.0	-6.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295228/2 Calibration Date: 09/18/2017 11:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70918102.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloronaphthalene	Ave	1.069	1.057	0.8000	9.89	10.0	-1.1	20.0
2-Nitroaniline	Ave	0.4086	0.4225	0.0100	10.3	10.0	3.4	20.0
Dimethyl phthalate	Ave	1.260	1.239	0.0100	9.84	10.0	-1.6	20.0
1,3-Dinitrobenzene	Ave	0.1991	0.2030		10.2	10.0	2.0	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2951		10.3	10.0	3.4	20.0
Acenaphthylene	Ave	1.607	1.634	0.9000	10.2	10.0	1.7	20.0
3-Nitroaniline	Ave	0.2762	0.2892	0.0100	10.5	10.0	4.7	20.0
2,4-Dinitrophenol	Lin1		0.1784	0.0100	18.2	20.0	-8.9	20.0
Acenaphthene	Ave	1.074	1.062	0.9000	9.89	10.0	-1.1	20.0
4-Nitrophenol	Ave	0.2443	0.2474		20.2	20.0	1.2	20.0
2,4-Dinitrotoluene	Ave	0.3829	0.3888	0.2000	10.2	10.0	1.5	20.0
Dibenzofuran	Ave	1.530	1.504	0.8000	9.83	10.0	-1.7	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2926	0.2923	0.0100	9.99	10.0	-0.0	20.0
Diethyl phthalate	Ave	1.281	1.218	0.0100	9.51	10.0	-4.9	20.0
Hexadecane	Ave	0.8143	0.7914		9.72	10.0	-2.8	20.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.5776	0.4000	9.50	10.0	-5.0	20.0
4-Nitroaniline	Ave	0.2821	0.3119	0.0100	11.1	10.0	10.6	20.0
Fluorene	Ave	1.233	1.197	0.9000	9.70	10.0	-3.0	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1459	0.0100	17.9	20.0	-10.4	20.0
Diphenylamine	Ave	0.6190	0.6214		8.54	8.50	0.4	20.0
N-Nitrosodiphenylamine	Ave	0.5263	0.5283	0.0100	10.0	10.0	0.4	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9544	0.9460		9.90	10.0	-0.9	20.0
Azobenzene	Ave	0.9552	0.9460		9.90	10.0	-1.0	20.0
4-Bromophenyl phenyl ether	Ave	0.2060	0.1964	0.1000	9.53	10.0	-4.7	20.0
Hexachlorobenzene	Ave	0.2294	0.2041	0.1000	8.90	10.0	-11.0	20.0
Atrazine	Ave	0.2063	0.1990	0.0100	19.3	20.0	-3.5	20.0
n-Octadecane	Ave	0.4542	0.4937		10.9	10.0	8.7	20.0
Pentachlorophenol	Lin1		0.1409	0.0500	16.9	20.0	-15.6	20.0
Phenanthrene	Ave	1.047	1.043	0.7000	9.96	10.0	-0.4	20.0
Anthracene	Ave	1.057	1.079	0.7000	10.2	10.0	2.1	20.0
Carbazole	Ave	0.8846	0.9814	0.0100	11.1	10.0	10.9	20.0
Di-n-butyl phthalate	Ave	1.161	1.221	0.0100	10.5	10.0	5.2	20.0
Fluoranthene	Ave	1.105	1.172	0.6000	10.6	10.0	6.1	20.0
Benzidine	Lin1		0.5013		20.0	20.0	-0.0	20.0
Pyrene	Ave	0.996	1.083	0.6000	10.9	10.0	8.8	20.0
Butyl benzyl phthalate	Ave	0.5119	0.5173	0.0100	10.1	10.0	1.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6809	0.7121	0.0100	10.5	10.0	4.6	20.0
3,3'-Dichlorobenzidine	Ave	0.3112	0.3488	0.0100	22.4	20.0	12.1	20.0
Benzo[a]anthracene	Ave	1.004	1.000	0.8000	9.96	10.0	-0.4	20.0
Chrysene	Ave	0.9564	0.9357	0.7000	9.78	10.0	-2.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295228/2 Calibration Date: 09/18/2017 11:18

Instrument ID: A4HP9 Calib Start Date: 09/09/2017 12:29

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 09/09/2017 15:52

Lab File ID: 70918102.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Ave	1.401	1.407	0.0100	10.0	10.0	0.4	20.0
Benzo[b]fluoranthene	Ave	1.125	1.149	0.7000	10.2	10.0	2.1	20.0
Benzo[k]fluoranthene	Ave	1.214	1.200	0.7000	9.88	10.0	-1.2	20.0
Benzo[a]pyrene	Ave	1.068	1.087	0.7000	10.2	10.0	1.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.132	1.305	0.5000	11.5	10.0	15.2	20.0
Dibenz(a,h)anthracene	Ave	0.8851	1.059	0.4000	12.0	10.0	19.6	20.0
Benzo[g,h,i]perylene	Ave	0.9507	1.100	0.5000	11.6	10.0	15.7	20.0
2-Fluorophenol (Surr)	Ave	1.292	1.257		9.73	10.0	-2.7	20.0
Phenol-d5 (Surr)	Ave	1.729	1.721		9.95	10.0	-0.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5107	0.5151		10.1	10.0	0.9	20.0
2-Fluorobiphenyl (Surr)	Ave	1.186	1.133		9.56	10.0	-4.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1543	0.1566		10.2	10.0	1.5	20.0
Terphenyl-d14 (Surr)	Ave	0.6725	0.7005		10.4	10.0	4.2	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: 70916006.D Lab Sample ID: MB 240-294797/23-A

Matrix: Solid Date Extracted: 09/14/2017 08:41

Instrument ID: A4HP9 Date Analyzed: 09/16/2017 12:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-294797/24-A	70916007.D	09/16/2017 12:38
SB-119A-10-12.5'	240-84819-1	70918128.D	09/18/2017 21:39
SB-119B-56-58'	240-84819-2	70918129.D	09/18/2017 22:04
SB-117A-33-35'	240-84819-3	70918130.D	09/18/2017 22:28
SB-117B-47-50'	240-84819-4	70918131.D	09/18/2017 22:53

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294797/23-A

Matrix: Solid | Lab File ID: 70916006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30(g) | Date Analyzed: 09/16/2017 12:13

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295100 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	3.5	U	50	3.5
108-60-1	2,2'-oxybis[1-chloropropane]	9.5	U	100	9.5
95-95-4	2,4,5-Trichlorophenol	25	U	150	25
88-06-2	2,4,6-Trichlorophenol	8.9	U	150	8.9
120-83-2	2,4-Dichlorophenol	20	U	150	20
105-67-9	2,4-Dimethylphenol	20	U	150	20
51-28-5	2,4-Dinitrophenol	21	U	330	21
121-14-2	2,4-Dinitrotoluene	17	U	200	17
606-20-2	2,6-Dinitrotoluene	21	U	200	21
91-58-7	2-Chloronaphthalene	0.45	U	50	0.45
95-57-8	2-Chlorophenol	8.2	U	50	8.2
91-57-6	2-Methylnaphthalene	0.50	U	6.7	0.50
95-48-7	2-Methylphenol	11	U	200	11
88-74-4	2-Nitroaniline	9.1	U	200	9.1
88-75-5	2-Nitrophenol	8.3	U	50	8.3
91-94-1	3,3'-Dichlorobenzidine	18	U	100	18
99-09-2	3-Nitroaniline	16	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	9.2	U	150	9.2
101-55-3	4-Bromophenyl phenyl ether	13	U	50	13
123-91-1	1,4-Dioxane	22	U	100	22
59-50-7	4-Chloro-3-methylphenol	21	U	150	21
106-47-8	4-Chloroaniline	17	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	13	U	50	13
100-01-6	4-Nitroaniline	26	U	200	26
100-02-7	4-Nitrophenol	17	U	330	17
83-32-9	Acenaphthene	0.76	U	6.7	0.76
208-96-8	Acenaphthylene	0.35	U	6.7	0.35
98-86-2	Acetophenone	9.2	U	100	9.2
120-12-7	Anthracene	0.78	U	6.7	0.78
1912-24-9	Atrazine	9.1	U	200	9.1
100-52-7	Benzaldehyde	12	U	100	12
56-55-3	Benzo[a]anthracene	0.63	U	6.7	0.63
50-32-8	Benzo[a]pyrene	0.64	U	6.7	0.64
205-99-2	Benzo[b]fluoranthene	0.59	U	6.7	0.59

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294797/23-A

Matrix: Solid | Lab File ID: 70916006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30(g) | Date Analyzed: 09/16/2017 12:13

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295100 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	0.35	U	6.7	0.35
207-08-9	Benzo[k]fluoranthene	0.68	U	6.7	0.68
111-91-1	Bis(2-chloroethoxy)methane	22	U	100	22
111-44-4	Bis(2-chloroethyl)ether	2.0	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	19	U	70	19
85-68-7	Butyl benzyl phthalate	10	U	70	10
105-60-2	Caprolactam	37	U	330	37
86-74-8	Carbazole	27	U	50	27
218-01-9	Chrysene	1.1	U	6.7	1.1
53-70-3	Dibenz(a,h)anthracene	0.66	U	6.7	0.66
132-64-9	Dibenzofuran	0.66	U	50	0.66
84-66-2	Diethyl phthalate	16	U	70	16
131-11-3	Dimethyl phthalate	17	U	70	17
84-74-2	Di-n-butyl phthalate	15	U	70	15
117-84-0	Di-n-octyl phthalate	7.9	U	70	7.9
206-44-0	Fluoranthene	0.55	U	6.7	0.55
86-73-7	Fluorene	0.53	U	6.7	0.53
118-74-1	Hexachlorobenzene	2.1	U	6.7	2.1
87-68-3	Hexachlorobutadiene	5.6	U	50	5.6
77-47-4	Hexachlorocyclopentadiene	8.1	U	330	8.1
67-72-1	Hexachloroethane	9.0	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	0.35	U	6.7	0.35
78-59-1	Isophorone	13	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	6.3	U	50	6.3
86-30-6	N-Nitrosodiphenylamine	21	U	50	21
91-20-3	Naphthalene	0.82	U	6.7	0.82
98-95-3	Nitrobenzene	2.2	U	100	2.2
87-86-5	Pentachlorophenol	9.1	U	150	9.1
85-01-8	Phenanthrene	0.73	U	6.7	0.73
108-95-2	Phenol	7.3	U	50	7.3
129-00-0	Pyrene	0.44	U	6.7	0.44
15831-10-4	3 & 4 Methylphenol	20	U	400	20
62-75-9	N-Nitrosodimethylamine	16	U	100	16

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294797/23-A

Matrix: Solid | Lab File ID: 70916006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30(g) | Date Analyzed: 09/16/2017 12:13

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295100 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	97		41-120
4165-62-2	Phenol-d5 (Surr)	88		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	75		30-120
367-12-4	2-Fluorophenol (Surr)	88		29-120
321-60-8	2-Fluorobiphenyl (Surr)	85		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	52		10-120

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 70916007.D

Lab ID: LCS 240-294797/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	518	78	48-120	
2,2'-oxybis[1-chloropropane]	667	495	74	37-120	
2,4,5-Trichlorophenol	667	514	77	34-120	
2,4,6-Trichlorophenol	667	463	69	19-120	
2,4-Dichlorophenol	667	492	74	48-120	
2,4-Dimethylphenol	667	461	69	37-120	
2,4-Dinitrophenol	1330	637	48	10-120	
2,4-Dinitrotoluene	667	578	87	53-120	
2,6-Dinitrotoluene	667	578	87	54-120	
2-Chloronaphthalene	667	516	77	49-120	
2-Chlorophenol	667	498	75	50-120	
2-Methylnaphthalene	667	505	76	49-120	
2-Methylphenol	667	495	74	49-120	
2-Nitroaniline	667	615	92	46-120	
2-Nitrophenol	667	493	74	46-120	
3,3'-Dichlorobenzidine	1330	1220	91	40-120	
3-Nitroaniline	667	567	85	48-120	
4,6-Dinitro-2-methylphenol	1330	830	62	18-120	
4-Bromophenyl phenyl ether	667	569	85	51-120	
1,4-Dioxane	667	216	32	10-120	
4-Chloro-3-methylphenol	667	562	84	47-120	
4-Chloroaniline	667	424	64	37-120	
4-Chlorophenyl phenyl ether	667	528	79	49-120	
4-Nitroaniline	667	591	89	49-120	
4-Nitrophenol	1330	1210	91	42-120	
Acenaphthene	667	524	79	48-120	
Acenaphthylene	667	508	76	46-120	
Acetophenone	667	452	68	46-120	
Anthracene	667	573	86	51-120	
Atrazine	1330	1360	102	57-120	
Benzaldehyde	1330	1110	83	48-120	
Benzo[a]anthracene	667	573	86	53-120	
Benzo[a]pyrene	667	619	93	50-120	
Benzo[b]fluoranthene	667	644	97	48-120	
Benzo[g,h,i]perylene	667	664	100	50-120	
Benzo[k]fluoranthene	667	588	88	51-120	
Bis(2-chloroethoxy)methane	667	513	77	50-120	
Bis(2-chloroethyl)ether	667	496	74	48-120	
Bis(2-ethylhexyl) phthalate	667	603	90	52-120	
Butyl benzyl phthalate	667	587	88	53-120	
Caprolactam	1330	1280	96	59-120	
Carbazole	667	638	96	56-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 70916007.D

Lab ID: LCS 240-294797/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Chrysene	667	573	86	54-120	
Dibenz(a,h)anthracene	667	731	110	48-120	
Dibenzofuran	667	529	79	49-120	
Diethyl phthalate	667	587	88	52-120	
Dimethyl phthalate	667	561	84	53-120	
Di-n-butyl phthalate	667	644	97	56-120	
Di-n-octyl phthalate	667	628	94	42-120	
Fluoranthene	667	619	93	53-120	
Fluorene	667	546	82	50-120	
Hexachlorobenzene	667	571	86	46-120	
Hexachlorobutadiene	667	478	72	44-120	
Hexachlorocyclopentadiene	667	385	58	14-120	
Hexachloroethane	667	455	68	45-120	
Indeno[1,2,3-cd]pyrene	667	681	102	49-120	
Isophorone	667	502	75	47-120	
N-Nitrosodi-n-propylamine	667	508	76	49-120	
N-Nitrosodiphenylamine	667	561	84	53-120	
Naphthalene	667	486	73	48-120	
Nitrobenzene	667	519	78	48-120	
Pentachlorophenol	1330	758	57	14-120	
Phenanthrene	667	567	85	52-120	
Phenol	667	513	77	49-120	
Pyrene	667	605	91	55-120	
3 & 4 Methylphenol	667	517	78	50-120	
N-Nitrosodimethylamine	667	440	66	41-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS/ ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
SB-119A-10-12.5'	240-84819-1	81	79	66	85	81	114
SB-119B-56-58'	240-84819-2	77	74	65	93	69	109
SB-117A-33-35'	240-84819-3	80	77	72	85	70	115
SB-117B-47-50'	240-84819-4	83	78	73	86	59	110
	MB 240-294797/23-A	88	88	75	85	52	97
	LCS 240-294797/24-A	80	81	80	82	74	97

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	29-120
PHL = Phenol-d5 (Surr)	29-120
NBZ = Nitrobenzene-d5 (Surr)	30-120
FBP = 2-Fluorobiphenyl (Surr)	32-120
TBP = 2,4,6-Tribromophenol (Surr)	10-120
TPHL = Terphenyl-d14 (Surr)	41-120

Column to be used to flag recovery values

FORM II 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: STD6 240-294210/7 Date Analyzed: 09/09/2017 14:36

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70909007.D Heated Purge: (Y/N) N

Calibration ID: 41358

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		144957	6.44	587122	7.55	367296	9.05
UPPER LIMIT		289914	6.94	1174244	8.05	734592	9.55
LOWER LIMIT		72479	5.94	293561	7.05	183648	8.55
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-294210/11		185015	6.44	723915	7.55	449271	9.05
ICV 240-294210/20		147442	6.44	571016	7.55	352472	9.05
CCV 240-295100/2 CCVIS		106349	6.29	425069	7.40	261951	8.90
CCV 240-295228/2 CCVIS		153262	6.22	581458	7.34	364530	8.84

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: STD6 240-294210/7 Date Analyzed: 09/09/2017 14:36

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70909007.D Heated Purge: (Y/N) N

Calibration ID: 41358

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		573819	10.31	701066	12.61	555031	14.43
UPPER LIMIT		1147638	10.81	1402132	13.11	1110062	14.93
LOWER LIMIT		286910	9.81	350533	12.11	277516	13.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-294210/11		700801	10.31	841081	12.61	683646	14.43
ICV 240-294210/20		581434	10.31	643824	12.61	510504	14.42
CCV 240-295100/2 CCVIS		443230	10.16	494240	12.42	392986	14.12
CCV 240-295228/2 CCVIS		608761	10.10	667350	12.35	566129	13.99

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCV 240-295100/2 Date Analyzed: 09/16/2017 10:30

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70916002.D Heated Purge: (Y/N) N

Calibration ID: 41397

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		106349	6.29	425069	7.40	261951	8.90
UPPER LIMIT		212698	6.79	850138	7.90	523902	9.40
LOWER LIMIT		53175	5.79	212535	6.90	130976	8.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-295100/3		103644	6.29	407327	7.40	253911	8.90
MB 240-294797/23-A		88928	6.29	366128	7.40	217485	8.90
LCS 240-294797/24-A		102300	6.29	401417	7.40	238519	8.90

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCV 240-295100/2 Date Analyzed: 09/16/2017 10:30

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70916002.D Heated Purge: (Y/N) N

Calibration ID: 41397

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		443230	10.16	494240	12.42	392986	14.12
UPPER LIMIT		886460	10.66	988480	12.92	785972	14.62
LOWER LIMIT		221615	9.66	247120	11.92	196493	13.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-295100/3		436337	10.16	453934	12.42	385625	14.12
MB 240-294797/23-A		371638	10.16	413241	12.42	331212	14.11
LCS 240-294797/24-A		392754	10.16	449574	12.42	349096	14.11

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCV 240-295228/2 Date Analyzed: 09/18/2017 11:18

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70918102.D Heated Purge: (Y/N) N

Calibration ID: 41397

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		153262	6.22	581458	7.34	364530	8.84
UPPER LIMIT		306524	6.72	1162916	7.84	729060	9.34
LOWER LIMIT		76631	5.72	290729	6.84	182265	8.34
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-84819-1	SB-119A-10-12.5'	99142	6.22	408560	7.34	286688	8.84
240-84819-2	SB-119B-56-58'	121629	6.22	472937	7.34	247060	8.84
240-84819-3	SB-117A-33-35'	108799	6.22	420619	7.34	234995	8.84
240-84819-4	SB-117B-47-50'	109817	6.22	427864	7.34	247566	8.83

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCV 240-295228/2 Date Analyzed: 09/18/2017 11:18

Instrument ID: A4HP9 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 70918102.D Heated Purge: (Y/N) N

Calibration ID: 41397

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		608761	10.10	667350	12.35	566129	13.99
UPPER LIMIT		1217522	10.60	1334700	12.85	1132258	14.49
LOWER LIMIT		304381	9.60	333675	11.85	283065	13.49
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-84819-1	SB-119A-10-12.5'	518978	10.09	582383	12.34	570830	13.99
240-84819-2	SB-119B-56-58'	496164	10.09	454471	12.34	434766	13.99
240-84819-3	SB-117A-33-35'	440453	10.09	480371	12.34	429447	13.99
240-84819-4	SB-117B-47-50'	447443	10.09	495425	12.34	442642	13.98

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

SAMPLE CALCULATION - SVOC	Soil	
SAMPLE IDENTIFICATION	LCS 240-294797/24-A	
COMPOUND	Benzo(a)pyrene	
COMPOUND AREA	865780	
INTERNAL STANDARD AMOUNT (ng)	4	
INTERNAL STANDARD AREA	349096	
AVERAGE RRF	1.0683	
865780 x 4 x 1 / 349096 x 1.0683	9.2860	ng/ul
PERCENT SOLIDS	1	
INITIAL WEIGHT	30	g
FINAL VOLUME	2	mL
conversion	1000	
dilution	1	
injection volume	1	
9.28601625292883 x (2/30) x (1/1) x 1000 x 1 / 1	619	µg/kg

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 240-294797/24-A
Matrix: Solid | Lab File ID: 70916007.D
Analysis Method: 8270D | Date Collected:
Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41
Sample wt/vol: 30(g) | Date Analyzed: 09/16/2017 12:38
Con. Extract Vol.: 2(mL) | Dilution Factor: 1
Injection Volume: 1(uL) | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 295100 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	518		50	3.5
108-60-1	2,2'-oxybis[1-chloropropane]	495		100	9.5
95-95-4	2,4,5-Trichlorophenol	514		150	25
88-06-2	2,4,6-Trichlorophenol	463		150	8.9
120-83-2	2,4-Dichlorophenol	492		150	20
105-67-9	2,4-Dimethylphenol	461		150	20
51-28-5	2,4-Dinitrophenol	637		330	21
121-14-2	2,4-Dinitrotoluene	578		200	17
606-20-2	2,6-Dinitrotoluene	578		200	21
91-58-7	2-Chloronaphthalene	516		50	0.45
95-57-8	2-Chlorophenol	498		50	8.2
91-57-6	2-Methylnaphthalene	505		6.7	0.50
95-48-7	2-Methylphenol	495		200	11
88-74-4	2-Nitroaniline	615		200	9.1
88-75-5	2-Nitrophenol	493		50	8.3
91-94-1	3,3'-Dichlorobenzidine	1220		100	18
99-09-2	3-Nitroaniline	567		200	16
534-52-1	4,6-Dinitro-2-methylphenol	830		150	9.2
101-55-3	4-Bromophenyl phenyl ether	569		50	13
123-91-1	1,4-Dioxane	216		100	22
59-50-7	4-Chloro-3-methylphenol	562		150	21
106-47-8	4-Chloroaniline	424		150	17
7005-72-3	4-Chlorophenyl phenyl ether	528		50	13
100-01-6	4-Nitroaniline	591		200	26
100-02-7	4-Nitrophenol	1210		330	17
83-32-9	Acenaphthene	524		6.7	0.76
208-96-8	Acenaphthylene	508		6.7	0.35
98-86-2	Acetophenone	452		100	9.2
120-12-7	Anthracene	573		6.7	0.78
1912-24-9	Atrazine	1360		200	9.1
100-52-7	Benzaldehyde	1110		100	12
56-55-3	Benzo[a]anthracene	573		6.7	0.63
50-32-8	Benzo[a]pyrene	619	✓	6.7	0.64
205-99-2	Benzo[b]fluoranthene	644		6.7	0.59

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 240-294797/24-A
Matrix: Solid | Lab File ID: 70916007.D
Analysis Method: 8270D | Date Collected:
Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41
Sample wt/vol: 30(g) | Date Analyzed: 09/16/2017 12:38
Con. Extract Vol.: 2(mL) | Dilution Factor: 1
Injection Volume: 1(uL) | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 295100 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	664		6.7	0.35
207-08-9	Benzo[k]fluoranthene	588		6.7	0.68
111-91-1	Bis(2-chloroethoxy)methane	513		100	22
111-44-4	Bis(2-chloroethyl)ether	496		100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	603		70	19
85-68-7	Butyl benzyl phthalate	587		70	10
105-60-2	Caprolactam	1280		330	37
86-74-8	Carbazole	638		50	27
218-01-9	Chrysene	573		6.7	1.1
53-70-3	Dibenz(a,h)anthracene	731		6.7	0.66
132-64-9	Dibenzofuran	529		50	0.66
84-66-2	Diethyl phthalate	587		70	16
131-11-3	Dimethyl phthalate	561		70	17
84-74-2	Di-n-butyl phthalate	644		70	15
117-84-0	Di-n-octyl phthalate	628		70	7.9
206-44-0	Fluoranthene	619		6.7	0.55
86-73-7	Fluorene	546		6.7	0.53
118-74-1	Hexachlorobenzene	571		6.7	2.1
87-68-3	Hexachlorobutadiene	478		50	5.6
77-47-4	Hexachlorocyclopentadiene	385		330	8.1
67-72-1	Hexachloroethane	455		50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	681		6.7	0.35
78-59-1	Isophorone	502		50	13
621-64-7	N-Nitrosodi-n-propylamine	508		50	6.3
86-30-6	N-Nitrosodiphenylamine	561		50	21
91-20-3	Naphthalene	486		6.7	0.82
98-95-3	Nitrobenzene	519		100	2.2
87-86-5	Pentachlorophenol	758		150	9.1
85-01-8	Phenanthrene	567		6.7	0.73
108-95-2	Phenol	513		50	7.3
129-00-0	Pyrene	605		6.7	0.44
15831-10-4	3 & 4 Methylphenol	517		400	20
62-75-9	N-Nitrosodimethylamine	440		100	16

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-294797/24-A

Matrix: Solid | Lab File ID: 70916007.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/14/2017 08:41

Sample wt/vol: 30(g) | Date Analyzed: 09/16/2017 12:38

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295100 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	97		41-120
4165-62-2	Phenol-d5 (Surr)	81		29-120
4165-60-0	Nitrobenzene-d5 (Surr)	80		30-120
367-12-4	2-Fluorophenol (Surr)	80		29-120
321-60-8	2-Fluorobiphenyl (Surr)	82		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	74		10-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A4HP9\20170916-68765.b\70916007.D
Lims ID: LCS 240-294797/24-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Sep-2017 12:38:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0068765-007
Misc. Info.: LCS 240-294797/24-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\ChromNA\Canton\ChromData\A4HP9\20170916-68765.b\8270 _9.m
Limit Group: MSS 8270D ICAL
Last Update: 18-Sep-2017 09:49:22 Calib Date: 12-Sep-2017 11:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A4HP9\20170912-68631.b\70912011.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: ulmanm Date: 16-Sep-2017 13:20:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.293	6.292	0.001	95	102300	4.00	4.00	
* 2 Naphthalene-d8	136	7.404	7.403	0.001	99	401417	4.00	4.00	
* 3 Acenaphthene-d10	164	8.900	8.904	-0.004	93	238519	4.00	4.00	
* 4 Phenanthrene-d10	188	10.160	10.163	-0.003	98	392754	4.00	4.00	
* 5 Chrysene-d12	240	12.420	12.419	0.001	97	449574	4.00	4.00	
* 6 Perylene-d12	264	14.112	14.116	-0.004	98	349096	4.00	4.00	
$ 7 2-Fluorophenol	112	5.077	5.057	0.020	93	265432	10.0	8.03	
$ 8 Phenol-d5	99	5.937	5.932	0.005	97	360390	10.0	8.15	
$ 9 Nitrobenzene-d5	82	6.769	6.769	0.000	92	411093	10.0	8.02	
$ 10 2-Fluorobiphenyl (Surr)	172	8.303	8.303	0.000	99	582164	10.0	8.23	
$ 11 2,4,6-Tribromophenol	330	9.563	9.567	-0.004	83	68323	10.0	7.43	
$ 12 Terphenyl-d14	244	11.472	11.472	0.000	99	736853	10.0	9.75	
25 1,4-Dioxane	88	2.764	2.753	0.011	92	50602	10.0	3.24	M
26 N-Nitrosodimethylamine	74	3.326	3.321	0.005	89	159816	10.0	6.61	
27 Pyridine	79	3.398	3.383	0.015	95	425688	20.0	9.69	
41 Benzaldehyde	77	5.889	5.894	-0.005	90	575150	20.0	16.6	
43 Phenol	94	5.952	5.946	0.006	95	368361	10.0	7.69	
44 Aniline	93	5.986	5.985	0.001	96	377425	10.0	6.51	
69 Bis(2-chloroethyl)ether	93	6.029	6.028	0.001	96	288133	10.0	7.44	
46 2-Chlorophenol	128	6.111	6.105	0.006	93	258382	10.0	7.47	
243 n-Decane	57	6.135	6.134	0.001	93	244439	10.0	5.97	
47 1,3-Dichlorobenzene	146	6.245	6.245	0.000	89	264553	10.0	7.00	
48 1,4-Dichlorobenzene	146	6.308	6.307	0.001	86	269895	10.0	6.95	
49 Benzyl alcohol	108	6.394	6.394	0.000	85	162126	10.0	6.61	
50 1,2-Dichlorobenzene	146	6.447	6.447	0.000	88	259025	10.0	7.11	
51 2-Methylphenol	108	6.486	6.485	0.001	95	254270	10.0	7.43	
53 2,2'-oxybis[1-chloropropan	45	6.510	6.509	0.001	95	330577	10.0	7.42	
52 Indene	115	6.524	6.523	0.001	88	1027639	20.0	14.2	
21 3 & 4 Methylphenol	108	6.616	6.615	0.001	94	280903	10.0	7.75	
57 N-Nitrosodi-n-propylamine	70	6.620	6.620	0.000	83	248867	10.0	7.62	
58 Acetophenone	105	6.630	6.629	0.001	95	386242	10.0	6.78	

Report Date: 18-Sep-2017 09:50:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Canton\ChromData\A4HP9\20170916-68765.b\70916007.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
61 Hexachloroethane	117	6.750	6.754	-0.004	92	117086	10.0	6.82	
62 Nitrobenzene	77	6.784	6.783	0.001	89	378079	10.0	7.79	
64 Isophorone	82	6.986	6.985	0.001	99	625355	10.0	7.53	
66 2-Nitrophenol	139	7.063	7.062	0.001	88	139363	10.0	7.40	
65 2,4-Dimethylphenol	107	7.072	7.072	0.000	95	293433	10.0	6.91	
71 Benzoic acid	122	7.140	7.134	0.006	92	33081	20.0	2.18	
70 Bis(2-chloroethoxy)methane	93	7.149	7.149	0.000	97	348810	10.0	7.70	
73 2,4-Dichlorophenol	162	7.270	7.269	0.001	95	213871	10.0	7.38	
74 1,2,4-Trichlorobenzene	180	7.351	7.351	0.000	91	228977	10.0	7.17	
75 Naphthalene	128	7.423	7.423	0.000	99	750718	10.0	7.29	
76 4-Chloroaniline	127	7.443	7.447	-0.004	91	275658	10.0	6.35	
77 2,6-Dichlorophenol	162	7.462	7.461	0.001	91	210973	10.0	7.28	
79 Hexachlorobutadiene	225	7.524	7.524	0.000	96	142012	10.0	7.17	
84 Caprolactam	113	7.717	7.735	-0.018	79	196063	20.0	19.2	
86 4-Chloro-3-methylphenol	107	7.842	7.841	0.001	92	295249	10.0	8.43	
87 2-Methylnaphthalene	142	8.010	8.009	0.001	89	511852	10.0	7.57	
88 1-Methylnaphthalene	142	8.097	8.096	0.001	90	488095	10.0	7.91	
89 Hexachlorocyclopentadiene	237	8.150	8.149	0.001	95	127777	10.0	5.77	
91 1,2,4,5-Tetrachlorobenzene	216	8.154	8.154	0.000	97	240941	10.0	7.60	
92 2,4,6-Trichlorophenol	196	8.236	8.240	-0.004	93	146126	10.0	6.94	
93 2,4,5-Trichlorophenol	196	8.275	8.274	0.001	89	167687	10.0	7.72	
98 1,1'-Biphenyl	154	8.395	8.394	0.001	97	605357	10.0	7.78	
100 2-Chloronaphthalene	162	8.428	8.428	0.000	99	493282	10.0	7.74	
102 2-Nitroaniline	65	8.486	8.490	-0.004	74	224621	10.0	9.22	
105 Dimethyl phthalate	163	8.621	8.620	0.001	96	632587	10.0	8.42	
106 1,3-Dinitrobenzene	168	8.654	8.659	-0.005	83	106671	10.0	8.99	
107 2,6-Dinitrotoluene	165	8.679	8.678	0.000	97	147457	10.0	8.67	
109 Acenaphthylene	152	8.784	8.784	0.000	98	730739	10.0	7.62	
110 3-Nitroaniline	138	8.828	8.832	-0.004	87	139976	10.0	8.50	
111 2,4-Dinitrophenol	184	8.914	8.918	-0.004	88	103217	20.0	9.55	
112 Acenaphthene	153	8.929	8.933	-0.004	97	503844	10.0	7.86	
113 4-Nitrophenol	109	8.943	8.947	-0.004	92	264784	20.0	18.2	
114 2,4-Dinitrotoluene	165	9.025	9.024	0.001	83	198063	10.0	8.67	
116 Dibenzofuran	168	9.073	9.072	0.001	99	723290	10.0	7.93	
119 2,3,4,6-Tetrachlorophenol	232	9.169	9.168	0.001	80	115436	10.0	6.62	
121 Diethyl phthalate	149	9.207	9.207	0.000	96	672053	10.0	8.80	
247 Hexadecane	57	9.207	9.212	-0.005	85	386359	10.0	7.96	
123 4-Chlorophenyl phenyl ethe	204	9.337	9.337	0.000	98	287454	10.0	7.93	
125 4-Nitroaniline	138	9.347	9.351	-0.004	76	149110	10.0	8.86	
126 Fluorene	166	9.361	9.365	-0.004	99	602680	10.0	8.19	
128 4,6-Dinitro-2-methylphenol	198	9.376	9.375	0.001	91	194613	20.0	12.5	
130 Diphenylamine	169	9.429	9.433	-0.004	94	434847	8.55	7.15	
131 N-Nitrosodiphenylamine	169	9.429	9.433	-0.004	98	434847	10.0	8.42	
132 1,2-Diphenylhydrazine	77	9.472	9.471	0.001	95	833143	10.0	8.88	
133 Azobenzene	77	9.472	9.471	0.001	99	832845	10.0	8.88	
139 4-Bromophenyl phenyl ether	248	9.756	9.755	0.001	97	172760	10.0	8.54	
141 Hexachlorobenzene	284	9.842	9.846	-0.004	92	193046	10.0	8.57	
142 Atrazine	200	9.852	9.851	0.001	91	413899	20.0	20.4	
244 n-Octadecane	57	9.982	9.981	0.001	80	413334	10.0	9.27	
143 Pentachlorophenol	266	9.991	9.995	-0.004	88	182417	20.0	11.4	
148 Phenanthrene	178	10.184	10.183	0.001	99	874245	10.0	8.50	
149 Anthracene	178	10.227	10.226	0.001	97	891584	10.0	8.59	

Report Date: 18-Sep-2017 09:50:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Canton\ChromData\A4HP9\20170916-68765.b\70916007.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.338	10.342	-0.004	97	831337	10.0	9.57	
154 Di-n-butyl phthalate	149	10.573	10.577	-0.004	100	1102085	10.0	9.67	
159 Fluoranthene	202	11.194	11.193	0.001	99	1007796	10.0	9.29	
160 Benzidine	184	11.261	11.260	0.001	99	471631	20.0	9.16	
161 Pyrene	202	11.391	11.390	0.001	97	1016052	10.0	9.08	
168 Butyl benzyl phthalate	149	11.848	11.847	0.001	96	506246	10.0	8.80	
173 Bis(2-ethylhexyl) phthalat	149	12.309	12.313	-0.004	98	692467	10.0	9.05	
175 3,3'-Dichlorobenzidine	252	12.343	12.347	-0.004	75	637871	20.0	18.2	
177 Benzo[a]anthracene	228	12.410	12.409	0.001	98	970322	10.0	8.59	
178 Chrysene	228	12.444	12.448	-0.004	97	923534	10.0	8.59	
180 Di-n-octyl phthalate	149	12.939	12.938	0.001	100	1151445	10.0	9.42	
182 Benzo[b]fluoranthene	252	13.588	13.588	0.000	96	947804	10.0	9.66	
183 Benzo[k]fluoranthene	252	13.617	13.621	-0.004	99	935163	10.0	8.83	
184 Benzo[a]pyrene	252	14.040	14.040	0.000	77	865780	10.0	9.29	✓
188 Indeno[1,2,3-cd]pyrene	276	15.959	15.963	-0.004	97	1010078	10.0	10.2	
189 Dibenz(a,h)anthracene	278	15.964	15.968	-0.004	87	847100	10.0	11.0	
190 Benzo[g,h,i]perylene	276	16.531	16.540	-0.009	98	825950	10.0	9.95	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00015 Amount Added: 5.00 Units: uL Run Reagent

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 294210

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2017 12:29 Calibration End Date: 09/09/2017 15:52 Calibration ID: 41358

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	1.0051 1.2294	0.9394 1.2640	0.9881 1.2585	0.9139 1.2522	1.0906	Ave		1.1046			0.6000	13.3		20.0			
Benzidine	 0.4993	+++++ 0.5311	0.2639 0.5279	0.2938 0.5177	0.4188	Lin1	-0.728	0.5379							0.9980		0.9900
Pyrene	0.9240 1.0423	0.9378 1.0401	0.9450 1.0779	0.9125 1.1042	0.9757	Ave		0.9955			0.6000	7.2		20.0			
Butyl benzyl phthalate	 0.5165	0.4311 0.5337	0.5264 0.5328	0.5002 0.5372	0.5173	Ave		0.5119			0.0100	6.8		20.0			
Bis(2-ethylhexyl) phthalate	 0.6971	0.5807 0.7134	0.6814 0.7212	0.6547 0.7099	0.6888	Ave		0.6809			0.0100	6.7		20.0			
3,3'-Dichlorobenzidine	 0.2944	0.2644 0.3240	0.3127 0.3517	0.2967 0.3594	0.2863	Ave		0.3112			0.0100	10.5		20.0			
Benzo[a]anthracene	1.0044 1.0024	0.9522 1.0404	1.0112 1.0586	0.9440 1.0519	0.9750	Ave		1.0045			0.8000	4.1		20.0			
Chrysene	0.9335 0.9647	0.8977 0.9958	0.9769 1.0018	0.9062 1.0087	0.9226	Ave		0.9564			0.7000	4.4		20.0			
Di-n-octyl phthalate	 1.4507	0.9881 1.5196	1.3154 1.5772	1.3833 1.5318	1.4439	Ave		1.4012			0.0100	13.3		20.0			
Benzo[b]fluoranthene	0.8543 1.1637	0.9424 1.2590	1.1446 1.2601	1.0805 1.2867	1.1308	Ave		1.1247			0.7000	13.1		20.0			
Benzo[k]fluoranthene	1.1278 1.2378	1.0561 1.2778	1.1807 1.3913	1.1600 1.3063	1.1893	Ave		1.2141			0.7000	8.3		20.0			
Benzo[a]pyrene	0.8291 1.1170	0.9037 1.1728	1.0375 1.2295	1.0357 1.2183	1.0711	Ave		1.0683			0.7000	12.7		20.0			
Dibenz(a,h)anthracene	0.6394 0.9875	0.7514 1.0443	0.9066 +++++	0.9263 +++++	0.9406	Ave		0.8851			0.4000	15.9		20.0			
Indeno[1,2,3-cd]pyrene	0.7835 1.1959	0.9719 1.2563	1.1360 1.3087	1.0983 1.2887	1.1518	Ave		1.1324			0.5000	14.8		20.0			
Benzo[g,h,i]perylene	0.8405 0.9565	0.8654 0.9860	1.0076 1.0162	0.9502 0.9828	0.9512	Ave		0.9507			0.5000	6.4		20.0			
2-Fluorophenol (Surr)	 1.3038	1.1294 1.3302	1.3007 1.3303	1.2812 1.3137	1.3491	Ave		1.2923				5.3		20.0			
Phenol-d5 (Surr)	 1.7317	1.5944 1.7680	1.7302 1.7779	1.7249 1.7575	1.7511	Ave		1.7295				3.3		20.0			
Nitrobenzene-d5 (Surr)	0.5083 0.5192	0.4726 0.5236	0.5013 0.5409	0.5090 0.5125	0.5092	Ave		0.5107				3.6		20.0			
2-Fluorobiphenyl (Surr)	1.1341 1.1741	1.1137 1.2152	1.1707 1.2971	1.1530 1.2611	1.1516	Ave		1.1856				5.1		20.0			
2,4,6-Tribromophenol (Surr)	 0.1491	0.1284 0.1602	0.1558 0.1687	0.1497 0.1661	0.1561	Ave		0.1543				8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Batch Number: 294797 Batch Start Date: 09/14/17 13:45 Batch Analyst: Trushel, Jessica

Batch Method: 3540C Batch End Date: 09/15/17 05:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	exBENZALDEHYD 00049	exBNASPIKE 00080	exBNASURR W 00048	
240-84819-C-1	SB-119A-10-12.5'	3540C, 8270D	T	30.16 g	2 mL			1 mL	
240-84819-C-2	SB-119B-56-58'	3540C, 8270D	T	30.39 g	2 mL			1 mL	
240-84819-C-3	SB-117A-33-35'	3540C, 8270D	T	30.38 g	2 mL			1 mL	
240-84819-C-4	SB-117B-47-50'	3540C, 8270D	T	29.92 g	2 mL			1 mL	
240-84836-K-1 MS		3540C, 8270D	T	30.00 g	2 mL	1 mL	1 mL	1 mL	
240-84836-K-1 MSD		3540C, 8270D	T	30.01 g	2 mL	1 mL	1 mL	1 mL	
MB 240-294797/23		3540C, 8270D		30 g	2 mL			1 mL	
LCS 240-294797/24		3540C, 8270D		30 g	2 mL	1 mL	1 mL	1 mL	

Batch Notes	
Balance ID	1339916
Na2SO4 ID	2982639
Prep Solvent ID	3231079

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015D_DRO

Diesel Range Orgnics (DRO) (GC)

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: STD3 240-293496/9 Date Analyzed: 09/01/2017 20:43

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P5R090109.D Heated Purge: (Y/N) N

Calibration ID: 41304

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
INITIAL CALIBRATION SURROGATE				8.62		
UPPER LIMIT				8.72		
LOWER LIMIT				8.52		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-293496/9 ICRT		09/01/2017 20:43	P5R090109.D	8.62		

Column used to flag values outside QC limits

FORM VIII 8015D

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCV 240-295958/7 Date Analyzed: 09/22/2017 17:24

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P5R092207.D Heated Purge: (Y/N) N

Calibration ID: 41304

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.63		
UPPER LIMIT				8.73		
LOWER LIMIT				8.53		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-295958/7 CCVRT		09/22/2017 17:24	P5R092207.D	8.63		
MB 240-295761/16-A		09/22/2017 17:51	P5R092208.D	8.63		
LCS 240-295761/17-A		09/22/2017 18:18	P5R092209.D	8.63		
CCV 240-295958/18		09/22/2017 22:23	P5R092218.D	8.63		
240-84819-1	SB-119A-10-12.5'	09/22/2017 22:50	P5R092219.D	8.63		
240-84819-2	SB-119B-56-58'	09/22/2017 23:17	P5R092220.D	8.63		
240-84819-3	SB-117A-33-35'	09/22/2017 23:44	P5R092221.D	8.63		
240-84819-4	SB-117B-47-50'	09/23/2017 00:12	P5R092222.D	8.63		
CCV 240-295958/26		09/23/2017 02:00	P5R092226.D	8.63		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015D

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 293496

SDG No.:

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2017 19:49 Calibration End Date: 09/01/2017 21:37 Calibration ID: 41304

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-293496/7	P5R090107.D
Level 2	STD2 240-293496/8	P5R090108.D
Level 3	STD3 240-293496/9	P5R090109.D
Level 4	STD4 240-293496/10	P5R090110.D
Level 5	STD5 240-293496/11	P5R090111.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	7.887	7.887	7.887	7.887	7.887						3.839 - 11.935	7.887
o-Terphenyl	8.620	8.620	8.620	8.622	8.627						8.520 - 8.720	8.622

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 293496

SDG No.:

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2017 19:49 Calibration End Date: 09/01/2017 21:37 Calibration ID: 41304

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-293496/7	P5R090107.D
Level 2	STD2 240-293496/8	P5R090108.D
Level 3	STD3 240-293496/9	P5R090109.D
Level 4	STD4 240-293496/10	P5R090110.D
Level 5	STD5 240-293496/11	P5R090111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	150789 145036	143328	149711	149392	Ave		147651.170				2.2		20.0			
o-Terphenyl	170654 174457	162191	175274	174928	Ave		171500.741				3.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 293496

SDG No.:

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2017 19:49 Calibration End Date: 09/01/2017 21:37 Calibration ID: 41304

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-293496/7	P5R090107.D
Level 2	STD2 240-293496/8	P5R090108.D
Level 3	STD3 240-293496/9	P5R090109.D
Level 4	STD4 240-293496/10	P5R090110.D
Level 5	STD5 240-293496/11	P5R090111.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	15078930	28665538	74855681	149391773	290071452	100	200	500	1000	2000
o-Terphenyl	Ave	1365233	2595063	7010947	13994223	27913069	8.00	16.0	40.0	80.0	160

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-293496/12 Calibration Date: 09/01/2017 22:04

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R090112.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	147651	153049		520	502	3.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-293496/12 Calibration Date: 09/01/2017 22:04

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R090112.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel	7.89	3.84	11.94

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295958/7 Calibration Date: 09/22/2017 17:24

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R092207.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	147651	147205		498	500	-0.3	20.0
o-Terphenyl	Ave	171501	178884		41.7	40.0	4.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295958/7 Calibration Date: 09/22/2017 17:24

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R092207.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel	7.91	3.87	11.95
o-Terphenyl	8.63	8.53	8.73

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295958/18 Calibration Date: 09/22/2017 22:23

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R092218.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	147651	145997		494	500	-1.1	20.0
o-Terphenyl	Ave	171501	183014		42.7	40.0	6.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295958/18 Calibration Date: 09/22/2017 22:23

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R092218.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel	7.91	3.87	11.95
o-Terphenyl	8.63	8.53	8.73

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295958/26 Calibration Date: 09/23/2017 02:00

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R092226.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	147651	151442		513	500	2.6	20.0
o-Terphenyl	Ave	171501	192762		45.0	40.0	12.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-295958/26 Calibration Date: 09/23/2017 02:00

Instrument ID: A2HP5R Calib Start Date: 09/01/2017 19:49

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/01/2017 21:37

Lab File ID: P5R092226.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel	7.91	3.87	11.95
o-Terphenyl	8.63	8.53	8.73

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: RTC 240-295958/6 Date Analyzed: 09/22/2017 16:56

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID: P5R092206.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel	7.91	3.87	11.95

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab File ID: P5R092208.D Lab Sample ID: MB 240-295761/16-A

Matrix: Solid Date Extracted: 09/21/2017 14:40

Instrument ID: A2HP5R Date Analyzed: 09/22/2017 17:51

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-295761/17-A	P5R092209.D	09/22/2017 18:18
SB-119A-10-12.5'	240-84819-1	P5R092219.D	09/22/2017 22:50
SB-119B-56-58'	240-84819-2	P5R092220.D	09/22/2017 23:17
SB-117A-33-35'	240-84819-3	P5R092221.D	09/22/2017 23:44
SB-117B-47-50'	240-84819-4	P5R092222.D	09/23/2017 00:12

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-295761/16-A

Matrix: Solid | Lab File ID: P5R092208.D

Analysis Method: 8015D | Date Collected:

Extraction Method: 3546 | Date Extracted: 09/21/2017 14:40

Sample wt/vol: 10(g) | Date Analyzed: 09/22/2017 17:51

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295958 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	15	U	50	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	75		26-125

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5R092209.D

Lab ID: LCS 240-295761/17-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel Range Organics [C10 - C28]	250	166	66	45-120	

Column to be used to flag recovery and RPD values

FORM III 8015D

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rxi-5HT ID: 0.53(mm)

Client Sample ID	Lab Sample ID	OTPH #
SB-119A-10-12.5'	240-84819-1	70
SB-119B-56-58'	240-84819-2	63
SB-117A-33-35'	240-84819-3	71
SB-117B-47-50'	240-84819-4	73
	MB 240-295761/16-A	75
	LCS 240-295761/17-A	69

	QC LIMITS
OTPH = o-Terphenyl	26-125

Column to be used to flag recovery values

FORM II 8015D

SAMPLE CALCULATION - DRO	Sediment	
SAMPLE IDENTIFICATION	SB-119A-10-12.5'	
COMPOUND	DRO	
COMPOUND AREA	6010134	
AVERAGE RRF	147651.17	
6010134 / 147651.17	40.70	ng/ul
DILUTION FACTOR	1	
PERCENT SOLIDS	0.828	
INITIAL WEIGHT	10.02	g
FINAL VOLUME	5	ml
conversion	1	
40.7049534385674 x (5/10.02) x (1/0.828) x 1	25	mg/kg

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' | Lab Sample ID: 240-84819-1

Matrix: Solid | Lab File ID: P5R092219.D

Analysis Method: 8015D | Date Collected: 09/09/2017 14:20

Extraction Method: 3546 | Date Extracted: 09/21/2017 14:40

Sample wt/vol: 10.02(g) | Date Analyzed: 09/22/2017 22:50

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 295958 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	25	J	60	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	70		26-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP5R\20170922-68951.b\P5R092219.D
Lims ID: 240-84819-C-1-B
Client ID: SB-119A-10-12.5'
Sample Type: Client
Inject. Date: 22-Sep-2017 22:50:43 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0068951-019
Operator ID: Instrument ID: A2HP5R

Method: \\ChromNA\Canton\ChromData\A2HP5R\20170922-68951.b\TPH5R.m
Limit Group: GC 8015C TPH ICAL
Last Update: 23-Sep-2017 11:24:15 Calib Date: 06-Sep-2017 16:37:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP5R\20170906-68490.b\P5R090610.D

Column 1 : Det: GC FID1A
Process Host: XAWRK022

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
A	20 Diesel					
	7.911	(3.874-11.948)		4550261	30.8	
A	24 C10-C32					
	8.582	(3.874-13.290)		6010134	40.7	✓
$	23 o-Terphenyl					
	8.633	8.634	-0.001	4777700	27.9	

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 293496

SDG No.:

Instrument ID: A2HP5R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2017 19:49 Calibration End Date: 09/01/2017 21:37 Calibration ID: 41304

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-293496/7	P5R090107.D
Level 2	STD2 240-293496/8	P5R090108.D
Level 3	STD3 240-293496/9	P5R090109.D
Level 4	STD4 240-293496/10	P5R090110.D
Level 5	STD5 240-293496/11	P5R090111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	150789 145036	143328	149711	149392	Ave		147651.170				2.2		20.0			
o-Terphenyl	170654 174457	162191	175274	174928	Ave		171500.741				3.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

8015D_GRO

Gasoline Range Organics (GRO) (GC)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Instrument ID: YPID Start Date: 07/17/2017 17:41

Analysis Batch Number: 287466 End Date: 07/17/2017 21:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-287466/4 IC		07/17/2017 17:41	1	Y0717004.D	RTX-VRX 0.45(mm)
STD2 240-287466/5 IC		07/17/2017 18:23	1	Y0717005.D	RTX-VRX 0.45(mm)
STD3 240-287466/6 IC		07/17/2017 19:04	1	Y0717006.D	RTX-VRX 0.45(mm)
STD4 240-287466/7 IC		07/17/2017 19:45	1	Y0717007.D	RTX-VRX 0.45(mm)
STD5 240-287466/8 IC		07/17/2017 20:26	1	Y0717008.D	RTX-VRX 0.45(mm)
STD6 240-287466/9 IC		07/17/2017 21:07	1	Y0717009.D	RTX-VRX 0.45(mm)
ICV 240-287466/10		07/17/2017 21:47	1	Y0717010.D	RTX-VRX 0.45(mm)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Instrument ID: YPID Start Date: 09/13/2017 07:51

Analysis Batch Number: 294581 End Date: 09/13/2017 15:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-294581/4		09/13/2017 07:51	1	Y0913004.D	RTX-VRX 0.45(mm)
ZZZZZ		09/13/2017 08:33	5		RTX-VRX 0.45(mm)
CCV 240-294581/6		09/13/2017 09:14	1	Y0913006.D	RTX-VRX 0.45(mm)
MB 240-294599/1-A		09/13/2017 09:54	1	Y0913007.D	RTX-VRX 0.45(mm)
LCS 240-294599/2-A		09/13/2017 10:35	1	Y0913008.D	RTX-VRX 0.45(mm)
240-84819-1		09/13/2017 11:15	1	Y0913009.D	RTX-VRX 0.45(mm)
240-84819-2		09/13/2017 11:55	1	Y0913010.D	RTX-VRX 0.45(mm)
ZZZZZ		09/13/2017 12:36	1		RTX-VRX 0.45(mm)
240-84819-4		09/13/2017 13:16	1	Y0913012.D	RTX-VRX 0.45(mm)
240-84819-4 MS		09/13/2017 13:57	1	Y0913013.D	RTX-VRX 0.45(mm)
240-84819-4 MSD		09/13/2017 14:38	1	Y0913014.D	RTX-VRX 0.45(mm)
CCV 240-294581/15		09/13/2017 15:18	1	Y0913015.D	RTX-VRX 0.45(mm)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Instrument ID: YPID Start Date: 09/15/2017 13:34

Analysis Batch Number: 294931 End Date: 09/15/2017 21:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-294931/4		09/15/2017 13:34	1	Y0915004.D	RTX-VRX 0.45(mm)
MB 240-294928/1-A		09/15/2017 14:15	1	Y0915005.D	RTX-VRX 0.45(mm)
LCS 240-294928/2-A		09/15/2017 14:56	1	Y0915006.D	RTX-VRX 0.45(mm)
240-84819-3		09/15/2017 16:17	1	Y0915008.D	RTX-VRX 0.45(mm)
CCV 240-294931/15		09/15/2017 21:01	1	Y0915015.D	RTX-VRX 0.45(mm)

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCVRT 240-294581/4 Date Analyzed: 09/13/2017 07:51

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): Y0913004.D Heated Purge: (Y/N) N

Calibration ID: 40792

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.52		
UPPER LIMIT				9.62		
LOWER LIMIT				9.42		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-294581/4		09/13/2017 07:51	Y0913004.D	9.52		
CCV 240-294581/6		09/13/2017 09:14	Y0913006.D	9.52		
MB 240-294599/1-A		09/13/2017 09:54	Y0913007.D	9.51		
LCS 240-294599/2-A		09/13/2017 10:35	Y0913008.D	9.52		
240-84819-1	SB-119A-10-12.5'	09/13/2017 11:15	Y0913009.D	9.51		
240-84819-2	SB-119B-56-58'	09/13/2017 11:55	Y0913010.D	9.51		
240-84819-4	SB-117B-47-50'	09/13/2017 13:16	Y0913012.D	9.51		
240-84819-4 MS	SB-117B-47-50' MS	09/13/2017 13:57	Y0913013.D	9.51		
240-84819-4 MSD	SB-117B-47-50' MSD	09/13/2017 14:38	Y0913014.D	9.51		
CCV 240-294581/15		09/13/2017 15:18	Y0913015.D	9.52		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015D

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Sample No.: CCVRT 240-294931/4 Date Analyzed: 09/15/2017 13:34

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): Y0915004.D Heated Purge: (Y/N) N

Calibration ID: 40792

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT		
				RT #		
CONTINUING CALIBRATION SURROGATE				9.52		
UPPER LIMIT				9.62		
LOWER LIMIT				9.42		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-294931/4		09/15/2017 13:34	Y0915004.D	9.52		
MB 240-294928/1-A		09/15/2017 14:15	Y0915005.D	9.52		
LCS 240-294928/2-A		09/15/2017 14:56	Y0915006.D	9.52		
240-84819-3	SB-117A-33-35'	09/15/2017 16:17	Y0915008.D	9.51		
CCV 240-294931/15		09/15/2017 21:01	Y0915015.D	9.52		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015D

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 287466

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/17/2017 17:41 Calibration End Date: 07/17/2017 21:07 Calibration ID: 40792

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-287466/4	Y0717004.D
Level 2	STD2 240-287466/5	Y0717005.D
Level 3	STD3 240-287466/6	Y0717006.D
Level 4	STD4 240-287466/7	Y0717007.D
Level 5	STD5 240-287466/8	Y0717008.D
Level 6	STD6 240-287466/9	Y0717009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Gasoline Range Organics [C6 - C10]	10.729	10.729	10.729	10.729	10.729	10.729					4.737 - 16.722	10.729
C6-C12	12.073	12.073	12.073	12.073	12.073	12.073					4.737 - 19.409	12.073
Trifluorotoluene (Surr)	9.501	9.510	9.500	9.503	9.502	9.502					9.253 - 9.753	9.503

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 287466

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/17/2017 17:41 Calibration End Date: 07/17/2017 21:07 Calibration ID: 40792

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-287466/4	Y0717004.D
Level 2	STD2 240-287466/5	Y0717005.D
Level 3	STD3 240-287466/6	Y0717006.D
Level 4	STD4 240-287466/7	Y0717007.D
Level 5	STD5 240-287466/8	Y0717008.D
Level 6	STD6 240-287466/9	Y0717009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Gasoline Range Organics [C6 - C10]	175253 126932	133083 129784	136001	129729	Lin1	3901527.68	125323.199							0.9990		0.9900
C6-C12	222148 141119	156680 143794	155451	145139	Lin1	7055447.63	136958.732							0.9980		0.9900
Trifluorotoluene (Surr)	142302 117432	121786 118415	120127	115591	Lin1	70521.1388	117113.955							1.0000		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 287466

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/17/2017 17:41 Calibration End Date: 07/17/2017 21:07 Calibration ID: 40792

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-287466/4	Y0717004.D
Level 2	STD2 240-287466/5	Y0717005.D
Level 3	STD3 240-287466/6	Y0717006.D
Level 4	STD4 240-287466/7	Y0717007.D
Level 5	STD5 240-287466/8	Y0717008.D
Level 6	STD6 240-287466/9	Y0717009.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Gasoline Range Organics [C6 - C10]	Lin1	17525316 207654575	26616653	54400235	103783179	152318963	100 1600	200	400	800	1200
C6-C12	Lin1	22214834 230069726	31336025	62180442	116110982	169343225	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Lin1	569207 23683035	974285	2402544	4623641	9394527	4.00 200	8.00	20.0	40.0	80.0

Curve Type Legend:
Lin1 = Linear 1/conc

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-287466/10 Calibration Date: 07/17/2017 21:47

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0717010.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		139338		858	800	7.3	20.0
C6-C12	Lin1		160825		888	800	11.0	20.0
Trifluorotoluene (Surr)	Lin1		121350		40.8	40.0	2.1	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: ICV 240-287466/10 Calibration Date: 07/17/2017 21:47

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0717010.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	10.73	4.74	16.72
C6-C12	12.07	4.74	19.41
Trifluorotoluene (Surr)	9.50	9.25	9.75

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVRT 240-294581/4 Calibration Date: 09/13/2017 07:51

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0913004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		137909		849	800	6.2	20.0
C6-C12	Lin1		164390		909	800	13.6	20.0
Trifluorotoluene (Surr)	Lin1		139776		47.1	40.0	17.8	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVRT 240-294581/4 Calibration Date: 09/13/2017 07:51

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0913004.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	10.78	4.76	16.81
C6-C12	12.09	4.76	19.41
Trifluorotoluene (Surr)	9.52	9.27	9.77

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294581/6 Calibration Date: 09/13/2017 09:14

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0913006.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		134704		829	800	3.6	20.0
C6-C12	Lin1		160941		889	800	11.1	20.0
Trifluorotoluene (Surr)	Lin1		128623		43.3	40.0	8.3	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294581/6 Calibration Date: 09/13/2017 09:14

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0913006.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	10.78	4.76	16.81
C6-C12	12.09	4.76	19.41
Trifluorotoluene (Surr)	9.52	9.27	9.77

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294581/15 Calibration Date: 09/13/2017 15:18

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0913015.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		127433		782	800	-2.2	20.0
C6-C12	Lin1		146418		804	800	0.5	20.0
Trifluorotoluene (Surr)	Lin1		105564		35.5	40.0	-11.4	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294581/15 Calibration Date: 09/13/2017 15:18

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0913015.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	10.78	4.76	16.81
C6-C12	12.09	4.76	19.41
Trifluorotoluene (Surr)	9.52	9.27	9.77

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVRT 240-294931/4 Calibration Date: 09/15/2017 13:34

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0915004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		136025		837	800	4.6	20.0
C6-C12	Lin1		154356		850	800	6.3	20.0
Trifluorotoluene (Surr)	Lin1		106622		35.8	40.0	-10.5	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCVRT 240-294931/4 Calibration Date: 09/15/2017 13:34

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0915004.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	10.87	4.81	16.82
C6-C12	12.11	4.81	19.40
Trifluorotoluene (Surr)	9.52	9.27	9.77

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294931/15 Calibration Date: 09/15/2017 21:01

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0915015.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin1		125504		770	800	-3.7	20.0
C6-C12	Lin1		150340		827	800	3.3	20.0
Trifluorotoluene (Surr)	Lin1		104396		35.1	40.0	-12.4	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: CCV 240-294931/15 Calibration Date: 09/15/2017 21:01

Instrument ID: YPID Calib Start Date: 07/17/2017 17:41

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 07/17/2017 21:07

Lab File ID: Y0915015.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	10.87	4.81	16.82
C6-C12	12.11	4.81	19.40
Trifluorotoluene (Surr)	9.52	9.27	9.77

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: MB 240-294599/1-A

Matrix: Solid Date Extracted: 09/13/2017 07:19

Lab File ID:(1) Y0913007.D Lab File ID:(2)

Date Analyzed:(1) 09/13/2017 09:54 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-294599/2-A	09/13/2017 10:35	
SB-119A-10-12.5'	240-84819-1	09/13/2017 11:15	
SB-119B-56-58'	240-84819-2	09/13/2017 11:55	
SB-117B-47-50'	240-84819-4	09/13/2017 13:16	
SB-117B-47-50' MS	240-84819-4 MS	09/13/2017 13:57	
SB-117B-47-50' MSD	240-84819-4 MSD	09/13/2017 14:38	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294599/1-A

Matrix: Solid | Lab File ID: Y0913007.D

Analysis Method: 8015D | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/13/2017 09:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294581 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	12	U	100	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		43-120

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0913008.D

Lab ID: LCS 240-294599/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	856	107	76-120	

Column to be used to flag recovery and RPD values

FORM III 8015D

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0913013.D

Lab ID: 240-84819-4 MS Client ID: SB-117B-47-50' MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	943	14 U	885	94	25-120	

Column to be used to flag recovery and RPD values

FORM III 8015D

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0913014.D

Lab ID: 240-84819-4 MSD Client ID: SB-117B-47-50' MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Gasoline Range Organics [C6 - C10]	941	905	96	2	40	25-120	

Column to be used to flag recovery and RPD values

FORM III 8015D

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Lab Sample ID: MB 240-294928/1-A

Matrix: Solid Date Extracted: 09/15/2017 05:41

Lab File ID:(1) Y0915005.D Lab File ID:(2)

Date Analyzed:(1) 09/15/2017 14:15 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-294928/2-A	09/15/2017 14:56	
SB-117A-33-35'	240-84819-3	09/15/2017 16:17	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-84819-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-294928/1-A

Matrix: Solid | Lab File ID: Y0915005.D

Analysis Method: 8015D | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/15/2017 14:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 294931 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	12	U	100	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		43-120

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0915006.D

Lab ID: LCS 240-294928/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	776	97	76-120	

Column to be used to flag recovery and RPD values

FORM III 8015D

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45(mm)

Client Sample ID	Lab Sample ID	TFT1 #
SB-119A-10-12.5'	240-84819-1	80
SB-119B-56-58'	240-84819-2	74
SB-117A-33-35'	240-84819-3	77
SB-117B-47-50'	240-84819-4	46
	MB 240-294599/1-A	77
	MB 240-294928/1-A	77
	LCS 240-294599/2-A	76
	LCS 240-294928/2-A	91
SB-117B-47-50' MS	240-84819-4 MS	76
SB-117B-47-50' MSD	240-84819-4 MSD	73

	QC LIMITS
TFT = Trifluorotoluene (Surr)	43-120

Column to be used to flag recovery values

FORM II 8015D

SAMPLE CALCULATION - GRO	SOIL	
SAMPLE IDENTIFICATION	SB-119A-10-12.5'	
COMPOUND	GRO	
COMPOUND AREA	18521396	
INTERNAL STANDARD AREA	1	
INTERNAL STANDARD AMOUND (ng)	1	
AVERAGE RRF	125323.199	
Y-INTERCEPT	3901527.68	
18521396 / 125323.199	116.66	ng/ul
DILUTION FACTOR	1	
PERCENT SOLIDS	0.828	
INITIAL WEIGHT	4.97	g
FINAL VOLUME	5	ml
conversion	1	
116.657318330982 x (5/4.97) x (1/0.828) x 1	142	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-84819-1

SDG No.:

Client Sample ID: SB-119A-10-12.5' Lab Sample ID: 240-84819-1

Matrix: Solid Lab File ID: Y0913009.D

Analysis Method: 8015D Date Collected: 09/09/2017 14:20

Sample wt/vol: 4.97(g) Date Analyzed: 09/13/2017 11:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 17.2 Level: (low/med) Low

Analysis Batch No.: 294581 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	140		120	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	80		43-120

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation - Page 3

Data File: \\ChromNA\Canton\ChromData\YPID\20170913-68658.b\Y0913009.D
Lims ID: 240-84819-A-1-A
Client ID: SB-119A-10-12.5'
Sample Type: Client
Inject. Date: 13-Sep-2017 11:15:22 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0068658-009
Operator ID: Instrument ID: YPID

Method: \\ChromNA\Canton\ChromData\YPID\20170913-68658.b\Y80158021.m
Limit Group: GCV 8015C GRO ICAL
Last Update: 14-Sep-2017 08:39:36 Calib Date: 17-Jul-2017 21:07:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\YPID\20170717-66996.b\Y0717009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK018

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	9.513	9.515	-0.002	3802653	31.9	
A 5 C6-C10	10.784	(4.759-16.809)		18521396	116.7	
A 1 C6-C12	12.086	(4.759-19.412)		25846820	137.2	
A 11 GRO	12.438	(4.712-20.164)		31494599	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

VGGASURROGATE_00044 Amount Added: 1.00 Units: uL Run Reagent

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-84819-1 Analy Batch No.: 287466

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/17/2017 17:41 Calibration End Date: 07/17/2017 21:07 Calibration ID: 40792

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-287466/4	Y0717004.D
Level 2	STD2 240-287466/5	Y0717005.D
Level 3	STD3 240-287466/6	Y0717006.D
Level 4	STD4 240-287466/7	Y0717007.D
Level 5	STD5 240-287466/8	Y0717008.D
Level 6	STD6 240-287466/9	Y0717009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Gasoline Range Organics [C6 - C10]	175253 126932	133083 129784	136001	129729	Lin1	3901527.68	125323.199							0.9990		0.9900
C6-C12	222148 141119	156680 143794	155451	145139	Lin1	7055447.63	136958.732							0.9980		0.9900
Trifluorotoluene (Surr)	142302 117432	121786 118415	120127	115591	Lin1	70521.1388	117113.955							1.0000		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **FEBRUARY 13, 2018**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / 1,4-DIOXANE / PCB HOMOLOGS / DRO / GRO / TOTAL AND DISSOLVED METALS**
MRC- FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-86215-1

SAMPLES: 3 / Aqueous / VOC / 1,4-Dioxane / PCB Homologs / DRO / GRO / Total and Dissolved Metals

MRC-MW121B-100917 MRC-MW131B-100917 TRIP BLANK*

*Analyzed for VOC only.

OVERVIEW

The sample set for MRC SDG 240-86215-1, consists of two (2) aqueous environmental samples and one (1) trip blank. Environmental samples were analyzed for volatile organic compounds (VOC), 1,4-dioxane, polychlorinated biphenyl (PCB) homologs, diesel range organics (DRO), gasoline range organics (GRO), and total and dissolved metals. No field duplicate pairs are included in this SDG.

The samples were collected by Tetra Tech on October 09, 2017, and analyzed by TestAmerica. Analyses were conducted in accordance with SW-846 Methods 8260C (for VOC), 8207D (for 1,4-dioxane), 8015C (for DRO and GRO), 7470A (for mercury), and 6020A (for metals other than mercury) as well as EPA Method 680 (for PCB homologs) analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, ICP/MS tuning, initial/continuing calibrations, laboratory method/trip blank results, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate results, matrix spike/matrix spike duplicate results, interference check sample results, serial dilution results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern with respect to data quality are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The VOC continuing calibration performed on 10/13/17 at 12:47 on instrument A3UX9 had percent differences (%Ds) for chloromethane, vinyl chloride, and chloroethane that were greater than the 20% quality control limit. All VOC samples were affected by the noncompliances for chloromethane and chloroethane. For vinyl chloride, only samples MRC-MW121B-100917 and TRIP BLANK were affected, as the result for vinyl chloride in sample MRC-MW131B-100917 was associated with the continuing calibration performed on 10/19/17 at 09:16 on instrument A3UX16. Non-detected results for chloromethane and chloroethane in all VOC samples and for vinyl chloride in samples MRC-MW121B-100917 and TRIP BLANK were qualified as estimated (UJ).

- The following analyte was detected in the VOC method blanks at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Methylene chloride	0.692 ug/L	6.92 ug/L

1 – Concentration detected in method blank associated with preparation batch 240-298976 affecting samples MRC-MW121B-100917, MRC-MW131B-100917, and TRIP BLANK.

An action level of 10x the maximum concentration of the common laboratory contaminant methylene chloride was used to evaluate sample data for blank contamination. Sample dilution factors, if applicable, were considered in applying the action level. The detected concentration of methylene chloride in sample MRC-MW131B-100917 was less than the sample-specific action level and was qualified as non-detected (U).

- Detected results below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Sample TRIP BLANK was not listed on the chain of custody. No action was taken.

Non-detected results were reported to the MDL.

VOC sample MRC-MW131B-100917 was analyzed at a dilution factor of 10.

The VOC laboratory control sample (LCS) 240-298976/4 associated with preparation batch 240-298976 had a percent recovery (%R) for chloromethane that was greater than the laboratory quality control limits. Samples MRC-MW121B-100917, MRC-MW131B-100917, and TRIP BLANK were associated with this LCS. No action was necessary because results for chloromethane were non-detected in the associated samples.

The VOC matrix spike (MS)/matrix spike duplicate (MSD) analysis performed on sample 240-86277-B-4 (laboratory identifier) had a relative percent difference (RPD) that was greater than the laboratory quality control limits for chloromethane. No action was necessary because this MS/MSD was not performed on a sample from this SDG.

The VOC MS/MSD analysis performed on sample 200-40412-B-5 (laboratory identifier) had RPDs that was greater than the laboratory quality control limits for chloroform and cis-1,2-dichloroethene. No action was necessary because this MS/MSD was not performed on a sample from this SDG.

The laboratory case narrative report notes that for the PCB homologs analysis, the method requires samples to be preserved to a pH of 5 to 9. Sample MRC-MW121B-100917 was received with insufficient preservation at a pH of greater than 10 (shown on the preparation forms in Appendix C of this validation report). The case narrative indicates that the laboratory preserved the sample to the appropriate pH. No validation action was taken.

Sample MRC-MW117B-100917 was incorrectly recorded on the chain of custody record. The sample ID should have been MW131B. The laboratory updated the data report and the database was revised.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Some detected and non-detected VOC results were qualified due to calibration noncompliance. One VOC result was qualified as non-detected due to method blank contamination.

Other Factors Affecting Data Quality: Detected results below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017) and National Functional Guidelines for Inorganic Superfund Methods Data Review" (January 2017). The text of this report has been formulated to address only those problem areas affecting data quality.

Leigh A. Ciofani

Tetra Tech
Leigh A. Ciofani
Environmental Scientist/Data Validator

Joseph A. Samchuck

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

MW131B

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B-~~100917			MRC-MW121B-100917			TRIP BLANK		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1			240-86215-3		
FRACTION: OV	SAMP_DATE	10/9/2017			10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2.3	U		0.23	U		0.23	U	
1,1,2,2-TETRACHLOROETHANE		3.2	U		0.32	U		0.32	U	
1,1,2-TRICHLOROETHANE		3.4	U		0.34	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		4.1	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		2.5	U		0.25	U		0.25	U	
1,1-DICHLOROETHENE		6.8	J	P	0.27	U		0.27	U	
1,2,4-TRICHLOROBENZENE		2.7	U		0.45	J	P	0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		4.7	U		0.47	U		0.47	U	
1,2-DIBROMOETHANE		2.3	U		0.23	U		0.23	U	
1,2-DICHLOROBENZENE		2.6	U		0.26	U		0.26	U	
1,2-DICHLOROETHANE		3	U		0.3	U		0.3	U	
1,2-DICHLOROPROPANE		3	U		0.3	U		0.3	U	
1,3-DICHLOROBENZENE		3.2	U		0.32	U		0.32	U	
1,4-DICHLOROBENZENE		2.3	U		0.23	U		0.23	U	
2-BUTANONE		10	U		1.4	J	P	1	U	
2-HEXANONE		12	U		1.2	U		1.2	U	
4-METHYL-2-PENTANONE		7.1	U		0.71	U		0.71	U	
ACETONE		18	U		8.1	J	P	1.8	U	
BENZENE		2.8	U		0.28	U		0.28	U	
BROMODICHLOROMETHANE		3	U		0.3	U		0.3	U	
BROMOFORM		4.3	U		0.43	U		0.43	U	
BROMOMETHANE		4.2	U		0.42	U		0.42	U	
CARBON DISULFIDE		3.4	U		0.34	U		0.34	U	
CARBON TETRACHLORIDE		3.5	U		0.35	U		0.35	U	
CHLOROBENZENE		3.2	U		0.32	U		0.32	U	
CHLORODIBROMOMETHANE		2.5	U		0.25	U		0.25	U	
CHLOROETHANE		4.1	UJ	C	0.41	UJ	C	0.41	UJ	C
CHLOROFORM		3.1	U		0.31	U		0.31	U	
CHLOROMETHANE		4.3	UJ	C	0.43	UJ	C	0.43	UJ	C
CIS-1,2-DICHLOROETHENE		320			0.3	U		0.3	U	
CIS-1,3-DICHLOROPROPENE		2.6	U		0.26	U		0.26	U	
CYCLOHEXANE		4.4	U		0.44	U		0.44	U	
DICHLORODIFLUOROMETHANE		5	U		0.5	U		0.5	U	
ETHYLBENZENE		2.6	U		0.26	U		0.26	U	
ISOPROPYLBENZENE		2.1	U		0.21	U		0.21	U	

LAC 02/13/18

LAC 02/13/18

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B~~-100917			MRC-MW121B-100917			TRIP BLANK		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1			240-86215-3		
FRACTION: OV	SAMP_DATE	10/9/2017			10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		14	U		1.4	U		1.4	U	
METHYL CYCLOHEXANE		4.5	U		0.45	U		0.45	U	
METHYL TERT-BUTYL ETHER		2.7	U		0.27	U		0.27	U	
METHYLENE CHLORIDE		7.1	U	A	0.53	U		0.53	U	
STYRENE		2.3	U		0.23	U		0.23	U	
TETRACHLOROETHENE		3	U		0.3	U		0.3	U	
TOLUENE		2.3	U		0.23	U		0.23	U	
TOTAL XYLENES		2.4	U		0.24	U		0.24	U	
TRANS-1,2-DICHLOROETHENE		17			0.29	U		0.29	U	
TRANS-1,3-DICHLOROPROPENE		3.1	U		0.31	U		0.31	U	
TRICHLOROETHENE		71			12			0.33	U	
TRICHLOROFLUOROMETHANE		5	U		0.5	U		0.5	U	
VINYL CHLORIDE		17			0.45	UJ	C	0.45	UJ	C

LAC 02/13/18

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B-~~100917			MRC-MW121B-100917		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1		
FRACTION: OS	SAMP_DATE	10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		6.4			0.48	U	

LAC 02/13/18

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B~~-100917			MRC-MW121B-100917		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1		
FRACTION: PCB	SAMP_DATE	10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL		0.068	U		0.071	U	
DICHLOROBIPHENYLS		0.0053	U		0.0055	U	
HEPTACHLOROBIPHENYLS		0.029	U		0.03	U	
HEXACHLOROBIPHENYLS		0.015	U		0.015	U	
MONOCHLOROBIPHENYLS		0.0055	U		0.0057	U	
NONACHLOROBIPHENYLS		0.048	U		0.05	U	
OCTACHLOROBIPHENYLS		0.037	U		0.039	U	
PENTACHLOROBIPHENYLS		0.014	U		0.014	U	
TETRACHLOROBIPHENYLS		0.013	U		0.013	U	
TRICHLOROBIPHENYLS		0.0063	U		0.0066	U	

MW131B

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B~~-100917			MRC-MW121B-100917		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1		
FRACTION: PET	SAMP_DATE	10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		120			49	U	
TPH (C10-C32)		240	J	P	810		

LAC 02/13/18

LAC 02/13/18

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B~~-100917			MRC-MW121B-100917		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1		
FRACTION: M	SAMP_DATE	10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.92	J	P	2.4		
ARSENIC		1.4	J	P	3.8	J	P
BARIUM		170			20		
BERYLLIUM		1.6			0.44	J	P
CADMIUM		0.43	J	P	0.21	J	P
CHROMIUM		1.4	J	P	6.9		
COBALT		290			2.2		
COPPER		2.6			10		
LEAD		0.73	J	P	4.4		
MERCURY		0.13	U		0.13	U	
MOLYBDENUM		1.1	J	P	13		
NICKEL		350			5.5		
SELENIUM		1.4	J	P	1.9	J	P
SILVER		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U	
VANADIUM		1.9	J	P	23		
ZINC		140			51		

LAC 02/13/18

PROJ_NO: 08109	NSAMPLE	MRC-~~MW117B~~-100917			MRC-MW121B-100917		
SDG: 240-86215-1	LAB_ID	240-86215-2			240-86215-1		
FRACTION: MF	SAMP_DATE	10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.57	U		1.9	J	P
ARSENIC		1	J	P	3.4	J	P
BARIUM		160			15		
BERYLLIUM		1.6			0.31	U	
CADMIUM		0.21	U		0.21	U	
CHROMIUM		0.98	U		3.3		
COBALT		290			0.59	J	P
COPPER		1.7	U		8.7		
LEAD		0.45	U		1.2		
MERCURY		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		13		
NICKEL		360			1.5	U	
SELENIUM		1.2	J	P	1.6	J	P
SILVER		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U	
VANADIUM		0.82	U		19		
ZINC		160			15	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: UX966356.D

Analysis Method: 8260C | Date Collected: 10/09/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 17:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.45	J	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.4	J	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	8.1	J	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U *	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: UX966356.D

Analysis Method: 8260C | Date Collected: 10/09/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 17:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	12		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	96		69-124
460-00-4	4-Bromofluorobenzene (Surr)	87		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: UX966357.D

Analysis Method: 8260C | Date Collected: 10/09/2017 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 17:58

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	2.3	U	10	2.3
79-34-5	1,1,2,2-Tetrachloroethane	3.2	U	10	3.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.1	U	10	4.1
79-00-5	1,1,2-Trichloroethane	3.4	U	10	3.4
75-34-3	1,1-Dichloroethane	2.5	U	10	2.5
75-35-4	1,1-Dichloroethene	6.8	J	10	2.7
120-82-1	1,2,4-Trichlorobenzene	2.7	U	10	2.7
96-12-8	1,2-Dibromo-3-Chloropropane	4.7	U	20	4.7
106-93-4	Ethylene Dibromide	2.3	U	10	2.3
95-50-1	1,2-Dichlorobenzene	2.6	U	10	2.6
107-06-2	1,2-Dichloroethane	3.0	U	10	3.0
78-87-5	1,2-Dichloropropane	3.0	U	10	3.0
541-73-1	1,3-Dichlorobenzene	3.2	U	10	3.2
106-46-7	1,4-Dichlorobenzene	2.3	U	10	2.3
78-93-3	2-Butanone (MEK)	10	U	100	10
591-78-6	2-Hexanone	12	U	100	12
108-10-1	4-Methyl-2-pentanone (MIBK)	7.1	U	100	7.1
67-64-1	Acetone	18	U	100	18
71-43-2	Benzene	2.8	U	10	2.8
75-27-4	Dichlorobromomethane	3.0	U	10	3.0
75-25-2	Bromoform	4.3	U	10	4.3
74-83-9	Bromomethane	4.2	U	10	4.2
75-15-0	Carbon disulfide	3.4	U	10	3.4
56-23-5	Carbon tetrachloride	3.5	U	10	3.5
108-90-7	Chlorobenzene	3.2	U	10	3.2
75-00-3	Chloroethane	4.1	U	10	4.1
67-66-3	Chloroform	3.1	U	10	3.1
74-87-3	Chloromethane	4.3	U *	10	4.3
156-59-2	cis-1,2-Dichloroethene	320		10	3.0
10061-01-5	cis-1,3-Dichloropropene	2.6	U	10	2.6
110-82-7	Cyclohexane	4.4	U	10	4.4
124-48-1	Chlorodibromomethane	2.5	U	10	2.5
75-71-8	Dichlorodifluoromethane	5.0	U	10	5.0
100-41-4	Ethylbenzene	2.6	U	10	2.6
98-82-8	Isopropylbenzene	2.1	U	10	2.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: UX966357.D

Analysis Method: 8260C | Date Collected: 10/09/2017 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 17:58

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	14	U	100	14
1634-04-4	Methyl tert-butyl ether	2.7	U	10	2.7
108-87-2	Methylcyclohexane	4.5	U	10	4.5
75-09-2	Methylene Chloride	7.1	J B	10	5.3
100-42-5	Styrene	2.3	U	10	2.3
127-18-4	Tetrachloroethene	3.0	U	10	3.0
108-88-3	Toluene	2.3	U	10	2.3
156-60-5	trans-1,2-Dichloroethene	17		10	2.9
10061-02-6	trans-1,3-Dichloropropene	3.1	U	10	3.1
79-01-6	Trichloroethene	71		10	3.3
75-69-4	Trichlorofluoromethane	5.0	U	10	5.0
1330-20-7	Xylenes, Total	2.4	U	20	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	99		69-124
460-00-4	4-Bromofluorobenzene (Surr)	87		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: UXM6944.D

Analysis Method: 8260C | Date Collected: 10/09/2017 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 17:25

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	17		10	4.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		73-120
1868-53-7	Dibromofluoromethane (Surr)	114		69-124
460-00-4	4-Bromofluorobenzene (Surr)	103		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-86215-3

Matrix: Water | Lab File ID: UX966358.D

Analysis Method: 8260C | Date Collected: 10/09/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U *	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-86215-3

Matrix: Water | Lab File ID: UX966358.D

Analysis Method: 8260C | Date Collected: 10/09/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	95		69-124
460-00-4	4-Bromofluorobenzene (Surr)	85		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		61-138

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: 71013020.D

Analysis Method: 8270D | Date Collected: 10/09/2017 11:50

Extract. Method: 3510C | Date Extracted: 10/11/2017 09:04

Sample wt/vol: 1030(mL) | Date Analyzed: 10/13/2017 18:30

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298910 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.48	U	0.97	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	83		23-127
4165-62-2	Phenol-d5 (Surr)	26		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	59		32-120
367-12-4	2-Fluorophenol (Surr)	40		10-120
321-60-8	2-Fluorobiphenyl (Surr)	81		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	97		28-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: 71013019.D

Analysis Method: 8270D | Date Collected: 10/09/2017 14:35

Extract. Method: 3510C | Date Extracted: 10/11/2017 09:04

Sample wt/vol: 1040(mL) | Date Analyzed: 10/13/2017 18:07

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298910 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.4		0.96	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	94		23-127
4165-62-2	Phenol-d5 (Surr)	32		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	62		32-120
367-12-4	2-Fluorophenol (Surr)	48		10-120
321-60-8	2-Fluorobiphenyl (Surr)	75		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	92		28-120

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: xj1809.D

Analysis Method: 680 | Date Collected: 10/09/2017 11:50

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 984.2(mL) | Date Analyzed: 10/18/2017 17:37

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.030	U	0.30	0.030
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.050	U	0.51	0.050
55722-26-4	Octachlorobiphenyl	0.039	U	0.30	0.039
27323-18-8	Monochlorobiphenyl	0.0057	U	0.10	0.0057
2051-24-3	DCB Decachlorobiphenyl	0.071	U	0.51	0.071
25512-42-9	Dichlorobiphenyl	0.0055	U	0.10	0.0055
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0066	U	0.10	0.0066

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	71		25-113

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: xj1810.D

Analysis Method: 680 | Date Collected: 10/09/2017 14:35

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 1024.5(mL) | Date Analyzed: 10/18/2017 18:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.029	U	0.29	0.029
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.048	U	0.49	0.048
55722-26-4	Octachlorobiphenyl	0.037	U	0.29	0.037
27323-18-8	Monochlorobiphenyl	0.0055	U	0.098	0.0055
2051-24-3	DCB Decachlorobiphenyl	0.068	U	0.49	0.068
25512-42-9	Dichlorobiphenyl	0.0053	U	0.098	0.0053
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0063	U	0.098	0.0063

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	73		25-113

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: P14R101812.D

Analysis Method: 8015C | Date Collected: 10/09/2017 11:50

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 270(mL) | Date Analyzed: 10/18/2017 18:10

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	810		460	210

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	92		37-130

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: P14R101713.D

Analysis Method: 8015C | Date Collected: 10/09/2017 14:35

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 280(mL) | Date Analyzed: 10/17/2017 17:37

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299263 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	240	J	450	200

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	81		37-130

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: A0101622.D

Analysis Method: 8015C | Date Collected: 10/09/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/16/2017 19:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299105 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	91		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW131B-100917 | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: A0101623.D

Analysis Method: 8015C | Date Collected: 10/09/2017 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/16/2017 20:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299105 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	120		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	92		56-120

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW121B-100917 Lab Sample ID: 240-86215-1

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 11:50

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW121B-100917 Lab Sample ID: 240-86215-1

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 11:50

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.4	2.0	0.57	ug/L			1	6020A
7440-38-2	Arsenic	3.8	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	20	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.44	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	2.2	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	6.9	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	10	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	13	10	1.1	ug/L			1	6020A
7440-02-0	Nickel	5.5	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	4.4	1.0	0.45	ug/L			1	6020A
7782-49-2	Selenium	1.9	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	23	5.0	0.82	ug/L			1	6020A
7440-66-6	Zinc	51	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW121B-100917 Lab Sample ID: 240-86215-1

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 11:50

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	3.4	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	15	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	0.59	1.0	0.19	ug/L	J		1	6020A
7440-47-3	Chromium	3.3	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	8.7	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	13	10	1.1	ug/L			1	6020A
7440-02-0	Nickel	1.5	2.0	1.5	ug/L	U		1	6020A
7439-92-1	Lead	1.2	1.0	0.45	ug/L			1	6020A
7440-36-0	Antimony	1.9	2.0	0.57	ug/L	J		1	6020A
7782-49-2	Selenium	1.6	5.0	0.89	ug/L	J		1	6020A
7440-62-2	Vanadium	19	5.0	0.82	ug/L			1	6020A
7440-66-6	Zinc	15	20	15	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW131B-100917 Lab Sample ID: 240-86215-2

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 14:35

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW131B-100917 Lab Sample ID: 240-86215-2

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 14:35

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.92	2.0	0.57	ug/L	J		1	6020A
7440-38-2	Arsenic	1.4	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	170	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	1.6	1.0	0.31	ug/L			1	6020A
7440-43-9	Cadmium	0.43	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	290	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	1.4	2.0	0.98	ug/L	J		1	6020A
7440-50-8	Copper	2.6	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	J		1	6020A
7440-02-0	Nickel	350	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.73	1.0	0.45	ug/L	J		1	6020A
7782-49-2	Selenium	1.4	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	1.9	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	140	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW131B-100917 Lab Sample ID: 240-86215-2

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 14:35

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	1.0	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	160	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	1.6	1.0	0.31	ug/L			1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	290	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	0.98	2.0	0.98	ug/L	U		1	6020A
7440-50-8	Copper	1.7	2.0	1.7	ug/L	U		1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	360	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	1.2	5.0	0.89	ug/L	J		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	160	20	15	ug/L			1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

APPENDIX C

SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Groundwater Sampling

Report Number: 240-86215-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 680_PCB analysis was performed at TestAmerica Savannah Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 10/10/2017 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MRC-MW121B-100917 (240-86215-1), MRC-MW117B-100917 (240-86215-2) and TRIP BLANK (240-86215-3) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 10/13/2017 and 10/19/2017.

Methylene Chloride was detected in method blank MB 240-298976/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample MRC-MW117B-100917 (240-86215-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) associated with batch 240-298976 recovered above the upper control limit for some analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MRC-MW121B-100917 (240-86215-1), MRC-MW117B-100917 (240-86215-2), TRIP BLANK (240-86215-3) and (CCVIS 240-298976/3).

The laboratory control sample (LCS) for analytical batch 240-298976 recovered outside control limits for chloromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/11/2017 and analyzed on 10/13/2017.

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

GASOLINE RANGE ORGANICS (GRO)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 10/16/2017.

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

POLYCHLORINATED BIPHENYLS (PCBS)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 10/13/2017 and analyzed on 10/18/2017.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 680-498449.

The reference method requires samples to be preserved to a pH of 5 - 9. The following sample was received with insufficient preservation at a pH of >10. The sample was preserved to the appropriate pH in the laboratory.

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

DIESEL RANGE ORGANICS (DRO)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 10/16/2017 and analyzed on 10/17/2017 and 10/18/2017.

The continuing calibration verification (CCV) associated with batch 240-299263 recovered above the upper control limit for o-Terphenyl (Surr). The samples associated with this CCV were non-detects at the RL; therefore, the data have been reported. The following sample is impacted: MRC-MW117B-100917 (240-86215-2).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-299156.

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

DISSOLVED METALS (ICPMS)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 10/11/2017 and analyzed on 10/12/2017.

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

TOTAL RECOVERABLE METALS (ICPMS)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/11/2017 and analyzed on 10/12/2017.

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

DISSOLVED MERCURY (CVAA)
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/11/2017 and analyzed on 10/12/2017.

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

TOTAL MERCURY
Samples MRC-MW121B-100917 (240-86215-1) and MRC-MW117B-100917 (240-86215-2) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/11/2017 and analyzed on 10/12/2017.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Groundwater Sampling

TestAmerica Job ID: 240-86215-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
680	Polychlorinated Biphenyls (PCBs) (GC/MS)	EPA	TAL SAV
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL CAN
6020A	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Groundwater Sampling

TestAmerica Job ID: 240-86215-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-86215-1	MRC-MW121B-100917	Water	10/09/17 11:50	10/10/17 09:20
240-86215-2	MRC-MW117B-100917	Water	10/09/17 11:50	10/10/17 09:20
240-86215-3	TRIP BLANK	Water	10/09/17 00:00	10/10/17 09:20

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

3.8/3.8

Chain of Custody Record

000625

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: TONY APANAVAGE	Site Contact: Mike Wilks	Date: 10-09-2017	COC No:
Company Name: Tetra Tech	Tel/Fax: 301-233-8230	Lab Contact: Ken Ives	Carrier:	1 of ____ COCs
Address: 20251 Century Blvd. #200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown, MD	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-5552	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: LMC Groundwater Sampling	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO# 112IC08109	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	8015C-DRO	6020A-METALS	8260C-TCL VOA	8015C-GRO	8270D-1,4-dioxane	6020A-Diss. METALS	680	8260C-TCL VOA TB	Sample Specific Notes:
MRC-MW121B-100917	10/09/17	1150	G	W	14	N	N									14 total Containers
MRC-MW117B-100917	"	"	"	"	14											

180325
BALTIMORE

240-86215 Chain of Custody

Page 403 of 405

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Michael Wilkes	Tetra Tech	10/9/1620		TAL BALT	10/9/17 1620
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	T. A	10/07/17 1710		TA	10-10-17 0920
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 84225
Canton Facility

Client _____ Site Name _____ Cooler unpacked by:

Cooler Received on _____ Opened on _____

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN #36 (CF +0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN # 627 (CF -1.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

COC ID = MRC-MW117B, Bottles = MW117A, will log per COC, with time of 14:35 per bottles.

Container count = 14 bottles. Only recd (13) for MW117A and (17 containers) for MW121B. will log per volume recd.

Rec'd 3x40 TB not on COC will log

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MRC-MW121B-100917	240-86215-L-1	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW121B-100917	240-86215-M-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW117B-100917	240-86215-H-2	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW117B-100917	240-86215-I-2	Plastic 500ml - with Nitric Acid	<2	_____	_____

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: BFB5411.D BFB Injection Date: 10/03/2017

Instrument ID: A3UX16 BFB Injection Time: 15:09

Analysis Batch No.: 297419

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.8	
75	30.0 - 60.0 % of mass 95	50.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	80.9	
175	5.0 - 9.0 % of mass 174	5.5	(6.8) 1
176	95.0 - 101.0 % of mass 174	81.2	(100.3) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-297419/9	UXM6334.D	10/03/2017	16:10
	STD8260 240-297419/10	UXM6335.D	10/03/2017	16:33
	STD8260 240-297419/11	UXM6336.D	10/03/2017	16:56
	STD8260 240-297419/12	UXM6337.D	10/03/2017	17:19
	ICIS 240-297419/13	UXM6338.D	10/03/2017	17:42
	STD8260 240-297419/14	UXM6339.D	10/03/2017	18:06
	STD8260L7 240-297419/15	UXM6340.D	10/03/2017	18:29
	ICV 240-297419/16	UXM6341.D	10/03/2017	18:52
	ICV 240-297419/25	UXM6350.D	10/03/2017	22:22

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-297419/9	UXM6334.D
Level 2	STD8260 240-297419/10	UXM6335.D
Level 3	STD8260 240-297419/11	UXM6336.D
Level 4	STD8260 240-297419/12	UXM6337.D
Level 5	ICIS 240-297419/13	UXM6338.D
Level 6	STD8260 240-297419/14	UXM6339.D
Level 7	STD8260L7 240-297419/15	UXM6340.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2459 0.2583	0.2368 0.2448	0.3070	0.2869	0.2609	Ave		0.2629			0.1000	9.6		20.0			
Chloromethane	0.3145 0.2514	0.3081 0.2708	0.3483	0.2772	0.3021	Ave		0.2961			0.1000	10.9		20.0			
Vinyl chloride	0.3397 0.2924	0.3076 0.2947	0.3783	0.3317	0.3350	Ave		0.3256			0.1000	9.3		20.0			
Butadiene	0.3303 0.2976	0.3589 0.2914	0.3785	0.3387	0.3252	Ave		0.3315				9.4		20.0			
Bromomethane	0.2334 0.1947	0.2210 0.2119	0.2519	0.2101	0.2340	Ave		0.2224			0.0500	8.5		20.0			
Chloroethane	0.2523 0.1925	0.2181 0.2057	0.2464	0.2092	0.2173	Ave		0.2202			0.0500	9.9		20.0			
Dichlorofluoromethane	0.5030 0.4428	0.5680 0.4722	0.5940	0.5152	0.5397	Ave		0.5193				10.2		20.0			
Trichlorofluoromethane	0.3268 0.3453	0.3604 0.3396	0.4397	0.3931	0.3866	Ave		0.3702			0.1000	10.6		20.0			
Ethyl ether	0.2806 0.2195	0.2731 0.2304	0.2439	0.2265	0.2396	Ave		0.2448				9.6		20.0			
Acrolein	0.0484 0.0390	0.0495 0.0396	0.0457	0.0375	0.0421	Ave		0.0431				11.1		20.0			
1,1-Dichloroethene	0.3208 0.2792	0.3335 0.2796	0.2959	0.2954	0.2984	Ave		0.3004			0.1000	6.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2437 0.2201	0.2604 0.1950	0.2496	0.2212	0.2132	Ave		0.2290			0.0500	10.0		20.0			
Acetone	+++++ 0.0637	0.1438 0.0637	0.0926	0.0651	0.0701	Lin1	0.1566	0.0624			0.0100	5.8			0.9990		0.9900
Iodomethane	0.5416 0.4448	0.5186 0.4764	0.4958	0.4659	0.5067	Ave		0.4928				6.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.9690 0.9136	1.0655 0.9489	0.9496	0.9521	0.9843	Ave		0.9690			0.1000	4.9		20.0			
3-Chloro-1-propene	0.2440 0.1717	0.1943 0.1884	0.1793	0.1689	0.1927	Ave		0.1913				13.2		20.0			
Methyl acetate	0.1742 0.1519	0.1992 0.1566	0.1478	0.1569	0.1644	Ave		0.1644			0.1000	10.7		20.0			
Methylene Chloride	+++++ 0.2947	0.6881 0.3153	0.4543	0.3368	0.3324	Lin1	0.3854	0.3013			0.1000	3.6			0.9980		0.9900
2-Methyl-2-propanol	0.0163 0.0160	0.0181 0.0175	0.0150	0.0157	0.0169	Ave		0.0165				6.5		20.0			
Acrylonitrile	0.0815 0.0817	0.0838 0.0855	0.0819	0.0792	0.0844	Ave		0.0826				2.6		20.0			
Methyl tert-butyl ether	0.7638 0.7660	0.8713 0.8283	0.7609	0.7279	0.8121	Ave		0.7901			0.1000	6.2		20.0			
trans-1,2-Dichloroethene	0.3446 0.3042	0.3018 0.3264	0.3040	0.2893	0.3234	Ave		0.3134			0.1000	6.0		20.0			
Hexane	0.3277 0.2857	0.2446 0.2465	0.2959	0.2809	0.2469	Ave		0.2754				11.4		20.0			
1,1-Dichloroethane	0.4973 0.4777	0.5460 0.5154	0.4921	0.4784	0.5186	Ave		0.5036			0.2000	4.9		20.0			
Vinyl acetate	0.3880 0.3806	0.3892 0.4137	0.3550	0.3595	0.3881	Ave		0.3820				5.2		20.0			
cis-1,2-Dichloroethene	0.3513 0.3278	0.3525 0.3511	0.3417	0.3319	0.3564	Ave		0.3447			0.1000	3.2		20.0			
2,2-Dichloropropane	0.0568 0.0764	0.0739 0.0806	0.0781	0.0794	0.0786	Ave		0.0748				11.0		20.0			
2-Butanone (MEK)	0.1142 0.0822	0.0953 0.0855	0.0960	0.0796	0.0872	Ave		0.0914			0.0100	12.9		20.0			
Chlorobromomethane	0.1555 0.1435	0.1762 0.1559	0.1547	0.1453	0.1582	Ave		0.1556				6.9		20.0			
Tetrahydrofuran	+++++ 0.0525	0.0697 0.0551	0.0556	0.0535	0.0529	Ave		0.0565				11.6		20.0			
Chloroform	0.4954 0.4727	0.5458 0.5183	0.5032	0.4783	0.5226	Ave		0.5052			0.2000	5.1		20.0			
1,1,1-Trichloroethane	0.3898 0.4107	0.4303 0.4229	0.4216	0.4177	0.4397	Ave		0.4189			0.1000	3.8		20.0			
Cyclohexane	0.4857 0.4471	0.4095 0.4022	0.4553	0.4546	0.4319	Ave		0.4409			0.1000	6.5		20.0			
1,1-Dichloropropene	0.3907 0.3664	0.3653 0.3752	0.3467	0.3782	0.3831	Ave		0.3722				3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.4098 0.3502	0.3512 0.3495	0.3768	0.3462	0.3718	Ave		0.3651			0.1000	6.3		20.0			
Isobutyl alcohol	0.0043 0.0052	0.0053 0.0055	0.0049	0.0054	0.0054	Ave		0.0052				8.1		20.0			
Benzene	1.1616 1.0898	1.1692 1.2051	1.1021	1.1147	1.1883	Ave		1.1473			0.5000	3.9		20.0			
1,2-Dichloroethane	0.3378 0.3351	0.3657 0.3630	0.3439	0.3376	0.3592	Ave		0.3489			0.1000	3.8		20.0			
n-Heptane	+++++ 0.1373	0.7992 +++++	0.3631	0.1739	0.1330	Lin1	0.6620	0.1128				16.7			0.9900		0.9900
Trichloroethene	0.2827 0.2697	0.2768 0.2930	0.2937	0.2786	0.2977	Ave		0.2846			0.1500	3.7		20.0			
Methylcyclohexane	0.4059 0.4090	0.4240 0.3604	0.4155	0.4118	0.3696	Ave		0.3995			0.1000	6.1		20.0			
1,2-Dichloropropane	0.2235 0.2299	0.2276 0.2485	0.2264	0.2298	0.2434	Ave		0.2327			0.1000	4.0		20.0			
Dibromomethane	0.1396 0.1422	0.1821 0.1519	0.1457	0.1427	0.1512	Ave		0.1508				9.7		20.0			
1,4-Dioxane	+++++ 0.0021	0.0028 0.0022	0.0022	0.0019	0.0022	Ave		0.0022				12.6		20.0			
Dichlorobromomethane	0.3636 0.3226	0.3196 0.3575	0.3248	0.3183	0.3542	Ave		0.3372			0.1500	6.0		20.0			
2-Chloroethyl vinyl ether	+++++ 0.0985	0.0965 0.1094	0.0831	0.0929	0.1046	Ave		0.0975				9.4		20.0			
cis-1,3-Dichloropropene	0.2691 0.3292	0.2826 0.3726	0.2914	0.3126	0.3463	Ave		0.3148			0.1500	11.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.1539 0.1624	0.1542 0.1739	0.1483	0.1596	0.1682	Ave		0.1601			0.0500	5.5		20.0			
Toluene	1.5309 1.5062	1.5266 1.6706	1.4947	1.5486	1.6547	Ave		1.5617			0.4000	4.6		20.0			
trans-1,3-Dichloropropene	0.4136 0.4007	0.3971 0.4415	0.3756	0.3858	0.4197	Ave		0.4048			0.1000	5.5		20.0			
Ethyl methacrylate	0.3261 0.3223	0.3139 0.3566	0.2810	0.3138	0.3430	Ave		0.3224				7.5		20.0			
1,1,2-Trichloroethane	0.2543 0.2542	0.2917 0.2744	0.2525	0.2625	0.2687	Ave		0.2655			0.1000	5.3		20.0			
Tetrachloroethene	0.3586 0.2699	0.2864 0.2838	0.2715	0.2845	0.2981	Ave		0.2933			0.1500	10.4		20.0			
1,3-Dichloropropane	0.4275 0.4299	0.4285 0.4724	0.4262	0.4420	0.4728	Ave		0.4428				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.1204 0.1306	0.1459 0.1376	0.1202	0.1355	0.1418	Ave		0.1332			0.0500	7.5		20.0			
Chlorodibromomethane	0.2848 0.2976	0.2711 0.3228	0.2718	0.2872	0.3156	Ave		0.2930				6.9		20.0			
Ethylene Dibromide	0.2408 0.2487	0.2558 0.2690	0.2530	0.2395	0.2687	Ave		0.2537				4.7		20.0			
Chlorobenzene	1.0584 0.9045	0.9096 1.0051	0.9120	0.9351	1.0024	Ave		0.9610			0.3000	6.3		20.0			
1,1,1,2-Tetrachloroethane	0.3892 0.3698	0.3878 0.4053	0.3327	0.3757	0.4060	Ave		0.3809				6.6		20.0			
Ethylbenzene	0.4688 0.5060	0.4859 0.5583	0.4617	0.5112	0.5577	Ave		0.5071				7.7		20.0			
m-Xylene & p-Xylene	0.6018 0.6240	0.5689 0.6923	0.5928	0.6286	0.6977	Ave		0.6295				7.8		20.0			
o-Xylene	0.7570 0.6929	0.6550 0.7588	0.6145	0.6956	0.7628	Ave		0.7052				8.2		20.0			
Styrene	0.9001 1.0678	0.9753 1.1915	1.0063	1.0653	1.1583	Ave		1.0521			0.3000	9.7		20.0			
Bromoform	0.1961 0.1858	0.1948 0.2025	0.1757	0.1856	0.1963	Ave		0.1910			0.1000	4.7		20.0			
Isopropylbenzene	1.7361 1.7088	1.6138 1.8575	1.5686	1.7297	1.8865	Ave		1.7287			0.1000	6.7		20.0			
1,1,2,2-Tetrachloroethane	0.5988 0.5767	0.5417 0.6107	0.5710	0.5747	0.6113	Ave		0.5836			0.3000	4.3		20.0			
Bromobenzene	0.6349 0.6235	0.6073 0.6885	0.6520	0.6164	0.6936	Ave		0.6452				5.3		20.0			
1,2,3-Trichloropropane	0.2499 0.1788	0.1712 0.1899	0.1861	0.1693	0.1787	Ave		0.1891				14.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1309	0.0880 0.1449	0.1180	0.1327	0.1428	Ave		0.1262				16.7		20.0			
N-Propylbenzene	0.7783 0.6730	0.5989 0.7191	0.6399	0.6583	0.7239	Ave		0.6845				8.8		20.0			
2-Chlorotoluene	0.6194 0.6277	0.6307 0.6941	0.6351	0.6259	0.6839	Ave		0.6453				4.7		20.0			
1,3,5-Trimethylbenzene	1.9610 2.2274	1.9011 2.4387	1.9426	2.1636	2.4582	Ave		2.1561				10.8		20.0			
4-Chlorotoluene	0.7381 0.6292	0.6667 0.6906	0.6065	0.6213	0.6820	Ave		0.6621				7.0		20.0			
tert-Butylbenzene	1.8332 1.9431	1.8843 2.2793	1.8522	1.8574	2.2762	Ave		1.9894				10.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.1843 2.3707	2.1358 2.6286	2.1658	2.3127	2.5973	Ave		2.3422				8.7		20.0			
sec-Butylbenzene	2.2114 2.4973	2.1601 2.6704	2.2317	2.4053	2.7215	Ave		2.4140				9.4		20.0			
1,3-Dichlorobenzene	1.2597 1.3172	1.3986 1.4380	1.2844	1.3397	1.4586	Ave		1.3566			0.6000	5.6		20.0			
4-Isopropyltoluene	1.8476 2.2063	1.8283 2.3974	1.9085	2.1681	2.4122	Ave		2.1098				11.9		20.0			
1,4-Dichlorobenzene	1.3937 1.3681	1.5405 1.4780	1.3548	1.3925	1.5085	Ave		1.4337			0.5000	5.2		20.0			
n-Butylbenzene	2.0548 1.8809	1.8464 2.0111	1.6273	1.8214	2.0640	Ave		1.9009				8.2		20.0			
1,2-Dichlorobenzene	1.5240 1.3386	1.4461 1.4364	1.3243	1.3317	1.4954	Ave		1.4138			0.4000	5.8		20.0			
1,2-Dibromo-3-Chloropropane	0.1180 0.1232	0.1301 0.1331	0.1168	0.1149	0.1288	Ave		0.1236			0.0500	5.8		20.0			
1,2,4-Trichlorobenzene	0.7101 0.7291	0.7473 0.7797	0.6590	0.6958	0.8054	Ave		0.7323			0.2000	6.8		20.0			
Hexachlorobutadiene	0.3644 0.2886	0.3606 0.3018	0.2870	0.2873	0.3120	Ave		0.3145				10.8		20.0			
Naphthalene	1.6880 2.0616	1.7593 2.2025	1.7282	1.8680	2.1906	Ave		1.9283				11.4		20.0			
1,2,3-Trichlorobenzene	0.6737 0.6663	0.7123 0.7145	0.6469	0.6565	0.7339	Ave		0.6863				4.9		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2401	0.2724 0.2650	0.2498	0.2375	0.2626	Ave		0.2546				5.6		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2767	0.2878 0.2930	0.2976	0.2832	0.3073	Ave		0.2909				3.7		20.0			
Toluene-d8 (Surr)	+++++ 1.2641	1.2721 1.3862	1.2678	1.2713	1.3471	Ave		1.3014				4.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4325	0.4596 0.4818	0.4358	0.4325	0.4694	Ave		0.4519				4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-297419/9	UXM6334.D
Level 2	STD8260 240-297419/10	UXM6335.D
Level 3	STD8260 240-297419/11	UXM6336.D
Level 4	STD8260 240-297419/12	UXM6337.D
Level 5	ICIS 240-297419/13	UXM6338.D
Level 6	STD8260 240-297419/14	UXM6339.D
Level 7	STD8260L7 240-297419/15	UXM6340.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	6268 616054	11277 914424	38299	161656	283048	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Chloromethane	FB	Ave	8015 599771	14671 1011349	43459	156195	327751	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Vinyl chloride	FB	Ave	8657 697568	14646 1100805	47205	186868	363465	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Butadiene	FB	Ave	8419 709853	17091 1088421	47229	190809	352907	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromomethane	FB	Ave	5949 464416	10522 791580	31434	118362	253928	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Chloroethane	FB	Ave	6431 459127	10386 768287	30742	117870	235799	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dichlorofluoromethane	FB	Ave	12819 1056232	27048 1763650	74107	290263	585560	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Trichlorofluoromethane	FB	Ave	8328 823572	17162 1268274	54861	221473	419512	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethyl ether	FB	Ave	7151 523674	13006 860521	30427	127625	260018	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Acrolein	FB	Ave	6171 464717	11782 738920	28528	105619	228484	2.50 200	5.00 300	12.5	50.0	100
1,1-Dichloroethene	FB	Ave	8176 665929	15882 1044326	36924	166443	323777	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	6212 524977	12400 728181	31142	124614	231332	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Acetone	FB	Lin1	+++++ 303800	13693 476147	23117	73342	152020	+++++ 80.0	2.00 120	5.00	20.0	40.0
Iodomethane	FB	Ave	13803 1061136	24695 1779244	61866	262510	549782	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Carbon disulfide	FB	Ave	24696 2179210	50737 3544018	118478	536438	1068006	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	6219 409680	9253 703617	22368	95156	209066	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Methyl acetate	FB	Ave	8878 724563	18968 1169526	36885	176755	356834	1.00 80.0	2.00 120	5.00	20.0	40.0
Methylene Chloride	FB	Lin1	+++++ 702925	32763 1177453	56680	189742	360684	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
2-Methyl-2-propanol	FB	Ave	4154 380717	8626 652608	18725	88606	183108	5.00 400	10.0 600	25.0	100	200
Acrylonitrile	FB	Ave	20781 1948102	39915 3194780	102228	446160	916261	5.00 400	10.0 600	25.0	100	200
Methyl tert-butyl ether	FB	Ave	19467 1827292	41490 3093794	94936	410125	881161	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	8782 725614	14369 1219098	37931	162990	350890	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Hexane	FB	Ave	8351 681428	11645 920727	36915	158253	267879	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1-Dichloroethane	FB	Ave	12675 1139385	25997 1924857	61396	269539	562663	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Vinyl acetate	FB	Ave	9890 907808	18534 1545224	44288	202525	421145	0.500 40.0	1.00 60.0	2.50	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	8953 781957	16783 1311332	42638	186988	386718	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2,2-Dichloropropane	FB	Ave	1448 182345	3521 300897	9739	44721	85252	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Butanone (MEK)	FB	Ave	5819 391987	9080 638516	23953	89667	189216	1.00 80.0	2.00 120	5.00	20.0	40.0
Chlorobromomethane	FB	Ave	3964 342195	8390 582225	19307	81839	171676	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Tetrahydrofuran	FB	Ave	+++++ 250295	6636 411284	13869	60338	114789	+++++ 80.0	2.00 120	5.00	20.0	40.0
Chloroform	FB	Ave	12627 1127570	25988 1935632	62788	269493	567018	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	9934 979648	20491 1579323	52606	235331	477044	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Cyclohexane	FB	Ave	12378 1066535	19500 1502258	56810	256158	468668	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1-Dichloropropene	FB	Ave	9958 873939	17394 1401323	43254	213099	415632	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Carbon tetrachloride	FB	Ave	10445 835412	16721 1305500	47014	195087	403435	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Isobutyl alcohol	FB	Ave	2758 312736	6311 517266	15423	76538	147411	12.5 1000	25.0 1500	62.5	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	29606 2599520	55672 4501045	137508	628048	1289361	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloroethane	FB	Ave	8609 799309	17411 1355792	42908	190212	389711	0.500 40.0	1.00 60.0	2.50	10.0	20.0
n-Heptane	FB	Lin1	+++++ 327622	38057 +++++	45301	97964	144337	+++++ 40.0	1.00 +++++	2.50	10.0	20.0
Trichloroethene	FB	Ave	7205 643234	13180 1094413	36639	156978	322997	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Methylcyclohexane	FB	Ave	10346 975623	20189 1346127	51842	232012	401062	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloropropane	FB	Ave	5696 548338	10838 928017	28242	129487	264140	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dibromomethane	FB	Ave	3557 339278	8670 567344	18179	80425	164089	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 98866	2630 167553	5498	21786	47482	+++++ 800	20.0 1200	50.0	200	400
Dichlorobromomethane	FB	Ave	9267 769508	15219 1335138	40528	179326	384298	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 470128	9190 817202	20727	104703	226914	+++++ 80.0	2.00 120	5.00	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	6858 785344	13457 1391546	36358	176104	375717	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	7844 774602	14688 1298638	37005	179839	365077	1.00 80.0	2.00 120	5.00	20.0	40.0
Toluene	CBNZ d5	Ave	25814 2448121	49083 4286732	123707	577721	1201971	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	6974 651236	12766 1133000	31088	143929	304845	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	5499 523868	10093 915063	23254	117073	249186	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4288 413182	9379 704092	20898	97942	195208	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	6047 438707	9208 728263	22468	106153	216509	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	7209 698784	13777 1212196	35271	164897	343443	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Hexanone	CBNZ d5	Ave	4061 424490	9384 706416	19899	101105	205966	1.00 80.0	2.00 120	5.00	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	4803 483684	8715 828348	22497	107126	229246	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	4061 404247	8225 690356	20940	89356	195157	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	17846 1470111	29244 2579177	75481	348866	728151	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6563 600981	12468 1039927	27532	140147	294891	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	7905 822404	15623 1432648	38214	190693	405096	0.500 40.0	1.00 60.0	2.50	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	10148 1014271	18292 1776387	49061	234509	506846	0.500 40.0	1.00 60.0	2.50	10.0	20.0
o-Xylene	CBNZ d5	Ave	12764 1126222	21059 1947229	50860	259496	554141	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Styrene	CBNZ d5	Ave	15178 1735500	31359 3057449	83285	397413	841378	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromoform	CBNZ d5	Ave	3306 301966	6263 519496	14542	69249	142569	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	29273 2777456	51888 4766445	129830	645268	1370345	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6686 605298	11696 999793	31897	142410	289805	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromobenzene	DCBd 4	Ave	7089 654493	13112 1127151	36423	152746	328830	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	2790 187633	3697 310884	10396	41957	84715	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 137383	1901 237173	6591	32881	67708	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	8690 706431	12930 1177191	35748	163108	343193	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	6916 658897	13617 1136325	35478	155092	324232	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	21895 2338051	41045 3992428	108514	536117	1165401	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	8241 660416	14395 1130515	33878	153952	323327	0.500 40.0	1.00 60.0	2.50	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	20468 2039648	40683 3731481	103465	460244	1079083	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	24388 2488419	46113 4303202	120986	573053	1231327	0.500 40.0	1.00 60.0	2.50	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	24690 2621371	46638 4371654	124666	595996	1290217	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	14065 1382584	30197 2354096	71749	331966	691502	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	20629 2315891	39473 3924747	106610	537217	1143583	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	15561 1436062	33260 2419583	75678	345045	715160	0.500 40.0	1.00 60.0	2.50	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	22942 1974321	39865 3292320	90904	451311	978511	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	17015 1405056	31222 2351535	73978	329972	708936	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1318 129331	2809 217923	6527	28469	61077	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	7928 765368	16135 1276372	36814	172402	381829	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	4068 302932	7786 494054	16033	71186	147931	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Naphthalene	DCBd 4	Ave	18847 2164004	37983 3605700	96540	462853	1038493	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7522 699374	15379 1169690	36134	162664	347922	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 572684	12970 989819	31163	133831	284975	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 660113	13702 1094461	37128	159543	333400	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 2054651	40899 3557024	104927	474272	978529	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 703005	14778 1236409	36070	161352	340966	+++++ 40.0	1.00 60.0	2.50	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2629	0.2734	0.1000	0.0208	0.0200	4.0	30.0
Chloromethane	Ave	0.2961	0.2972	0.1000	0.0201	0.0200	0.4	30.0
Vinyl chloride	Ave	0.3256	0.3316	0.1000	0.0204	0.0200	1.8	30.0
Butadiene	Ave	0.3315	0.3265		0.0197	0.0200	-1.5	30.0
Bromomethane	Ave	0.2224	0.2222	0.0500	0.0200	0.0200	-0.0	30.0
Chloroethane	Ave	0.2202	0.2215	0.0500	0.0201	0.0200	0.6	30.0
Dichlorofluoromethane	Ave	0.5193	0.5397		0.0208	0.0200	3.9	30.0
Trichlorofluoromethane	Ave	0.3702	0.3847	0.1000	0.0208	0.0200	3.9	30.0
Ethyl ether	Ave	0.2448	0.2415		0.0197	0.0200	-1.3	30.0
Acrolein	Ave	0.0431	0.0400		0.0927	0.100	-7.3	50.0
1,1-Dichloroethene	Ave	0.3004	0.2842	0.1000	0.0189	0.0200	-5.4	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2290	0.2106	0.0500	0.0184	0.0200	-8.0	30.0
Acetone	Lin1		0.0672	0.0100	0.0406	0.0400	1.4	50.0
Iodomethane	Ave	0.4928	0.4835		0.0196	0.0200	-1.9	30.0
Carbon disulfide	Ave	0.9690	0.9411	0.1000	0.0194	0.0200	-2.9	30.0
3-Chloro-1-propene	Ave	0.1913	0.1776		0.0186	0.0200	-7.2	30.0
Methyl acetate	Ave	0.1644	0.1530	0.1000	0.0372	0.0400	-6.9	30.0
Methylene Chloride	Lin1		0.3310	0.1000	0.0207	0.0200	3.4	50.0
2-Methyl-2-propanol	Ave	0.0165	0.0172		0.209	0.200	4.4	50.0
Acrylonitrile	Ave	0.0826	0.0835		0.202	0.200	1.1	30.0
Methyl tert-butyl ether	Ave	0.7901	0.7986	0.1000	0.0202	0.0200	1.1	30.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3187	0.1000	0.0203	0.0200	1.7	30.0
Hexane	Ave	0.2754	0.2486		0.0181	0.0200	-9.7	30.0
1,1-Dichloroethane	Ave	0.5036	0.5122	0.2000	0.0203	0.0200	1.7	30.0
Vinyl acetate	Ave	0.3820	0.4053		0.0212	0.0200	6.1	50.0
2,2-Dichloropropane	Ave	0.0748	0.0764		0.0204	0.0200	2.1	30.0
2-Butanone (MEK)	Ave	0.0914	0.0835	0.0100	0.0365	0.0400	-8.7	30.0
cis-1,2-Dichloroethene	Ave	0.3447	0.3472	0.1000	0.0201	0.0200	0.7	30.0
Chlorobromomethane	Ave	0.1556	0.1536		0.0197	0.0200	-1.3	30.0
Tetrahydrofuran	Ave	0.0565	0.0532		0.0376	0.0400	-5.9	30.0
Chloroform	Ave	0.5052	0.5201	0.2000	0.0206	0.0200	2.9	30.0
1,1,1-Trichloroethane	Ave	0.4189	0.4188	0.1000	0.0200	0.0200	-0.0	30.0
Cyclohexane	Ave	0.4409	0.4136	0.1000	0.0188	0.0200	-6.2	30.0
1,1-Dichloropropene	Ave	0.3722	0.3608		0.0194	0.0200	-3.1	30.0
Carbon tetrachloride	Ave	0.3651	0.3452	0.1000	0.0189	0.0200	-5.4	30.0
Isobutyl alcohol	Ave	0.0052	0.0054		0.524	0.500	4.8	30.0
1,2-Dichloroethane	Ave	0.3489	0.3550	0.1000	0.0203	0.0200	1.7	30.0
Benzene	Ave	1.147	1.149	0.5000	0.0200	0.0200	0.1	30.0
n-Heptane	Lin1		0.1268		0.0166	0.0200	-16.9	30.0
Trichloroethene	Ave	0.2846	0.2800	0.1500	0.0197	0.0200	-1.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3995	0.3535	0.1000	0.0177	0.0200	-11.5	30.0
1,2-Dichloropropane	Ave	0.2327	0.2504	0.1000	0.0215	0.0200	7.6	30.0
Dibromomethane	Ave	0.1508	0.1478		0.0196	0.0200	-2.0	30.0
1,4-Dioxane	Ave	0.0022	0.0020		0.362	0.400	-9.4	50.0
Dichlorobromomethane	Ave	0.3372	0.3375	0.1500	0.0200	0.0200	0.0	30.0
2-Chloroethyl vinyl ether	Ave	0.0975	0.1022		0.0210	0.0200	4.8	30.0
cis-1,3-Dichloropropene	Ave	0.3148	0.3502	0.1500	0.0222	0.0200	11.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1601	0.1637	0.0500	0.0409	0.0400	2.2	30.0
Toluene	Ave	1.562	1.595	0.4000	0.0204	0.0200	2.1	30.0
trans-1,3-Dichloropropene	Ave	0.4048	0.4038	0.1000	0.0199	0.0200	-0.3	30.0
Ethyl methacrylate	Ave	0.3224	0.3399		0.0211	0.0200	5.4	30.0
1,1,2-Trichloroethane	Ave	0.2655	0.2737	0.1000	0.0206	0.0200	3.1	30.0
1,3-Dichloropropane	Ave	0.4428	0.4579		0.0207	0.0200	3.4	30.0
Tetrachloroethene	Ave	0.2933	0.2836	0.1500	0.0193	0.0200	-3.3	30.0
2-Hexanone	Ave	0.1332	0.1405	0.0500	0.0422	0.0400	5.5	30.0
Chlorodibromomethane	Ave	0.2930	0.3030		0.0207	0.0200	3.4	30.0
Ethylene Dibromide	Ave	0.2537	0.2673		0.0211	0.0200	5.4	30.0
Chlorobenzene	Ave	0.9610	0.9772	0.3000	0.0203	0.0200	1.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3809	0.3966		0.0208	0.0200	4.1	30.0
Ethylbenzene	Ave	0.5071	0.5317		0.0210	0.0200	4.9	30.0
m-Xylene & p-Xylene	Ave	0.6295	0.6749		0.0214	0.0200	7.2	30.0
o-Xylene	Ave	0.7052	0.7318		0.0208	0.0200	3.8	30.0
Styrene	Ave	1.052	1.117	0.3000	0.0212	0.0200	6.2	30.0
Bromoform	Ave	0.1910	0.1895	0.1000	0.0198	0.0200	-0.8	30.0
Isopropylbenzene	Ave	1.729	1.791	0.1000	0.0207	0.0200	3.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5836	0.5941	0.3000	0.0204	0.0200	1.8	30.0
Bromobenzene	Ave	0.6452	0.6715		0.0208	0.0200	4.1	30.0
1,2,3-Trichloropropane	Ave	0.1891	0.1866		0.0197	0.0200	-1.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1262	0.1441		0.0228	0.0200	14.2	30.0
N-Propylbenzene	Ave	0.6845	0.6899		0.0202	0.0200	0.8	30.0
2-Chlorotoluene	Ave	0.6453	0.6591		0.0204	0.0200	2.1	30.0
1,3,5-Trimethylbenzene	Ave	2.156	2.285		0.0212	0.0200	6.0	30.0
4-Chlorotoluene	Ave	0.6621	0.6697		0.0202	0.0200	1.2	30.0
tert-Butylbenzene	Ave	1.989	2.089		0.0210	0.0200	5.0	30.0
1,2,4-Trimethylbenzene	Ave	2.342	2.419		0.0207	0.0200	3.3	30.0
sec-Butylbenzene	Ave	2.414	2.550		0.0211	0.0200	5.6	30.0
1,3-Dichlorobenzene	Ave	1.357	1.396	0.6000	0.0206	0.0200	2.9	30.0
4-Isopropyltoluene	Ave	2.110	2.267		0.0215	0.0200	7.4	30.0
1,4-Dichlorobenzene	Ave	1.434	1.447	0.5000	0.0202	0.0200	0.9	30.0
n-Butylbenzene	Ave	1.901	1.922		0.0202	0.0200	1.1	30.0
1,2-Dichlorobenzene	Ave	1.414	1.422	0.4000	0.0201	0.0200	0.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1236	0.1125	0.0500	0.0182	0.0200	-8.9	50.0
1,2,4-Trichlorobenzene	Ave	0.7323	0.7715	0.2000	0.0211	0.0200	5.3	50.0
Hexachlorobutadiene	Ave	0.3145	0.3424		0.0218	0.0200	8.9	30.0
Naphthalene	Ave	1.928	2.081		0.0216	0.0200	7.9	50.0
1,2,3-Trichlorobenzene	Ave	0.6863	0.7072		0.0206	0.0200	3.0	30.0
Dibromofluoromethane (Surr)	Ave	0.2546	0.2442		0.0192	0.0200	-4.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2807		0.0193	0.0200	-3.5	30.0
Toluene-d8 (Surr)	Ave	1.301	1.316		0.0202	0.0200	1.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4760		0.0211	0.0200	5.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297419/25 Calibration Date: 10/03/2017 22:22

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6350.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2546	0.2603		0.0204	0.0200	2.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2759		0.0190	0.0200	-5.2	30.0
Toluene-d8 (Surr)	Ave	1.301	1.257		0.0193	0.0200	-3.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4710		0.0208	0.0200	4.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297419/25 Calibration Date: 10/03/2017 22:22

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 20:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 21:59

Lab File ID: UXM6350.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0260	0.0236		0.182	0.200	-9.2	30.0
Isopropyl ether	Ave	0.2633	0.2750		0.0209	0.0200	4.4	30.0
2-Chloro-1,3-butadiene	Ave	0.4473	0.4394		0.0196	0.0200	-1.8	30.0
Tert-butyl ethyl ether	Ave	0.8428	0.8447		0.0200	0.0200	0.2	30.0
Ethyl acetate	Ave	0.1413	0.1388		0.0393	0.0400	-1.8	50.0
Propionitrile	Ave	0.0289	0.0277		0.191	0.200	-4.4	30.0
Methacrylonitrile	Ave	0.1161	0.1119		0.193	0.200	-3.6	30.0
Tert-amyl methyl ether	Ave	0.8176	0.8063		0.0197	0.0200	-1.4	30.0
n-Butanol	Ave	0.0040	0.0042		0.518	0.500	3.6	30.0
Ethyl acrylate	Ave	0.1598	0.1540		0.0193	0.0200	-3.7	30.0
Methyl methacrylate	Ave	0.1179	0.1187		0.0403	0.0400	0.6	30.0
2-Nitropropane	Ave	0.0348	0.0350		0.0402	0.0400	0.6	30.0
n-Butyl acetate	Ave	0.1988	0.1995		0.0201	0.0200	0.3	30.0
1-Chlorohexane	Ave	0.3427	0.3299		0.0193	0.0200	-3.7	30.0
Cyclohexanone	Ave	0.0113	0.0121		0.213	0.200	6.5	30.0
Pentachloroethane	Ave	0.2496	0.2437		0.0390	0.0400	-2.4	30.0
1,2,3-Trimethylbenzene	Ave	2.430	2.441		0.0201	0.0200	0.5	30.0
Benzyl chloride	Lin1		0.1923		0.0170	0.0200	-15.1	30.0
1,3,5-Trichlorobenzene	Ave	0.8028	0.8072		0.0201	0.0200	0.5	30.0
2-Methylnaphthalene	Lin1		0.9906		0.0383	0.0400	-4.1	30.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: BFB5432.D BFB Injection Date: 10/19/2017

Instrument ID: A3UX16 BFB Injection Time: 08:48

Analysis Batch No.: 299702

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.4	
75	30.0 - 60.0 % of mass 95	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	86.7	
175	5.0 - 9.0 % of mass 174	6.9	(8.0) 1
176	95.0 - 101.0 % of mass 174	83.3	(96.1) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-299702/3	UXM6924.D	10/19/2017	09:16
	CCV 240-299702/4	UXM6925.D	10/19/2017	09:39
	LCS 240-299702/5	UXM6926.D	10/19/2017	10:03
	MB 240-299702/7	UXM6928.D	10/19/2017	10:49
MRC-MW117B-100917	240-86215-2	UXM6944.D	10/19/2017	17:25
	200-40412-B-5 MS	UXM6950.D	10/19/2017	19:45
	200-40412-B-5 MSD	UXM6951.D	10/19/2017	20:08

Only result for vinyl chloride reported from this analysis.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 240-299702/3 Calibration Date: 10/19/2017 09:16

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6924.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2629	0.2569	0.1000	0.0195	0.0200	-2.3	20.0
Chloromethane	Ave	0.2961	0.3025	0.1000	0.0204	0.0200	2.2	20.0
Vinyl chloride	Ave	0.3256	0.3624	0.1000	0.0223	0.0200	11.3	20.0
Butadiene	Ave	0.3315	0.3260		0.0197	0.0200	-1.7	20.0
Bromomethane	Ave	0.2224	0.2497	0.0500	0.0225	0.0200	12.3	20.0
Chloroethane	Ave	0.2202	0.2329	0.0500	0.0212	0.0200	5.8	20.0
Dichlorofluoromethane	Ave	0.5193	0.5755		0.0222	0.0200	10.8	20.0
Trichlorofluoromethane	Ave	0.3702	0.3826	0.1000	0.0207	0.0200	3.4	20.0
Ethyl ether	Ave	0.2448	0.2454		0.0200	0.0200	0.2	20.0
Acrolein	Ave	0.0431	0.0346		0.0802	0.100	-19.8	50.0
1,1-Dichloroethene	Ave	0.3004	0.3303	0.1000	0.0220	0.0200	9.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2290	0.2364	0.0500	0.0206	0.0200	3.2	20.0
Acetone	Lin1		0.0654	0.0100	0.0394	0.0400	-1.4	50.0
Iodomethane	Ave	0.4928	0.5822		0.0236	0.0200	18.1	20.0
Carbon disulfide	Ave	0.9690	1.024	0.1000	0.0211	0.0200	5.6	20.0
3-Chloro-1-propene	Ave	0.1913	0.1832		0.0191	0.0200	-4.3	20.0
Methyl acetate	Ave	0.1644	0.1565	0.1000	0.0381	0.0400	-4.8	20.0
Methylene Chloride	Lin1		0.3535	0.1000	0.0222	0.0200	10.9	50.0
2-Methyl-2-propanol	Ave	0.0165	0.0183		0.222	0.200	10.8	50.0
Acrylonitrile	Ave	0.0826	0.0864		0.209	0.200	4.6	20.0
Methyl tert-butyl ether	Ave	0.7901	0.8555	0.1000	0.0217	0.0200	8.3	20.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3565	0.1000	0.0228	0.0200	13.8	20.0
Hexane	Ave	0.2754	0.2071		0.0150	0.0200	-24.8*	20.0
1,1-Dichloroethane	Ave	0.5036	0.5280	0.2000	0.0210	0.0200	4.8	20.0
Vinyl acetate	Ave	0.3820	0.3507		0.0184	0.0200	-8.2	50.0
2,2-Dichloropropane	Ave	0.0748	0.0886		0.0237	0.0200	18.4	20.0
2-Butanone (MEK)	Ave	0.0914	0.0807	0.0100	0.0353	0.0400	-11.7	20.0
cis-1,2-Dichloroethene	Ave	0.3447	0.3977	0.1000	0.0231	0.0200	15.4	20.0
Chlorobromomethane	Ave	0.1556	0.1805		0.0232	0.0200	16.0	20.0
Tetrahydrofuran	Ave	0.0565	0.0531		0.0375	0.0400	-6.2	20.0
Chloroform	Ave	0.5052	0.5484	0.2000	0.0217	0.0200	8.6	20.0
1,1,1-Trichloroethane	Ave	0.4189	0.4909	0.1000	0.0234	0.0200	17.2	20.0
Cyclohexane	Ave	0.4409	0.4028	0.1000	0.0183	0.0200	-8.6	20.0
1,1-Dichloropropene	Ave	0.3722	0.3879		0.0208	0.0200	4.2	20.0
Carbon tetrachloride	Ave	0.3651	0.3893	0.1000	0.0213	0.0200	6.6	20.0
Isobutyl alcohol	Ave	0.0052	0.0055		0.526	0.500	5.2	20.0
Benzene	Ave	1.147	1.213	0.5000	0.0211	0.0200	5.7	20.0
1,2-Dichloroethane	Ave	0.3489	0.3599	0.1000	0.0206	0.0200	3.1	20.0
n-Heptane	Lin1		0.1138		0.0143	0.0200	-28.4*	20.0
Trichloroethene	Ave	0.2846	0.3251	0.1500	0.0228	0.0200	14.2	20.0

Only result for vinyl chloride reported from this analysis.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 240-299702/3 Calibration Date: 10/19/2017 09:16

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6924.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3995	0.3546	0.1000	0.0178	0.0200	-11.2	20.0
1,2-Dichloropropane	Ave	0.2327	0.2420	0.1000	0.0208	0.0200	4.0	20.0
1,4-Dioxane	Ave	0.0022	0.0027		0.475	0.400	18.8	50.0
Dibromomethane	Ave	0.1508	0.1593		0.0211	0.0200	5.7	20.0
Dichlorobromomethane	Ave	0.3372	0.3449	0.1500	0.0205	0.0200	2.3	20.0
2-Chloroethyl vinyl ether	Ave	0.0975	0.1052		0.0432	0.0400	7.9	20.0
cis-1,3-Dichloropropene	Ave	0.3148	0.3402	0.1500	0.0216	0.0200	8.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1601	0.1651	0.0500	0.0413	0.0400	3.2	20.0
Toluene	Ave	1.562	1.496	0.4000	0.0192	0.0200	-4.2	20.0
trans-1,3-Dichloropropene	Ave	0.4048	0.3726	0.1000	0.0184	0.0200	-8.0	20.0
Ethyl methacrylate	Ave	0.3224	0.3194		0.0198	0.0200	-0.9	20.0
1,1,2-Trichloroethane	Ave	0.2655	0.2664	0.1000	0.0201	0.0200	0.4	20.0
1,3-Dichloropropane	Ave	0.4428	0.4262		0.0193	0.0200	-3.7	20.0
Tetrachloroethene	Ave	0.2933	0.2819	0.1500	0.0192	0.0200	-3.9	20.0
2-Hexanone	Ave	0.1332	0.1346	0.0500	0.0404	0.0400	1.1	20.0
Chlorodibromomethane	Ave	0.2930	0.3001		0.0205	0.0200	2.4	20.0
Ethylene Dibromide	Ave	0.2537	0.2592		0.0204	0.0200	2.2	20.0
Chlorobenzene	Ave	0.9610	0.9850	0.3000	0.0205	0.0200	2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3809	0.3816		0.0200	0.0200	0.2	20.0
Ethylbenzene	Ave	0.5071	0.5373		0.0212	0.0200	6.0	20.0
m-Xylene & p-Xylene	Ave	0.6295	0.6609		0.0210	0.0200	5.0	20.0
o-Xylene	Ave	0.7052	0.7140		0.0202	0.0200	1.2	20.0
Styrene	Ave	1.052	1.126	0.3000	0.0214	0.0200	7.1	20.0
Bromoform	Ave	0.1910	0.1892	0.1000	0.0198	0.0200	-0.9	20.0
Isopropylbenzene	Ave	1.729	1.697	0.1000	0.0196	0.0200	-1.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5836	0.5369	0.3000	0.0184	0.0200	-8.0	20.0
Bromobenzene	Ave	0.6452	0.6584		0.0204	0.0200	2.0	20.0
1,2,3-Trichloropropane	Ave	0.1891	0.1761		0.0186	0.0200	-6.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1262	0.0756		0.0120	0.0200	-40.1*	20.0
N-Propylbenzene	Ave	0.6845	0.6639		0.0194	0.0200	-3.0	20.0
2-Chlorotoluene	Ave	0.6453	0.6390		0.0198	0.0200	-1.0	20.0
1,3,5-Trimethylbenzene	Ave	2.156	2.089		0.0194	0.0200	-3.1	20.0
4-Chlorotoluene	Ave	0.6621	0.6561		0.0198	0.0200	-0.9	20.0
tert-Butylbenzene	Ave	1.989	1.745		0.0175	0.0200	-12.3	20.0
1,2,4-Trimethylbenzene	Ave	2.342	2.262		0.0193	0.0200	-3.4	20.0
sec-Butylbenzene	Ave	2.414	2.262		0.0187	0.0200	-6.3	20.0
1,3-Dichlorobenzene	Ave	1.357	1.333	0.6000	0.0197	0.0200	-1.7	20.0
4-Isopropyltoluene	Ave	2.110	2.069		0.0196	0.0200	-1.9	20.0
1,4-Dichlorobenzene	Ave	1.434	1.368	0.5000	0.0191	0.0200	-4.6	20.0
n-Butylbenzene	Ave	1.901	1.688		0.0178	0.0200	-11.2	20.0
1,2-Dichlorobenzene	Ave	1.414	1.311	0.4000	0.0186	0.0200	-7.2	20.0

Only result for vinyl chloride reported from this analysis.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 240-299702/3 Calibration Date: 10/19/2017 09:16

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6924.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1236	0.1046	0.0500	0.0169	0.0200	-15.3	50.0
1,2,4-Trichlorobenzene	Ave	0.7323	0.6965	0.2000	0.0190	0.0200	-4.9	50.0
Hexachlorobutadiene	Ave	0.3145	0.2927		0.0186	0.0200	-6.9	20.0
Naphthalene	Ave	1.928	2.072		0.0215	0.0200	7.5	50.0
1,2,3-Trichlorobenzene	Ave	0.6863	0.6784		0.0198	0.0200	-1.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2546	0.2844		0.0223	0.0200	11.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2910		0.0200	0.0200	0.0	20.0
Toluene-d8 (Surr)	Ave	1.301	1.256		0.0193	0.0200	-3.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4559		0.0202	0.0200	0.9	20.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: BFB3774.D BFB Injection Date: 08/28/2017

Instrument ID: A3UX9 BFB Injection Time: 15:15

Analysis Batch No.: 292814

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.2	
175	5.0 - 9.0 % of mass 174	6.1	(7.8) 1
176	95.0 - 101.0 % of mass 174	76.3	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-292814/9	UX965278.D	08/28/2017	15:40
	STD8260 240-292814/10	UX965279.D	08/28/2017	16:05
	STD8260 240-292814/11	UX965280.D	08/28/2017	16:29
	ICIS 240-292814/12	UX965281.D	08/28/2017	16:53
	STD8260 240-292814/13	UX965282.D	08/28/2017	17:20
	STD8260 240-292814/14	UX965283.D	08/28/2017	17:44

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-292814/9	UX965278.D
Level 2	STD8260 240-292814/10	UX965279.D
Level 3	STD8260 240-292814/11	UX965280.D
Level 4	ICIS 240-292814/12	UX965281.D
Level 5	STD8260 240-292814/13	UX965282.D
Level 6	STD8260 240-292814/14	UX965283.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2667 0.3580	0.3045	0.3492	0.3527	0.3423	Ave		0.3289			0.1000	10.9		20.0			
Chloromethane	+++++ 0.2308	0.2557	0.2683	0.2331	0.2346	Ave		0.2445			0.1000	6.8		20.0			
Vinyl chloride	0.3162 0.2758	0.2613	0.2912	0.2872	0.2711	Ave		0.2838			0.1000	6.8		20.0			
Butadiene	0.3541 0.2747	0.3319	0.2835	0.2838	0.2701	Ave		0.2997				11.6		20.0			
Bromomethane	0.2586 0.2581	0.2280	0.2465	0.2334	0.2191	Ave		0.2406			0.0500	6.8		20.0			
Chloroethane	0.1767 0.2121	0.2145	0.2189	0.1960	0.2009	Ave		0.2032			0.0500	7.7		20.0			
Dichlorofluoromethane	0.5198 0.4820	0.5344	0.5419	0.4779	0.5015	Ave		0.5096				5.3		20.0			
Trichlorofluoromethane	0.4054 0.4861	0.4585	0.4771	0.4708	0.4867	Ave		0.4641			0.1000	6.6		20.0			
Ethyl ether	0.2042 0.1798	0.2028	0.1949	0.1737	0.1827	Ave		0.1897				6.7		20.0			
Acrolein	0.0235 0.0217	0.0240	0.0241	0.0219	0.0225	Ave		0.0229				4.6		20.0			
1,1-Dichloroethene	0.4608 0.3974	0.3729	0.4058	0.3900	0.4186	Ave		0.4076			0.1000	7.4		20.0			
Acetone	+++++ 0.0638	0.1337	0.0746	0.0664	0.0594	Lin1	0.1534	0.0613			0.0100	7.8			0.9970		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2633 0.2906	0.3033	0.2719	0.2830	0.3039	Ave		0.2860			0.0500	5.8		20.0			
Iodomethane	0.4546 0.4386	0.4220	0.4805	0.4414	0.4613	Ave		0.4497				4.5		20.0			
Carbon disulfide	0.9377 0.6307	0.7945	0.6928	0.6495	0.6743	Ave		0.7299			0.1000	16.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.3595 0.2698	0.3212	0.2717	0.2590	0.2442	Ave		0.2876				15.2		20.0			
Methyl acetate	0.1918 0.1415	0.1763	0.1534	0.1461	0.1470	Ave		0.1593			0.1000	12.6		20.0			
Methylene Chloride	+++++ 0.2755	0.3957	0.3151	0.2589	0.2863	Ave		0.3063			0.1000	17.6		20.0			
2-Methyl-2-propanol	0.0173 0.0190	0.0207	0.0193	0.0192	0.0174	Ave		0.0188				6.8		20.0			
Acrylonitrile	0.0803 0.0742	0.0909	0.0802	0.0759	0.0757	Ave		0.0795				7.7		20.0			
Methyl tert-butyl ether	0.7591 0.7212	0.7483	0.7592	0.7214	0.7485	Ave		0.7430			0.1000	2.4		20.0			
trans-1,2-Dichloroethene	0.2698 0.2983	0.3083	0.3122	0.2938	0.3038	Ave		0.2977			0.1000	5.1		20.0			
Hexane	0.2289 0.2639	0.2630	0.2183	0.2574	0.2609	Ave		0.2487				8.0		20.0			
1,1-Dichloroethane	0.3675 0.3708	0.3745	0.3736	0.3513	0.3667	Ave		0.3674			0.2000	2.3		20.0			
Vinyl acetate	0.2940 0.3138	0.3085	0.2967	0.2869	0.3094	Ave		0.3016				3.5		20.0			
2-Butanone (MEK)	0.0956 0.0850	0.0960	0.0919	0.0851	0.0860	Ave		0.0899			0.0100	5.8		20.0			
cis-1,2-Dichloroethene	0.3169 0.2753	0.2829	0.2883	0.2609	0.2763	Ave		0.2834			0.1000	6.6		20.0			
2,2-Dichloropropane	0.1841 0.2038	0.2226	0.1919	0.1889	0.2012	Ave		0.1988				7.0		20.0			
Chlorobromomethane	0.1817 0.1599	0.1759	0.1838	0.1603	0.1686	Ave		0.1717				6.1		20.0			
Tetrahydrofuran	+++++ 0.0515	0.0614	0.0587	0.0527	0.0540	Ave		0.0557				7.6		20.0			
Chloroform	0.4166 0.4104	0.4191	0.4289	0.4018	0.4142	Ave		0.4152			0.2000	2.2		20.0			
1,1,1-Trichloroethane	0.2310 0.3619	0.3581	0.3436	0.3511	0.3433	Ave		0.3315			0.1000	15.0		20.0			
Cyclohexane	0.3898 0.4056	0.4376	0.3701	0.3848	0.3972	Ave		0.3975			0.1000	5.8		20.0			
1,1-Dichloropropene	0.3995 0.3378	0.3118	0.3345	0.3255	0.3350	Ave		0.3407				8.9		20.0			
Carbon tetrachloride	0.2492 0.3235	0.2261	0.2886	0.2866	0.3133	Ave		0.2812			0.1000	13.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0043 0.0040	0.0036	0.0036	0.0031	0.0031	Ave		0.0036				13.2		20.0			
1,2-Dichloroethane	0.3304 0.3427	0.3818	0.3704	0.3442	0.3465	Ave		0.3526			0.1000	5.5		20.0			
Benzene	0.9670 0.9515	1.0258	1.0052	0.9246	0.9544	Ave		0.9714			0.5000	3.8		20.0			
n-Heptane	+++++ 0.1893	0.3175	0.1578	0.1855	0.1906	Lin1	0.1022	0.1838				15.2			0.9960		0.9900
Trichloroethene	0.3753 0.2985	0.2908	0.3110	0.2872	0.2915	Ave		0.3091			0.1500	10.9		20.0			
Methylcyclohexane	0.3243 0.3998	0.3368	0.3422	0.3780	0.3862	Ave		0.3612			0.1000	8.5		20.0			
1,2-Dichloropropane	0.2207 0.2136	0.2133	0.2107	0.1993	0.2109	Ave		0.2114			0.1000	3.3		20.0			
Dibromomethane	0.1767 0.1771	0.1931	0.1851	0.1730	0.1784	Ave		0.1806				4.0		20.0			
1,4-Dioxane	+++++ 0.0035	0.0024	0.0035	0.0027	0.0018	Ave		0.0028				26.2	*	20.0			
Dichlorobromomethane	0.2739 0.3160	0.2582	0.2990	0.2840	0.3154	Ave		0.2911			0.1500	8.0		20.0			
2-Chloroethyl vinyl ether	0.1462 0.1551	0.1460	0.1586	0.1501	0.1535	Ave		0.1516				3.3		20.0			
cis-1,3-Dichloropropene	0.2888 0.3687	0.2675	0.3249	0.3301	0.3601	Ave		0.3234			0.1500	12.2		20.0			
4-Methyl-2-pentanone (MIBK)	0.1574 0.1801	0.1842	0.1943	0.1777	0.1811	Ave		0.1791			0.0500	6.8		20.0			
Toluene	1.2974 1.2430	1.3018	1.3247	1.2225	1.2457	Ave		1.2725			0.4000	3.2		20.0			
trans-1,3-Dichloropropene	0.3268 0.4000	0.2952	0.3400	0.3424	0.3843	Ave		0.3481			0.1000	11.0		20.0			
Ethyl methacrylate	0.2669 0.3513	0.2781	0.3168	0.3195	0.3384	Ave		0.3118				10.6		20.0			
1,1,2-Trichloroethane	0.2654 0.2601	0.2716	0.2741	0.2546	0.2611	Ave		0.2645			0.1000	2.8		20.0			
1,3-Dichloropropane	0.4636 0.4553	0.4813	0.4862	0.4497	0.4647	Ave		0.4668				3.1		20.0			
Tetrachloroethene	0.3483 0.3115	0.3380	0.3231	0.3076	0.3110	Ave		0.3233			0.1500	5.1		20.0			
2-Hexanone	0.0980 0.1450	0.1523	0.1491	0.1455	0.1448	Ave		0.1391			0.0500	14.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2248 0.2779	0.2204	0.2485	0.2358	0.2696	Ave		0.2462				9.6		20.0			
Ethylene Dibromide	0.2719 0.2860	0.3184	0.2978	0.2804	0.2914	Ave		0.2910				5.5		20.0			
Chlorobenzene	1.0111 0.8982	0.9177	0.9617	0.8843	0.9077	Ave		0.9301			0.3000	5.1		20.0			
1,1,1,2-Tetrachloroethane	0.1999 0.2978	0.2526	0.2761	0.2649	0.2909	Ave		0.2637				13.4		20.0			
Ethylbenzene	0.4719 0.4843	0.4708	0.5044	0.4559	0.4785	Ave		0.4776				3.4		20.0			
m-Xylene & p-Xylene	0.5941 0.6058	0.5620	0.5926	0.5621	0.6063	Ave		0.5871				3.5		20.0			
o-Xylene	0.5592 0.5905	0.5582	0.5974	0.5704	0.5860	Ave		0.5770				2.9		20.0			
Styrene	0.8902 1.0393	0.8455	1.0133	0.9537	1.0269	Ave		0.9615			0.3000	8.3		20.0			
Bromoform	+++++ 0.1652	0.0959	0.1279	0.1334	0.1562	Ave		0.1357			0.1000	20.0		20.0			
Isopropylbenzene	1.3507 1.4574	1.2219	1.4603	1.3823	1.4500	Ave		1.3871			0.1000	6.7		20.0			
1,1,2,2-Tetrachloroethane	0.6885 0.6446	0.6573	0.6674	0.6432	0.6471	Ave		0.6580			0.3000	2.7		20.0			
Bromobenzene	0.7718 0.7016	0.7753	0.7383	0.6883	0.7214	Ave		0.7328				4.9		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1490	0.1138	0.1042	0.1138	0.1347	Ave		0.1231				14.8		20.0			
1,2,3-Trichloropropane	0.2062 0.2512	0.2980	0.2786	0.2521	0.2552	Ave		0.2569				12.1		20.0			
N-Propylbenzene	0.7981 0.7663	0.7624	0.7460	0.7326	0.7540	Ave		0.7599				2.9		20.0			
2-Chlorotoluene	0.6495 0.6780	0.6827	0.6878	0.6634	0.6825	Ave		0.6740				2.2		20.0			
1,3,5-Trimethylbenzene	1.8581 2.2405	1.9159	2.1456	2.1564	2.2261	Ave		2.0904				7.8		20.0			
4-Chlorotoluene	0.7579 0.7331	0.7026	0.7389	0.6937	0.7410	Ave		0.7279				3.4		20.0			
tert-Butylbenzene	1.8339 2.1950	1.7323	1.9743	2.1074	2.1977	Ave		2.0067				9.7		20.0			
1,2,4-Trimethylbenzene	2.1138 2.3815	2.1477	2.3096	2.2435	2.3570	Ave		2.2588				4.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	0.5081 0.6079	0.5170	0.5751	0.5826	0.5961	Ave		0.5645				7.4		20.0			
1,3-Dichlorobenzene	1.4254 1.3692	1.3704	1.4152	1.3314	1.3805	Ave		1.3820			0.6000	2.5		20.0			
4-Isopropyltoluene	2.0316 2.3944	1.9116	2.3288	2.2643	2.4164	Ave		2.2245				9.3		20.0			
1,4-Dichlorobenzene	1.5587 1.4268	1.4528	1.4599	1.3892	1.4437	Ave		1.4552			0.5000	3.9		20.0			
n-Butylbenzene	1.8336 1.9530	1.6838	1.8461	1.8181	1.9039	Ave		1.8397				5.0		20.0			
1,2-Dichlorobenzene	1.6168 1.3270	1.4725	1.3520	1.3299	1.3486	Ave		1.4078			0.4000	8.2		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1479	0.1247	0.1230	0.1331	0.1357	Ave		0.1329			0.0500	7.5		20.0			
1,2,4-Trichlorobenzene	0.9108 0.8218	0.8031	0.8013	0.7738	0.7794	Ave		0.8150			0.2000	6.1		20.0			
Hexachlorobutadiene	0.3323 0.2931	0.2348	0.2958	0.2786	0.2840	Ave		0.2864				11.0		20.0			
Naphthalene	2.3389 2.4919	2.2285	2.4380	2.3996	2.4112	Ave		2.3847				3.8		20.0			
1,2,3-Trichlorobenzene	0.7323 0.7742	0.7009	0.8014	0.7516	0.7374	Ave		0.7496				4.7		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2355	0.2374	0.2513	0.2257	0.2404	Ave		0.2381				3.9		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2893	0.2824	0.2946	0.2732	0.2823	Ave		0.2844				2.9		20.0			
Toluene-d8 (Surr)	+++++ 1.1017	1.1137	1.1673	1.0744	1.1092	Ave		1.1133				3.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4489	0.4705	0.4506	0.4235	0.4565	Ave		0.4500				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-292814/9	UX965278.D
Level 2	STD8260 240-292814/10	UX965279.D
Level 3	STD8260 240-292814/11	UX965280.D
Level 4	ICIS 240-292814/12	UX965281.D
Level 5	STD8260 240-292814/13	UX965282.D
Level 6	STD8260 240-292814/14	UX965283.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	5685 954174	12378	136552	289057	581630	0.500 60.0	1.00	10.0	20.0	40.0
Chloromethane	FB	Ave	+++++ 615136	10392	104910	191021	398602	+++++ 60.0	1.00	10.0	20.0	40.0
Vinyl chloride	FB	Ave	6739 735166	10622	113884	235431	460702	0.500 60.0	1.00	10.0	20.0	40.0
Butadiene	FB	Ave	7547 732013	13491	110867	232575	458915	0.500 60.0	1.00	10.0	20.0	40.0
Bromomethane	FB	Ave	5512 687979	9266	96383	191310	372251	0.500 60.0	1.00	10.0	20.0	40.0
Chloroethane	FB	Ave	3767 565421	8718	85590	160656	341394	0.500 60.0	1.00	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	11079 1284692	21721	211885	391742	852179	0.500 60.0	1.00	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	8641 1295651	18635	186542	385924	827035	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl ether	FB	Ave	4353 479245	8245	76227	142342	310442	0.500 60.0	1.00	10.0	20.0	40.0
Acrolein	FB	Ave	2503 289086	4876	47125	89835	190881	2.50 300	5.00	50.0	100	200
1,1-Dichloroethene	FB	Ave	9821 1059146	15156	158659	319662	711321	0.500 60.0	1.00	10.0	20.0	40.0
Acetone	FB	Lin1	+++++ 340149	10865	58331	108888	201888	+++++ 120	2.00	20.0	40.0	80.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	5613 774542	12328	106304	231996	516432	0.500 60.0	1.00	10.0	20.0	40.0
Iodomethane	FB	Ave	9689 1169071	17155	187900	361809	783840	0.500 60.0	1.00	10.0	20.0	40.0
Carbon disulfide	FB	Ave	19988 1680853	32292	270904	532378	1145809	0.500 60.0	1.00	10.0	20.0	40.0
3-Chloro-1-propene	FB	Ave	7663 719023	13057	106257	212295	415028	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	8178 754267	14329	119928	239509	499522	1.00 120	2.00	20.0	40.0	80.0
Methylene Chloride	FB	Ave	+++++ 734339	16084	123196	212240	486473	+++++ 60.0	1.00	10.0	20.0	40.0
2-Methyl-2-propanol	FB	Ave	3686 506975	8418	75539	157415	296012	5.00 600	10.0	100	200	400
Acrylonitrile	FB	Ave	17112 1977634	36956	313787	621852	1286685	5.00 600	10.0	100	200	400
Methyl tert-butyl ether	FB	Ave	16180 1922112	30416	296884	591260	1272043	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	5750 795108	12530	122089	240843	516246	0.500 60.0	1.00	10.0	20.0	40.0
Hexane	FB	Ave	4879 703376	10689	85360	210946	443346	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	7833 988199	15221	146082	287950	623166	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl acetate	FB	Ave	6267 836371	12541	116005	235138	525830	0.500 60.0	1.00	10.0	20.0	40.0
2-Butanone (MEK)	FB	Ave	4075 452955	7804	71845	139542	292187	1.00 120	2.00	20.0	40.0	80.0
cis-1,2-Dichloroethene	FB	Ave	6754 733633	11498	112717	213866	469522	0.500 60.0	1.00	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	3924 543218	9050	75049	154791	341978	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	3872 426075	7148	71863	131428	286428	0.500 60.0	1.00	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	+++++ 274513	4995	45927	86469	183449	+++++ 120	2.00	20.0	40.0	80.0
Chloroform	FB	Ave	8879 1093735	17036	167728	329349	703921	0.500 60.0	1.00	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	4924 964535	14554	134365	287807	583384	0.500 60.0	1.00	10.0	20.0	40.0
Cyclohexane	FB	Ave	8308 1080919	17789	144706	315372	674900	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	8516 900336	12674	130796	266804	569359	0.500 60.0	1.00	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	5311 862298	9192	112851	234881	532376	0.500 60.0	1.00	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	2290 269233	3696	35000	63142	133659	12.5 1500	25.0	250	500	1000
1,2-Dichloroethane	FB	Ave	7042 913249	15519	144844	282093	588758	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	20611 2536080	41695	393060	757865	1621801	0.500 60.0	1.00	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 504588	12906	61687	152078	323815	+++++ 60.0	1.00	10.0	20.0	40.0
Trichloroethene	FB	Ave	8000 795508	11822	121619	235427	495274	0.500 60.0	1.00	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	6912 1065533	13690	133819	309799	656360	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	4705 569330	8671	82371	163330	358410	0.500 60.0	1.00	10.0	20.0	40.0
Dibromomethane	FB	Ave	3767 472005	7848	72370	141785	303231	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	+++++ 185404	1985	27483	44916	60659	+++++ 1200	20.0	200	400	800
Dichlorobromomethane	FB	Ave	5839 842151	10497	116933	232780	535968	0.500 60.0	1.00	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	6234 826693	11870	124040	246030	521829	1.00 120	2.00	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	6156 982634	10874	127060	270597	611882	0.500 60.0	1.00	10.0	20.0	40.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	6711 959962	14977	151936	291354	615351	1.00 120	2.00	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	24057 3002786	45089	461223	895701	1909735	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	6060 966376	10224	118376	250874	589175	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	4949 848557	9632	110296	234093	518799	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4921 628230	9407	95428	186554	400214	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	8597 1099943	16672	169277	329461	712483	0.500 60.0	1.00	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	6459 752572	11708	112485	225365	476804	0.500 60.0	1.00	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	3636 700551	10548	103835	213161	443956	1.00 120	2.00	20.0	40.0	80.0
Chlorodibromomethane	CBNZ d5	Ave	4169 671343	7634	86516	172770	413340	0.500 60.0	1.00	10.0	20.0	40.0
Ethylene Dibromide	CBNZ d5	Ave	5042 691008	11029	103684	205480	446671	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobenzene	CBNZ d5	Ave	18748 2169768	31784	334854	647930	1391627	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3707 719462	8748	96122	194074	446005	0.500 60.0	1.00	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	8750 1169909	16308	175603	334004	733598	0.500 60.0	1.00	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	11015 1463466	19465	206310	411858	929521	0.500 60.0	1.00	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	10369 1426538	19335	207982	417945	898344	0.500 60.0	1.00	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	16506 2510679	29285	352807	698775	1574232	0.500 60.0	1.00	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	+++++ 399164	3323	44548	97758	239400	+++++ 60.0	1.00	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	25044 3520791	42323	508420	1012795	2223003	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6856 871047	11622	131337	257657	553435	0.500 60.0	1.00	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	7685 948089	13709	145299	275705	617007	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 201317	2012	20509	45570	115205	+++++ 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	2053 339514	5270	54828	100993	218290	0.500 60.0	1.00	10.0	20.0	40.0
N-Propylbenzene	DCBd 4	Ave	7947 1035475	13481	146818	293453	644900	0.500 60.0	1.00	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	6467 916196	12072	135357	265753	583727	0.500 60.0	1.00	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	18502 3027571	33877	422263	863781	1903943	0.500 60.0	1.00	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	7547 990666	12424	145417	277885	633723	0.500 60.0	1.00	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	18261 2966171	30630	388541	844144	1879588	0.500 60.0	1.00	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	21048 3218159	37976	454521	898687	2015831	0.500 60.0	1.00	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	5059 821422	9141	113182	233388	509809	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	14194 1850163	24232	278515	533337	1180712	0.500 60.0	1.00	10.0	20.0	40.0
4-Isopropyltoluene	DCBd 4	Ave	20230 3235579	33800	458308	907013	2066628	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dichlorobenzene	DCBd 4	Ave	15521 1928110	25689	287314	556455	1234710	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	18258 2639097	29773	363310	728277	1628376	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	16099 1793215	26036	266075	532709	1153426	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 199908	2205	24199	53334	116027	+++++ 60.0	1.00	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	9069 1110491	14201	157691	309942	666615	0.500 60.0	1.00	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	3309 396045	4152	58217	111601	242882	0.500 60.0	1.00	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	23290 3367367	39404	479800	961214	2062242	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7292 1046191	12393	157712	301061	630635	0.500 60.0	1.00	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 627787	9651	98261	184979	408478	+++++ 60.0	1.00	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 771109	11478	115207	223928	479649	+++++ 60.0	1.00	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 2661561	38574	406417	787192	1700544	+++++ 60.0	1.00	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 1084379	16296	156882	310270	699868	+++++ 60.0	1.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: BFB3822.D BFB Injection Date: 10/13/2017

Instrument ID: A3UX9 BFB Injection Time: 12:22

Analysis Batch No.: 298976

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	49.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.3	
175	5.0 - 9.0 % of mass 174	6.4	(8.0) 1
176	95.0 - 101.0 % of mass 174	78.6	(99.1) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-298976/3	UX966344.D	10/13/2017	12:47
	LCS 240-298976/4	UX966345.D	10/13/2017	13:10
	CCV 240-298976/5	UX966346.D	10/13/2017	13:34
	MB 240-298976/7	UX966348.D	10/13/2017	14:22
MRC-MW121B-100917	240-86215-1	UX966356.D	10/13/2017	17:34
MRC-MW117B-100917	240-86215-2	UX966357.D	10/13/2017	17:58
TRIP BLANK	240-86215-3	UX966358.D	10/13/2017	18:22
	240-86277-B-4 MS	UX966363.D	10/13/2017	20:22
	240-86277-B-4 MSD	UX966364.D	10/13/2017	20:46

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 240-298976/3 Calibration Date: 10/13/2017 12:47

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX966344.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3289	0.3576	0.1000	0.0217	0.0200	8.7	20.0
Chloromethane	Ave	0.2445	0.3202	0.1000	0.0262	0.0200	31.0*	20.0
Vinyl chloride	Ave	0.2838	0.3426	0.1000	0.0241	0.0200	20.7*	20.0
Butadiene	Ave	0.2997	0.3108		0.0207	0.0200	3.7	20.0
Bromomethane	Ave	0.2406	0.2615	0.0500	0.0217	0.0200	8.7	20.0
Chloroethane	Ave	0.2032	0.2488	0.0500	0.0245	0.0200	22.5*	20.0
Dichlorofluoromethane	Ave	0.5096	0.5925		0.0233	0.0200	16.3	20.0
Trichlorofluoromethane	Ave	0.4641	0.5010	0.1000	0.0216	0.0200	8.0	20.0
Ethyl ether	Ave	0.1897	0.2029		0.0214	0.0200	7.0	20.0
Acrolein	Ave	0.0229	0.0370		0.161	0.100	61.1*	50.0
1,1-Dichloroethene	Ave	0.4076	0.4522	0.1000	0.0222	0.0200	11.0	20.0
Acetone	Lin1		0.0717	0.0100	0.0443	0.0400	10.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2860	0.2999	0.0500	0.0210	0.0200	4.8	20.0
Iodomethane	Ave	0.4497	0.4505		0.0200	0.0200	0.2	20.0
Carbon disulfide	Ave	0.7299	0.6686	0.1000	0.0183	0.0200	-8.4	20.0
3-Chloro-1-propene	Ave	0.2876	0.3110		0.0216	0.0200	8.1	20.0
Methyl acetate	Ave	0.1593	0.1738	0.1000	0.0436	0.0400	9.1	20.0
Methylene Chloride	Ave	0.3063	0.3587	0.1000	0.0234	0.0200	17.1	50.0
2-Methyl-2-propanol	Ave	0.0188	0.0186		0.197	0.200	-1.4	50.0
Acrylonitrile	Ave	0.0795	0.0882		0.222	0.200	10.9	20.0
Methyl tert-butyl ether	Ave	0.7430	0.7463	0.1000	0.0201	0.0200	0.4	20.0
trans-1,2-Dichloroethene	Ave	0.2977	0.3307	0.1000	0.0222	0.0200	11.1	20.0
Hexane	Ave	0.2487	0.2791		0.0224	0.0200	12.2	20.0
1,1-Dichloroethane	Ave	0.3674	0.4231	0.2000	0.0230	0.0200	15.2	20.0
Vinyl acetate	Ave	0.3016	0.3217		0.0213	0.0200	6.7	50.0
2-Butanone (MEK)	Ave	0.0899	0.1028	0.0100	0.0457	0.0400	14.3	20.0
cis-1,2-Dichloroethene	Ave	0.2834	0.3042	0.1000	0.0215	0.0200	7.3	20.0
2,2-Dichloropropane	Ave	0.1988	0.2210		0.0222	0.0200	11.2	20.0
Chlorobromomethane	Ave	0.1717	0.2024		0.0236	0.0200	17.9	20.0
Tetrahydrofuran	Ave	0.0557	0.0610		0.0438	0.0400	9.5	20.0
Chloroform	Ave	0.4152	0.4411	0.2000	0.0213	0.0200	6.3	20.0
1,1,1-Trichloroethane	Ave	0.3315	0.3527	0.1000	0.0213	0.0200	6.4	20.0
Cyclohexane	Ave	0.3975	0.3227	0.1000	0.0162	0.0200	-18.8	20.0
1,1-Dichloropropene	Ave	0.3407	0.3649		0.0214	0.0200	7.1	20.0
Carbon tetrachloride	Ave	0.2812	0.2740	0.1000	0.0195	0.0200	-2.6	20.0
Isobutyl alcohol	Ave	0.0036	0.0060		0.826	0.500	65.2*	20.0
1,2-Dichloroethane	Ave	0.3526	0.3640	0.1000	0.0206	0.0200	3.2	20.0
Benzene	Ave	0.9714	1.098	0.5000	0.0226	0.0200	13.0	20.0
n-Heptane	Lin1		0.1784		0.0189	0.0200	-5.7	20.0
Trichloroethene	Ave	0.3091	0.2989	0.1500	0.0193	0.0200	-3.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 240-298976/3 Calibration Date: 10/13/2017 12:47

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX966344.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3612	0.3792	0.1000	0.0210	0.0200	5.0	20.0
1,2-Dichloropropane	Ave	0.2114	0.2477	0.1000	0.0234	0.0200	17.1	20.0
1,4-Dioxane	Ave	0.0028	0.0033		0.479	0.400	19.8	50.0
Dibromomethane	Ave	0.1806	0.1749		0.0194	0.0200	-3.2	20.0
Dichlorobromomethane	Ave	0.2911	0.3199	0.1500	0.0220	0.0200	9.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1516	0.1637		0.0432	0.0400	8.0	20.0
cis-1,3-Dichloropropene	Ave	0.3234	0.3720	0.1500	0.0230	0.0200	15.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1791	0.1966	0.0500	0.0439	0.0400	9.7	20.0
Toluene	Ave	1.273	1.406	0.4000	0.0221	0.0200	10.5	20.0
trans-1,3-Dichloropropene	Ave	0.3481	0.3854	0.1000	0.0221	0.0200	10.7	20.0
Ethyl methacrylate	Ave	0.3118	0.3373		0.0216	0.0200	8.2	20.0
1,1,2-Trichloroethane	Ave	0.2645	0.2940	0.1000	0.0222	0.0200	11.2	20.0
1,3-Dichloropropane	Ave	0.4668	0.5220		0.0224	0.0200	11.8	20.0
Tetrachloroethene	Ave	0.3233	0.3208	0.1500	0.0198	0.0200	-0.8	20.0
2-Hexanone	Ave	0.1391	0.1587	0.0500	0.0456	0.0400	14.1	20.0
Chlorodibromomethane	Ave	0.2462	0.2577		0.0209	0.0200	4.7	20.0
Ethylene Dibromide	Ave	0.2910	0.2950		0.0203	0.0200	1.4	20.0
Chlorobenzene	Ave	0.9301	0.9635	0.3000	0.0207	0.0200	3.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2637	0.2823		0.0214	0.0200	7.1	20.0
Ethylbenzene	Ave	0.4776	0.5043		0.0211	0.0200	5.6	20.0
m-Xylene & p-Xylene	Ave	0.5871	0.6291		0.0214	0.0200	7.1	20.0
o-Xylene	Ave	0.5770	0.6107		0.0212	0.0200	5.9	20.0
Styrene	Ave	0.9615	1.075	0.3000	0.0224	0.0200	11.8	20.0
Bromoform	Ave	0.1357	0.1435	0.1000	0.0211	0.0200	5.7	20.0
Isopropylbenzene	Ave	1.387	1.469	0.1000	0.0212	0.0200	5.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6580	0.7136	0.3000	0.0217	0.0200	8.4	20.0
Bromobenzene	Ave	0.7328	0.7276		0.0199	0.0200	-0.7	20.0
1,2,3-Trichloropropane	Ave	0.2569	0.2613		0.0203	0.0200	1.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.1423		0.0231	0.0200	15.6	20.0
N-Propylbenzene	Ave	0.7599	0.7301		0.0192	0.0200	-3.9	20.0
2-Chlorotoluene	Ave	0.6740	0.6962		0.0207	0.0200	3.3	20.0
1,3,5-Trimethylbenzene	Ave	2.090	2.206		0.0211	0.0200	5.5	20.0
4-Chlorotoluene	Ave	0.7279	0.7430		0.0204	0.0200	2.1	20.0
tert-Butylbenzene	Ave	2.007	2.106		0.0210	0.0200	4.9	20.0
1,2,4-Trimethylbenzene	Ave	2.259	2.357		0.0209	0.0200	4.3	20.0
sec-Butylbenzene	Ave	0.5645	0.5896		0.0209	0.0200	4.5	20.0
1,3-Dichlorobenzene	Ave	1.382	1.411	0.6000	0.0204	0.0200	2.1	20.0
4-Isopropyltoluene	Ave	2.225	2.330		0.0209	0.0200	4.7	20.0
1,4-Dichlorobenzene	Ave	1.455	1.484	0.5000	0.0204	0.0200	2.0	20.0
n-Butylbenzene	Ave	1.840	1.924		0.0209	0.0200	4.6	20.0
1,2-Dichlorobenzene	Ave	1.408	1.383	0.4000	0.0196	0.0200	-1.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 240-298976/3 Calibration Date: 10/13/2017 12:47

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX966344.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1329	0.1092	0.0500	0.0164	0.0200	-17.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8150	0.7824	0.2000	0.0192	0.0200	-4.0	50.0
Hexachlorobutadiene	Ave	0.2864	0.2969		0.0207	0.0200	3.7	20.0
Naphthalene	Ave	2.385	2.214		0.0186	0.0200	-7.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7496	0.7293		0.0195	0.0200	-2.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2381	0.2248		0.0189	0.0200	-5.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2844	0.2786		0.0196	0.0200	-2.0	20.0
Toluene-d8 (Surr)	Ave	1.113	1.149		0.0206	0.0200	3.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4500	0.4343		0.0193	0.0200	-3.5	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: UX966348.D Lab Sample ID: MB 240-298976/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX9 Date Analyzed: 10/13/2017 14:22

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-298976/4	UX966345.D	10/13/2017 13:10
MRC-MW121B-100917	240-86215-1	UX966356.D	10/13/2017 17:34
MRC-MW117B-100917	240-86215-2	UX966357.D	10/13/2017 17:58
TRIP BLANK	240-86215-3	UX966358.D	10/13/2017 18:22
	240-86277-B-4 MS	UX966363.D	10/13/2017 20:22
	240-86277-B-4 MSD	UX966364.D	10/13/2017 20:46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298976/7

Matrix: Water | Lab File ID: UX966348.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 14:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298976/7

Matrix: Water | Lab File ID: UX966348.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 14:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.692	J	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	91		69-124
460-00-4	4-Bromofluorobenzene (Surr)	86		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		61-138

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966345.D

Lab ID: LCS 240-298976/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	21.4	107	64-147	
1,1,2,2-Tetrachloroethane	20.0	21.6	108	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3	102	65-144	
1,1,2-Trichloroethane	20.0	22.0	110	76-121	
1,1-Dichloroethane	20.0	22.7	113	74-120	
1,1-Dichloroethene	20.0	21.6	108	65-127	
1,2,4-Trichlorobenzene	20.0	18.9	95	34-141	
1,2-Dibromo-3-Chloropropane	20.0	16.7	83	50-130	
Ethylene Dibromide	20.0	19.9	100	80-120	
1,2-Dichlorobenzene	20.0	20.0	100	80-120	
1,2-Dichloroethane	20.0	20.2	101	68-133	
1,2-Dichloropropane	20.0	23.8	119	78-127	
1,3-Dichlorobenzene	20.0	20.7	103	80-120	
1,4-Dichlorobenzene	20.0	20.5	102	80-120	
2-Butanone (MEK)	40.0	44.0	110	43-149	
2-Hexanone	40.0	45.3	113	28-169	
4-Methyl-2-pentanone (MIBK)	40.0	42.6	107	53-144	
Acetone	40.0	42.0	105	35-131	
Benzene	20.0	22.2	111	79-120	
Dichlorobromomethane	20.0	20.9	104	79-125	
Bromoform	20.0	20.3	101	55-145	
Bromomethane	20.0	20.9	104	17-158	
Carbon disulfide	20.0	18.2	91	49-141	
Carbon tetrachloride	20.0	19.6	98	55-171	
Chlorobenzene	20.0	20.7	103	80-120	
Chloroethane	20.0	23.4	117	10-149	
Chloroform	20.0	21.6	108	80-120	
Chloromethane	20.0	27.8	139	59-124	*
cis-1,2-Dichloroethene	20.0	21.6	108	77-120	
cis-1,3-Dichloropropene	20.0	23.4	117	75-120	
Cyclohexane	20.0	15.6	78	66-135	
Chlorodibromomethane	20.0	20.1	101	64-129	
Dichlorodifluoromethane	20.0	18.8	94	42-141	
Ethylbenzene	20.0	20.7	104	80-120	
Isopropylbenzene	20.0	21.4	107	80-128	
Methyl acetate	40.0	41.4	104	63-137	
Methyl tert-butyl ether	20.0	19.7	98	73-120	
Methylcyclohexane	20.0	20.1	100	63-141	
Methylene Chloride	20.0	22.8	114	64-140	
Styrene	20.0	21.6	108	80-121	
Tetrachloroethene	20.0	19.2	96	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966345.D

Lab ID: LCS 240-298976/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	22.0	110	78-120	
trans-1,2-Dichloroethene	20.0	22.8	114	74-124	
trans-1,3-Dichloropropene	20.0	21.3	106	67-120	
Trichloroethene	20.0	19.3	96	76-124	
Trichlorofluoromethane	20.0	19.6	98	27-176	
Vinyl chloride	20.0	23.0	115	65-124	
Xylenes, Total	40.0	42.3	106	80-120	
m-Xylene & p-Xylene	20.0	21.3	107	80-120	
o-Xylene	20.0	21.0	105	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966363.D

Lab ID: 240-86277-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	29 U	2260	90	57-156	
1,1,2,2-Tetrachloroethane	2500	40 U	2530	101	51-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	51 U	2310	93	58-137	
1,1,2-Trichloroethane	2500	43 U	2520	101	68-127	
1,1-Dichloroethane	2500	31 U	2520	101	69-122	
1,1-Dichloroethene	2500	34 U	2650	106	62-127	
1,2,4-Trichlorobenzene	2500	34 U	2120	85	26-138	
1,2-Dibromo-3-Chloropropane	2500	59 U	1670	67	48-130	
Ethylene Dibromide	2500	29 U	2220	89	73-121	
1,2-Dichlorobenzene	2500	33 U	2300	92	70-120	
1,2-Dichloroethane	2500	38 U	2280	91	64-138	
1,2-Dichloropropane	2500	38 U	2660	107	72-131	
1,3-Dichlorobenzene	2500	40 U	2320	93	71-120	
1,4-Dichlorobenzene	2500	29 U	2320	93	72-120	
2-Butanone (MEK)	5000	10000	14800	90	34-153	
2-Hexanone	5000	150 U	6010	120	21-184	
4-Methyl-2-pentanone (MIBK)	5000	610 J	5550	99	53-147	
Acetone	5000	16000	20000	90	19-133	E
Benzene	2500	35 U	2520	101	69-127	
Dichlorobromomethane	2500	38 U	2280	91	75-128	
Bromoform	2500	54 U	1970	79	61-135	
Bromomethane	2500	53 U	2460	98	10-148	
Carbon disulfide	2500	43 U	1970	79	46-143	
Carbon tetrachloride	2500	44 U	1980	79	53-175	
Chlorobenzene	2500	40 U	2300	92	76-120	
Chloroethane	2500	51 U	2890	115	10-141	
Chloroform	2500	39 U	2440	98	74-125	
Chloromethane	2500	54 U	3180	127	34-127	
cis-1,2-Dichloroethene	2500	38 U	2370	95	69-127	
cis-1,3-Dichloropropene	2500	33 U	2460	98	68-120	
Cyclohexane	2500	55 U	1760	70	56-135	
Chlorodibromomethane	2500	31 U	2030	81	62-131	
Dichlorodifluoromethane	2500	63 U	2460	98	45-130	
Ethylbenzene	2500	33 U	2320	93	72-121	
Isopropylbenzene	2500	26 U	2370	95	70-132	
Methyl acetate	5000	180 U	5050	101	52-139	
Methyl tert-butyl ether	2500	34 U	2190	88	67-125	
Methylcyclohexane	2500	56 U	2190	88	46-139	
Methylene Chloride	2500	68 J	2660	104	52-137	
Styrene	2500	29 U	2390	95	74-125	
Tetrachloroethene	2500	38 U	2210	88	69-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966363.D

Lab ID: 240-86277-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	2500	29 U	2490	99	69-125	
trans-1,2-Dichloroethene	2500	36 U	2620	105	66-131	
trans-1,3-Dichloropropene	2500	39 U	2160	86	59-120	
Trichloroethene	2500	41 U	2180	87	68-129	
Trichlorofluoromethane	2500	63 U	2470	99	28-172	
Vinyl chloride	2500	56 U	2760	110	55-123	
Xylenes, Total	5000	30 U	4680	94	71-122	
m-Xylene & p-Xylene	2500	30 U	2320	93	70-121	
o-Xylene	2500	35 U	2360	94	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966364.D

Lab ID: 240-86277-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	2330	93	3	13	57-156	
1,1,2,2-Tetrachloroethane	2500	2450	98	3	17	51-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2180	87	6	35	58-137	
1,1,2-Trichloroethane	2500	2640	106	4	11	68-127	
1,1-Dichloroethane	2500	2670	107	6	11	69-122	
1,1-Dichloroethene	2500	2530	101	5	14	62-127	
1,2,4-Trichlorobenzene	2500	2080	83	2	35	26-138	
1,2-Dibromo-3-Chloropropane	2500	1700	68	1	31	48-130	
Ethylene Dibromide	2500	2400	96	8	12	73-121	
1,2-Dichlorobenzene	2500	2240	89	3	19	70-120	
1,2-Dichloroethane	2500	2430	97	6	11	64-138	
1,2-Dichloropropane	2500	2880	115	8	12	72-131	
1,3-Dichlorobenzene	2500	2270	91	2	18	71-120	
1,4-Dichlorobenzene	2500	2260	90	3	17	72-120	
2-Butanone (MEK)	5000	15500	105	5	23	34-153	E
2-Hexanone	5000	6050	121	1	12	21-184	
4-Methyl-2-pentanone (MIBK)	5000	5740	103	3	16	53-147	
Acetone	5000	19900	88	1	35	19-133	E
Benzene	2500	2640	106	5	10	69-127	
Dichlorobromomethane	2500	2420	97	6	13	75-128	
Bromoform	2500	2140	86	8	13	61-135	
Bromomethane	2500	2650	106	8	35	10-148	
Carbon disulfide	2500	1980	79	1	18	46-143	
Carbon tetrachloride	2500	2060	83	4	17	53-175	
Chlorobenzene	2500	2360	94	2	12	76-120	
Chloroethane	2500	3010	120	4	35	10-141	
Chloroform	2500	2510	100	3	11	74-125	
Chloromethane	2500	3450	138	8	25	34-127	F1
cis-1,2-Dichloroethene	2500	2530	101	6	11	69-127	
cis-1,3-Dichloropropene	2500	2650	106	8	13	68-120	
Cyclohexane	2500	1700	68	3	35	56-135	
Chlorodibromomethane	2500	2190	88	8	15	62-131	
Dichlorodifluoromethane	2500	2320	93	6	34	45-130	
Ethylbenzene	2500	2380	95	2	15	72-121	
Isopropylbenzene	2500	2370	95	0	16	70-132	
Methyl acetate	5000	4990	100	1	14	52-139	
Methyl tert-butyl ether	2500	2330	93	6	12	67-125	
Methylcyclohexane	2500	2020	81	8	35	46-139	
Methylene Chloride	2500	2700	105	1	12	52-137	
Styrene	2500	2480	99	4	14	74-125	
Tetrachloroethene	2500	2170	87	2	18	69-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966364.D

Lab ID: 240-86277-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	2500	2540	102	2	14	69-125	
trans-1,2-Dichloroethene	2500	2690	108	3	11	66-131	
trans-1,3-Dichloropropene	2500	2280	91	6	14	59-120	
Trichloroethene	2500	2200	88	1	12	68-129	
Trichlorofluoromethane	2500	2440	98	1	26	28-172	
Vinyl chloride	2500	2920	117	6	12	55-123	
Xylenes, Total	5000	4890	98	4	14	71-122	
m-Xylene & p-Xylene	2500	2410	97	4	15	70-121	
o-Xylene	2500	2480	99	5	15	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: UXM6928.D Lab Sample ID: MB 240-299702/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 10/19/2017 10:49

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-299702/5	UXM6926.D	10/19/2017 10:03
MRC-MW117B-100917	240-86215-2	UXM6944.D	10/19/2017 17:25
	200-40412-B-5 MS	UXM6950.D	10/19/2017 19:45
	200-40412-B-5 MSD	UXM6951.D	10/19/2017 20:08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299702/7

Matrix: Water | Lab File ID: UXM6928.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 10:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299702/7

Matrix: Water | Lab File ID: UXM6928.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 10:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		69-124
460-00-4	4-Bromofluorobenzene (Surr)	102		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		61-138

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6926.D

Lab ID: LCS 240-299702/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	24.1	120	64-147	
1,1,2,2-Tetrachloroethane	20.0	17.2	86	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.2	101	65-144	
1,1,2-Trichloroethane	20.0	19.1	96	76-121	
1,1-Dichloroethane	20.0	21.0	105	74-120	
1,1-Dichloroethene	20.0	23.6	118	65-127	
1,2,4-Trichlorobenzene	20.0	18.8	94	34-141	
1,2-Dibromo-3-Chloropropane	20.0	17.2	86	50-130	
Ethylene Dibromide	20.0	19.9	99	80-120	
1,2-Dichlorobenzene	20.0	18.9	94	80-120	
1,2-Dichloroethane	20.0	20.5	102	68-133	
1,2-Dichloropropane	20.0	20.6	103	78-127	
1,3-Dichlorobenzene	20.0	19.2	96	80-120	
1,4-Dichlorobenzene	20.0	19.1	95	80-120	
2-Butanone (MEK)	40.0	32.2	81	43-149	
2-Hexanone	40.0	35.0	88	28-169	
4-Methyl-2-pentanone (MIBK)	40.0	38.4	96	53-144	
Acetone	40.0	35.4	89	35-131	
Benzene	20.0	21.7	109	79-120	
Dichlorobromomethane	20.0	20.7	104	79-125	
Bromoform	20.0	17.5	88	55-145	
Bromomethane	20.0	23.2	116	17-158	
Carbon disulfide	20.0	22.6	113	49-141	
Carbon tetrachloride	20.0	22.0	110	55-171	
Chlorobenzene	20.0	20.2	101	80-120	
Chloroethane	20.0	21.9	110	10-149	
Chloroform	20.0	22.6	113	80-120	
Chloromethane	20.0	21.8	109	59-124	
cis-1,2-Dichloroethene	20.0	23.9	120	77-120	
cis-1,3-Dichloropropene	20.0	22.1	111	75-120	
Cyclohexane	20.0	17.7	89	66-135	
Chlorodibromomethane	20.0	19.6	98	64-129	
Dichlorodifluoromethane	20.0	18.3	92	42-141	
Ethylbenzene	20.0	21.4	107	80-120	
Isopropylbenzene	20.0	19.8	99	80-128	
Methyl acetate	40.0	34.9	87	63-137	
Methyl tert-butyl ether	20.0	21.4	107	73-120	
Methylcyclohexane	20.0	17.2	86	63-141	
Methylene Chloride	20.0	23.1	116	64-140	
Styrene	20.0	20.6	103	80-121	
Tetrachloroethene	20.0	18.2	91	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6926.D

Lab ID: LCS 240-299702/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	19.1	95	78-120	
trans-1,3-Dichloropropene	20.0	16.8	84	67-120	
Trichloroethene	20.0	22.9	115	76-124	
Trichlorofluoromethane	20.0	23.6	118	27-176	
Vinyl chloride	20.0	23.2	116	65-124	
Xylenes, Total	40.0	41.2	103	80-120	
m-Xylene & p-Xylene	20.0	20.9	105	80-120	
o-Xylene	20.0	20.3	102	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6950.D

Lab ID: 200-40412-B-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2000	23 U	2360	118	57-156	
1,1,2,2-Tetrachloroethane	2000	32 U	1690	85	51-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	2000	41 U	2460	123	58-137	
1,1,2-Trichloroethane	2000	34 U	1730	87	68-127	
1,1-Dichloroethane	2000	25 U	2020	101	69-122	
1,1-Dichloroethene	2000	27 U	2340	117	62-127	
1,2,4-Trichlorobenzene	2000	27 U	1650	83	26-138	
1,2-Dibromo-3-Chloropropane	2000	47 U	1540	77	48-130	
Ethylene Dibromide	2000	23 U	1840	92	73-121	
1,2-Dichlorobenzene	2000	26 U	1750	88	70-120	
1,2-Dichloroethane	2000	30 U	1910	96	64-138	
1,2-Dichloropropane	2000	30 U	1940	97	72-131	
1,3-Dichlorobenzene	2000	32 U	1790	90	71-120	
1,4-Dichlorobenzene	2000	23 U	1760	88	72-120	
2-Butanone (MEK)	4000	100 U	3050	76	34-153	
2-Hexanone	4000	120 U	3250	81	21-184	
4-Methyl-2-pentanone (MIBK)	4000	71 U	3590	90	53-147	
Acetone	4000	180 U	3600	90	19-133	
Benzene	2000	28 U	2050	103	69-127	
Dichlorobromomethane	2000	30 U	1960	98	75-128	
Bromoform	2000	43 U	1750	87	61-135	
Bromomethane	2000	42 U	2170	109	10-148	
Carbon disulfide	2000	34 U	2180	109	46-143	
Carbon tetrachloride	2000	35 U	2220	111	53-175	
Chlorobenzene	2000	32 U	1890	94	76-120	
Chloroethane	2000	41 U	1970	98	10-141	
Chloroform	2000	31 U	2160	108	74-125	
Chloromethane	2000	43 U	2010	101	34-127	
cis-1,2-Dichloroethene	2000	30 U	2230	111	69-127	
cis-1,3-Dichloropropene	2000	26 U	2060	103	68-120	
Chlorodibromomethane	2000	25 U	1810	90	62-131	
Dichlorodifluoromethane	2000	50 U	2130	106	45-130	
Ethylbenzene	2000	26 U	1980	99	72-121	
Isopropylbenzene	2000	21 U	1830	91	70-132	
Methyl tert-butyl ether	2000	27 U	2030	102	67-125	
Methylene Chloride	2000	53 U	2230	111	52-137	
Styrene	2000	23 U	1950	97	74-125	
Tetrachloroethene	2000	2800	4470	86	69-126	
Toluene	2000	23 U	1780	89	69-125	
trans-1,2-Dichloroethene	2000	29 U	2450	123	66-131	
trans-1,3-Dichloropropene	2000	31 U	1530	76	59-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6950.D

Lab ID: 200-40412-B-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Trichloroethene	2000	33 U	2040	102	68-129	
Trichlorofluoromethane	2000	50 U	2590	129	28-172	
Vinyl chloride	2000	45 U	2020	101	55-123	
Xylenes, Total	4000	24 U	3860	97	71-122	
m-Xylene & p-Xylene	2000	24 U	2020	101	70-121	
o-Xylene	2000	28 U	1840	92	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6951.D

Lab ID: 200-40412-B-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	2000	2570	128	9	13	57-156	
1,1,2,2-Tetrachloroethane	2000	1840	92	8	17	51-123	
1,1,2-Trichloro-1,2,2-trifluoroethane	2000	2350	118	4	35	58-137	
1,1,2-Trichloroethane	2000	1900	95	9	11	68-127	
1,1-Dichloroethane	2000	2220	111	9	11	69-122	
1,1-Dichloroethene	2000	2520	126	7	14	62-127	
1,2,4-Trichlorobenzene	2000	1930	96	15	35	26-138	
1,2-Dibromo-3-Chloropropane	2000	1690	85	10	31	48-130	
Ethylene Dibromide	2000	1960	98	6	12	73-121	
1,2-Dichlorobenzene	2000	1910	96	9	19	70-120	
1,2-Dichloroethane	2000	2120	106	10	11	64-138	
1,2-Dichloropropane	2000	2150	108	10	12	72-131	
1,3-Dichlorobenzene	2000	1940	97	8	18	71-120	
1,4-Dichlorobenzene	2000	1890	95	7	17	72-120	
2-Butanone (MEK)	4000	3300	83	8	23	34-153	
2-Hexanone	4000	3220	81	1	12	21-184	
4-Methyl-2-pentanone (MIBK)	4000	3760	94	5	16	53-147	
Acetone	4000	3700	93	3	35	19-133	
Benzene	2000	2210	111	8	10	69-127	
Dichlorobromomethane	2000	2110	105	7	13	75-128	
Bromoform	2000	1800	90	3	13	61-135	
Bromomethane	2000	2270	114	4	35	10-148	
Carbon disulfide	2000	2350	117	7	18	46-143	
Carbon tetrachloride	2000	2440	122	9	17	53-175	
Chlorobenzene	2000	2060	103	9	12	76-120	
Chloroethane	2000	2200	110	11	35	10-141	
Chloroform	2000	2420	121	12	11	74-125	F2
Chloromethane	2000	2240	112	11	25	34-127	
cis-1,2-Dichloroethene	2000	2500	125	12	11	69-127	F2
cis-1,3-Dichloropropene	2000	2220	111	8	13	68-120	
Chlorodibromomethane	2000	2020	101	11	15	62-131	
Dichlorodifluoromethane	2000	2080	104	2	34	45-130	
Ethylbenzene	2000	2210	111	11	15	72-121	
Isopropylbenzene	2000	2010	101	10	16	70-132	
Methyl tert-butyl ether	2000	2240	112	10	12	67-125	
Methylene Chloride	2000	2490	124	11	12	52-137	
Styrene	2000	2140	107	9	14	74-125	
Tetrachloroethene	2000	4750	99	6	18	69-126	
Toluene	2000	1920	96	7	14	69-125	
trans-1,2-Dichloroethene	2000	2620	131	6	11	66-131	
trans-1,3-Dichloropropene	2000	1660	83	9	14	59-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6951.D

Lab ID: 200-40412-B-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Trichloroethene	2000	2270	113	10	12	68-129	
Trichlorofluoromethane	2000	2570	128	1	26	28-172	
Vinyl chloride	2000	2280	114	12	12	55-123	
Xylenes, Total	4000	4220	106	9	14	71-122	
m-Xylene & p-Xylene	2000	2170	108	7	15	70-121	
o-Xylene	2000	2050	103	11	15	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MRC-MW121B-100917	240-86215-1	96	104	103	87
MRC-MW117B-100917	240-86215-2	114	104	91	103
MRC-MW117B-100917	240-86215-2	99	104	102	87
TRIP BLANK	240-86215-3	95	103	101	85
	MB 240-298976/7	91	99	100	86
	MB 240-299702/7	109	99	90	102
	LCS 240-298976/4	97	103	103	95
	LCS 240-299702/5	112	98	96	101
	240-86277-B-4 MS	95	101	103	95
	200-40412-B-5 MS	110	105	91	101
	240-86277-B-4 MSD	97	97	104	96
	200-40412-B-5 MSD	112	104	93	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	69-124
DCA = 1,2-Dichloroethane-d4 (Surr)	61-138
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	69-120

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: ICIS 240-297419/13 Date Analyzed: 10/03/2017 17:42

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6338.D Heated Purge: (Y/N) N

Calibration ID: 41708

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1085046	5.82	726412	8.51	474078	10.75
UPPER LIMIT		2170092	6.32	1452824	9.01	948156	11.25
LOWER LIMIT		542523	5.32	363206	8.01	237039	10.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297419/16		1187854	5.82	799475	8.51	529764	10.75
ICV 240-297419/25		982434	5.82	676071	8.51	463968	10.75
CCVIS 240-299702/3		867036	5.82	682099	8.51	466676	10.75

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCVIS 240-299702/3 Date Analyzed: 10/19/2017 09:16

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6924.D Heated Purge: (Y/N) N

Calibration ID: 41742

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		867036	5.82	682099	8.51	466676	10.75
UPPER LIMIT		1734072	6.32	1364198	9.01	933352	11.25
LOWER LIMIT		433518	5.32	341050	8.01	233338	10.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-299702/4		782770	5.82	665382	8.51	440712	10.75
LCS 240-299702/5		815133	5.82	661070	8.51	454027	10.75
MB 240-299702/7		779397	5.82	646953	8.51	440406	10.75
240-86215-2	MRC-MW117B-100917	752788	5.82	617797	8.51	412675	10.75
200-40412-B-5 MS		793214	5.82	663110	8.51	451558	10.75
200-40412-B-5 MSD		782963	5.82	654314	8.51	450161	10.75

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: ICIS 240-292814/12 Date Analyzed: 08/28/2017 16:53

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX965281.D Heated Purge: (Y/N) N

Calibration ID: 41275

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		819642	5.72	732704	8.41	400571	10.65
UPPER LIMIT		1639284	6.22	1465408	8.91	801142	11.15
LOWER LIMIT		409821	5.22	366352	7.91	200286	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-298976/3		865031	5.72	757048	8.41	427580	10.66
MB 240-298976/7		839092	5.72	732606	8.41	368009	10.65

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCVIS 240-298976/3 Date Analyzed: 10/13/2017 12:47

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX966344.D Heated Purge: (Y/N) N

Calibration ID: 41278

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		865031	5.72	757048	8.41	427580	10.66
UPPER LIMIT		1730062	6.22	1514096	8.91	855160	11.16
LOWER LIMIT		432516	5.22	378524	7.91	213790	10.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-298976/4		880830	5.73	774043	8.41	424373	10.65
CCV 240-298976/5		878027	5.73	746623	8.41	380725	10.65
MB 240-298976/7		839092	5.72	732606	8.41	368009	10.65
240-86215-1	MRC-MW121B-100917	793081	5.73	691230	8.41	354920	10.65
240-86215-2	MRC-MW117B-100917	789165	5.73	695930	8.41	345869	10.65
240-86215-3	TRIP BLANK	816468	5.72	711328	8.41	349439	10.65
240-86277-B-4 MS		888537	5.73	780835	8.41	422492	10.65
240-86277-B-4 MSD		883755	5.73	774903	8.41	443433	10.65

FB = Fluorobenzene
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
CBNZd5 = Chlorobenzene-d5
Area Limit = 50%-200% of internal standard area
DCBd4 = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

SAMPLE IDENTIFICATION	MRC-MW121B-100917	
COMPOUND	TRICHLOROETHENE	
COMPOUND AREA	142706	
INTERNAL STANDARD AMOUNT (ug)	20	
DILUTION FACTOR	1	
INTERNAL STANDARD AREA	793081	
AVERAGE RRF	0.3091	
142706 x 20 / 793081 x 0.3091	11.6428	ug/L
11.6427528452116 x 1	11.64	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: UX966356.D

Analysis Method: 8260C | Date Collected: 10/09/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/13/2017 17:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 298976 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.45	J	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.4	J	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	8.1	J	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U *	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 Lab Sample ID: 240-86215-1

Matrix: Water Lab File ID: UX966356.D

Analysis Method: 8260C Date Collected: 10/09/2017 11:50

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2017 17:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 298976 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	12	✓	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	96		69-124
460-00-4	4-Bromofluorobenzene (Surr)	87		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		61-138

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX9\20171013-69642.b\UX966356.D
Lims ID: 240-86215-B-1
Client ID: MRC-MW121B-100917
Sample Type: Client
Inject. Date: 13-Oct-2017 17:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069642-015
Operator ID: 001904 Instrument ID: A3UX9

Method: \\ChromNA\Canton\ChromData\A3UX9\20171013-69642.b\8260_9.m
Limit Group: MSV 8260C ICAL
Last Update: 15-Oct-2017 15:26:32 Calib Date: 28-Aug-2017 20:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX9\20170828-68245.b\UX965290.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: laveyt Date: 15-Oct-2017 15:25:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.734	5.734	0.000	99	793081	20.0	
* 2 Chlorobenzene-d5	117	8.408	8.409	-0.001	86	691230	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.645	10.645	0.000	97	354920	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.143	5.144	-0.001	93	181556	19.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.438	5.439	-0.001	100	233970	20.7	
$ 6 Toluene-d8 (Surr)	98	7.095	7.096	-0.001	92	795113	20.7	
$ 7 4-Bromofluorobenzene (Surr	95	9.521	9.522	-0.001	89	271226	17.4	
9 Dichlorodifluoromethane	85		1.712				ND	
10 Chloromethane	50		1.890				ND	
11 Vinyl chloride	62		2.031				ND	
13 Bromomethane	94		2.363				ND	
15 Chloroethane	64		2.493				ND	
17 Trichlorofluoromethane	101		2.718				ND	
24 1,1-Dichloroethene	61		3.227				ND	
23 Acetone	43	3.226	3.227	-0.001	98	25850	8.13	
22 1,1,2-Trichloro-1,2,2-trif	101		3.239				ND	
26 Carbon disulfide	76	3.427	3.428	-0.001	81	8646	0.2987	
29 Methyl acetate	43		3.534				ND	
30 Methylene Chloride	49	3.663	3.676	-0.013	29	1705	0.1404	
34 trans-1,2-Dichloroethene	61		3.878				ND	
33 Methyl tert-butyl ether	73		3.878				ND	
36 1,1-Dichloroethane	63		4.244				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
43 cis-1,2-Dichloroethene	96	4.752	4.741	0.011	76	2660	0.2367	
41 2-Butanone (MEK)	43	4.740	4.741	-0.001	59	4931	1.38	
49 Chloroform	83		5.013				ND	
50 1,1,1-Trichloroethane	97		5.179				ND	
51 Cyclohexane	84		5.238				ND	
53 Carbon tetrachloride	117		5.333				ND	
56 1,2-Dichloroethane	62		5.499				ND	
55 Benzene	78		5.499				ND	
60 Trichloroethene	130	6.042	6.043	-0.001	95	142706	11.6	✓
62 Methylcyclohexane	83		6.220				ND	
63 1,2-Dichloropropane	63		6.232				ND	
67 Dichlorobromomethane	83		6.457				ND	
71 cis-1,3-Dichloropropene	75		6.848				ND	
72 4-Methyl-2-pentanone (MIBK	43	6.965	6.978	-0.013	86	3443	0.4847	
73 Toluene	91		7.155				ND	
74 trans-1,3-Dichloropropene	75		7.333				ND	
76 1,1,2-Trichloroethane	97		7.498				ND	
78 Tetrachloroethene	166		7.664				ND	
80 2-Hexanone	43		7.711				ND	
82 Chlorodibromomethane	129		7.877				ND	
83 Ethylene Dibromide	107		7.984				ND	
85 Chlorobenzene	112		8.445				ND	
87 Ethylbenzene	106		8.540				ND	
88 m-Xylene & p-Xylene	106		8.646				ND	
89 o-Xylene	106		9.025				ND	
90 Styrene	104		9.025				ND	
91 Bromoform	173		9.214				ND	
92 Isopropylbenzene	105		9.368				ND	
94 1,1,2,2-Tetrachloroethane	83		9.640				ND	
108 1,3-Dichlorobenzene	146	10.598	10.587	0.011	79	2445	0.0997	
110 1,4-Dichlorobenzene	146		10.670				ND	
114 1,2-Dichlorobenzene	146		11.048				ND	
115 1,2-Dibromo-3-Chloropropan	157		11.817				ND	
117 1,2,4-Trichlorobenzene	180	12.645	12.646	-0.001	91	6472	0.4475	
S 131 Xylenes, Total	106		17.230				ND	

Reagents:

vm100ss_stk_00027	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00102	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added: 1.00	Units: uL	Run Reagent

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0043 0.0040	0.0036	0.0036	0.0031	0.0031	Ave		0.0036				13.2		20.0			
1,2-Dichloroethane	0.3304 0.3427	0.3818	0.3704	0.3442	0.3465	Ave		0.3526			0.1000	5.5		20.0			
Benzene	0.9670 0.9515	1.0258	1.0052	0.9246	0.9544	Ave		0.9714			0.5000	3.8		20.0			
n-Heptane	+++++ 0.1893	0.3175	0.1578	0.1855	0.1906	Lin1	0.1022	0.1838				15.2			0.9960		0.9900
Trichloroethene	0.3753 0.2985	0.2908	0.3110	0.2872	0.2915	Ave		0.3091			0.1500	10.9		20.0			
Methylcyclohexane	0.3243 0.3998	0.3368	0.3422	0.3780	0.3862	Ave		0.3612			0.1000	8.5		20.0			
1,2-Dichloropropane	0.2207 0.2136	0.2133	0.2107	0.1993	0.2109	Ave		0.2114			0.1000	3.3		20.0			
Dibromomethane	0.1767 0.1771	0.1931	0.1851	0.1730	0.1784	Ave		0.1806				4.0		20.0			
1,4-Dioxane	+++++ 0.0035	0.0024	0.0035	0.0027	0.0018	Ave		0.0028				26.2	*	20.0			
Dichlorobromomethane	0.2739 0.3160	0.2582	0.2990	0.2840	0.3154	Ave		0.2911			0.1500	8.0		20.0			
2-Chloroethyl vinyl ether	0.1462 0.1551	0.1460	0.1586	0.1501	0.1535	Ave		0.1516				3.3		20.0			
cis-1,3-Dichloropropene	0.2888 0.3687	0.2675	0.3249	0.3301	0.3601	Ave		0.3234			0.1500	12.2		20.0			
4-Methyl-2-pentanone (MIBK)	0.1574 0.1801	0.1842	0.1943	0.1777	0.1811	Ave		0.1791			0.0500	6.8		20.0			
Toluene	1.2974 1.2430	1.3018	1.3247	1.2225	1.2457	Ave		1.2725			0.4000	3.2		20.0			
trans-1,3-Dichloropropene	0.3268 0.4000	0.2952	0.3400	0.3424	0.3843	Ave		0.3481			0.1000	11.0		20.0			
Ethyl methacrylate	0.2669 0.3513	0.2781	0.3168	0.3195	0.3384	Ave		0.3118				10.6		20.0			
1,1,2-Trichloroethane	0.2654 0.2601	0.2716	0.2741	0.2546	0.2611	Ave		0.2645			0.1000	2.8		20.0			
1,3-Dichloropropane	0.4636 0.4553	0.4813	0.4862	0.4497	0.4647	Ave		0.4668				3.1		20.0			
Tetrachloroethene	0.3483 0.3115	0.3380	0.3231	0.3076	0.3110	Ave		0.3233			0.1500	5.1		20.0			
2-Hexanone	0.0980 0.1450	0.1523	0.1491	0.1455	0.1448	Ave		0.1391			0.0500	14.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: 71004001.D DFTPP Injection Date: 10/04/2017

Instrument ID: A4HP7 DFTPP Injection Time: 10:14

Analysis Batch No.: 297506

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.5	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	43.8	
70	Less than 2.0% of mass 69	0.2	(0.6) 1
127	25.0 - 75.0% of mass 198	48.1	
197	Less than 1.0% of mass 198	0.4	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	26.0	
365	Greater than 0.75% of mass 198	2.8	
441	Present, but less than mass 443	8.4	
442	40.0 - 110.0% of mass 198	56.6	
443	15.0 - 24.0% of mass 442	10.2	(18.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-297506/2	71004002.D	10/04/2017	10:36
	STD4 240-297506/3	71004003.D	10/04/2017	11:00
	STD3 240-297506/4	71004004.D	10/04/2017	11:24
	STD2 240-297506/5	71004005.D	10/04/2017	11:47
	STD1 240-297506/6	71004006.D	10/04/2017	12:11
	STD9 240-297506/7	71004007.D	10/04/2017	12:34
	STD8 240-297506/8	71004008.D	10/04/2017	12:58
	STD7 240-297506/9	71004009.D	10/04/2017	13:21
	STD6 240-297506/10	71004010.D	10/04/2017	13:45
	ICV 240-297506/11	71004011.D	10/04/2017	14:08

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4992	0.5748 0.5083	0.6324 0.5395	0.5206 0.5451	0.5493	Ave		0.5462				7.8		20.0			
N-Nitrosodimethylamine	0.6999	0.7110 0.7306	0.7923 0.7479	0.7515 0.7657	0.6620	Ave		0.7326				5.6		20.0			
Pyridine	1.4702 1.3973	1.3259 1.4312	1.3422 1.4341	1.3870 1.4747	1.3909	Ave		1.4060				3.7		20.0			
Benzaldehyde	1.3418 1.1061	1.1460 1.0608	1.1236 1.0627	1.1259 1.0187	1.0957	Ave		1.1202			0.0100	8.2		20.0			
Phenol	1.6347	1.5388 1.6263	1.7341 1.7260	1.6338 1.7079	1.7784	Ave		1.6725			0.8000	4.6		20.0			
Aniline	2.0192	1.8225 2.0278	1.8766 2.1134	2.0187 2.1299	2.0339	Ave		2.0053				5.3		20.0			
Bis(2-chloroethyl)ether	1.2201	1.2288 1.2200	1.2183 1.2823	1.2140 1.2640	1.2614	Ave		1.2386			0.7000	2.1		20.0			
2-Chlorophenol	1.3148	1.0751 1.3346	1.2274 1.3745	1.2755 1.3793	1.3058	Ave		1.2859			0.8000	7.7		20.0			
n-Decane	1.4332	1.3682 1.4265	1.4633 1.4812	1.4535 1.4890	1.5025	Ave		1.4522				3.0		20.0			
1,3-Dichlorobenzene	1.4916	1.3903 1.4926	1.4887 1.5383	1.5031 1.5742	1.5044	Ave		1.4979				3.5		20.0			
1,4-Dichlorobenzene	1.5003	1.5311 1.5506	1.5331 1.5763	1.5614 1.6091	1.5778	Ave		1.5549				2.2		20.0			
Benzyl alcohol	0.7755	0.6629 0.8150	0.6559 0.8372	0.6916 0.8598	0.7572	Ave		0.7569				10.5		20.0			
1,2-Dichlorobenzene	1.4185	1.4010 1.4457	1.3757 1.4899	1.4510 1.4871	1.4657	Ave		1.4418				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	1.2006	1.0371 1.1805	1.1384 1.2454	1.1469 1.2559	1.2020	Ave		1.1759			0.7000	5.9		20.0			
bis (2-chloroisopropyl) ether	1.6437	1.6919 1.6674	1.7801 1.7248	1.7770 1.7792	1.7037	Ave		1.7210				3.1		20.0			
Indene	2.4711	2.3348 2.5008	2.4441 2.6322	2.4516 2.7286	2.4764	Ave		2.5049				4.9		20.0			
N-Nitrosodi-n-propylamine	0.9398	0.7244 0.9449	0.7753 1.0203	0.8919 1.0096	0.9191	Ave		0.9032			0.5000	11.6		20.0			
3 & 4 Methylphenol	1.2471	0.9704 1.2756	1.0916 1.3374	1.1892 1.4067	1.2206	Ave		1.2173				11.3		20.0			
Acetophenone	1.8773	1.7032 1.8929	1.7944 2.0084	1.8985 2.0760	1.8798	Ave		1.8913			0.0100	6.1		20.0			
Hexachloroethane	0.6021	0.7115 0.6258	0.6762 0.6544	0.5949 0.6621	0.6475	Ave		0.6468			0.3000	6.0		20.0			
Nitrobenzene	0.4041	0.3733 0.4095	0.3643 0.4189	0.4046 0.4149	0.4305	Ave		0.4025			0.2000	5.6		20.0			
Isophorone	0.6775	0.5291 0.7053	0.6013 0.7228	0.6238 0.7268	0.6871	Ave		0.6592			0.4000	10.5		20.0			
2-Nitrophenol	0.1751	0.1288 0.1849	0.1572 0.1886	0.1648 0.1850	0.1728	Ave		0.1697			0.1000	11.6		20.0			
2,4-Dimethylphenol	0.3762	0.3043 0.3880	0.3382 0.3951	0.3594 0.4018	0.3691	Ave		0.3665			0.2000	8.8		20.0			
Benzoic acid	0.1610	+++++ 0.1931	0.0944 0.2002	0.1212 0.2030	0.1436	Lin1	-0.297	0.2010							0.9930		0.9900
Bis(2-chloroethoxy)methane	0.3950	0.3698 0.4175	0.3757 0.4248	0.4036 0.4254	0.4062	Ave		0.4023			0.3000	5.2		20.0			
2,4-Dichlorophenol	0.2981	0.2020 0.3081	0.2494 0.3130	0.2659 0.3161	0.2915	Ave		0.2805			0.2000	14.0		20.0			
1,2,4-Trichlorobenzene	0.3499	0.3369 0.3482	0.3161 0.3554	0.3497 0.3642	0.3445	Ave		0.3456				4.1		20.0			
Naphthalene	1.0610 1.0026	0.8885 1.0289	0.9995 1.0546	0.9545 1.0751	1.0123	Ave		1.0086			0.7000	5.8		20.0			
4-Chloroaniline	0.4286	0.3651 0.4384	0.3965 0.4451	0.4041 0.4579	0.4228	Ave		0.4198			0.0100	7.2		20.0			
2,6-Dichlorophenol	0.3001	0.2303 0.2991	0.2786 0.3057	0.2709 0.3144	0.2962	Ave		0.2869				9.4		20.0			
Hexachlorobutadiene	0.2357	0.1870 0.2405	0.2262 0.2392	0.2319 0.2457	0.2427	Ave		0.2311			0.0100	8.2		20.0			
Caprolactam	0.1291 0.0976	0.0756 0.1012	0.0802 0.1021	0.0900 +++++	0.0981	Ave		0.0967			0.0100	16.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3304	0.2500 0.3351	0.2470 0.3419	0.2797 0.3523	0.3211	Ave		0.3072			0.2000	13.7		20.0			
2-Methylnaphthalene	0.7439 0.7247	0.6309 0.7246	0.7004 0.7526	0.6788 0.7866	0.7135	Ave		0.7173			0.4000	6.3		20.0			
1-Methylnaphthalene	0.6090 0.6610	0.5776 0.6748	0.6087 0.6907	0.5915 0.7101	0.6667	Ave		0.6433				7.4		20.0			
Hexachlorocyclopentadiene	0.3717	0.2703 0.3982	0.2891 0.4195	0.3198 0.4282	0.3615	Ave		0.3573			0.0500	16.5		20.0			
1,2,4,5-Tetrachlorobenzene	0.6023	0.5540 0.5893	0.5828 0.6136	0.5743 0.6223	0.5633	Ave		0.5878			0.0100	4.1		20.0			
2,4,6-Trichlorophenol	0.3597	0.2941 0.3620	0.3135 0.3762	0.3015 0.3766	0.3503	Ave		0.3417			0.2000	9.8		20.0			
2,4,5-Trichlorophenol	0.3658	0.2427 0.3752	0.2975 0.3864	0.3138 0.3845	0.3615	Ave		0.3409			0.2000	15.1		20.0			
1,1'-Biphenyl	1.1640 1.3617	1.3244 1.3687	1.2761 1.4254	1.2643 1.4390	1.3414	Ave		1.3294			0.0100	6.4		20.0			
2-Chloronaphthalene	1.0003 1.0081	0.9524 1.0328	0.9140 1.0434	0.9900 1.0618	0.9893	Ave		0.9991			0.8000	4.6		20.0			
2-Nitroaniline	0.3716	0.2871 0.3769	0.2991 0.3988	0.3316 0.3935	0.3664	Ave		0.3531			0.0100	12.0		20.0			
Dimethyl phthalate	1.1910	1.1059 1.2241	1.1610 1.2571	1.1856 1.2681	1.1895	Ave		1.1978			0.0100	4.4		20.0			
1,3-Dinitrobenzene	0.2003	0.0898 0.2008	0.1551 0.2068	0.1854 0.2056	0.1730	Lin1	-0.059	0.2064							0.9990		0.9900
2,6-Dinitrotoluene	0.2846	0.2264 0.2902	0.2463 0.3010	0.2421 0.3078	0.2679	Ave		0.2708				11.0		20.0			
Acenaphthylene	1.2420 1.5918	1.4218 1.6531	1.4699 1.7132	1.4645 1.7032	1.5416	Ave		1.5335			0.9000	9.9		20.0			
3-Nitroaniline	0.2810	0.1739 0.2996	0.2514 0.3035	0.2490 0.2963	0.2727	Ave		0.2659			0.0100	16.0		20.0			
2,4-Dinitrophenol	0.1524	+++++ 0.1780	0.0667 0.1863	0.0856 0.1957	0.1274	Qua	-0.266	0.1520	0.0010012		0.0100				0.9990		0.9900
Acenaphthene	0.8054 1.1136	1.0422 1.1394	1.0544 1.1901	1.0471 1.2087	1.0741	Ave		1.0750			0.9000	11.0		20.0			
4-Nitrophenol	0.2345	0.1231 0.2379	0.1576 0.2429	0.1887 0.2404	0.2191	Lin1	-0.152	0.2431							1.0000		0.9900
2,4-Dinitrotoluene	0.3846	0.2848 0.3987	0.3103 0.4006	0.3370 0.4158	0.3705	Ave		0.3628			0.2000	13.0		20.0			
Dibenzofuran	1.4352 1.5627	1.4118 1.5741	1.5624 1.6157	1.4618 1.6453	1.5413	Ave		1.5344			0.8000	5.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.3392	0.2562 0.3511	0.2630 0.3585	0.2982 0.3653	0.3185	Ave		0.3187			0.0100	13.3		20.0			
Diethyl phthalate	1.2333	1.1698 1.2791	1.1857 1.3077	1.1582 1.3395	1.2207	Ave		1.2367			0.0100	5.4		20.0			
Hexadecane	0.7454	0.6359 0.7671	0.6779 0.7901	0.6996 0.8054	0.7478	Ave		0.7336				7.9		20.0			
4-Chlorophenyl phenyl ether	0.6474	0.6491 0.6694	0.6108 0.6861	0.6327 0.6976	0.6367	Ave		0.6537			0.4000	4.4		20.0			
4-Nitroaniline	0.3050	0.2237 0.3124	0.2445 0.3283	0.2621 0.3426	0.2765	Ave		0.2869			0.0100	14.6		20.0			
Fluorene	1.0130 1.2345	1.1508 1.3018	1.2158 1.3464	1.1602 1.4091	1.2372	Ave		1.2299			0.9000	9.5		20.0			
4,6-Dinitro-2-methylphenol	0.1161	0.0542 0.1298	0.0846 0.1360	0.0960 0.1361	0.1024	Lin1	-0.107	0.1334			0.0100				0.9950		0.9900
Diphenylamine	0.5489	0.4828 0.5795	0.5513 0.5838	0.5502 0.5741	0.5293	Ave		0.5500				6.0		20.0			
N-Nitrosodiphenylamine	0.4667	0.4105 0.4927	0.4687 0.4963	0.4678 0.4881	0.4500	Ave		0.4676			0.0100	6.0		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.6896	0.5619 0.7104	0.6721 0.7382	0.6920 0.7232	0.6779	Ave		0.6831				7.9		20.0			
Azobenzene	0.6895	0.5619 0.7104	0.6721 0.7382	0.6926 0.7232	0.6771	Ave		0.6831				7.9		20.0			
4-Bromophenyl phenyl ether	0.1914	0.1649 0.2015	0.1902 0.2058	0.2048 0.2124	0.1896	Ave		0.1951			0.1000	7.6		20.0			
Hexachlorobenzene	0.2305 0.1826	0.1724 0.1891	0.1988 0.1944	0.1833 0.1940	0.1744	Lin1	0.0006	0.1901			0.1000				0.9990		0.9900
Atrazine	0.1607 0.1955	0.1659 0.2124	0.1963 0.2121	0.1994 0.2062	0.1972	Ave		0.1940			0.0100	9.6		20.0			
n-Octadecane	0.3927	0.3232 0.4157	0.3680 0.4352	0.3900 0.4326	0.3850	Ave		0.3928				9.3		20.0			
Pentachlorophenol	0.1182	0.0587 0.1307	0.0817 0.1381	0.0942 0.1426	0.1088	Lin1	-0.113	0.1371			0.0500				0.9950		0.9900
Phenanthrene	0.8447 0.9928	0.9443 1.0203	1.0270 1.0532	0.9851 1.0493	0.9533	Ave		0.9855			0.7000	6.6		20.0			
Anthracene	0.7948 0.9869	0.8323 1.0309	0.9235 1.0726	0.9659 1.0638	0.9635	Ave		0.9593			0.7000	10.0		20.0			
Carbazole	0.8901	0.7829 0.9250	0.8846 0.9464	0.8588 0.9474	0.8751	Ave		0.8888			0.0100	6.1		20.0			
Di-n-butyl phthalate	1.0212	0.7239 1.0877	0.9584 1.1189	0.9895 1.1305	1.0083	Ave		1.0048			0.0100	12.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	0.9648 1.1342	0.9770 1.1924	1.1392 1.2288	1.0882 1.2265	1.1039	Ave		1.1172			0.6000	8.7		20.0			
Benzidine	 0.4657	0.2690 0.5008	0.3995 0.4842	0.4542 0.4720	0.4742	Ave		0.4399				17.1		20.0			
Pyrene	0.9536 1.0421	0.8498 1.1022	1.0440 1.1145	0.9836 1.1012	1.0597	Ave		1.0279			0.6000	8.4		20.0			
Butyl benzyl phthalate	 0.4235	0.2971 0.4510	0.3900 0.4571	0.3732 0.4453	0.4129	Ave		0.4063			0.0100	13.1		20.0			
Bis(2-ethylhexyl) phthalate	 0.5657	0.3779 0.6172	0.4640 0.6338	0.4572 0.6361	0.5550	Ave		0.5384			0.0100	17.7		20.0			
3,3'-Dichlorobenzidine	 0.3482	0.2501 0.3675	0.3083 0.3822	0.2987 0.3829	0.3405	Ave		0.3348			0.0100	13.8		20.0			
Benzo[a]anthracene	0.9781 1.0286	0.8689 1.0669	1.0099 1.0767	0.9787 1.0778	1.0440	Ave		1.0144			0.8000	6.6		20.0			
Chrysene	0.8537 0.9699	0.9048 1.0258	1.0248 1.0486	0.9569 1.0344	1.0068	Ave		0.9806			0.7000	6.7		20.0			
Di-n-octyl phthalate	 1.2032	0.7925 1.2596	0.9274 1.3357	0.8920 1.3639	1.0605	Ave		1.1044			0.0100	19.7		20.0			
Benzo[b]fluoranthene	0.9243 1.2447	1.0226 1.2408	1.0992 1.2531	1.0205 1.3125	1.1157	Ave		1.1370			0.7000	11.7		20.0			
Benzo[k]fluoranthene	0.6804 1.2493	0.9796 1.2820	1.2643 1.3272	1.1918 1.3089	1.1937	Ave		1.1641			0.7000	17.9		20.0			
Benzo[a]pyrene	0.5811 1.1675	0.8719 1.1705	1.0367 1.2223	0.9781 1.2547	1.0876	Lin1	-0.108	1.2079			0.7000				0.9980		0.9900
Indeno[1,2,3-cd]pyrene	1.0209 1.3011	1.0209 1.3245	1.1333 1.3766	1.1191 1.3942	1.2018	Ave		1.2103			0.5000	12.0		20.0			
Dibenz(a,h)anthracene	0.9523 1.0789	0.7934 1.1095	0.9300 1.1629	0.9223 1.2077	1.0150	Ave		1.0191			0.4000	13.0		20.0			
Benzo[g,h,i]perylene	1.1524 1.0906	0.8642 1.1089	1.0138 1.1442	0.9826 1.1512	1.0374	Ave		1.0606			0.5000	9.1		20.0			
2-Fluorophenol (Surr)	 1.1732	0.9158 1.1887	1.1098 1.2162	1.0871 1.2196	1.1908	Ave		1.1376				8.9		20.0			
Phenol-d5 (Surr)	 1.5057	1.3831 1.5399	1.4256 1.5661	1.5599 1.5979	1.5087	Ave		1.5109				4.8		20.0			
Nitrobenzene-d5 (Surr)	0.3712 0.4029	0.3420 0.4107	0.3917 0.4137	0.3838 0.4130	0.4092	Ave		0.3931				6.1		20.0			
2-Fluorobiphenyl (Surr)	1.1469 1.1691	1.1541 1.2122	1.1967 1.2360	1.1579 1.2370	1.1845	Ave		1.1883				2.9		20.0			
2,4,6-Tribromophenol (Surr)	 0.1485	+++++ 0.1524	0.1202 0.1572	0.1317 0.1646	0.1423	Ave		0.1453				10.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Terphenyl-d14 (Surr)	0.6445 0.6621	0.6337 0.7027	0.6724 0.7063	0.6388 0.6926	0.6771	Ave		0.6700				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCBd 4	Ave	155799	8200 240867	18913 324762	30826 383406	78004	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCBd 4	Ave	218412	10142 346180	23695 450238	44497 538503	93996	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCBd 4	Ave	8769 872123	37827 1356254	80278 1726767	164250 2074390	394988	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzaldehyde	DCBd 4	Ave	8003 690373	32695 1005307	67205 1279497	133332 1432956	311173	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCBd 4	Ave	510175	21950 770613	51859 1039115	96734 1201187	252517	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCBd 4	Ave	630161	25997 960835	56122 1272339	119524 1497945	288806	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCBd 4	Ave	380773	17529 578086	36433 771962	71879 888990	179105	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCBd 4	Ave	410313	15336 632367	36707 827496	75524 970065	185413	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
n-Decane	DCBd 4	Ave	447275	19517 675912	43762 891715	86062 1047194	213350	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	465508	19832 707230	44519 926087	88997 1107152	213620	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	468209	21840 734706	45847 948946	92447 1131665	224033	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCBd 4	Ave	242034	9456 386154	19615 504031	40949 604673	107523	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	442691	19985 685006	41141 896946	85914 1045891	208123	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCBd 4	Ave	374691	14794 559369	34044 749760	67909 883277	170671	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
bis (2-chloroisopropyl) ether	DCBd 4	Ave	512964	24135 790063	53235 1038349	105214 1251352	241921	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indene	DCBd 4	Ave	1542378	66611 2369913	146186 3169265	290312 3838025	703263	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodi-n-propylamine	DCBd 4	Ave	293293	10334 447732	23187 614230	52809 710080	130512	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3 & 4 Methylphenol	DCBd 4	Ave	389197	13842 604425	32645 805155	70412 989329	173316	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCBd 4	Ave	585870	24296 896917	53663 1209126	112408 1460032	266913	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCBd 4	Ave	187908	10149 296509	20221 393960	35222 465674	91942	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	474833	20292 723338	41464 969068	93246 1139001	230870	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	796086	28761 1245869	68433 1671863	143757 1995297	368478	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	205753	7003 326576	17888 436229	37982 507971	92654	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	442002	16542 685474	38489 913855	82821 1102981	197901	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Lin1	378422	+++++ 682251	21486 926274	55876 1114336	154023	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	464094	20104 737590	42755 982600	93016 1167843	217835	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	350204	10980 544244	28380 724111	61277 867701	156317	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	411119	18312 615024	35980 822115	80595 999674	184743	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	11891 1178033	48301 1817569	113761 2439393	219950 2951300	542855	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	503613	19845 774445	45128 1029657	93123 1257063	226721	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	352649	12521 528316	31706 707148	62417 863040	158826	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	276977	10167 424857	25749 553388	53439 674479	130161	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	2894 229327	8214 357495	18254 472269	41497 +++++	105200	0.200 20.0	1.00 30.0	2.00 40.0	4.00 +++++	10.0
4-Chloro-3-methylphenol	NPT	Ave	388225	13591 592047	28112 790787	64455 967076	172168	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	8337 851459	34297 1280089	79715 1740926	156418 2159215	382629	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1-Methylnaphthalene	NPT	Ave	6825 776629	31400 1192045	69278 1597684	136314 1949329	357506	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorocyclopentadiene	ANT	Ave	 282994	9020 458664	21153 632443	46946 789181	127709	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	 458585	18490 678765	42646 925036	84317 1146948	198986	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	 273845	9814 416915	22937 567169	44267 694124	123726	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	 278470	8099 432150	21773 582571	46076 708653	127687	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	8249 1036769	44198 1576418	93377 2148826	185610 2652322	473819	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	7089 767557	31785 1189546	66885 1573070	145340 1957025	349438	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	 282947	9580 434071	21888 601147	48683 725240	129407	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	 906787	36906 1409826	84960 1895186	174065 2337250	420162	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Lin1	 152491	2997 231225	11349 311803	27223 378952	61105	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	 216644	7556 334242	18024 453802	35544 567368	94647	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	8802 1211952	47448 1903998	107563 2582814	215011 3139265	544529	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	 213917	5804 345061	18398 457604	36557 546181	96310	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Qua	 231985	+++++ 409936	9760 561686	25125 721239	90005	 20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	5708 847851	34782 1312346	77156 1794208	153721 2227743	379396	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Lin1	 357136	8213 547991	23065 732281	55409 886326	154807	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	 292802	9504 459215	22703 603999	49472 766309	130859	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	10171 1189751	47114 1812967	114327 2435800	214604 3032385	544426	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	 258276	8549 404328	19243 540456	43780 673347	112492	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	 938974	39039 1473225	86761 1971470	170040 2468842	431188	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexadecane	ANT	Ave	 567535	21221 883458	49607 1191120	102713 1484470	264139	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Chlorophenyl phenyl ether	ANT	Ave	492933	21661 771007	44695 1034382	92885 1285767	224917	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	232181	7467 359783	17894 494986	38479 631499	97657	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	7179 939867	38404 1499408	88963 2029776	170333 2597191	437031	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	344640	6881 574293	23046 784900	52197 989882	143104	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Diphenylamine	PHN	Ave	692455	26051 1090343	63866 1431991	127170 1775067	314331	8.50	0.425 12.8	0.850 17.0	1.70 21.3	4.25
N-Nitrosodiphenylamine	PHN	Ave	692455	26051 1090343	63866 1431991	127170 1775067	314331	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	1023229	35658 1572053	91588 2129932	188138 2630051	473580	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	1023139	35658 1572053	91588 2129932	188279 2630051	472988	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	284071	10464 446017	25921 593676	55684 772489	132442	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Lin1	3120 270983	10943 418527	27090 561003	49837 705449	121824	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	4350 580038	21055 940253	53513 1224099	108420 1500060	275449	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
n-Octadecane	PHN	Ave	582625	20510 919860	50141 1255710	106035 1573277	268940	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Lin1	350815	7454 578474	22266 797070	51213 1036945	151980	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	11435 1473126	59924 2257937	139948 3038587	267812 3815929	665926	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	10760 1464399	52817 2281330	125840 3094591	262584 3868950	673052	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	1320702	49685 2047120	120548 2730700	233473 3445490	611290	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	1515259	45943 2407022	130606 3228158	269004 4111487	704369	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	13061 1682964	62000 2638719	155233 3545476	295839 4460565	771159	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	1515439	37173 2420807	120088 3099062	277583 3869429	707596	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	13559 1695568	58728 2663764	156895 3566825	300574 4513702	790698	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	688994	20528 1089953	58605 1462968	114050 1825432	308067	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bis(2-ethylhexyl) phthalate	CRY	Ave	920454	26118 1491673	69727 2028413	139692 2607117	414141	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	1133177	34564 1776400	92667 2446125	182578 3139127	508101	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	13907 1673585	60044 2578454	151766 3445968	299058 4417897	778986	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	12138 1578035	62525 2479102	154019 3355820	292402 4239803	751251	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	1458692	41295 2344925	108845 3239603	208342 4149021	631644	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	9942 1509015	53286 2309976	129006 3039199	238341 3992487	664542	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	7319 1514553	51044 2386658	148389 3218942	278363 3981504	710991	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Lin1	6250 1415444	45432 2179089	121671 2964559	228438 3816637	647833	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	10981 1577390	53199 2465702	133015 3338910	261389 4241122	715827	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	10243 1307982	41344 2065476	109151 2820560	215405 3673614	604541	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	12395 1322192	45031 2064390	118986 2775151	229497 3501712	617903	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCBd 4	Ave	366140	13063 563228	33188 732200	64365 857722	169091	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCBd 4	Ave	469910	19729 729643	42632 942805	92359 1123847	214232	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	4160 473401	18589 725575	44580 956902	88438 1133704	219421	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	8128 890082	38516 1396167	87571 1863334	169988 2280003	418399	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	113088	+++++ 175568	8799 236981	19340 303462	50259	10.0	+++++ 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	9164 1077309	43789 1698368	101054 2260424	195205 2838933	505243	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.4853		8.88	10.0	-11.2	30.0
N-Nitrosodimethylamine	Ave	0.7326	0.6375		8.70	10.0	-13.0	30.0
Pyridine	Ave	1.406	1.300		18.5	20.0	-7.5	30.0
Benzaldehyde	Ave	1.120	1.075	0.0100	19.2	20.0	-4.0	30.0
Phenol	Ave	1.673	1.578	0.8000	9.43	10.0	-5.7	30.0
Aniline	Ave	2.005	1.816		9.06	10.0	-9.4	30.0
Bis(2-chloroethyl)ether	Ave	1.239	1.169	0.7000	9.44	10.0	-5.6	30.0
2-Chlorophenol	Ave	1.286	1.290	0.8000	10.0	10.0	0.3	30.0
n-Decane	Ave	1.452	1.364		9.39	10.0	-6.1	30.0
1,3-Dichlorobenzene	Ave	1.498	1.453		9.70	10.0	-3.0	30.0
1,4-Dichlorobenzene	Ave	1.555	1.491		9.59	10.0	-4.1	30.0
Benzyl alcohol	Ave	0.7569	0.7637		10.1	10.0	0.9	30.0
1,2-Dichlorobenzene	Ave	1.442	1.370		9.50	10.0	-5.0	30.0
2-Methylphenol	Ave	1.176	1.125	0.7000	9.56	10.0	-4.4	30.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.494		8.68	10.0	-13.2	30.0
Indene	Ave	2.505	2.263		18.1	20.0	-9.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.8606	0.5000	9.53	10.0	-4.7	30.0
3 & 4 Methylphenol	Ave	1.217	1.211		9.95	10.0	-0.5	30.0
Acetophenone	Ave	1.891	1.747	0.0100	9.24	10.0	-7.6	30.0
Hexachloroethane	Ave	0.6468	0.5917	0.3000	9.15	10.0	-8.5	30.0
Nitrobenzene	Ave	0.4025	0.3854	0.2000	9.57	10.0	-4.3	30.0
Isophorone	Ave	0.6592	0.6512	0.4000	9.88	10.0	-1.2	30.0
2-Nitrophenol	Ave	0.1697	0.1684	0.1000	9.92	10.0	-0.8	30.0
2,4-Dimethylphenol	Ave	0.3665	0.2941	0.2000	8.03	10.0	-19.7	30.0
Benzoic acid	Lin1		0.1686		18.2	20.0	-8.8	30.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3789	0.3000	9.42	10.0	-5.8	30.0
2,4-Dichlorophenol	Ave	0.2805	0.2833	0.2000	10.1	10.0	1.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3199		9.26	10.0	-7.4	30.0
Naphthalene	Ave	1.009	0.9504	0.7000	9.42	10.0	-5.8	30.0
4-Chloroaniline	Ave	0.4198	0.3833	0.0100	9.13	10.0	-8.7	30.0
2,6-Dichlorophenol	Ave	0.2869	0.2753		9.60	10.0	-4.0	30.0
Hexachlorobutadiene	Ave	0.2311	0.2244	0.0100	9.71	10.0	-2.9	30.0
Caprolactam	Ave	0.0967	0.0976	0.0100	20.2	20.0	0.9	30.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3079	0.2000	10.0	10.0	0.2	30.0
2-Methylnaphthalene	Ave	0.7173	0.6659	0.4000	9.28	10.0	-7.2	30.0
1-Methylnaphthalene	Ave	0.6433	0.6467		10.1	10.0	0.5	30.0
Hexachlorocyclopentadiene	Ave	0.3573	0.2954	0.0500	8.27	10.0	-17.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5413	0.0100	9.21	10.0	-7.9	30.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3348	0.2000	9.80	10.0	-2.0	30.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3521	0.2000	10.3	10.0	3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.280	0.0100	9.63	10.0	-3.7	30.0
2-Chloronaphthalene	Ave	0.999	0.9518	0.8000	9.53	10.0	-4.7	30.0
2-Nitroaniline	Ave	0.3531	0.3461	0.0100	9.80	10.0	-2.0	30.0
Dimethyl phthalate	Ave	1.198	1.143	0.0100	9.54	10.0	-4.6	30.0
1,3-Dinitrobenzene	Lin1		0.1864		9.32	10.0	-6.8	30.0
2,6-Dinitrotoluene	Ave	0.2708	0.2748		10.1	10.0	1.5	30.0
Acenaphthylene	Ave	1.533	1.536	0.9000	10.0	10.0	0.1	30.0
3-Nitroaniline	Ave	0.2659	0.2703	0.0100	10.2	10.0	1.6	30.0
2,4-Dinitrophenol	Qua		0.1562	0.0100	19.7	20.0	-1.3	30.0
Acenaphthene	Ave	1.075	1.032	0.9000	9.60	10.0	-4.0	30.0
4-Nitrophenol	Lin1		0.2219		18.9	20.0	-5.6	30.0
2,4-Dinitrotoluene	Ave	0.3628	0.3747	0.2000	10.3	10.0	3.3	30.0
Dibenzofuran	Ave	1.534	1.448	0.8000	9.44	10.0	-5.6	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.3082	0.0100	9.67	10.0	-3.3	30.0
Diethyl phthalate	Ave	1.237	1.179	0.0100	9.53	10.0	-4.7	30.0
Hexadecane	Ave	0.7336	0.7020		9.57	10.0	-4.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.6098	0.4000	9.33	10.0	-6.7	30.0
4-Nitroaniline	Ave	0.2869	0.2769	0.0100	9.65	10.0	-3.5	30.0
Fluorene	Ave	1.230	1.180	0.9000	9.60	10.0	-4.0	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1211	0.0100	18.9	20.0	-5.3	30.0
Diphenylamine	Ave	0.5500	0.5216		8.07	8.51	-5.2	30.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4439	0.0100	9.49	10.0	-5.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6700		9.81	10.0	-1.9	30.0
Azobenzene	Ave	0.6831	0.6696		9.80	10.0	-2.0	30.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.1814	0.1000	9.30	10.0	-7.0	30.0
Hexachlorobenzene	Lin1		0.1744	0.1000	9.17	10.0	-8.3	30.0
Atrazine	Ave	0.1940	0.2025	0.0100	20.9	20.0	4.4	30.0
n-Octadecane	Ave	0.3928	0.3838		9.77	10.0	-2.3	30.0
Pentachlorophenol	Lin1		0.1227	0.0500	18.7	20.0	-6.4	30.0
Phenanthrene	Ave	0.9855	0.9442	0.7000	9.58	10.0	-4.2	30.0
Anthracene	Ave	0.9593	0.9454	0.7000	9.85	10.0	-1.5	30.0
Carbazole	Ave	0.8888	0.8550	0.0100	9.62	10.0	-3.8	30.0
Di-n-butyl phthalate	Ave	1.005	1.023	0.0100	10.2	10.0	1.8	30.0
Fluoranthene	Ave	1.117	1.091	0.6000	9.77	10.0	-2.3	30.0
Benzidine	Ave	0.4399	0.4387		19.9	20.0	-0.3	30.0
Pyrene	Ave	1.028	1.002	0.6000	9.75	10.0	-2.5	30.0
Butyl benzyl phthalate	Ave	0.4063	0.3972	0.0100	9.78	10.0	-2.2	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.5435	0.0100	10.1	10.0	1.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3370	0.0100	20.1	20.0	0.7	30.0
Benzo[a]anthracene	Ave	1.014	0.9574	0.8000	9.44	10.0	-5.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9371	0.7000	9.56	10.0	-4.4	30.0
Di-n-octyl phthalate	Ave	1.104	1.106	0.0100	10.0	10.0	0.2	30.0
Benzo[b]fluoranthene	Ave	1.137	1.148	0.7000	10.1	10.0	1.0	30.0
Benzo[k]fluoranthene	Ave	1.164	1.169	0.7000	10.0	10.0	0.4	30.0
Benzo[a]pyrene	Lin1		1.048	0.7000	8.76	10.0	-12.4	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.167	0.5000	9.64	10.0	-3.6	30.0
Dibenz(a,h)anthracene	Ave	1.019	1.009	0.4000	9.90	10.0	-1.0	30.0
Benzo[g,h,i]perylene	Ave	1.061	0.9738	0.5000	9.18	10.0	-8.2	30.0
2-Fluorophenol (Surr)	Ave	1.138	1.290		11.3	10.0	13.4	30.0
Phenol-d5 (Surr)	Ave	1.511	1.672		11.1	10.0	10.7	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.4373		11.1	10.0	11.2	30.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.248		10.5	10.0	5.0	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1663		11.4	10.0	14.4	30.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.7194		10.7	10.0	7.4	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: 71013001.D DFTPP Injection Date: 10/13/2017

Instrument ID: A4HP7 DFTPP Injection Time: 11:03

Analysis Batch No.: 298910

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	44.1	
68	Less than 2.0% of mass 69	0.1	(0.3) 1
69	Mass 69 relative abundance	41.0	
70	Less than 2.0% of mass 69	0.3	(0.7) 1
127	25.0 - 75.0% of mass 198	47.4	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0- 30.0% of mass 198	25.6	
365	Greater than 0.75% of mass 198	2.5	
441	Present, but less than mass 443	9.6	
442	40.0 - 110.0% of mass 198	61.9	
443	15.0 - 24.0% of mass 442	12.2	(19.8) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-298910/2	71013002.D	10/13/2017	11:21
	MB 240-298527/21-A	71013004.D	10/13/2017	12:09
	LCS 240-298527/22-A	71013005.D	10/13/2017	12:33
MRC-MW117B-100917	240-86215-2	71013019.D	10/13/2017	18:07
MRC-MW121B-100917	240-86215-1	71013020.D	10/13/2017	18:30

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-298910/2 Calibration Date: 10/13/2017 11:21

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71013002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.5184		9.49	10.0	-5.1	20.0
N-Nitrosodimethylamine	Ave	0.7326	0.6696		9.14	10.0	-8.6	20.0
Pyridine	Ave	1.406	1.414		20.1	20.0	0.5	20.0
Benzaldehyde	Ave	1.120	1.045	0.0100	18.6	20.0	-6.8	20.0
Phenol	Ave	1.673	1.555	0.8000	9.30	10.0	-7.0	20.0
Aniline	Ave	2.005	2.100		10.5	10.0	4.7	20.0
Bis(2-chloroethyl)ether	Ave	1.239	1.272	0.7000	10.3	10.0	2.7	20.0
2-Chlorophenol	Ave	1.286	1.306	0.8000	10.2	10.0	1.6	20.0
n-Decane	Ave	1.452	1.476		10.2	10.0	1.7	20.0
1,3-Dichlorobenzene	Ave	1.498	1.504		10.0	10.0	0.4	20.0
1,4-Dichlorobenzene	Ave	1.555	1.478		9.50	10.0	-5.0	20.0
Benzyl alcohol	Ave	0.7569	0.2870		3.79	10.0	-62.1*	20.0
1,2-Dichlorobenzene	Ave	1.442	1.443		10.0	10.0	0.0	20.0
2-Methylphenol	Ave	1.176	1.253	0.7000	10.7	10.0	6.5	20.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.660		9.64	10.0	-3.6	20.0
Indene	Ave	2.505	2.480		19.8	20.0	-1.0	20.0
3 & 4 Methylphenol	Ave	1.217	1.238		10.2	10.0	1.7	20.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.9246	0.5000	10.2	10.0	2.4	20.0
Acetophenone	Ave	1.891	1.874	0.0100	9.91	10.0	-0.9	20.0
Hexachloroethane	Ave	0.6468	0.6172	0.3000	9.54	10.0	-4.6	20.0
Nitrobenzene	Ave	0.4025	0.3858	0.2000	9.58	10.0	-4.2	20.0
Isophorone	Ave	0.6592	0.6720	0.4000	10.2	10.0	1.9	20.0
2-Nitrophenol	Ave	0.1697	0.1771	0.1000	10.4	10.0	4.4	20.0
2,4-Dimethylphenol	Ave	0.3665	0.3513	0.2000	9.58	10.0	-4.2	20.0
Benzoic acid	Lin1		0.1608		17.5	20.0	-12.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3979	0.3000	9.89	10.0	-1.1	20.0
2,4-Dichlorophenol	Ave	0.2805	0.2932	0.2000	10.5	10.0	4.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3415		9.88	10.0	-1.2	20.0
Naphthalene	Ave	1.009	1.014	0.7000	10.1	10.0	0.5	20.0
4-Chloroaniline	Ave	0.4198	0.4243	0.0100	10.1	10.0	1.1	20.0
2,6-Dichlorophenol	Ave	0.2869	0.2883		10.0	10.0	0.5	20.0
Hexachlorobutadiene	Ave	0.2311	0.2166	0.0100	9.37	10.0	-6.3	20.0
Caprolactam	Ave	0.0967	0.0972	0.0100	20.1	20.0	0.4	20.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3112	0.2000	10.1	10.0	1.3	20.0
2-Methylnaphthalene	Ave	0.7173	0.7136	0.4000	9.95	10.0	-0.5	20.0
1-Methylnaphthalene	Ave	0.6433	0.6416		9.97	10.0	-0.3	20.0
Hexachlorocyclopentadiene	Ave	0.3573	0.3627	0.0500	10.2	10.0	1.5	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5872	0.0100	9.99	10.0	-0.0	20.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3546	0.2000	10.4	10.0	3.8	20.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3585	0.2000	10.5	10.0	5.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-298910/2 Calibration Date: 10/13/2017 11:21

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71013002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.402	0.0100	10.5	10.0	5.5	20.0
2-Chloronaphthalene	Ave	0.999	1.059	0.8000	10.6	10.0	6.0	20.0
2-Nitroaniline	Ave	0.3531	0.3661	0.0100	10.4	10.0	3.7	20.0
Dimethyl phthalate	Ave	1.198	1.219	0.0100	10.2	10.0	1.7	20.0
1,3-Dinitrobenzene	Lin1		0.2005		10.0	10.0	0.0	20.0
2,6-Dinitrotoluene	Ave	0.2708	0.2924		10.8	10.0	8.0	20.0
Acenaphthylene	Ave	1.533	1.660	0.9000	10.8	10.0	8.3	20.0
3-Nitroaniline	Ave	0.2659	0.2902	0.0100	10.9	10.0	9.1	20.0
Acenaphthene	Ave	1.075	1.138	0.9000	10.6	10.0	5.9	20.0
2,4-Dinitrophenol	Qua		0.1851	0.0100	22.7	20.0	13.6	20.0
4-Nitrophenol	Lin1		0.2113		18.0	20.0	-10.0	20.0
2,4-Dinitrotoluene	Ave	0.3628	0.3960	0.2000	10.9	10.0	9.2	20.0
Dibenzofuran	Ave	1.534	1.546	0.8000	10.1	10.0	0.7	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.3325	0.0100	10.4	10.0	4.3	20.0
Diethyl phthalate	Ave	1.237	1.265	0.0100	10.2	10.0	2.3	20.0
Hexadecane	Ave	0.7336	0.7485		10.2	10.0	2.0	20.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.6630	0.4000	10.1	10.0	1.4	20.0
4-Nitroaniline	Ave	0.2869	0.2919	0.0100	10.2	10.0	1.7	20.0
Fluorene	Ave	1.230	1.273	0.9000	10.3	10.0	3.5	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1269	0.0100	19.8	20.0	-0.9	20.0
Diphenylamine	Ave	0.5500	0.5778		8.93	8.50	5.1	20.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4912	0.0100	10.5	10.0	5.1	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6743		9.87	10.0	-1.3	20.0
Azobenzene	Ave	0.6831	0.6748		9.88	10.0	-1.2	20.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.2008	0.1000	10.3	10.0	2.9	20.0
Hexachlorobenzene	Lin1		0.1869	0.1000	9.83	10.0	-1.7	20.0
Atrazine	Ave	0.1940	0.1937	0.0100	20.0	20.0	-0.2	20.0
n-Octadecane	Ave	0.3928	0.3954		10.1	10.0	0.7	20.0
Pentachlorophenol	Lin1		0.1226	0.0500	18.7	20.0	-6.5	20.0
Phenanthrene	Ave	0.9855	1.000	0.7000	10.1	10.0	1.5	20.0
Anthracene	Ave	0.9593	1.022	0.7000	10.7	10.0	6.5	20.0
Carbazole	Ave	0.8888	0.9082	0.0100	10.2	10.0	2.2	20.0
Di-n-butyl phthalate	Ave	1.005	1.044	0.0100	10.4	10.0	3.9	20.0
Fluoranthene	Ave	1.117	1.164	0.6000	10.4	10.0	4.2	20.0
Benzidine	Ave	0.4399	0.5182		23.6	20.0	17.8	20.0
Pyrene	Ave	1.028	1.052	0.6000	10.2	10.0	2.3	20.0
Butyl benzyl phthalate	Ave	0.4063	0.4245	0.0100	10.4	10.0	4.5	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.6061	0.0100	11.3	10.0	12.6	20.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3606	0.0100	21.5	20.0	7.7	20.0
Benzo[a]anthracene	Ave	1.014	1.041	0.8000	10.3	10.0	2.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-298910/2 Calibration Date: 10/13/2017 11:21

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71013002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9864	0.7000	10.1	10.0	0.6	20.0
Di-n-octyl phthalate	Ave	1.104	1.229	0.0100	11.1	10.0	11.2	20.0
Benzo[b]fluoranthene	Ave	1.137	1.150	0.7000	10.1	10.0	1.1	20.0
Benzo[k]fluoranthene	Ave	1.164	1.202	0.7000	10.3	10.0	3.3	20.0
Benzo[a]pyrene	Lin1		1.136	0.7000	9.49	10.0	-5.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.215	0.5000	10.0	10.0	0.4	20.0
Dibenz(a,h)anthracene	Ave	1.019	1.029	0.4000	10.1	10.0	1.0	20.0
Benzo[g,h,i]perylene	Ave	1.061	1.026	0.5000	9.68	10.0	-3.2	20.0
2-Fluorophenol (Surr)	Ave	1.138	1.180		10.4	10.0	3.8	20.0
Phenol-d5 (Surr)	Ave	1.511	1.539		10.2	10.0	1.9	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.3805		9.68	10.0	-3.2	20.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.228		10.3	10.0	3.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1505		10.4	10.0	3.6	20.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.6751		10.1	10.0	0.8	20.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID (1): CCV 240-298910/2 CCVIS Instrument ID (1): A4HP7

GC Column (1): RXI-5SILMS ID: 0.25(mm) Date Analyzed (1): 10/13/2017 11:21

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	2.54	100.0
2-Fluorophenol (Surr)	4.86	100.0
Phenol-d5 (Surr)	5.75	100.0
Nitrobenzene-d5 (Surr)	6.58	100.0
2-Fluorobiphenyl (Surr)	8.12	100.0
2,4,6-Tribromophenol (Surr)	9.37	100.0
Terphenyl-d14 (Surr)	11.32	100.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab File ID: 71013004.D Lab Sample ID: MB 240-298527/21-A

Matrix: Water Date Extracted: 10/11/2017 09:04

Instrument ID: A4HP7 Date Analyzed: 10/13/2017 12:09

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-298527/22-A	71013005.D	10/13/2017 12:33
MRC-MW117B-100917	240-86215-2	71013019.D	10/13/2017 18:07
MRC-MW121B-100917	240-86215-1	71013020.D	10/13/2017 18:30

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298527/21-A

Matrix: Water | Lab File ID: 71013004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 10/11/2017 09:04

Sample wt/vol: 1000(mL) | Date Analyzed: 10/13/2017 12:09

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298910 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.49	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	90		23-127
4165-62-2	Phenol-d5 (Surr)	29		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	72		32-120
367-12-4	2-Fluorophenol (Surr)	48		10-120
321-60-8	2-Fluorobiphenyl (Surr)	75		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	66		28-120

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 71013005.D

Lab ID: LCS 240-298527/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	5.25	26	10-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
MRC-MW121B-100917	240-86215-1	40	26	59	81	97	83
MRC-MW117B-100917	240-86215-2	48	32	62	75	92	94
	MB 240-298527/21-A	48	29	72	75	66	90
	LCS 240-298527/22-A	52	32	77	86	97	97

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-120
PHL = Phenol-d5 (Surr)	10-120
NBZ = Nitrobenzene-d5 (Surr)	32-120
FBP = 2-Fluorobiphenyl (Surr)	38-120
TBP = 2,4,6-Tribromophenol (Surr)	28-120
TPHL = Terphenyl-d14 (Surr)	23-127

Column to be used to flag recovery values

FORM II 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: STD6 240-297506/10 Date Analyzed: 10/04/2017 13:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71004010.D Heated Purge: (Y/N) N

Calibration ID: 41776

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124833	6.10	469993	7.22	304542	8.71
UPPER LIMIT		249666	6.60	939986	7.72	609084	9.21
LOWER LIMIT		62417	5.60	234997	6.72	152271	8.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297506/11		124508	6.10	479747	7.22	315567	8.71
CCV 240-298910/2 CCVIS		145781	6.09	555415	7.21	339282	8.71

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: STD6 240-297506/10 Date Analyzed: 10/04/2017 13:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71004010.D Heated Purge: (Y/N) N

Calibration ID: 41776

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		593523	9.96	650805	12.55	484933	14.67
UPPER LIMIT		1187046	10.46	1301610	13.05	969866	15.17
LOWER LIMIT		296762	9.46	325403	12.05	242467	14.17
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297506/11		603100	9.96	675755	12.55	512426	14.67
CCV 240-298910/2 CCVIS		651684	9.97	733367	12.56	594726	14.68

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCV 240-298910/2 Date Analyzed: 10/13/2017 11:21

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71013002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		145781	6.09	555415	7.21	339282	8.71
UPPER LIMIT		291562	6.59	1110830	7.71	678564	9.21
LOWER LIMIT		72891	5.59	277708	6.71	169641	8.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-298527/21-A		147260	6.09	549615	7.21	305882	8.71
LCS 240-298527/22-A		134880	6.09	511644	7.21	284415	8.71
240-86215-2	MRC-MW117B-100917	139032	6.09	550134	7.21	291175	8.71
240-86215-1	MRC-MW121B-100917	142421	6.09	593552	7.21	292655	8.70

DCBd4 = 1,4-Dichlorobenzene-d4
DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
NPT = Naphthalene-d8
Area Limit = 50%-200% of internal standard area
ANT = Acenaphthene-d10
RT Limit = ± 0.5 minutes of internal standard RT
ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCV 240-298910/2 Date Analyzed: 10/13/2017 11:21

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71013002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		651684	9.97	733367	12.56	594726	14.68
UPPER LIMIT		1303368	10.47	1466734	13.06	1189452	15.18
LOWER LIMIT		325842	9.47	366684	12.06	297363	14.18
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-298527/21-A		602945	9.96	633691	12.55	543022	14.68
LCS 240-298527/22-A		582835	9.97	623554	12.56	525181	14.68
240-86215-2	MRC-MW117B-100917	611597	9.96	653969	12.55	569017	14.68
240-86215-1	MRC-MW121B-100917	615368	9.96	688653	12.55	601765	14.67

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

SAMPLE CALCULATION - 1,4-DIOXANE	WATER	
SAMPLE IDENTIFICATION	MRC-MW117B-100917	
COMPOUND	1,4-DIOXANE	
COMPOUND AREA	62973	
INTERNAL STANDARD AMOUNT (ng)	4	
INTERNAL STANDARD AREA	139032	
AVERAGE RRF	0.5462	
62973 x 4 x 1 / 139032 x 0.5462	3.3170	ng/uL
DILUTION FACTOR	1	
SAMPLE VOLUME (uL)	1.04	
VOLUME EXTRACT (uL)	0.002	
uL in 1 mL	1000	
3.3170186141774 x 1 x 1000 x 0.002 / (1.04)	6.4	ug/L

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.: MRC-MW131B-100917 LAC 02/13/18

Client Sample ID: ~~MRC-MW117B-100917~~ | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: 71013019.D

Analysis Method: 8270D | Date Collected: 10/09/2017 11:50

Extract. Method: 3510C | Date Extracted: 10/11/2017 09:04

Sample wt/vol: 1040(mL) | Date Analyzed: 10/13/2017 18:07

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 298910 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.4		0.96	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	94		23-127
4165-62-2	Phenol-d5 (Surr)	32		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	62		32-120
367-12-4	2-Fluorophenol (Surr)	48		10-120
321-60-8	2-Fluorobiphenyl (Surr)	75		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	92		28-120

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation - Page 3

Data File: \\ChromNA\Canton\ChromData\A4HP7\20171013-69636.b\71013019.D
Lims ID: 240-86215-J-2-A
Client ID: ~~MRC-MW117B-100917~~ MRC-MW131B-100917 LAC 02/13/18
Sample Type: Client
Inject. Date: 13-Oct-2017 18:07:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069636-019
Misc. Info.: 240-86215-J-2-A
Operator ID: 001710 Instrument ID: A4HP7

Method: \\ChromNA\Canton\ChromData\A4HP7\20171013-69636.b\8270_hp7.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Oct-2017 10:09:41 Calib Date: 09-Oct-2017 12:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A4HP7\20171009-69473.b\71009009.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: gruberj Date: 16-Oct-2017 09:46:40

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.093	6.093	0.000	98	139032	4.00	
*	2 Naphthalene-d8	136	7.211	7.211	0.000	100	550134	4.00	
*	3 Acenaphthene-d10	164	8.709	8.709	0.000	95	291175	4.00	
*	4 Phenanthrene-d10	188	9.960	9.966	-0.006	97	611597	4.00	
*	5 Chrysene-d12	240	12.554	12.560	-0.006	97	653969	4.00	
*	6 Perylene-d12	264	14.678	14.678	0.000	99	569017	4.00	
$	7 2-Fluorophenol	112	4.858	4.858	0.000	93	191590	4.85	
$	8 Phenol-d5	99	5.756	5.751	0.005	96	169157	3.22	
$	9 Nitrobenzene-d5	82	6.574	6.580	-0.006	94	333379	6.17	
$	10 2-Fluorobiphenyl (Surr)	172	8.115	8.115	0.000	100	645287	7.46	
$	11 2,4,6-Tribromophenol	330	9.372	9.372	0.000	91	96823	9.15	
$	12 Terphenyl-d14	244	11.313	11.319	-0.006	99	1030580	9.41	
	24 1,4-Dioxane	88	2.536	2.542	-0.006	95	62973	3.32	✓

Reagents:

SMIS80PPMW_00016 Amount Added: 5.00 Units: uL Run Reagent

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4992	0.5748 0.5083	0.6324 0.5395	0.5206 0.5451	0.5493	Ave		0.5462				7.8		20.0			
N-Nitrosodimethylamine	0.6999	0.7110 0.7306	0.7923 0.7479	0.7515 0.7657	0.6620	Ave		0.7326				5.6		20.0			
Pyridine	1.4702 1.3973	1.3259 1.4312	1.3422 1.4341	1.3870 1.4747	1.3909	Ave		1.4060				3.7		20.0			
Benzaldehyde	1.3418 1.1061	1.1460 1.0608	1.1236 1.0627	1.1259 1.0187	1.0957	Ave		1.1202			0.0100	8.2		20.0			
Phenol	1.6347	1.5388 1.6263	1.7341 1.7260	1.6338 1.7079	1.7784	Ave		1.6725			0.8000	4.6		20.0			
Aniline	2.0192	1.8225 2.0278	1.8766 2.1134	2.0187 2.1299	2.0339	Ave		2.0053				5.3		20.0			
Bis(2-chloroethyl)ether	1.2201	1.2288 1.2200	1.2183 1.2823	1.2140 1.2640	1.2614	Ave		1.2386			0.7000	2.1		20.0			
2-Chlorophenol	1.3148	1.0751 1.3346	1.2274 1.3745	1.2755 1.3793	1.3058	Ave		1.2859			0.8000	7.7		20.0			
n-Decane	1.4332	1.3682 1.4265	1.4633 1.4812	1.4535 1.4890	1.5025	Ave		1.4522				3.0		20.0			
1,3-Dichlorobenzene	1.4916	1.3903 1.4926	1.4887 1.5383	1.5031 1.5742	1.5044	Ave		1.4979				3.5		20.0			
1,4-Dichlorobenzene	1.5003	1.5311 1.5506	1.5331 1.5763	1.5614 1.6091	1.5778	Ave		1.5549				2.2		20.0			
Benzyl alcohol	0.7755	0.6629 0.8150	0.6559 0.8372	0.6916 0.8598	0.7572	Ave		0.7569				10.5		20.0			
1,2-Dichlorobenzene	1.4185	1.4010 1.4457	1.3757 1.4899	1.4510 1.4871	1.4657	Ave		1.4418				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

Method 680

Polychlorinated Biphenyls (PCBs) (GC/MS) by Method 680

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab File ID: xG1317.D DFTPP Injection Date: 07/13/2017

Instrument ID: CMSX DFTPP Injection Time: 21:27

Analysis Batch No.: 487683

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	55.2
197	Less than 1 % of mass 198	1.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	5.9
275	10 - 30% of mass 198	24.5
365	Greater than 1% of mass 198	3.5
441	Present but less than mass 443	9.5 (99.6) 2
442	Greater than 40% of mass 198	55.7
443	17 - 23% of mass 442	9.6 (17.2) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICISAV 680-487683/3	xG1319.D	07/13/2017	22:31
	IC 680-487683/4	xG1320.D	07/13/2017	23:00
	IC 680-487683/5	xG1321.D	07/13/2017	23:28
	IC 680-487683/6	xG1322.D	07/13/2017	23:57
	IC 680-487683/7	xG1323.D	07/14/2017	00:26
	ICV 680-487683/8	xG1324.D	07/14/2017	00:55

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 240-86215-1 Analy Batch No.: 487683

SDG No.:

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/13/2017 22:31 Calibration End Date: 07/14/2017 00:26 Calibration ID: 53004

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-487683/7	xG1323.D
Level 2	IC 680-487683/6	xG1322.D
Level 3	ICISAV 680-487683/3	xG1319.D
Level 4	IC 680-487683/5	xG1321.D
Level 5	IC 680-487683/4	xG1320.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Monochlorobiphenyl	0.6383	0.5922	0.6105	0.7179	0.5678	Ave		0.6253				9.2		20.0			
Dichlorobiphenyl	0.5120	0.4834	0.4971	0.5815	0.4625	Ave		0.5073				8.9		20.0			
Trichlorobiphenyl	0.3459	0.3378	0.3417	0.4008	0.3427	Ave		0.3538				7.5		20.0			
PCB-104			0.3009			Ave		0.3009						30.0			
Tetrachlorobiphenyl	0.2481	0.2303	0.2447	0.2794	0.2260	Ave		0.2457				8.6		20.0			
Pentachlorobiphenyl	0.2088	0.1975	0.2148	0.2409	0.2021	Ave		0.2128				8.0		20.0			
PCB-77			0.3717			Ave		0.3717						30.0			
Hexachlorobiphenyl	0.2057	0.1931	0.2108	0.2326	0.1918	Ave		0.2068				8.0		20.0			
Heptachlorobiphenyl	0.1742	0.1706	0.1866	0.2033	0.1713	Ave		0.1812				7.7		20.0			
Octachlorobiphenyl	0.1692	0.1568	0.1705	0.1889	0.1683	Ave		0.1707				6.8		20.0			
PCB-208			0.0606			Ave		0.0606						30.0			
Nonachlorobiphenyl			0.0485			Ave		0.0347				7.2		20.0			
DCB Decachlorobiphenyl	0.0323	0.0325	0.0362	0.0382	0.0342	Ave		0.0347				7.2		20.0			
Decachlorobiphenyl-13C12	0.0384	0.0375	0.0424	0.0430	0.0384	Ave		0.0399				6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 240-86215-1 Analy Batch No.: 487683

SDG No.:

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/13/2017 22:31 Calibration End Date: 07/14/2017 00:26 Calibration ID: 53004

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-487683/7	xG1323.D
Level 2	IC 680-487683/6	xG1322.D
Level 3	ICISAV 680-487683/3	xG1319.D
Level 4	IC 680-487683/5	xG1321.D
Level 5	IC 680-487683/4	xG1320.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Monochlorobiphenyl	CRY	Ave	5953	33261	54288	123580	355219	0.100	0.500	1.00	2.00	5.00
Dichlorobiphenyl	CRY	Ave	4775	27148	44207	100107	289315	0.100	0.500	1.00	2.00	5.00
Trichlorobiphenyl	CRY	Ave	3226	18973	30385	68995	214412	0.100	0.500	1.00	2.00	5.00
PCB-104	CRY	Ave			53519					2.00		
Tetrachlorobiphenyl	CRY	Ave	4628	25875	43516	96195	282720	0.200	1.00	2.00	4.00	10.0
Pentachlorobiphenyl	CRY	Ave	3894	22188	38201	82935	252835	0.200	1.00	2.00	4.00	10.0
PCB-77	CRY	Ave			66099					2.00		
Hexachlorobiphenyl	CRY	Ave	3837	21690	37491	80096	240032	0.200	1.00	2.00	4.00	10.0
Heptachlorobiphenyl	CRY	Ave	4875	28752	49769	104994	321447	0.300	1.50	3.00	6.00	15.0
Octachlorobiphenyl	CRY	Ave	4734	26417	45478	97547	315841	0.300	1.50	3.00	6.00	15.0
PCB-208	CRY	Ave			21552					4.00		
Nonachlorobiphenyl	CRY	Ave			21552					5.00		
DCB Decachlorobiphenyl	CRY	Ave	1507	9117	16083	32857	106822	0.500	2.50	5.00	10.0	25.0
Decachlorobiphenyl-13C12	CRY	Ave	1792	10523	18871	36978	96182	0.500	2.50	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD

FORM VII
PCBS CONTINUING CALIBRATION DATA

Does not affect samples in this SDG

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 680-487683/8 Calibration Date: 07/14/2017 00:55

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xG1324.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.6032		0.965	1.00	-3.5	20.0
Dichlorobiphenyl	Ave	0.5073	0.4501		0.887	1.00	-11.3	20.0
Trichlorobiphenyl	Ave	0.3538	0.3464		0.979	1.00	-2.1	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2404		1.96	2.00	-2.2	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2082		1.96	2.00	-2.2	20.0
Hexachlorobiphenyl	Ave	0.2068	0.1933		1.87	2.00	-6.5	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1748		2.89	3.00	-3.5	20.0
Octachlorobiphenyl	Ave	0.1707	0.1673		2.94	3.00	-2.0	20.0
Nonachlorobiphenyl	Ave	0.0485	0.0604		6.97	4.00	24.5*	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0330		4.77	5.00	-4.7	20.0

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab File ID: xj1802.D DFTPP Injection Date: 10/18/2017

Instrument ID: CMSX DFTPP Injection Time: 14:12

Analysis Batch No.: 499041

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.7
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.3
275	10 - 30% of mass 198	30.0
365	Greater than 1% of mass 198	6.7
441	Present but less than mass 443	18.1 (95.9) 2
442	Greater than 40% of mass 198	105.6
443	17 - 23% of mass 442	18.9 (17.9) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	WDM 680-499041/2	xj1803.D	10/18/2017	14:43
	CCVIS 680-499041/3	xj1804.D	10/18/2017	15:13
	MB 680-498449/7-A	xj1806.D	10/18/2017	16:11
	LCS 680-498449/8-A	xj1807.D	10/18/2017	16:39
MRC-MW121B-100917	240-86215-1	xj1809.D	10/18/2017	17:37
MRC-MW117B-100917	240-86215-2	xj1810.D	10/18/2017	18:05
	CCV 680-499041/14	xj1825.D	10/18/2017	20:29

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 680-499041/3 Calibration Date: 10/18/2017 15:13

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1804.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5086		0.813	1.00	-18.7	20.0
Dichlorobiphenyl	Ave	0.5073	0.4327		0.853	1.00	-14.7	20.0
Trichlorobiphenyl	Ave	0.3538	0.3259		0.921	1.00	-7.9	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2276		1.85	2.00	-7.4	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2087		1.96	2.00	-1.9	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2011		1.94	2.00	-2.8	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1843		3.05	3.00	1.7	20.0
Octachlorobiphenyl	Ave	0.1707	0.1708		3.00	3.00	0.0	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0330		4.75	5.00	-4.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0398		4.98	5.00	-0.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 680-499041/14 Calibration Date: 10/18/2017 20:29

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1825.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5142		0.822	1.00	-17.8	20.0
Dichlorobiphenyl	Ave	0.5073	0.4298		0.847	1.00	-15.3	20.0
Trichlorobiphenyl	Ave	0.3538	0.3193		0.903	1.00	-9.7	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2220		1.81	2.00	-9.6	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2013		1.89	2.00	-5.4	20.0
Hexachlorobiphenyl	Ave	0.2068	0.1878		1.82	2.00	-9.2	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1747		2.89	3.00	-3.6	20.0
Octachlorobiphenyl	Ave	0.1707	0.1552		2.73	3.00	-9.1	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0293		4.22	5.00	-15.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0354		4.43	5.00	-11.5	20.0

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab File ID: xj1904.D DFTPP Injection Date: 10/19/2017

Instrument ID: CMSX DFTPP Injection Time: 16:19

Analysis Batch No.: 499172

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	48.8
197	Less than 1 % of mass 198	0.5
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.8
365	Greater than 1% of mass 198	7.2
441	Present but less than mass 443	17.9 (91.9) 2
442	Greater than 40% of mass 198	109.9
443	17 - 23% of mass 442	19.5 (17.7) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	WDM 680-499172/2	xj1905.D	10/19/2017	16:50
	CCVIS 680-499172/3	xj1906.D	10/19/2017	17:20
	LCSD 680-498449/9-A	xj1908.D	10/19/2017	18:18
	CCV 680-499172/12	xj1915.D	10/19/2017	21:39

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVIS 680-499172/3 Calibration Date: 10/19/2017 17:20

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1906.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5839		0.934	1.00	-6.6	20.0
Dichlorobiphenyl	Ave	0.5073	0.4790		0.944	1.00	-5.6	20.0
Trichlorobiphenyl	Ave	0.3538	0.3631		1.03	1.00	2.6	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2694		2.19	2.00	9.6	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2287		2.15	2.00	7.5	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2225		2.15	2.00	7.6	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1965		3.25	3.00	8.4	20.0
Octachlorobiphenyl	Ave	0.1707	0.1855		3.26	3.00	8.7	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0332		4.79	5.00	-4.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0414		5.19	5.00	3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 680-499172/12 Calibration Date: 10/19/2017 21:39

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1915.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5339		0.854	1.00	-14.6	20.0
Dichlorobiphenyl	Ave	0.5073	0.4357		0.859	1.00	-14.1	20.0
Trichlorobiphenyl	Ave	0.3538	0.3267		0.923	1.00	-7.7	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2238		1.82	2.00	-8.9	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2097		1.97	2.00	-1.5	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2008		1.94	2.00	-2.9	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1805		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1707	0.1607		2.82	3.00	-5.9	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0307		4.43	5.00	-11.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0384		4.81	5.00	-3.8	20.0

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Lab File ID: xj1806.D Lab Sample ID: MB 680-498449/7-A

Matrix: Water Date Extracted: 10/13/2017 15:40

Instrument ID: CMSX Date Analyzed: 10/18/2017 16:11

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-498449/8-A	xj1807.D	10/18/2017 16:39
MRC-MW121B-100917	240-86215-1	xj1809.D	10/18/2017 17:37
MRC-MW117B-100917	240-86215-2	xj1810.D	10/18/2017 18:05
	LCSD 680-498449/9-A	xj1908.D	10/19/2017 18:18

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-498449/7-A

Matrix: Water | Lab File ID: xj1806.D

Analysis Method: 680 | Date Collected:

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2017 16:11

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.030	U	0.30	0.030
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.049	U	0.50	0.049
55722-26-4	Octachlorobiphenyl	0.038	U	0.30	0.038
27323-18-8	Monochlorobiphenyl	0.0056	U	0.10	0.0056
2051-24-3	DCB Decachlorobiphenyl	0.070	U	0.50	0.070
25512-42-9	Dichlorobiphenyl	0.0054	U	0.10	0.0054
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0065	U	0.10	0.0065

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	83		25-113

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: xj1807.D

Lab ID: LCS 680-498449/8-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Heptachlorobiphenyl	6.00	4.24	71	62-130	
Hexachlorobiphenyl	4.00	2.67	67	62-130	
Nonachlorobiphenyl	10.0	12.9	129	70-195	
Octachlorobiphenyl	6.00	4.21	70	64-130	
Monochlorobiphenyl	2.00	1.00	50	42-130	
DCB Decachlorobiphenyl	10.0	6.63	66	59-130	
Dichlorobiphenyl	2.00	1.11	55	49-130	
Pentachlorobiphenyl	4.00	2.68	67	63-130	
Tetrachlorobiphenyl	4.00	2.41	60	54-130	
Trichlorobiphenyl	2.00	1.16	58	51-130	

Column to be used to flag recovery and RPD values

FORM III 680

FORM III
PCBS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: xj1908.D

Lab ID: LCSD 680-498449/9-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Heptachlorobiphenyl	6.00	4.16	69	2	40	62-130	
Hexachlorobiphenyl	4.00	2.71	68	1	40	62-130	
Nonachlorobiphenyl	10.0	13.9	139	7	40	70-195	
Octachlorobiphenyl	6.00	4.33	72	3	40	64-130	
Monochlorobiphenyl	2.00	0.914	46	9	40	42-130	
DCB Decachlorobiphenyl	10.0	6.80	68	3	40	59-130	
Dichlorobiphenyl	2.00	0.996	50	11	40	49-130	
Pentachlorobiphenyl	4.00	2.65	66	1	40	63-130	
Tetrachlorobiphenyl	4.00	2.28	57	5	40	54-130	
Trichlorobiphenyl	2.00	1.14	57	2	40	51-130	

Column to be used to flag recovery and RPD values

FORM III 680

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): HP-5MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	13CDCB #
MRC-MW121B-100917	240-86215-1	71
MRC-MW117B-100917	240-86215-2	73
	MB 680-498449/7-A	83
	LCS 680-498449/8-A	70
	LCSD 680-498449/9-A	72

	QC LIMITS
13CDCB = Decachlorobiphenyl-13C12	25-113

Column to be used to flag recovery values

FORM II 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Instrument ID: CMSX Calibration Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calibration End Date: 07/14/2017 00:26

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		61690	9.78	75856	15.84		
UPPER LIMIT		92535	10.28	113784	16.34		
LOWER LIMIT		30845	9.28	37928	15.34		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-487683/8		66010	9.77	83301	15.84		
CCVIS 680-499041/3		44827	9.49	66470	15.52		
MB 680-498449/7-A		50875	9.49	69141	15.52		
LCS 680-498449/8-A		50860	9.49	75122	15.52		
240-86215-1	MRC-MW121B-100917	51728	9.47	77852	15.49		
240-86215-2	MRC-MW117B-100917	52269	9.47	79973	15.50		
CCV 680-499041/14		55078	9.49	79673	15.52		
CCVIS 680-499172/3		47919	9.50	64864	15.54		
LCSD 680-498449/9-A		54874	9.49	74852	15.52		
CCV 680-499172/12		51968	9.50	75368	15.52		

PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Sample No.: CCVIS 680-499041/3 Date Analyzed: 10/18/2017 15:13

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): xj1804.D Heated Purge: (Y/N) N

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		44827	9.49	66470	15.52		
UPPER LIMIT		58275	9.99	86411	16.02		
LOWER LIMIT		31379	8.99	46529	15.02		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-498449/7-A		50875	9.49	69141	15.52		
LCS 680-498449/8-A		50860	9.49	75122	15.52		
240-86215-1	MRC-MW121B-100917	51728	9.47	77852	15.49		
240-86215-2	MRC-MW117B-100917	52269	9.47	79973	15.50		
CCV 680-499041/14		55078	9.49	79673	15.52		

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
Area Limit = 70%-130% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Sample No.: CCVIS 680-499172/3 Date Analyzed: 10/19/2017 17:20

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): xj1906.D Heated Purge: (Y/N) N

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		47919	9.50	64864	15.54		
UPPER LIMIT		62295	10.00	84323	16.04		
LOWER LIMIT		33543	9.00	45405	15.04		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCSD 680-498449/9-A		54874	9.49	74852	15.52		
CCV 680-499172/12		51968	9.50	75368	15.52		

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
Area Limit = 70%-130% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Batch Number: 498449 Batch Start Date: 10/13/17 15:40 Batch Analyst: Wilson, Charles E

Batch Method: 680 Batch End Date: 10/14/17 09:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH
240-86215-P-1	MRC-MW121B-100917	680, 680	T	7 SU	1497.5 g	513.3 g	984.2 mL	1 mL	>10 SU
240-86215-L-2	MRC-MW117B-100917	680, 680	T	7 SU	1535.0 g	510.5 g	1024.5 mL	1 mL	7 SU
MB 680-498449/7		680, 680		7 SU			1000 mL	1 mL	7 SU
LCS 680-498449/8		680, 680		7 SU			1000 mL	1 mL	7 SU
LCSD 680-498449/9		680, 680		7 SU			1000 mL	1 mL	7 SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	ResidualChloCheck	680wkSPIKE 00112	680wkSURR-NEW 00024	680wkSURR-NEW 00025		
240-86215-P-1	MRC-MW121B-100917	680, 680	T	N		1 mL			
240-86215-L-2	MRC-MW117B-100917	680, 680	T	N		1 mL			
MB 680-498449/7		680, 680		N			1 mL		
LCS 680-498449/8		680, 680		N	1 mL		1 mL		
LCSD 680-498449/9		680, 680		N	1 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 240-86215-1

SDG No.:

Batch Number: 498449 Batch Start Date: 10/13/17 15:40 Batch Analyst: Wilson, Charles E

Batch Method: 680 Batch End Date: 10/14/17 09:45

Batch Notes	
Balance ID	23
Batch Comment	680 box 680-112
Concentration End Time	1353
Concentration Start Time	1324
Analyst ID - Concentration	JC
Exchange Solvent ID	5246303
Exchange Solvent Name	Hexanes
Exchange Solvent Volume Used	1 mL
Extraction 1 End Time	0945
Extraction 1 Start Time	1540
pH Paper ID	5053401/5030788/4961266
Pipette ID	AA02G/00515752
Prep Solvent ID	5250771
Prep Solvent Name	MeCL2
Prep Solvent Volume Used	70 mL
Person's name who did the prep	CEW/CMJ
Analyst ID - Reagent Drop Witness	CEW/CMJ
Residual Chlorine Indicator ID	4991768
Analyst ID - Spike Analyst	CEW
Analyst ID - Spike Witness Analyst	CMJ
Sufficient volume for MS/MSD?	NO
Vial Lot Number	90988

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: STD3 240-294860/9 Date Analyzed: 09/14/2017 17:55

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R091409.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
INITIAL CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-294860/9 ICRT		09/14/2017 17:55	P14R091409.D	8.49		

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCV 240-299263/5 Date Analyzed: 10/17/2017 13:33

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R101704a.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-299263/5 CCVRT		10/17/2017 13:33	P14R101704a.D	8.49		
MB 240-299156/13-A		10/17/2017 14:00	P14R101705a.D	8.49		
LCS 240-299156/14-A		10/17/2017 14:27	P14R101706.D	8.49		
CCV 240-299263/9		10/17/2017 15:22	P14R101708.D	8.49		
240-86215-2	MRC-MW117B-100917	10/17/2017 17:37	P14R101713.D	8.49		
CCV 240-299263/18		10/17/2017 19:26	P14R101717.D	8.49		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCV 240-299612/3 Date Analyzed: 10/18/2017 14:06

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R101803.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-299612/3 CCVRT		10/18/2017 14:06	P14R101803.D	8.49		
CCV 240-299612/8		10/18/2017 16:22	P14R101808.D	8.49		
240-86215-1	MRC-MW121B-100917	10/18/2017 18:10	P14R101812.D	8.49		
CCV 240-299612/13		10/18/2017 18:38	P14R101813.D	8.49		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: A2HP14R Start Date: 09/14/2017 15:50

Analysis Batch Number: 294860 End Date: 09/15/2017 01:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-294860/6		09/14/2017 15:50	1		Rxi-5HT 0.53(mm)
STD1 240-294860/7 IC		09/14/2017 17:00	1	P14R091407.D	Rxi-5HT 0.53(mm)
STD2 240-294860/8 IC		09/14/2017 17:28	1	P14R091408.D	Rxi-5HT 0.53(mm)
STD3 240-294860/9 ICRT		09/14/2017 17:55	1	P14R091409.D	Rxi-5HT 0.53(mm)
STD4 240-294860/10 IC		09/14/2017 18:22	1	P14R091410.D	Rxi-5HT 0.53(mm)
STD5 240-294860/11 IC		09/14/2017 18:49	1	P14R091411.D	Rxi-5HT 0.53(mm)
ICV 240-294860/12		09/14/2017 19:16	1	P14R091412.D	Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 19:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 20:11	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 20:38	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:05	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:59	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 22:27	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 22:54	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 23:21	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 23:48	1		Rxi-5HT 0.53(mm)
CCV 240-294860/23		09/15/2017 00:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/15/2017 00:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/15/2017 01:10	1		Rxi-5HT 0.53(mm)
CCV 240-294860/26		09/15/2017 01:37	1		Rxi-5HT 0.53(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: A2HP14R Start Date: 10/17/2017 11:50

Analysis Batch Number: 299263 End Date: 10/17/2017 19:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-299263/4		10/17/2017 11:50	1	P14R101704.D	Rxi-5HT 0.53(mm)
CCV 240-299263/5 CCVRT		10/17/2017 13:33	1	P14R101704a.D	Rxi-5HT 0.53(mm)
MB 240-299156/13-A		10/17/2017 14:00	1	P14R101705a.D	Rxi-5HT 0.53(mm)
LCS 240-299156/14-A		10/17/2017 14:27	1	P14R101706.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 14:55	1		Rxi-5HT 0.53(mm)
CCV 240-299263/9		10/17/2017 15:22	1	P14R101708.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 15:49	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 16:16	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 16:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 17:10	1		Rxi-5HT 0.53(mm)
240-86215-2		10/17/2017 17:37	1	P14R101713.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 18:04	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 18:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 18:59	1		Rxi-5HT 0.53(mm)
CCV 240-299263/18		10/17/2017 19:26	1	P14R101717.D	Rxi-5HT 0.53(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: A2HP14R Start Date: 10/18/2017 13:39

Analysis Batch Number: 299612 End Date: 10/19/2017 02:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-299612/2		10/18/2017 13:39	1	P14R101802.D	Rxi-5HT 0.53(mm)
CCV 240-299612/3 CCVRT		10/18/2017 14:06	1	P14R101803.D	Rxi-5HT 0.53(mm)
CCV 240-299612/8		10/18/2017 16:22	1	P14R101808.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 16:49	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 17:16	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 17:43	1		Rxi-5HT 0.53(mm)
240-86215-1		10/18/2017 18:10	1	P14R101812.D	Rxi-5HT 0.53(mm)
CCV 240-299612/13		10/18/2017 18:38	1	P14R101813.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 19:05	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 19:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 19:59	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 20:27	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 20:54	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 21:21	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 21:48	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 22:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 22:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 23:10	1		Rxi-5HT 0.53(mm)
CCV 240-299612/24		10/18/2017 23:37	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:04	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:31	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:58	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 01:26	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 01:53	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 02:20	1		Rxi-5HT 0.53(mm)
CCV 240-299612/31		10/19/2017 02:47	1		Rxi-5HT 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	7.683	7.683	7.683	7.683	7.683						3.479 - 11.888	7.683
o-Terphenyl (Surr)	8.489	8.490	8.491	8.493	8.497						8.389 - 8.589	8.492

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	903481 808073	804607	814100	861600	Ave		838372.398				5.1		20.0			
o-Terphenyl (Surr)	890646 905743	900616	924945	970715	Ave		918532.994				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]	Ave	18069625	32184297	81409987	172320075	323229227	20.0	40.0	100	200	400
o-Terphenyl (Surr)	Ave	1425034	2881972	7399560	15531436	28983767	1.60	3.20	8.00	16.0	32.0

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-294860/12 Calibration Date: 09/14/2017 19:16

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R091412.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	818178		97900	100000	-2.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-294860/12 Calibration Date: 09/14/2017 19:16

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R091412.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.48	11.89

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299263/5 Calibration Date: 10/17/2017 13:33

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101704a.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	932851		111000	100000	11.3	20.0
o-Terphenyl (Surr)	Ave	918533	1053325		9170	8000	14.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299263/5 Calibration Date: 10/17/2017 13:33

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101704a.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299263/9 Calibration Date: 10/17/2017 15:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101708.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	944066		113000	100000	12.6	20.0
o-Terphenyl (Surr)	Ave	918533	1092475		9510	8000	18.9	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299263/9 Calibration Date: 10/17/2017 15:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101708.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299263/18 Calibration Date: 10/17/2017 19:26

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101717.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	984564		117000	100000	17.4	20.0
o-Terphenyl (Surr)	Ave	918533	1202647		10500	8000	30.9*	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299263/18 Calibration Date: 10/17/2017 19:26

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101717.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299612/3 Calibration Date: 10/18/2017 14:06

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101803.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	795286		94900	100000	-5.1	20.0
o-Terphenyl (Surr)	Ave	918533	897155		7810	8000	-2.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299612/3 Calibration Date: 10/18/2017 14:06

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101803.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299612/8 Calibration Date: 10/18/2017 16:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101808.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	784254		93500	100000	-6.5	20.0
o-Terphenyl (Surr)	Ave	918533	907434		7900	8000	-1.2	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299612/8 Calibration Date: 10/18/2017 16:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101808.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299612/13 Calibration Date: 10/18/2017 18:38

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101813.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	787362		93900	100000	-6.1	20.0
o-Terphenyl (Surr)	Ave	918533	912207		7940	8000	-0.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299612/13 Calibration Date: 10/18/2017 18:38

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101813.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: RTC 240-299263/4 Date Analyzed: 10/17/2017 11:50

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID: P14R101704.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: RTC 240-299612/2 Date Analyzed: 10/18/2017 13:39

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID: P14R101802.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: MB 240-299156/13-A

Matrix: Water Date Extracted: 10/16/2017 09:27

Lab File ID:(1) P14R101705a.D Lab File ID:(2)

Date Analyzed:(1) 10/17/2017 14:00 Date Analyzed:(2)

Instrument ID:(1) A2HP14R Instrument ID:(2)

GC Column:(1) Rxi-5HT ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-299156/14-A	10/17/2017 14:27	
MRC-MW117B-100917	240-86215-2	10/17/2017 17:37	
MRC-MW121B-100917	240-86215-1	10/18/2017 18:10	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299156/13-A

Matrix: Water | Lab File ID: P14R101705a.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 250(mL) | Date Analyzed: 10/17/2017 14:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299263 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	230	U	500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	85		37-130

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P14R101706.D

Lab ID: LCS 240-299156/14-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2000	1480	74	56-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5HT ID: 0.53(mm)

Client Sample ID	Lab Sample ID	OTPH1 #
MRC-MW121B-100917	240-86215-1	92
MRC-MW117B-100917	240-86215-2	81
	MB 240-299156/13-A	85
	LCS 240-299156/14-A	89

	QC LIMITS
OTPH = o-Terphenyl (Surr)	37-130

Column to be used to flag recovery values

FORM II 8015C

SAMPLE IDENTIFICATION	MRC-MW121B-100917	
COMPOUND	DRO	
COMPOUND AREA	36700798	
AVERAGE RRF	838372.398	
36700798 / 838372.398	43.8	ng/ul
SAMPLE VOLUME (ml)	270	
VOLUME EXTRACT (µl)	5000	
VOLUME INJECTED (µl)	1	
DILUTION FACTOR	1	
43.7762479866376 x 1 x 5000 x / (270 x 1)	811	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: MRC-MW121B-100917 | Lab Sample ID: 240-86215-1

Matrix: Water | Lab File ID: P14R101812.D

Analysis Method: 8015C | Date Collected: 10/09/2017 11:50

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 270(mL) | Date Analyzed: 10/18/2017 18:10

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	810		460	210

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	92		37-130

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP14R\20171018-69803.b\P14R101812.D
Lims ID: 240-86215-K-1-A
Client ID: MRC-MW121B-100917
Sample Type: Client
Inject. Date: 18-Oct-2017 18:10:55 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: A2HP14R

Method: \\ChromNA\Canton\ChromData\A2HP14R\20171018-69803.b\TPH14RLVI.m
Limit Group: GC 8015C-D TPH LVI ICAL
Last Update: 19-Oct-2017 11:19:30 Calib Date: 14-Sep-2017 18:49:43
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP14R\20170914-68708.b\P14R091411.D

Column 1 : Det: GC FID1A
Process Host: XAWRK024

First Level Reviewer: bolgrind Date: 19-Oct-2017 06:36:53

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
A	32 Diesel					
	7.675	(3.468-11.883)		32006866	38.2	
A	36 C10-C32					
	8.331	(3.468-13.195)		36700798	43.8	✓
$	37 o-Terphenyl					
	8.486	8.487	-0.001	6777740	7.38	

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	903481 808073	804607	814100	861600	Ave		838372.398				5.1		20.0			
o-Terphenyl (Surr)	890646 905743	900616	924945	970715	Ave		918532.994				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

Method 8015C - GRO

Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: AFID Start Date: 09/21/2017 13:19

Analysis Batch Number: 295712 End Date: 09/21/2017 18:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-295712/4 IC		09/21/2017 13:19	1	A0092104.D	RTX-VRX 0.45(mm)
STD2 240-295712/5 IC		09/21/2017 13:57	1	A0092105.D	RTX-VRX 0.45(mm)
STD3 240-295712/6 IC		09/21/2017 14:35	1	A0092106.D	RTX-VRX 0.45(mm)
STD4 240-295712/7 IC		09/21/2017 15:14	1	A0092107.D	RTX-VRX 0.45(mm)
STD5 240-295712/8 IC		09/21/2017 15:53	1	A0092108.D	RTX-VRX 0.45(mm)
STD6 240-295712/9 IC		09/21/2017 16:32	1	A0092109.D	RTX-VRX 0.45(mm)
STD7 240-295712/10 IC		09/21/2017 17:10	1	A0092110.D	RTX-VRX 0.45(mm)
STD8 240-295712/11 IC		09/21/2017 17:48	1	A0092111.D	RTX-VRX 0.45(mm)
ICV 240-295712/12		09/21/2017 18:25	1	A0092112.D	RTX-VRX 0.45(mm)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: AFID Start Date: 10/16/2017 08:34

Analysis Batch Number: 299105 End Date: 10/16/2017 23:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-299105/4		10/16/2017 08:34	1	A0101604.D	RTX-VRX 0.45(mm)
MB 240-299105/5		10/16/2017 09:10	1	A0101605.D	RTX-VRX 0.45(mm)
LCS 240-299105/6		10/16/2017 09:47	1	A0101606.D	RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 10:24	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 11:00	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 13:27	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 14:04	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 14:41	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 15:18	1		RTX-VRX 0.45(mm)
CCV 240-299105/16		10/16/2017 15:55	1	A0101616.D	RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 16:32	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 17:45	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 18:22	1		RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 18:58	1		RTX-VRX 0.45(mm)
240-86215-1		10/16/2017 19:35	1	A0101622.D	RTX-VRX 0.45(mm)
240-86215-2		10/16/2017 20:12	1	A0101623.D	RTX-VRX 0.45(mm)
ZZZZZ		10/16/2017 20:48	1		RTX-VRX 0.45(mm)
CCV 240-299105/28		10/16/2017 23:14	1	A0101628.D	RTX-VRX 0.45(mm)

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Sample No.: CCVRT 240-299105/4 Date Analyzed: 10/16/2017 08:34

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): A0101604.D Heated Purge: (Y/N) N

Calibration ID: 41480

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT		
				RT #		
CONTINUING CALIBRATION SURROGATE				10.49		
UPPER LIMIT				10.59		
LOWER LIMIT				10.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-299105/4		10/16/2017 08:34	A0101604.D	10.49		
MB 240-299105/5		10/16/2017 09:10	A0101605.D	10.49		
LCS 240-299105/6		10/16/2017 09:47	A0101606.D	10.49		
CCV 240-299105/16		10/16/2017 15:55	A0101616.D	10.49		
240-86215-1	MRC-MW121B-100917	10/16/2017 19:35	A0101622.D	10.49		
240-86215-2	MRC-MW117B-100917	10/16/2017 20:12	A0101623.D	10.48		
CCV 240-299105/28		10/16/2017 23:14	A0101628.D	10.49		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Gasoline Range Organics [C6 - C10]	11.715	11.715	11.715	11.715	11.715	11.715	11.715	11.715			6.295 - 17.134	11.715
C6-C12	12.973	12.973	12.973	12.973	12.973	12.973	12.973	12.973			6.295 - 19.651	12.973
Trifluorotoluene (Surr)	10.493	10.488	10.487	10.489	10.489	10.489	10.489	10.491			10.439 - 10.539	10.489

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Gasoline Range Organics [C6 - C10]	467028 327734	404314 334335	358289 313395	333580 313854	Lin	21092163.3	309478.633							1.0000		0.9900
C6-C12	566060 358191	461616 365844	400114 341675	367288 341189	Lin	27740274.7	335538.951							1.0000		0.9900
Trifluorotoluene (Surr)	433595 352666	377792 367389	352227 323612	340107 337329	Ave		360589.558				9.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Gasoline Range Organics [C6 - C10]	Lin	46702752 534936239	80862842 1002863362	143315431 1506499199	266864076	393280590	100 1600	200 3200	400 4800	800	1200
C6-C12	Lin	56606036 585350085	92323209 1093361306	160045434 1637705499	293830549	429829177	100 1600	200 3200	400 4800	800	1200
Trifluorotoluene (Surr)	Ave	1734381 73477715	3022335 142389161	7044548 215890352	13604270	28213297	4.00 200	8.00 440	20.0 640	40.0	80.0

Curve Type Legend:

Ave = Average
Lin = Linear

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-295712/12 Calibration Date: 09/21/2017 18:25

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0092112.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		343843		821	800	2.6	20.0
C6-C12	Lin		379123		821	800	2.7	20.0
Trifluorotoluene (Surr)	Ave	360590	363207		40.3	40.0	0.7	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICV 240-295712/12 Calibration Date: 09/21/2017 18:25

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0092112.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.72	6.30	17.13
C6-C12	12.97	6.30	19.65
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVRT 240-299105/4 Calibration Date: 10/16/2017 08:34

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101604.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		312515		740	800	-7.5	20.0
C6-C12	Lin		341242		731	800	-8.6	20.0
Trifluorotoluene (Surr)	Ave	360590	370042		41.0	40.0	2.6	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCVRT 240-299105/4 Calibration Date: 10/16/2017 08:34

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101604.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.74	6.32	17.16
C6-C12	12.98	6.32	19.63
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299105/16 Calibration Date: 10/16/2017 15:55

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101616.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		319849		759	800	-5.2	20.0
C6-C12	Lin		348812		749	800	-6.4	20.0
Trifluorotoluene (Surr)	Ave	360590	351425		39.0	40.0	-2.5	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299105/16 Calibration Date: 10/16/2017 15:55

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101616.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.74	6.32	17.16
C6-C12	12.98	6.32	19.63
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299105/28 Calibration Date: 10/16/2017 23:14

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101628.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		294022		692	800	-13.5	20.0
C6-C12	Lin		322665		687	800	-14.2	20.0
Trifluorotoluene (Surr)	Ave	360590	324111		36.0	40.0	-10.1	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: CCV 240-299105/28 Calibration Date: 10/16/2017 23:14

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101628.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.74	6.32	17.16
C6-C12	12.98	6.32	19.63
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: MB 240-299105/5

Matrix: Water Date Extracted: 10/16/2017 09:10

Lab File ID:(1) A0101605.D Lab File ID:(2)

Date Analyzed:(1) 10/16/2017 09:10 Date Analyzed:(2)

Instrument ID:(1) AFID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-299105/6	10/16/2017 09:47	
MRC-MW121B-100917	240-86215-1	10/16/2017 19:35	
MRC-MW117B-100917	240-86215-2	10/16/2017 20:12	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299105/5

Matrix: Water | Lab File ID: A0101605.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/16/2017 09:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299105 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	96		56-120

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101606.D

Lab ID: LCS 240-299105/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	836	105	73-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45(mm)

Client Sample ID	Lab Sample ID	TFT1 #
MRC-MW121B-100917	240-86215-1	91
MRC-MW117B-100917	240-86215-2	92
	MB 240-299105/5	96
	LCS 240-299105/6	104

	QC LIMITS
TFT = Trifluorotoluene (Surr)	56-120

Column to be used to flag recovery values

FORM II 8015C

SAMPLE CALCULATION - GRO	WATER
SAMPLE IDENTIFICATION	MRC-MW117B-100917
COMPOUND	GRO
COMPOUND AREA	57170391
INTERNAL STANDARD AREA	1
INTERNAL STANDARD AMOUND (ng)	1
AVERAGE RRF	309478.633
Y-INTERCEPT	21092163.3

57170391 / 309478.633 = 116.58 ng/ul

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86215-1

SDG No.: MRC-MW131B-100917 | LAC 02/13/18

Client Sample ID: ~~MRC-MW117B-100917~~ | Lab Sample ID: 240-86215-2

Matrix: Water | Lab File ID: A0101623.D

Analysis Method: 8015C | Date Collected: 10/09/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/16/2017 20:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299105 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	120 ✓		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	92		56-120

Sample Calculation - Page 3

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\AFID\20171016-69681.b\A0101623.D
Lims ID: 240-86215-A-2
Client ID: ~~MRC-MW117B-100917~~ MRC-MW131B-100917 LAC 02/13/18
Sample Type: Client
Inject. Date: 16-Oct-2017 20:12:06 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069681-023
Operator ID: Instrument ID: AFID

Method: \\ChromNA\Canton\ChromData\AFID\20171016-69681.b\A80218015.m
Limit Group: GCV 8015C GRO ICAL
Last Update: 17-Oct-2017 07:01:22 Calib Date: 21-Sep-2017 17:48:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\AFID\20170921-68899.b\A0092111.D

Column 1 : Det: GC FID1A
Process Host: XAWRK016

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	10.484	10.489	-0.005	13274535	36.8	
A 5 C6-C10	11.742	(6.321-17.163)		57170391	116.6	

Reagents:

VGGASURROGATE_00044 Amount Added: 1.00 Units: uL Run Reagent

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86215-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Gasoline Range Organics [C6 - C10]	467028 327734	404314 334335	358289 313395	333580 313854	Lin	21092163.3	309478.633							1.0000		0.9900
C6-C12	566060 358191	461616 365844	400114 341675	367288 341189	Lin	27740274.7	335538.951							1.0000		0.9900
Trifluorotoluene (Surr)	433595 352666	377792 367389	352227 323612	340107 337329	Ave		360589.558				9.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG No.:

Project: MRC Groundwater Sampling

Client Sample ID	Lab Sample ID
MRC-MW121B-100917	240-86215-1
MRC-MW117B-100917	240-86215-2

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	ICV 240-298898/7 10/12/2017 11:46				CCV 240-298898/74 10/12/2017 16:57				CCV 240-298898/86 10/12/2017 17:52			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	42.6		40.0	106	52.0		50.0	104	52.0		50.0	104
Arsenic	42.1		40.0	105	50.3		50.0	101	50.6		50.0	101
Barium	40.5		40.0	101	51.9		50.0	104	52.4		50.0	105
Beryllium	42.4		40.0	106	51.0		50.0	102	50.0		50.0	100
Cadmium	42.0		40.0	105	49.4		50.0	99	49.7		50.0	99
Chromium	42.2		40.0	105	50.9		50.0	102	50.9		50.0	102
Cobalt	43.0		40.0	107	52.0		50.0	104	52.6		50.0	105
Copper	44.0		40.0	110	52.6		50.0	105	53.6		50.0	107
Iron	10600		10000	106	12600		12500	101	12900		12500	103
Lead	43.5		40.0	109	46.9		50.0	94	47.9		50.0	96
Manganese	209		200	105	250		250	100	254		250	101
Molybdenum	42.5		40.0	106	50.1		50.0	100	49.1		50.0	98
Nickel	42.1		40.0	105	47.6		50.0	95	45.8		50.0	92
Selenium	41.3		40.0	103	48.7		50.0	97	49.3		50.0	99
Silver	42.2		40.0	105	50.6		50.0	101	50.0		50.0	100
Thallium	43.1		40.0	108	46.6		50.0	93	47.5		50.0	95
Vanadium	41.3		40.0	103	50.9		50.0	102	50.8		50.0	102
Zinc	40.9		40.0	102	50.0		50.0	100	51.2		50.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	CCV 240-298898/91 10/12/2017 18:15											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.1		50.0	102								
Arsenic	49.9		50.0	100								
Barium	49.8		50.0	100								
Beryllium	50.0		50.0	100								
Cadmium	49.8		50.0	100								
Chromium	50.5		50.0	101								
Cobalt	51.9		50.0	104								
Copper	52.5		50.0	105								
Iron	12800		12500	102								
Lead	47.5		50.0	95								
Manganese	251		250	100								
Molybdenum	48.5		50.0	97								
Nickel	46.3		50.0	93								
Selenium	48.8		50.0	98								
Silver	49.5		50.0	99								
Thallium	47.1		50.0	94								
Vanadium	50.6		50.0	101								
Zinc	50.1		50.0	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICV Source: MTMSCRI6020AW_00062 Concentration Units: ug/L

CCV Source: MTMSCRI6020AW_00062

Analyte	ICVL 240-298898/9 10/12/2017 11:56				CCVL 240-298898/93 10/12/2017 18:24							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	1.99	J	2.00	99	2.11		2.00	105				
Arsenic	5.12		5.00	102	5.22		5.00	104				
Barium	4.71	J	5.00	94	4.95	J	5.00	99				
Beryllium	1.01		1.00	101	1.06		1.00	106				
Cadmium	1.05		1.00	105	1.03		1.00	103				
Chromium	1.87	J	2.00	93	1.82	J	2.00	91				
Cobalt	1.06		1.00	106	1.10		1.00	110				
Copper	2.22		2.00	111	2.32		2.00	116				
Iron	111		100	111	112		100	112				
Lead	1.10		1.00	110	0.998	J	1.00	100				
Manganese	4.75	J	5.00	95	4.77	J	5.00	95				
Molybdenum	5.11	J	5.00	102	4.81	J	5.00	96				
Nickel	1.94	J	2.00	97	1.64	J	2.00	82				
Selenium	4.91	J	5.00	98	5.28		5.00	106				
Silver	0.994	J	1.00	99	1.01		1.00	101				
Thallium	1.09		1.00	109	1.02		1.00	102				
Vanadium	4.99	J	5.00	100	4.89	J	5.00	98				
Zinc	19.2	J	20.0	96	20.7		20.0	104				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICV Source: MTHgICV_00001_00239 Concentration Units: ug/L

CCV Source: MTHGCALW_01638

Analyte	ICV 240-298512/7-A 10/12/2017 08:38				CCV 240-298512/10-A 10/12/2017 10:07				CCV 240-298512/10-A 10/12/2017 10:33			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.22		5.00	104	5.25		5.00	105	4.91		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICV Source: MTHgICV_00001_00239 Concentration Units: ug/L

CCV Source: MTHGCALW_01638

Analyte	CCV 240-298512/10-A 10/12/2017 11:11				CCV 240-298512/10-A 10/12/2017 11:34							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.09		5.00	102	4.96		5.00	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Method: 7470A Instrument ID: H3

Lab Sample ID: CRA 240-298512/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01638

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.168	J	84	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-298898/8 10/12/2017 11:51		CCB 240-298898/75 10/12/2017 17:01		CCB 240-298898/87 10/12/2017 17:56		CCB 240-298898/92 10/12/2017 18:19	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.57	U	0.57	U	0.57	U	0.57	U
Arsenic	5.0	0.75	U	0.75	U	0.75	U	0.75	U
Barium	5.0	2.2	U	2.2	U	2.2	U	2.2	U
Beryllium	1.0	0.31	U	0.31	U	0.31	U	0.31	U
Cadmium	1.0	0.21	U	0.21	U	0.21	U	0.21	U
Chromium	2.0	0.98	U	0.98	U	0.98	U	0.98	U
Cobalt	1.0	0.19	U	0.19	U	0.19	U	0.19	U
Copper	2.0	1.7	U	1.7	U	1.7	U	1.7	U
Iron	100	47	U	47	U	47	U	47	U
Lead	1.0	0.45	U	0.45	U	0.45	U	0.45	U
Manganese	5.0	2.1	U	2.1	U	2.1	U	2.1	U
Molybdenum	10	1.1	U	1.1	U	1.1	U	1.1	U
Nickel	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Selenium	5.0	0.89	U	0.89	U	0.89	U	0.89	U
Silver	1.0	0.053	U	0.053	U	0.053	U	0.053	U
Thallium	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Vanadium	5.0	0.82	U	0.82	U	0.82	U	0.82	U
Zinc	20	15	U	15	U	15	U	15	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-298512/8-A 10/12/2017 08:40		CCB 240-298512/11-A 10/12/2017 10:09		CCB 240-298512/11-A 10/12/2017 10:35		CCB 240-298512/11-A 10/12/2017 11:13	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.13	U	0.13	U	0.13	U	0.13	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-298512/11-A 10/12/2017 11:37							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.13	U						

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-298589/1-A

Instrument Code: I10 Batch No.: 298898

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.75	U		6020A
7440-39-3	Barium	2.2	U		6020A
7440-41-7	Beryllium	0.31	U		6020A
7440-43-9	Cadmium	0.21	U		6020A
7440-48-4	Cobalt	0.19	U		6020A
7440-47-3	Chromium	0.98	U		6020A
7440-50-8	Copper	1.7	U		6020A
7439-89-6	Iron	47	U		6020A
7439-96-5	Manganese	2.1	U		6020A
7439-98-7	Molybdenum	1.1	U		6020A
7440-02-0	Nickel	1.5	U		6020A
7439-92-1	Lead	0.45	U		6020A
7440-36-0	Antimony	0.57	U		6020A
7782-49-2	Selenium	0.89	U		6020A
7440-62-2	Vanadium	0.82	U		6020A
7440-66-6	Zinc	15	U		6020A
7440-22-4	Silver	0.053	U		6020A
7440-28-0	Thallium	0.20	U		6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-298593/1-A

Instrument Code: H3 Batch No.: 298779

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.13	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICSA 240-298898/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00082

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0580**	
Arsenic		**0.0510**	
Barium		**-0.0430**	
Beryllium		**-0.0160**	
Cadmium		**0.209**	
Chromium		**0.474**	
Cobalt		**-0.0050**	
Copper		**0.120**	
Iron	**50000**	**50353**	**101**
Lead		**0.0110**	
Manganese		**-0.439**	
Molybdenum	**1000**	**1023**	**102**
Nickel		**-0.0900**	
Selenium		**0.0550**	
Silver		**0.0080**	
Thallium		**-0.0010**	
Vanadium		**-0.0470**	
Zinc		**-1.53**	
Aluminum	*50000*	*51472*	*103*
Boron		*1.21*	
Calcium	*50000*	*50442*	*101*
Lithium		*-0.438*	
Magnesium	*50000*	*50979*	*102*
Potassium	*50000*	*50624*	*101*
Sodium	*50000*	*51704*	*103*
Strontium		*0.405*	
Tin		*0.0100*	
Titanium	*1000*	*1003*	*100*
Tungsten		*0.224*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Lab Sample ID: ICSAB 240-298898/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00079

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**103**	**103**
Arsenic	**100**	**105**	**105**
Barium	**100**	**101**	**101**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**102**	**102**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**105**	**105**
Copper	**100**	**105**	**105**
Iron	**50000**	**50319**	**101**
Lead	**100**	**105**	**105**
Manganese	**100**	**103**	**103**
Molybdenum	**1100**	**1137**	**103**
Nickel	**100**	**105**	**105**
Selenium	**100**	**101**	**101**
Silver	**100**	**101**	**101**
Thallium	**100**	**106**	**106**
Vanadium	**100**	**104**	**104**
Zinc	**100**	**104**	**104**
Aluminum	*50000*	*50934*	*102*
Boron	*100*	*101*	*101*
Calcium	*50000*	*50440*	*101*
Lithium	*100*	*97.6*	*98*
Magnesium	*50000*	*49866*	*100*
Potassium	*50000*	*50606*	*101*
Sodium	*50000*	*50112*	*100*
Strontium	*100*	*103*	*103*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1108*	*101*
Tungsten	*100*	*101*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MRC-MW121B-100917 MS
Lab ID: 240-86215-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-86215-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	1040		3.4	J	1000	103	75-125		6020A
Barium	1020		15		1000	101	75-125		6020A
Beryllium	1010		0.31	U	1000	101	75-125		6020A
Cadmium	993		0.21	U	1000	99	75-125		6020A
Cobalt	1090		0.59	J	1000	109	75-125		6020A
Chromium	1040		3.3		1000	104	75-125		6020A
Copper	1080		8.7		1000	107	75-125		6020A
Iron	10900		710		10000	101	75-125		6020A
Manganese	1050		6.1		1000	105	75-125		6020A
Molybdenum	110		13		100	97	75-125		6020A
Nickel	903		1.5	U	1000	90	75-125		6020A
Lead	1020		1.2		1000	102	75-125		6020A
Antimony	104		1.9	J	100	102	75-125		6020A
Selenium	997		1.6	J	1000	100	75-125		6020A
Vanadium	1050		19		1000	104	75-125		6020A
Zinc	1070		15	U	1000	107	75-125		6020A
Silver	102		0.053	U	100	102	75-125		6020A
Thallium	255		0.20	U	250	102	75-125		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-86229-A-5-E MS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.05		0.13	U	1.00	105	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MRC-MW121B-100917 MSD
Lab ID: 240-86215-1 MSD
Lab Name: TestAmerica Canton
Job No.: 240-86215-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	1040		1000	104	75-125	0	20		6020A
Barium	1040		1000	102	75-125	2	20		6020A
Beryllium	983		1000	98	75-125	3	20		6020A
Cadmium	985		1000	98	75-125	1	20		6020A
Cobalt	1060		1000	106	75-125	2	20		6020A
Chromium	1050		1000	105	75-125	1	20		6020A
Copper	1090		1000	108	75-125	1	20		6020A
Iron	11000		10000	103	75-125	1	20		6020A
Manganese	1040		1000	103	75-125	1	20		6020A
Molybdenum	107		100	95	75-125	2	20		6020A
Nickel	880		1000	88	75-125	3	20		6020A
Lead	998		1000	100	75-125	2	20		6020A
Antimony	103		100	101	75-125	1	20		6020A
Selenium	997		1000	100	75-125	0	20		6020A
Vanadium	1050		1000	103	75-125	1	20		6020A
Zinc	1060		1000	106	75-125	0	20		6020A
Silver	100		100	100	75-125	2	20		6020A
Thallium	247		250	99	75-125	3	20		6020A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-86229-A-5-F MSD

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.999		1.00	100	80-120	5	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-298589/3-A

Lab Name: TestAmerica Canton Job No.: 240-86215-1

Sample Matrix: Water LCS Source: MTICPMSA_00032

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	1000	1000		100	80	120		6020A
Barium	1000	997		100	80	120		6020A
Beryllium	1000	1010		101	80	120		6020A
Cadmium	1000	976		98	80	120		6020A
Cobalt	1000	1060		106	80	120		6020A
Chromium	1000	1040		104	80	120		6020A
Copper	1000	1060		106	80	120		6020A
Iron	10000	10100		101	80	120		6020A
Manganese	1000	1030		103	80	120		6020A
Molybdenum	100	89.7		90	80	120		6020A
Nickel	1000	864		86	80	120		6020A
Lead	1000	991		99	80	120		6020A
Antimony	100	98.6		99	80	120		6020A
Selenium	1000	993		99	80	120		6020A
Vanadium	1000	1010		101	80	120		6020A
Zinc	1000	1050		105	80	120		6020A
Silver	100	98.3		98	80	120		6020A
Thallium	250	245		98	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-298593/2-A

Lab Name: TestAmerica Canton Job No.: 240-86215-1

Sample Matrix: Water LCS Source: MTHGCALW_01638

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.14		103	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-86215-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-86215-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	3.4	J	3.8	U	NC		6020A
Barium	15		14.7	J	NC		6020A
Beryllium	0.31	U	1.5	U	NC		6020A
Cadmium	0.21	U	1.1	U	NC		6020A
Cobalt	0.59	J	0.95	U	NC		6020A
Chromium	3.3		4.9	U	NC		6020A
Copper	8.7		9.34	J	NC		6020A
Iron	710		758		NC		6020A
Manganese	6.1		10	U	NC		6020A
Molybdenum	13		12.3	J	NC		6020A
Nickel	1.5	U	7.4	U	NC		6020A
Lead	1.2		2.3	U	NC		6020A
Antimony	1.9	J	2.9	U	NC		6020A
Selenium	1.6	J	4.5	U	NC		6020A
Vanadium	19		18.7	J	NC		6020A
Zinc	15	U	75	U	NC		6020A
Silver	0.053	U	0.27	U	NC		6020A
Thallium	0.20	U	1.0	U	NC		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86215-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-86215-1

SDG No.:

Instrument ID: I10 Date: 09/29/2017 10:30

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Arsenic		10000	6020A
Barium		10000	6020A
Beryllium		2000	6020A
Cadmium		4000	6020A
Cobalt		5000	6020A
Chromium		10000	6020A
Copper		10000	6020A
Molybdenum		2000	6020A
Nickel		10000	6020A
Lead		4000	6020A
Antimony		200	6020A
Selenium		10000	6020A
Vanadium		10000	6020A
Zinc		10000	6020A
Silver		300	6020A
Thallium		2000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-298589/1-A	10/11/2017 14:00	298589		50	50
LCS 240-298589/3-A	10/11/2017 14:00	298589		50	50
240-86215-1	10/11/2017 14:00	298589		50	50
240-86215-1	10/11/2017 14:00	298589		50	50
240-86215-1 MS	10/11/2017 14:00	298589		50	50
240-86215-1 MSD	10/11/2017 14:00	298589		50	50
240-86215-2	10/11/2017 14:00	298589		50	50
240-86215-2	10/11/2017 14:00	298589		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-298593/1-A	10/11/2017 13:29	298593		50	50
LCS 240-298593/2-A	10/11/2017 13:29	298593		50	50
240-86229-A-5-E MS	10/11/2017 13:29	298593		50	50
240-86229-A-5-F MSD	10/11/2017 13:29	298593		50	50
240-86215-1	10/11/2017 13:29	298593		50	50
240-86215-1	10/11/2017 13:29	298593		50	50
240-86215-2	10/11/2017 13:29	298593		50	50
240-86215-2	10/11/2017 13:29	298593		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/12/2017 11:19 End Date: 10/12/2017 18:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			11:19																									
ICIS 240-298898/2			11:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD1 240-298898/3 IC	1		11:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 240-298898/4 IC	1		11:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 240-298898/5 IC	1		11:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD4 240-298898/6 IC	1		11:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 240-298898/7	1		11:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 240-298898/8	1		11:51	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X								
ICVL 240-298898/9	1		11:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 240-298898/10	1		12:00	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X								
ICSAB 240-298898/11	1		12:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 240-298898/12			12:09																									
CCB 240-298898/13			12:13																									
ZZZZZZ			12:27																									
ZZZZZZ			12:32																									
ZZZZZZ			12:36																									
ZZZZZZ			12:41																									
ZZZZZZ			12:45																									
ZZZZZZ			12:50																									
ZZZZZZ			12:54																									
ZZZZZZ			12:59																									
ZZZZZZ			13:03																									
ZZZZZZ			13:08																									
CCV 240-298898/24			13:12																									
CCB 240-298898/25			13:17																									
ZZZZZZ			13:21																									
ZZZZZZ			13:26																									
ZZZZZZ			13:30																									
ZZZZZZ			13:35																									
ZZZZZZ			13:39																									
ZZZZZZ			13:44																									
ZZZZZZ			13:48																									
ZZZZZZ			13:53																									
CCV 240-298898/34			13:57																									
CCB 240-298898/35			14:01																									
ZZZZZZ			14:06																									
ZZZZZZ			14:10																									
ZZZZZZ			14:15																									
ZZZZZZ			14:19																									
ZZZZZZ			14:24																									
ZZZZZZ			14:28																									
ZZZZZZ			14:33																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/12/2017 11:19 End Date: 10/12/2017 18:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			14:37																									
ZZZZZZ			14:42																									
ZZZZZZ			14:46																									
CCV 240-298898/46			14:51																									
CCB 240-298898/47			14:55																									
ZZZZZZ			15:00																									
ZZZZZZ			15:04																									
ZZZZZZ			15:09																									
CCV 240-298898/51			15:13																									
CCB 240-298898/52			15:18																									
ZZZZZZ			15:22																									
ZZZZZZ			15:27																									
ZZZZZZ			15:31																									
ZZZZZZ			15:36																									
ZZZZZZ			15:40																									
ZZZZZZ			15:45																									
ZZZZZZ			15:49																									
ZZZZZZ			15:53																									
ZZZZZZ			15:58																									
ZZZZZZ			16:02																									
CCV 240-298898/63			16:07																									
CCB 240-298898/64			16:11																									
ZZZZZZ			16:16																									
CCV 240-298898/66			16:20																									
CCB 240-298898/67			16:25																									
ZZZZZZ			16:29																									
ZZZZZZ			16:34																									
ZZZZZZ			16:38																									
ZZZZZZ			16:43																									
ZZZZZZ			16:48																									
ZZZZZZ			16:52																									
CCV 240-298898/74	1		16:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-298898/75	1		17:01	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
ZZZZZZ			17:06																									
MB 240-298589/1-A	1	R	17:10	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
LCS 240-298589/3-A	1	R	17:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
240-86215-1	1	R	17:20	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
240-86215-1	1	D	17:24	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
240-86215-1 SD	5	D	17:29	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
ZZZZZZ			17:33																									
240-86215-1 MS	1	D	17:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
240-86215-1 MSD	1	D	17:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/12/2017 11:19 End Date: 10/12/2017 18:33

Lab Sample Id	D/F	Type	Time	Analytes																											
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn										
240-86215-2	1	R	17:47	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X										
CCV 240-298898/86	1		17:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCB 240-298898/87	1		17:56	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X										
240-86215-2	1	D	18:01	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X										
ZZZZZZ			18:05																												
ZZZZZZ			18:10																												
CCV 240-298898/91	1		18:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCB 240-298898/92	1		18:19	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X										
CCVL 240-298898/93	1		18:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCV 240-298898/94			18:28																												
CCB 240-298898/95			18:33																												

Prep Types:
D = Dissolved
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/12/2017 08:00 End Date: 10/12/2017 12:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-298512/1-A			08:00	X																								
IC 240-298512/2-A			08:02	X																								
IC 240-298512/3-A			08:04	X																								
IC 240-298512/4-A			08:06	X																								
IC 240-298512/5-A			08:08	X																								
IC 240-298512/6-A			08:10	X																								
ICV 240-298512/7-A	1		08:38	X																								
ICB 240-298512/8-A	1		08:40	X																								
CRA 240-298512/9-A	1		08:42	X																								
CCV 240-298512/10-A			08:44																									
CCB 240-298512/11-A			08:46																									
CCV 240-298512/10-A			08:48																									
CCB 240-298512/11-A			08:50																									
CCV 240-298512/10-A			09:20																									
CCB 240-298512/11-A			09:22																									
ZZZZZZ			09:24																									
ZZZZZZ			09:26																									
ZZZZZZ			09:28																									
ZZZZZZ			09:30																									
ZZZZZZ			09:32																									
ZZZZZZ			09:34																									
ZZZZZZ			09:36																									
ZZZZZZ			09:37																									
ZZZZZZ			09:39																									
ZZZZZZ			09:41																									
CCV 240-298512/10-A			09:43																									
CCB 240-298512/11-A			09:45																									
ZZZZZZ			09:47																									
ZZZZZZ			09:49																									
ZZZZZZ			09:51																									
ZZZZZZ			09:53																									
ZZZZZZ			09:55																									
ZZZZZZ			09:57																									
ZZZZZZ			09:59																									
ZZZZZZ			10:01																									
ZZZZZZ			10:03																									
ZZZZZZ			10:05																									
CCV 240-298512/10-A	1		10:07	X																								
CCB 240-298512/11-A	1		10:09	X																								
ZZZZZZ			10:11																									
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/12/2017 08:00 End Date: 10/12/2017 12:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			10:17																									
CRA 240-298512/9-A			10:19																									
ZZZZZZ			10:21																									
ZZZZZZ			10:22																									
MB 240-298593/1-A	1	T	10:25	X																								
LCS 240-298593/2-A	1	T	10:27	X																								
ZZZZZZ			10:29																									
240-86229-A-5-E MS	1	T	10:31	X																								
CCV 240-298512/10-A	1		10:33	X																								
CCB 240-298512/11-A	1		10:35	X																								
ZZZZZZ			10:37																									
ZZZZZZ			10:39																									
ZZZZZZ			10:41																									
ZZZZZZ			10:43																									
ZZZZZZ			10:45																									
ZZZZZZ			10:47																									
ZZZZZZ			10:49																									
ZZZZZZ			10:51																									
ZZZZZZ			10:53																									
ZZZZZZ			10:55																									
CCV 240-298512/10-A			10:57																									
CCB 240-298512/11-A			10:59																									
CCV 240-298512/10-A			11:10																									
CCV 240-298512/10-A	1		11:11	X																								
CCB 240-298512/11-A	1		11:13	X																								
240-86229-A-5-F MSD	1	T	11:15	X																								
240-86215-1	1	T	11:17	X																								
240-86215-1	1	D	11:19	X																								
240-86215-2	1	T	11:21	X																								
240-86215-2	1	D	11:23	X																								
ZZZZZZ			11:25																									
ZZZZZZ			11:27																									
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
ZZZZZZ			11:32																									
CCV 240-298512/10-A	1		11:34	X																								
CCB 240-298512/11-A	1		11:37	X																								
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:47																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/12/2017 08:00 End Date: 10/12/2017 12:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:49																									
ZZZZZZ			11:51																									
ZZZZZZ			11:53																									
ZZZZZZ			11:55																									
ZZZZZZ			11:57																									
CCV 240-298512/10-A			11:59																									
CCB 240-298512/11-A			12:01																									
ZZZZZZ			12:03																									
ZZZZZZ			12:05																									
ZZZZZZ			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:10																									
ZZZZZZ			12:12																									
ZZZZZZ			12:14																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
CCV 240-298512/10-A			12:22																									
CCB 240-298512/11-A			12:24																									
ZZZZZZ			12:26																									
ZZZZZZ			12:28																									
ZZZZZZ			12:30																									
CCV 240-298512/10-A			12:32																									
CCB 240-298512/11-A			12:34																									

Prep Types:
D = Dissolved
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/12/2017 End Date: 10/12/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-298898/3 I	11:29	101		99		100		99		99	
STD2 240-298898/4 I	11:33	100		101		105		98		97	
STD3 240-298898/5 I	11:38	105		101		108		96		94	
STD4 240-298898/6 I	11:42	104		103		105		105		100	
ICV 240-298898/7	11:46	102		101		108		99		95	
ICB 240-298898/8	11:51	115		109		117		109		105	
ICVL 240-298898/9	11:56	116		111		118		112		107	
ICSA 240-298898/10	12:00	101		97		104		93		89	
ICSAB 240-298898/11	12:04	96		96		103		93		90	
CCV 240-298898/74	16:57	109		102		112		107		103	
CCB 240-298898/75	17:01	117		107		116		116		111	
MB 240-298589/1-A	17:10	102		99		99		110		104	
LCS 240-298589/3-A	17:15	90		85		93		96		90	
240-86215-1	17:20	90		85		92		94		91	
240-86215-1	17:24	88		84		91		92		89	
240-86215-1 SD	17:29	96		89		97		100		95	
240-86215-1 MS	17:38	80		79		86		86		83	
240-86215-1 MSD	17:43	81		78		86		88		83	
240-86215-2	17:47	81		78		89		87		85	
CCV 240-298898/86	17:52	102		93		103		102		98	
CCB 240-298898/87	17:56	105		95		102		107		102	
240-86215-2	18:01	85		81		91		90		87	
CCV 240-298898/91	18:15	109		101		111		108		102	
CCB 240-298898/92	18:19	115		105		115		114		109	
CCVL 240-298898/93	18:24	114		105		113		116		107	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/12/2017 End Date: 10/12/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-298898/3 I	11:29	100		100		99					
STD2 240-298898/4 I	11:33	98		101		99					
STD3 240-298898/5 I	11:38	98		99		93					
STD4 240-298898/6 I	11:42	99		102		102					
ICV 240-298898/7	11:46	96		97		96					
ICB 240-298898/8	11:51	103		104		103					
ICVL 240-298898/9	11:56	105		102		104					
ICSA 240-298898/10	12:00	90		92		90					
ICSAB 240-298898/11	12:04	93		92		90					
CCV 240-298898/74	16:57	111		112		100					
CCB 240-298898/75	17:01	113		118		106					
MB 240-298589/1-A	17:10	111		111		105					
LCS 240-298589/3-A	17:15	99		101		91					
240-86215-1	17:20	100		102		94					
240-86215-1	17:24	98		100		93					
240-86215-1 SD	17:29	101		101		98					
240-86215-1 MS	17:38	91		93		84					
240-86215-1 MSD	17:43	94		96		86					
240-86215-2	17:47	97		100		88					
CCV 240-298898/86	17:52	105		107		98					
CCB 240-298898/87	17:56	108		110		102					
240-86215-2	18:01	100		103		92					
CCV 240-298898/91	18:15	108		109		98					
CCB 240-298898/92	18:19	112		113		105					
CCVL 240-298898/93	18:24	109		110		105					

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Batch Number: 298589 Batch Start Date: 10/11/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 10/11/17 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00031	MTICPMSA 00032	MTICPMSB 00032	MTTMHCL 00173
MB 240-298589/1		3005A, 6020A		50 mL	50 mL				2.5 mL
LCS 240-298589/3		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86215-M-1	MRC-MW121B-100917	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86215-L-1	MRC-MW121B-100917	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86215-L-1 MS	MRC-MW121B-100917	3005A, 6020A	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86215-L-1 MSD	MRC-MW121B-100917	3005A, 6020A	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86215-I-2	MRC-MW117B-100917	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86215-H-2	MRC-MW117B-100917	3005A, 6020A	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
MB 240-298589/1		3005A, 6020A		1 mL					
LCS 240-298589/3		3005A, 6020A		1 mL					
240-86215-M-1	MRC-MW121B-100917	3005A, 6020A	R	1 mL					
240-86215-L-1	MRC-MW121B-100917	3005A, 6020A	D	1 mL					
240-86215-L-1 MS	MRC-MW121B-100917	3005A, 6020A	D	1 mL					
240-86215-L-1 MSD	MRC-MW121B-100917	3005A, 6020A	D	1 mL					
240-86215-I-2	MRC-MW117B-100917	3005A, 6020A	R	1 mL					
240-86215-H-2	MRC-MW117B-100917	3005A, 6020A	D	1 mL					

Batch Notes	
Filter Paper ID	60412103
Pipette/Syringe/Dispenser ID	mp1 mp3
Digestion Tube/Cup ID	1705110

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Batch Number: 298589 Batch Start Date: 10/11/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 10/11/17 22:00

Basis	Basis Description
R	Total Recoverable
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Batch Number: 298512 Batch Start Date: 10/11/17 08:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 10/11/17 10:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01638	MTHgICV_00001 00239
ICV 240-298512/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-298512/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-298512/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-298512/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-298512/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00143	MTTMHNO3 00132				
ICV 240-298512/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-298512/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-298512/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-298512/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-298512/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	takeout temp in range (90-95* Celsius)
Hot Block ID	C1
Pipette/Syringe/Dispenser ID	MP1, MP2, A8, A5, MP5
Digestion Tube/Cup ID	1703076

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Batch Number: 298593 Batch Start Date: 10/11/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/11/17 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01638	MTKMN04W 00143
MB 240-298593/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-298593/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-86229-A-5 MS		7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-86229-A-5 MSD		7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-86215-M-1	MRC-MW121B-100917	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86215-L-1	MRC-MW121B-100917	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86215-I-2	MRC-MW117B-100917	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86215-H-2	MRC-MW117B-100917	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
MB 240-298593/1		7470A, 7470A		1.25 mL					
LCS 240-298593/2		7470A, 7470A		1.25 mL					
240-86229-A-5 MS		7470A, 7470A	T	1.25 mL					
240-86229-A-5 MSD		7470A, 7470A	T	1.25 mL					
240-86215-M-1	MRC-MW121B-100917	7470A, 7470A	T	1.25 mL					
240-86215-L-1	MRC-MW121B-100917	7470A, 7470A	D	1.25 mL					
240-86215-I-2	MRC-MW117B-100917	7470A, 7470A	T	1.25 mL					
240-86215-H-2	MRC-MW117B-100917	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	take out temps within range
Hot Block ID	C1
Pipette/Syringe/Dispenser ID	mp2/3
Digestion Tube/Cup ID	1705110

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG No.:

Batch Number: 298593 Batch Start Date: 10/11/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/11/17 16:00

Basis	Basis Description
T	Total/NA
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Sample Calculation - Page 1

Client Sample ID: MRC-MW121B-100917 Lab Sample ID: 240-86215-1

Lab Name: TestAmerica Canton Job No.: 240-86215-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 11:50

Reporting Basis: WET Date Received: 10/10/2017 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.4	2.0	0.57	ug/L			1	6020A
7440-38-2	Arsenic	3.8	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	20	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.44	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	2.2	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	6.9	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	10	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	13	10	1.1	ug/L			1	6020A
7440-02-0	Nickel	5.5	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	4.4	1.0	0.45	ug/L			1	6020A
7782-49-2	Selenium	1.9	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	23	5.0	0.82	ug/L			1	6020A
7440-66-6	Zinc	51	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

Sample Report

Sample Table

Sample Name	240-86215-m-1-a
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10101217A.b
Acq Date Time	2017-10-12T17:20:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	3.842	3.842	1.93	176152	0.00	10000	
Be	9	45	2	NoGas	0.442	0.442	6.48	2188	0.02	2000	
B	11	6	2	NoGas	56.527	56.527	0.80	155191	0.04	300	
Na	23	45	1	He	20992.833	20992.833	0.92	12647392	0.17	500000	
Mg	24	45	1	He	368.743	368.743	1.10	130935	0.28	500000	
Al	27	45	1	He	3293.370	3293.370	1.16	629428	0.52	200000	
K	39	45	1	He	15683.198	15683.198	0.95	5462238	0.29	500000	
Ca	44	45	1	He	31706.788	31706.788	0.29	577274	5.49	500000	
Ti	47	45	1	He	55.908	55.908	6.73	5894	0.95	2500	
V	51	45	1	He	22.688	22.688	0.98	63751	0.04	10000	
Cr	52	45	1	He	6.852	6.852	0.92	22411	0.03	10000	
Mn	55	45	1	He	30.527	30.527	1.80	71141	0.04	10000	
Fe	56	45	1	He	3352.068	3352.068	0.92	8858350	0.04	200000	
Co	59	45	1	He	2.227	2.227	1.85	9495	0.02	5000	
Ni	60	103	1	He	5.464	5.464	3.50	6933	0.08	10000	
Cu	63	45	1	He	10.037	10.037	1.33	26571	0.04	10000	
Zn	66	45	1	He	50.819	50.819	1.56	29481	0.17	10000	
As	75	45	1	He	3.798	3.798	4.94	1983	0.19	10000	
Se	78	45	1	He	1.904	1.904	15.14	141	1.36	10000	
Sr	88	103	1	He	75.895	75.895	1.46	256405	0.03	10000	
Mo	95	103	1	He	13.478	13.478	2.01	21871	0.06	2000	
Ag	107	103	1	He	0.037	0.037	16.81	164	0.02	100	
Cd	111	115	1	He	0.206	0.206	12.07	176	0.12	4000	
Sn	118	115	1	He	3.940	3.940	16.10	7215	0.05	2000	
Sb	123	115	1	He	2.385	2.385	4.59	4227	0.06	200	
Ba	137	115	1	He	20.476	20.476	1.79	13960	0.15	10000	
W	182	159	1	He	0.783	0.783	5.79	2649	0.03	2500	
Tl	205	165	1	He	0.117	0.117	7.32	888	0.01	2000	
Pb	208	165	1	He	4.425	4.425	2.83	41818	0.01	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1646273	1.32	1835768	89.68	60	120	
Sc	45	1	He	622232	1.79	728251	85.44	60	120	
Sc	45	2	NoGas	7760771	0.40	8404544	92.34	60	120	
Rh	103	1	He	1668002	2.38	1777211	93.86	60	120	
In	115	1	He	919349	1.60	1010358	90.99	60	120	
Tb	159	1	He	1994685	2.40	2004553	99.51	60	120	
Ho	165	1	He	1854887	3.95	1823876	101.70	60	120	
Bi	209	1	He	1116298	2.21	1187343	94.02	60	120	

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **NOVEMBER 22, 2017**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / 1,4-DIOXANE / PCB HOMOLOGS / DRO / GRO / TOTAL AND DISSOLVED METALS**
MRC– FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-86291-1

SAMPLES: 7 / Aqueous / VOC / 1,4-Dioxane / PCB Homologs / DRO / GRO / Total and Dissolved Metals

MRC-MW117B-100917*	MRC-MW117B-101017**	MRC-MW119B-101017
MRC-MW120B-101017	MRC-MW121A-101017	MRC-MW122A-101017***
TRIP BLANK****		

*Not analyzed for dissolved metals.
**Analyzed for dissolved metals only.
***Analyzed for VOC and GRO only.
****Analyzed for VOC only.

OVERVIEW

The sample set for MRC SDG 240-86291-1, consists of six (6) aqueous environmental samples and one (1) trip blank. Environmental samples were analyzed for volatile organic compounds (VOC), 1,4-dioxane, polychlorinated biphenyl (PCB) homologs, diesel range organics (DRO), gasoline range organics (GRO), and total and dissolved metals. Sample MRC-MW117B-101017 was analyzed for dissolved metals only; sample MRC-MW117B-100917 was analyzed for total metals and not dissolved metals. No field duplicate pairs are included in this SDG.

The samples were collected by Tetra Tech on October 9 and 10, 2017, and analyzed by TestAmerica. Analyses were conducted in accordance with SW-846 Methods 8260C (for VOC), 8207D (for 1,4-dioxane), 8015C (for DRO and GRO), 7470A (for mercury), and 6020A (for metals other than mercury) as well as EPA Method 680 (for PCB homologs) analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, ICP/MS tuning, initial/continuing calibrations, laboratory method/trip blank results, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate results, matrix spike/matrix spike duplicate results, interference check sample results, serial dilution results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern with respect to data quality are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The VOC continuing calibration performed on 10/22/17 at 17:32 on instrument A3UX9 had percent differences (%Ds) for carbon tetrachloride, cis-1,3-dichloropropene, and bromoform that were greater than the 20% quality control limit. Samples MRC-MW119B-101017, MRC-MW122A-101017, and TRIP BLANK were associated with this calibration. Non-detected results for these analytes were qualified

- Tentatively identified compounds (TICs) were identified in several VOC samples. TICs were qualified as estimated (NJ) and these compounds are assumed to be presumptively present.

- Detected results below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Sample SB-122A-13-15' is listed on the chain of custody but is marked as hold.

Non-detected results were reported to the MDL.

In the VOC fraction, the following compounds were not listed on the laboratory control sample (LCS) Form III: 1,2,3-trimethylbenzene, diisopropyl ether, ethyl tert-butyl ether, and tert-amyl methyl ether. These compounds were included in the database and on the LCS Form I, which is in Appendix C of this report.

Although not included on the VOC LCS Form III, the database results for LCS 240-294629/6 and case narrative report indicate the LCS percent recovery (%R) for diisopropyl ether was greater than the laboratory quality control limits. All samples were associated with this LCS. No action was necessary because diisopropyl ether was non-detected in the associated samples.

The following TICs were detected in the method blank at the following maximum concentrations:

TIC	Concentration
Acetonitrile	7.08 ug/kg
Hexane	0.504 ug/kg
2-Methylnaphthalene	2.15 ug/kg

No action was taken on this basis.

The SVOC continuing calibration performed on 09/16/17 at 10:30 on instrument A4HP9 had a %D for dibenzo(a,h)anthracene that was greater than the 20% quality control limit. No action was necessary because no environmental samples from this SDG were associated with this calibration.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Non-detected results for one VOC analyte were qualified due to calibration noncompliance. One VOC result was qualified as non-detected due to laboratory blank contamination.

Other Factors Affecting Data Quality: TIC results were qualified as estimated and assumed to be presumptively present. Detected results below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017). The text of this report has been formulated to address only those problem areas affecting data quality.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Some non-detected VOC results were qualified due to calibration noncompliance. One VOC result was qualified as non-detected due to blank contamination.

Other Factors Affecting Data Quality: Detected results below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017) and National Functional Guidelines for Inorganic Superfund Methods Data Review" (January 2017). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Leigh A. Ciofani
Environmental Scientist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-100917			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-2			240-86291-5			240-86291-4			240-86291-3		
FRACTION: OV	SAMP_DATE	10/9/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.23	U		4.6	U		12	U		0.23	U	
1,1,2,2-TETRACHLOROETHANE		0.32	U		6.4	U		16	U		0.32	U	
1,1,2-TRICHLOROETHANE		0.34	U		6.8	U		17	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		8.2	U		21	U		0.41	U	
1,1-DICHLOROETHANE		0.25	U		5	U		13	U		0.25	U	
1,1-DICHLOROETHENE		0.27	U		44			200			0.27	U	
1,2,4-TRICHLOROBENZENE		0.27	U		5.4	U		14	U		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.47	U		9.4	U		24	U		0.47	U	
1,2-DIBROMOETHANE		0.23	U		4.6	U		12	U		0.23	U	
1,2-DICHLOROBENZENE		0.26	U		5.2	U		13	U		0.26	U	
1,2-DICHLOROETHANE		0.3	U		6	U		15	U		0.3	U	
1,2-DICHLOROPROPANE		0.3	U		6	U		15	U		0.3	U	
1,3-DICHLOROBENZENE		0.32	U		6.4	U		16	U		0.32	U	
1,4-DICHLOROBENZENE		0.23	U		4.6	U		12	U		0.23	U	
2-BUTANONE		1	U		20	U		51	U		1	U	
2-HEXANONE		1.2	U		25	U		62	U		1.2	U	
4-METHYL-2-PENTANONE		0.71	U		14	U		36	U		0.71	U	
ACETONE		16			35	U		88	U		23		
BENZENE		0.28	U		53			14	U		0.28	U	
BROMODICHLOROMETHANE		0.3	U		6	U		15	U		0.3	U	
BROMOFORM		0.43	U		8.6	UJ	C	22	U		0.43	U	
BROMOMETHANE		0.42	U		8.4	U		21	U		0.42	U	
CARBON DISULFIDE		5.1			6.8	U		17	U		0.34	U	
CARBON TETRACHLORIDE		0.35	U		7	UJ	C	18	U		0.35	U	
CHLOROBENZENE		0.32	U		6.4	U		16	U		0.32	U	
CHLORODIBROMOMETHANE		0.25	U		5	U		13	U		0.25	U	
CHLOROETHANE		0.41	U		8.2	U		21	U		0.41	U	
CHLOROFORM		1.1			6.2	U		16	U		0.31	U	
CHLOROMETHANE		0.43	U		8.6	U		22	U		0.43	U	
CIS-1,2-DICHLOROETHENE		2.4			170			120			0.66	J	P
CIS-1,3-DICHLOROPROPENE		0.26	U		5.2	UJ	C	13	U		0.26	U	
CYCLOHEXANE		0.44	U		8.8	U		22	U		0.44	U	
DICHLORODIFLUOROMETHANE		0.5	U		10	U		25	U		0.5	U	
ETHYLBENZENE		0.26	U		5.2	U		13	U		0.26	U	
ISOPROPYLBENZENE		0.21	U		4.2	U		11	U		0.21	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW122A-101017			TRIP BLANK		
SDG: 240-86291-1	LAB_ID	240-86291-6			240-86291-7		
FRACTION: OV	SAMP_DATE	10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.23	U		0.23	U	
1,1,2,2-TETRACHLOROETHANE		0.32	U		0.32	U	
1,1,2-TRICHLOROETHANE		0.34	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.25	U		0.25	U	
1,1-DICHLOROETHENE		0.27	U		0.27	U	
1,2,4-TRICHLOROBENZENE		0.27	U		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.47	U		0.47	U	
1,2-DIBROMOETHANE		0.23	U		0.23	U	
1,2-DICHLOROBENZENE		0.26	U		0.26	U	
1,2-DICHLOROETHANE		0.3	U		0.3	U	
1,2-DICHLOROPROPANE		0.3	U		0.3	U	
1,3-DICHLOROBENZENE		0.32	U		0.32	U	
1,4-DICHLOROBENZENE		0.23	U		0.23	U	
2-BUTANONE		1	U		1	U	
2-HEXANONE		1.2	U		1.2	U	
4-METHYL-2-PENTANONE		0.71	U		0.71	U	
ACETONE		13			1.8	U	
BENZENE		0.28	U		0.28	U	
BROMODICHLOROMETHANE		0.3	U		0.3	U	
BROMOFORM		0.43	UJ	C	0.43	UJ	C
BROMOMETHANE		0.42	U		0.42	U	
CARBON DISULFIDE		5.4			0.34	U	
CARBON TETRACHLORIDE		0.35	UJ	C	0.35	UJ	C
CHLOROBENZENE		0.32	U		0.32	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U	
CHLOROETHANE		0.41	U		0.41	U	
CHLOROFORM		1.4			0.31	U	
CHLOROMETHANE		0.43	U		0.43	U	
CIS-1,2-DICHLOROETHENE		0.8	J	P	0.3	U	
CIS-1,3-DICHLOROPROPENE		0.26	UJ	C	0.26	UJ	C
CYCLOHEXANE		0.44	U		0.44	U	
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U	
ETHYLBENZENE		0.26	U		0.26	U	
ISOPROPYLBENZENE		0.21	U		0.21	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-100917			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-2			240-86291-5			240-86291-4			240-86291-3		
FRACTION: OV	SAMP_DATE	10/9/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U		29	U		72	U		1.4	U	
METHYL CYCLOHEXANE		0.45	U		9	U		23	U		0.45	U	
METHYL TERT-BUTYL ETHER		0.27	U		5.4	U		14	U		0.27	U	
METHYLENE CHLORIDE		0.53	U		11	U		27	U		0.53	U	
STYRENE		0.23	U		4.6	U		12	U		0.23	U	
TETRACHLOROETHENE		0.3	U		6	U		15	U		0.3	U	
TOLUENE		0.27	J	P	4.6	U		12	U		0.23	J	P
TOTAL XYLENES		0.24	U		4.8	U		12	U		0.24	U	
TRANS-1,2-DICHLOROETHENE		0.29	U		12	J	P	15	U		0.29	U	
TRANS-1,3-DICHLOROPROPENE		0.31	U		6.2	U		16	U		0.31	U	
TRICHLOROETHENE		7.6			550			1400			8.2		
TRICHLOROFLUOROMETHANE		0.5	U		10	U		25	U		0.5	U	
VINYL CHLORIDE		0.45	U		9	U		23	U		0.45	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW122A-101017			TRIP BLANK		
SDG: 240-86291-1	LAB_ID	240-86291-6			240-86291-7		
FRACTION: OV	SAMP_DATE	10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U		1.4	U	
METHYL CYCLOHEXANE		0.45	U		0.45	U	
METHYL TERT-BUTYL ETHER		0.27	U		0.27	U	
METHYLENE CHLORIDE		0.9	U	A	0.53	U	
STYRENE		0.23	U		0.23	U	
TETRACHLOROETHENE		0.3	U		0.3	U	
TOLUENE		0.23	U		0.23	U	
TOTAL XYLENES		0.24	U		0.24	U	
TRANS-1,2-DICHLOROETHENE		0.37	J	P	0.29	U	
TRANS-1,3-DICHLOROPROPENE		0.31	U		0.31	U	
TRICHLOROETHENE		1.2			0.33	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U	
VINYL CHLORIDE		0.45	U		0.45	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-100917			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-2			240-86291-5			240-86291-4			240-86291-3		
FRACTION: OS	SAMP_DATE	10/9/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.47	U		2.8			10			0.48	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-100917			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-2			240-86291-5			240-86291-4			240-86291-3		
FRACTION: PCB	SAMP_DATE	10/9/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL		0.067	U		0.072	U		0.072	U		0.071	U	
DICHLOROBIPHENYLS		0.0052	U		0.0055	U		0.0055	U		0.0055	U	
HEPTACHLOROBIPHENYLS		0.029	U		0.031	U		0.031	U		0.03	U	
HEXACHLOROBIPHENYLS		0.014	U		0.015	U		0.015	U		0.015	U	
MONOCHLOROBIPHENYLS		0.0054	U		0.0058	U		0.0058	U		0.0057	U	
NONACHLOROBIPHENYLS		0.047	U		0.05	U		0.05	U		0.05	U	
OCTACHLOROBIPHENYLS		0.036	U		0.039	U		0.039	U		0.038	U	
PENTACHLOROBIPHENYLS		0.013	U		0.014	U		0.014	U		0.014	U	
TETRACHLOROBIPHENYLS		0.012	U		0.013	U		0.013	U		0.013	U	
TRICHLOROBIPHENYLS		0.0062	U		0.0067	U		0.0067	U		0.0066	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-100917			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-2			240-86291-5			240-86291-4			240-86291-3		
FRACTION: PET	SAMP_DATE	10/9/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		49	U		360			440			49	U	
TPH (C10-C32)		210	U		230	J	P	220	U		770		

PROJ_NO: 08109	NSAMPLE	MRC-MW122A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-6		
FRACTION: PET	SAMP_DATE	10/10/2017		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TPH (C06-C10)		49	U	
TPH (C10-C32)				

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-100917			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-2			240-86291-5			240-86291-4			240-86291-3		
FRACTION: M	SAMP_DATE	10/9/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		0.75	U		3	J	P	0.75	U		0.85	J	P
BARIUM		50			440			100			92		
BERYLLIUM		0.31	U		12			1.7			0.31	U	
CADMIUM		0.21	U		3.4			0.53	J	P	0.59	J	P
CHROMIUM		5.4			2.4			4.5			0.98	U	
COBALT		16			1100			190			77		
COPPER		1.7	U		230			15			1.9	J	P
LEAD		0.45	U		7.7			1.3			0.45	U	
MERCURY		0.13	U		1.3			0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		17			1700			200			120		
SELENIUM		0.89	U		1.7	J	P	0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.3	J	P	0.22	J	P	0.2	U	
VANADIUM		0.93	J	P	2	J	P	3.6	J	P	0.82	U	
ZINC		20			1500			300			170		

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-101017			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: 240-86291-1	LAB_ID	240-86291-1			240-86291-5			240-86291-4			240-86291-3		
FRACTION: MF	SAMP_DATE	10/10/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		0.75	U		1.6	J	P	0.75	U		0.81	J	P
BARIUM		45			540			95			100		
BERYLLIUM		0.31	U		15			1.7			0.35	J	P
CADMIUM		0.21	U		4.3			0.45	J	P	0.56	J	P
CHROMIUM		0.98	U		1.3	J	P	1.2	J	P	0.98	U	
COBALT		13			1400			180			84		
COPPER		1.7	U		310			4.5			4.8		
LEAD		0.45	U		9			0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		13			2100			190			130		
SELENIUM		0.89	U		2.1	J	P	0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.31	J	P	0.2	J	P	0.2	U	
VANADIUM		0.82	U		0.82	U		0.82	U		0.82	U	
ZINC		15	U		2000			280			190		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: UXM6967.D

Analysis Method: 8260C | Date Collected: 10/09/2017 16:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	16		10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	5.1		1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	1.1		1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	2.4		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U *	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: UXM6967.D

Analysis Method: 8260C | Date Collected: 10/09/2017 16:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.27	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	7.6		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		73-120
1868-53-7	Dibromofluoromethane (Surr)	117		69-124
460-00-4	4-Bromofluorobenzene (Surr)	100		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW119B-101017 | Lab Sample ID: 240-86291-5

Matrix: Water | Lab File ID: UX966578.D

Analysis Method: 8260C | Date Collected: 10/10/2017 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 19:26

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	4.6	U	20	4.6
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U	20	6.4
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	8.2	U	20	8.2
79-00-5	1,1,2-Trichloroethane	6.8	U	20	6.8
75-34-3	1,1-Dichloroethane	5.0	U	20	5.0
75-35-4	1,1-Dichloroethene	44		20	5.4
120-82-1	1,2,4-Trichlorobenzene	5.4	U	20	5.4
96-12-8	1,2-Dibromo-3-Chloropropane	9.4	U	40	9.4
106-93-4	Ethylene Dibromide	4.6	U	20	4.6
95-50-1	1,2-Dichlorobenzene	5.2	U	20	5.2
107-06-2	1,2-Dichloroethane	6.0	U	20	6.0
78-87-5	1,2-Dichloropropane	6.0	U	20	6.0
541-73-1	1,3-Dichlorobenzene	6.4	U	20	6.4
106-46-7	1,4-Dichlorobenzene	4.6	U	20	4.6
78-93-3	2-Butanone (MEK)	20	U	200	20
591-78-6	2-Hexanone	25	U	200	25
108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	200	14
67-64-1	Acetone	35	U	200	35
71-43-2	Benzene	53		20	5.6
75-27-4	Dichlorobromomethane	6.0	U	20	6.0
75-25-2	Bromoform	8.6	U	20	8.6
74-83-9	Bromomethane	8.4	U	20	8.4
75-15-0	Carbon disulfide	6.8	U	20	6.8
56-23-5	Carbon tetrachloride	7.0	U	20	7.0
108-90-7	Chlorobenzene	6.4	U	20	6.4
75-00-3	Chloroethane	8.2	U	20	8.2
67-66-3	Chloroform	6.2	U	20	6.2
74-87-3	Chloromethane	8.6	U *	20	8.6
156-59-2	cis-1,2-Dichloroethene	170		20	6.0
10061-01-5	cis-1,3-Dichloropropene	5.2	U *	20	5.2
110-82-7	Cyclohexane	8.8	U	20	8.8
124-48-1	Chlorodibromomethane	5.0	U	20	5.0
75-71-8	Dichlorodifluoromethane	10	U	20	10
100-41-4	Ethylbenzene	5.2	U	20	5.2
98-82-8	Isopropylbenzene	4.2	U	20	4.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW119B-101017 | Lab Sample ID: 240-86291-5

Matrix: Water | Lab File ID: UX966578.D

Analysis Method: 8260C | Date Collected: 10/10/2017 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 19:26

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	29	U	200	29
1634-04-4	Methyl tert-butyl ether	5.4	U	20	5.4
108-87-2	Methylcyclohexane	9.0	U	20	9.0
75-09-2	Methylene Chloride	11	U	20	11
100-42-5	Styrene	4.6	U	20	4.6
127-18-4	Tetrachloroethene	6.0	U	20	6.0
108-88-3	Toluene	4.6	U	20	4.6
156-60-5	trans-1,2-Dichloroethene	12	J	20	5.8
10061-02-6	trans-1,3-Dichloropropene	6.2	U	20	6.2
79-01-6	Trichloroethene	550		20	6.6
75-69-4	Trichlorofluoromethane	10	U	20	10
75-01-4	Vinyl chloride	9.0	U	20	9.0
1330-20-7	Xylenes, Total	4.8	U	40	4.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		69-124
460-00-4	4-Bromofluorobenzene (Surr)	94		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4

Matrix: Water | Lab File ID: UXM6969.D

Analysis Method: 8260C | Date Collected: 10/10/2017 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 15:08

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	12	U	50	12
79-34-5	1,1,2,2-Tetrachloroethane	16	U	50	16
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21	U	50	21
79-00-5	1,1,2-Trichloroethane	17	U	50	17
75-34-3	1,1-Dichloroethane	13	U	50	13
75-35-4	1,1-Dichloroethene	200		50	14
120-82-1	1,2,4-Trichlorobenzene	14	U	50	14
96-12-8	1,2-Dibromo-3-Chloropropane	24	U	100	24
106-93-4	Ethylene Dibromide	12	U	50	12
95-50-1	1,2-Dichlorobenzene	13	U	50	13
107-06-2	1,2-Dichloroethane	15	U	50	15
78-87-5	1,2-Dichloropropane	15	U	50	15
541-73-1	1,3-Dichlorobenzene	16	U	50	16
106-46-7	1,4-Dichlorobenzene	12	U	50	12
78-93-3	2-Butanone (MEK)	51	U	500	51
591-78-6	2-Hexanone	62	U	500	62
108-10-1	4-Methyl-2-pentanone (MIBK)	36	U	500	36
67-64-1	Acetone	88	U	500	88
71-43-2	Benzene	14	U	50	14
75-27-4	Dichlorobromomethane	15	U	50	15
75-25-2	Bromoform	22	U	50	22
74-83-9	Bromomethane	21	U	50	21
75-15-0	Carbon disulfide	17	U	50	17
56-23-5	Carbon tetrachloride	18	U	50	18
108-90-7	Chlorobenzene	16	U	50	16
75-00-3	Chloroethane	21	U	50	21
67-66-3	Chloroform	16	U	50	16
74-87-3	Chloromethane	22	U	50	22
156-59-2	cis-1,2-Dichloroethene	120		50	15
10061-01-5	cis-1,3-Dichloropropene	13	U	50	13
110-82-7	Cyclohexane	22	U	50	22
124-48-1	Chlorodibromomethane	13	U	50	13
75-71-8	Dichlorodifluoromethane	25	U *	50	25
100-41-4	Ethylbenzene	13	U	50	13
98-82-8	Isopropylbenzene	11	U	50	11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4

Matrix: Water | Lab File ID: UXM6969.D

Analysis Method: 8260C | Date Collected: 10/10/2017 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 15:08

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	72	U	500	72
1634-04-4	Methyl tert-butyl ether	14	U	50	14
108-87-2	Methylcyclohexane	23	U	50	23
75-09-2	Methylene Chloride	27	U	50	27
100-42-5	Styrene	12	U	50	12
127-18-4	Tetrachloroethene	15	U	50	15
108-88-3	Toluene	12	U	50	12
156-60-5	trans-1,2-Dichloroethene	15	U	50	15
10061-02-6	trans-1,3-Dichloropropene	16	U	50	16
79-01-6	Trichloroethene	1400		50	17
75-69-4	Trichlorofluoromethane	25	U	50	25
75-01-4	Vinyl chloride	23	U	50	23
1330-20-7	Xylenes, Total	12	U	100	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		73-120
1868-53-7	Dibromofluoromethane (Surr)	121		69-124
460-00-4	4-Bromofluorobenzene (Surr)	103		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: UXM6968.D

Analysis Method: 8260C | Date Collected: 10/10/2017 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 14:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	23		10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.66	J	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U *	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: UXM6968.D

Analysis Method: 8260C | Date Collected: 10/10/2017 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 14:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	8.2		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		73-120
1868-53-7	Dibromofluoromethane (Surr)	112		69-124
460-00-4	4-Bromofluorobenzene (Surr)	99		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW122A-101017 | Lab Sample ID: 240-86291-6

Matrix: Water | Lab File ID: UX966579.D

Analysis Method: 8260C | Date Collected: 10/10/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 19:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	13		10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	5.4		1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	1.4		1.0	0.31
74-87-3	Chloromethane	0.43	U *	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.80	J	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U *	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW122A-101017 | Lab Sample ID: 240-86291-6

Matrix: Water | Lab File ID: UX966579.D

Analysis Method: 8260C | Date Collected: 10/10/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 19:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.90	J B	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.37	J	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	1.2		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		69-124
460-00-4	4-Bromofluorobenzene (Surr)	93		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-86291-7

Matrix: Water | Lab File ID: UX966580.D

Analysis Method: 8260C | Date Collected: 10/10/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 20:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U *	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U *	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-86291-7

Matrix: Water | Lab File ID: UX966580.D

Analysis Method: 8260C | Date Collected: 10/10/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 20:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	101		69-124
460-00-4	4-Bromofluorobenzene (Surr)	92		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		61-138

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: 71015026.D

Analysis Method: 8270D | Date Collected: 10/09/2017 16:00

Extract. Method: 3510C | Date Extracted: 10/12/2017 08:37

Sample wt/vol: 1050(mL) | Date Analyzed: 10/15/2017 22:21

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299079 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.47	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	111		23-127
4165-62-2	Phenol-d5 (Surr)	19		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	59		32-120
367-12-4	2-Fluorophenol (Surr)	34		10-120
321-60-8	2-Fluorobiphenyl (Surr)	80		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	91		28-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW119B-101017 | Lab Sample ID: 240-86291-5

Matrix: Water | Lab File ID: 71017020.D

Analysis Method: 8270D | Date Collected: 10/10/2017 14:40

Extract. Method: 3510C | Date Extracted: 10/12/2017 08:37

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2017 15:25

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299324 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.8		1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	82		23-127
4165-62-2	Phenol-d5 (Surr)	19		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	50		32-120
367-12-4	2-Fluorophenol (Surr)	34		10-120
321-60-8	2-Fluorobiphenyl (Surr)	64		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	70		28-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4

Matrix: Water | Lab File ID: 71017019.D

Analysis Method: 8270D | Date Collected: 10/10/2017 11:55

Extract. Method: 3510C | Date Extracted: 10/12/2017 08:37

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2017 15:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299324 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10		1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		23-127
4165-62-2	Phenol-d5 (Surr)	19		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	56		32-120
367-12-4	2-Fluorophenol (Surr)	33		10-120
321-60-8	2-Fluorobiphenyl (Surr)	72		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	70		28-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: 71017018.D

Analysis Method: 8270D | Date Collected: 10/10/2017 09:15

Extract. Method: 3510C | Date Extracted: 10/12/2017 08:37

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2017 14:37

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299324 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.48	U	0.97	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	89		23-127
4165-62-2	Phenol-d5 (Surr)	19		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	54		32-120
367-12-4	2-Fluorophenol (Surr)	33		10-120
321-60-8	2-Fluorobiphenyl (Surr)	73		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	83		28-120

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: xj1811.D

Analysis Method: 680 | Date Collected: 10/09/2017 16:00

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 1042.4(mL) | Date Analyzed: 10/18/2017 18:34

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.029	U	0.29	0.029
26601-64-9	Hexachlorobiphenyl	0.014	U	0.19	0.014
53742-07-7	Nonachlorobiphenyl	0.047	U	0.48	0.047
55722-26-4	Octachlorobiphenyl	0.036	U	0.29	0.036
27323-18-8	Monochlorobiphenyl	0.0054	U	0.096	0.0054
2051-24-3	DCB Decachlorobiphenyl	0.067	U	0.48	0.067
25512-42-9	Dichlorobiphenyl	0.0052	U	0.096	0.0052
25429-29-2	Pentachlorobiphenyl	0.013	U	0.19	0.013
26914-33-0	Tetrachlorobiphenyl	0.012	U	0.19	0.012
25323-68-6	Trichlorobiphenyl	0.0062	U	0.096	0.0062

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	67		25-113

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW119B-101017 | Lab Sample ID: 240-86291-5

Matrix: Water | Lab File ID: xj1814.D

Analysis Method: 680 | Date Collected: 10/10/2017 14:40

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 973.3(mL) | Date Analyzed: 10/18/2017 20:00

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.031	U	0.31	0.031
26601-64-9	Hexachlorobiphenyl	0.015	U	0.21	0.015
53742-07-7	Nonachlorobiphenyl	0.050	U	0.51	0.050
55722-26-4	Octachlorobiphenyl	0.039	U	0.31	0.039
27323-18-8	Monochlorobiphenyl	0.0058	U	0.10	0.0058
2051-24-3	DCB Decachlorobiphenyl	0.072	U	0.51	0.072
25512-42-9	Dichlorobiphenyl	0.0055	U	0.10	0.0055
25429-29-2	Pentachlorobiphenyl	0.014	U	0.21	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.21	0.013
25323-68-6	Trichlorobiphenyl	0.0067	U	0.10	0.0067

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	74		25-113

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4

Matrix: Water | Lab File ID: xj1813.D

Analysis Method: 680 | Date Collected: 10/10/2017 11:55

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 973.4(mL) | Date Analyzed: 10/18/2017 19:31

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.031	U	0.31	0.031
26601-64-9	Hexachlorobiphenyl	0.015	U	0.21	0.015
53742-07-7	Nonachlorobiphenyl	0.050	U	0.51	0.050
55722-26-4	Octachlorobiphenyl	0.039	U	0.31	0.039
27323-18-8	Monochlorobiphenyl	0.0058	U	0.10	0.0058
2051-24-3	DCB Decachlorobiphenyl	0.072	U	0.51	0.072
25512-42-9	Dichlorobiphenyl	0.0055	U	0.10	0.0055
25429-29-2	Pentachlorobiphenyl	0.014	U	0.21	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.21	0.013
25323-68-6	Trichlorobiphenyl	0.0067	U	0.10	0.0067

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	68		25-113

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: xj1812.D

Analysis Method: 680 | Date Collected: 10/10/2017 09:15

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 989.3(mL) | Date Analyzed: 10/18/2017 19:02

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.030	U	0.30	0.030
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.050	U	0.51	0.050
55722-26-4	Octachlorobiphenyl	0.038	U	0.30	0.038
27323-18-8	Monochlorobiphenyl	0.0057	U	0.10	0.0057
2051-24-3	DCB Decachlorobiphenyl	0.071	U	0.51	0.071
25512-42-9	Dichlorobiphenyl	0.0055	U	0.10	0.0055
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0066	U	0.10	0.0066

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	73		25-113

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: P14R101714.D

Analysis Method: 8015C | Date Collected: 10/09/2017 16:00

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 270(mL) | Date Analyzed: 10/17/2017 18:04

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299263 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	210	U	460	210

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	91		37-130

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW119B-101017 | Lab Sample ID: 240-86291-5

Matrix: Water | Lab File ID: P14R101811.D

Analysis Method: 8015C | Date Collected: 10/10/2017 14:40

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 250(mL) | Date Analyzed: 10/18/2017 17:43

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	230	J	500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	82		37-130

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4

Matrix: Water | Lab File ID: P14R101810.D

Analysis Method: 8015C | Date Collected: 10/10/2017 11:55

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 260(mL) | Date Analyzed: 10/18/2017 17:16

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	220	U	480	220

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	85		37-130

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: P14R101809.D

Analysis Method: 8015C | Date Collected: 10/10/2017 09:15

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 250(mL) | Date Analyzed: 10/18/2017 16:49

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	770		500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	88		37-130

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: A0101716.D

Analysis Method: 8015C | Date Collected: 10/09/2017 16:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/17/2017 15:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299293 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	92		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW119B-101017 | Lab Sample ID: 240-86291-5

Matrix: Water | Lab File ID: A0101719.D

Analysis Method: 8015C | Date Collected: 10/10/2017 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 10/17/2017 16:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299293 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	360		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	97		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4

Matrix: Water | Lab File ID: A0101718.D

Analysis Method: 8015C | Date Collected: 10/10/2017 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 10/17/2017 16:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299293 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	440		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	94		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: A0101717.D

Analysis Method: 8015C | Date Collected: 10/10/2017 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/17/2017 15:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299293 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	89		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW122A-101017 | Lab Sample ID: 240-86291-6

Matrix: Water | Lab File ID: A0101720.D

Analysis Method: 8015C | Date Collected: 10/10/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/17/2017 17:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299293 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	93		56-120

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW117B-100917 Lab Sample ID: 240-86291-2

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 16:00

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW117B-100917 Lab Sample ID: 240-86291-2

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 16:00

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	50	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	16	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	5.4	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	1.7	2.0	1.7	ug/L	U		1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	17	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	0.93	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	20	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW117B-101017 Lab Sample ID: 240-86291-1

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 13:15

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	45	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U	^	1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	13	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	0.98	2.0	0.98	ug/L	U		1	6020A
7440-50-8	Copper	1.7	2.0	1.7	ug/L	U		1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U	^	1	6020A
7440-02-0	Nickel	13	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	15	20	15	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW119B-101017 Lab Sample ID: 240-86291-5

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 14:40

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	1.3	0.20	0.13	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW119B-101017 Lab Sample ID: 240-86291-5

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 14:40

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	3.0	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	440	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	12	1.0	0.31	ug/L			1	6020A
7440-43-9	Cadmium	3.4	1.0	0.21	ug/L			1	6020A
7440-48-4	Cobalt	1100	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	2.4	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	230	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	1700	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	7.7	1.0	0.45	ug/L			1	6020A
7782-49-2	Selenium	1.7	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.30	1.0	0.20	ug/L	J		1	6020A
7440-62-2	Vanadium	2.0	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	1500	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW119B-101017 Lab Sample ID: 240-86291-5

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 14:40

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	1.6	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	540	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	15	1.0	0.31	ug/L			1	6020A
7440-43-9	Cadmium	4.3	1.0	0.21	ug/L			1	6020A
7440-48-4	Cobalt	1400	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	1.3	2.0	0.98	ug/L	J		1	6020A
7440-50-8	Copper	310	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	2100	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	9.0	1.0	0.45	ug/L			1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	2.1	5.0	0.89	ug/L	J		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	2000	20	15	ug/L			1	6020A
7440-28-0	Thallium	0.31	1.0	0.20	ug/L	J		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW120B-101017 Lab Sample ID: 240-86291-4

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 11:55

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW120B-101017 Lab Sample ID: 240-86291-4

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 11:55

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	100	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	1.7	1.0	0.31	ug/L			1	6020A
7440-43-9	Cadmium	0.53	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	190	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	4.5	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	15	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	200	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	1.3	1.0	0.45	ug/L			1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-28-0	Thallium	0.22	1.0	0.20	ug/L	J		1	6020A
7440-62-2	Vanadium	3.6	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	300	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW120B-101017 Lab Sample ID: 240-86291-4

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 11:55

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	95	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	1.7	1.0	0.31	ug/L			1	6020A
7440-43-9	Cadmium	0.45	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	180	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	1.2	2.0	0.98	ug/L	J		1	6020A
7440-50-8	Copper	4.5	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	190	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	280	20	15	ug/L			1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	J		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW121A-101017 Lab Sample ID: 240-86291-3

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 09:15

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW121A-101017 Lab Sample ID: 240-86291-3

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 09:15

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	0.85	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	92	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	0.59	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	77	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	0.98	2.0	0.98	ug/L	U		1	6020A
7440-50-8	Copper	1.9	2.0	1.7	ug/L	J		1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	120	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	170	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW121A-101017 Lab Sample ID: 240-86291-3

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/10/2017 09:15

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	0.81	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	100	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.35	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.56	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	84	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	0.98	2.0	0.98	ug/L	U		1	6020A
7440-50-8	Copper	4.8	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	130	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	190	20	15	ug/L			1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

APPENDIX C

SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Block I GW Sampling

Report Number: 240-86291-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 680 Polychlorinated Biphenyls (PCBs) analysis was performed at the TestAmerica Savannah laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/11/2017 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0º C and 2.4º C.

The client changed sample ID MRC-MW122-101017 (240-86291-6) to MRC-MW122A-101017 (240-86291-6) by email on 10/30/17.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4), MRC-MW119B-101017 (240-86291-5), MRC-MW122A-101017 (240-86291-6) and TRIP BLANK (240-86291-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 10/20/2017 and 10/22/2017.

Methylene Chloride was detected in method blank MB 240-300098/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples MRC-MW120B-101017 (240-86291-4)[50X] and MRC-MW119B-101017 (240-86291-5)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for analytical batch 240-299922 recovered outside control limits for the following analytes: Dichlorodi fluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and (LCS 240-299922/5)

The continuing calibration verification (CCV) associated with batch 240-300098 recovered above the upper control limit for some analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MRC-MW119B-101017 (240-86291-5), MRC-MW122A-101017 (240-86291-6), TRIP BLANK (240-86291-7) and (CCVIS 240-300098/3).

The laboratory control sample (LCS) for analytical batch 240-300098 recovered outside control limits for some analytes: Chloromethane and cis-1,3-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/12/2017 and analyzed on 10/15/2017 and 10/17/2017.

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

GASOLINE RANGE ORGANICS (GRO)
Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4), MRC-MW119B-101017 (240-86291-5) and MRC-MW122A-101017 (240-86291-6) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 10/17/2017.

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

POLYCHLORINATED BIPHENYLS (PCBS)
Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 10/13/2017 and analyzed on 10/18/2017.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 680-498449.

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

DIESEL RANGE ORGANICS (DRO)
Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 10/16/2017 and analyzed on 10/17/2017 and 10/18/2017.

The continuing calibration verification (CCV) associated with batch 240-299263 recovered above the upper control limit for o-Terphenyl (Surr). The samples associated with this CCV were non-detects at the RL; therefore, the data have been reported. The following sample is impacted: MRC-MW117B-100917 (240-86291-2).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-299156.

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

DISSOLVED METALS (ICPMS)
Samples MRC-MW117B-101017 (240-86291-1), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 10/12/2017 and analyzed on 10/16/2017 and 10/17/2017.

The continuing calibration verification (CCV) associated with batch 240-299542 recovered above the upper control limit for beryllium and molybdenum. The samples associated with this CCV were below the requested reporting limit for the affected analytes; therefore, the data have been reported. The following sample is impacted: MRC-MW117B-101017 (240-86291-1).

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

TOTAL RECOVERABLE METALS (ICPMS)
Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/12/2017 and analyzed on 10/16/2017.

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

DISSOLVED MERCURY (CVAA)
Samples MRC-MW117B-101017 (240-86291-1), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/12/2017 and analyzed on 10/13/2017.

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

TOTAL MERCURY
Samples MRC-MW117B-100917 (240-86291-2), MRC-MW121A-101017 (240-86291-3), MRC-MW120B-101017 (240-86291-4) and MRC-MW119B-101017 (240-86291-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/12/2017 and analyzed on 10/13/2017.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block I GW Sampling

TestAmerica Job ID: 240-86291-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
680	Polychlorinated Biphenyls (PCBs) (GC/MS)	EPA	TAL SAV
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL CAN
6020A	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block I GW Sampling

TestAmerica Job ID: 240-86291-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-86291-1	MRC-MW117B-101017	Water	10/10/17 13:15	10/11/17 09:15
240-86291-2	MRC-MW117B-100917	Water	10/09/17 16:00	10/11/17 09:15
240-86291-3	MRC-MW121A-101017	Water	10/10/17 09:15	10/11/17 09:15
240-86291-4	MRC-MW120B-101017	Water	10/10/17 11:55	10/11/17 09:15
240-86291-5	MRC-MW119B-101017	Water	10/10/17 14:40	10/11/17 09:15
240-86291-6	MRC-MW122A-101017	Water	10/10/17 13:30	10/11/17 09:15
240-86291-7	TRIP BLANK	Water	10/10/17 00:00	10/11/17 09:15

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

410-982-7595

2.4/C2.4 20/C2.0

Chain of Custody Record

180325
000622
BALTIMORE

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Tony Apanavage	Site Contact: Mike Wilks	Date:	COC No:
Company Name: Tetra Tech	Tel/Fax: 301-233-8230	Lab Contact: Ken Ives	Carrier:	____ of ____ COCs
Address: 20251 Century Blvd. #200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown, MD	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-5552	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: GW Sampling Block I	☐ 1 week			
Site: MRC	☐ 2 days			Job / SDG No.:
PO# 117-0512139	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Water Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	8015C-DRO	6020A-METALS	8260C-TCL VOA	8015C-GRO	8270D-1,4 dioxane	6020A-Diss. Metals	680	8260C-TCL VOAs TB	Sample Specific Notes:
MRC-MW117B-101017	10/10	1315	G	[illegible]	41								✓			
MRC-MW117B-100917	10/09	1600	G	W	13			✓	✓	✓	✓	✓	✓	✓	✓	
MRC-MW121A-101017	10/10	0915	↓	↓	14			✓	✓	✓	✓	✓	✓	✓	✓	
MRC-MW120B-101017	↓	1155	↓	↓	14			✓	✓	✓	✓	✓	✓	✓	✓	
MRC-MW119B-101017	↓	1440	↓	↓	14			✓	✓	✓	✓	✓	✓	✓	✓	
MRC-MW122-101017	10/10	1330	G	W	6			X		✓	✓				✓	

240-86291 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Michael Wilks	Tetra Tech	10-10-17 1635	[signature]	TA	10-10-17 16:40
[signature]	TestAmerica	10-10-2017 1730	[signature]	TA	10-11-17 0915
			Received in Laboratory by:		

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 86291**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: MAB

Cooler Received on 10-11-17 Opened on 10-11-17

FedEx: 1st Grd ~~Exp~~ UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **+0** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF **+0.3**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN # 627 (CF **-1.3**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	~~Yes~~ No	
-Were the seals on the outside of the cooler(s) signed & dated?	~~Yes~~ No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes ~~No~~	
-Were tamper/custody seals intact and uncompromised?	~~Yes~~ No	NA
3. Shippers' packing slip attached to the cooler(s)?	~~Yes~~ No	
4. Did custody papers accompany the sample(s)?	~~Yes~~ No	
5. Were the custody papers relinquished & signed in the appropriate place?	~~Yes~~ No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes ~~No~~	
7. Did all bottles arrive in good condition (Unbroken)?	~~Yes~~ No	
8. Could all bottle labels be reconciled with the COC?	~~Yes~~ No	
9. Were correct bottle(s) used for the test(s) indicated?	~~Yes~~ No	
10. Sufficient quantity received to perform indicated analyses?	~~Yes~~ No	
11. Are these work share samples?	Yes ~~No~~	
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were all preserved sample(s) at the correct pH upon receipt?	~~Yes~~ No	NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	~~Yes~~ No	
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes ~~No~~	NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 021960IB	~~Yes~~ No	
15. Was a LL Hg or Me Hg trip blank present? _____	Yes ~~No~~	

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

MRC-MW117B-100917 sample not received for 6020A-Diss. metals test

Received 6x40mL VOA's trip blanks will log at end of sub.

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 46291
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	8	2.4	2.4	wet, ice
↓	↓	2.0	2.0	↓

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MRC-MW117B-101017	240-86291-A-1	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW117B-100917	240-86291-I-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW121A-101017	240-86291-I-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW121A-101017	240-86291-J-3	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW120B-101017	240-86291-I-4	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW120B-101017	240-86291-J-4	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW119B-101017	240-86291-I-5	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW119B-101017	240-86291-J-5	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: BFB5411.D BFB Injection Date: 10/03/2017

Instrument ID: A3UX16 BFB Injection Time: 15:09

Analysis Batch No.: 297419

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.8	
75	30.0 - 60.0 % of mass 95	50.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	80.9	
175	5.0 - 9.0 % of mass 174	5.5	(6.8) 1
176	95.0 - 101.0 % of mass 174	81.2	(100.3) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-297419/9	UXM6334.D	10/03/2017	16:10
	STD8260 240-297419/10	UXM6335.D	10/03/2017	16:33
	STD8260 240-297419/11	UXM6336.D	10/03/2017	16:56
	STD8260 240-297419/12	UXM6337.D	10/03/2017	17:19
	ICIS 240-297419/13	UXM6338.D	10/03/2017	17:42
	STD8260 240-297419/14	UXM6339.D	10/03/2017	18:06
	STD8260L7 240-297419/15	UXM6340.D	10/03/2017	18:29
	ICV 240-297419/16	UXM6341.D	10/03/2017	18:52
	ICV 240-297419/25	UXM6350.D	10/03/2017	22:22

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-297419/9	UXM6334.D
Level 2	STD8260 240-297419/10	UXM6335.D
Level 3	STD8260 240-297419/11	UXM6336.D
Level 4	STD8260 240-297419/12	UXM6337.D
Level 5	ICIS 240-297419/13	UXM6338.D
Level 6	STD8260 240-297419/14	UXM6339.D
Level 7	STD8260L7 240-297419/15	UXM6340.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2459 0.2583	0.2368 0.2448	0.3070	0.2869	0.2609	Ave		0.2629			0.1000	9.6		20.0			
Chloromethane	0.3145 0.2514	0.3081 0.2708	0.3483	0.2772	0.3021	Ave		0.2961			0.1000	10.9		20.0			
Vinyl chloride	0.3397 0.2924	0.3076 0.2947	0.3783	0.3317	0.3350	Ave		0.3256			0.1000	9.3		20.0			
Butadiene	0.3303 0.2976	0.3589 0.2914	0.3785	0.3387	0.3252	Ave		0.3315				9.4		20.0			
Bromomethane	0.2334 0.1947	0.2210 0.2119	0.2519	0.2101	0.2340	Ave		0.2224			0.0500	8.5		20.0			
Chloroethane	0.2523 0.1925	0.2181 0.2057	0.2464	0.2092	0.2173	Ave		0.2202			0.0500	9.9		20.0			
Dichlorofluoromethane	0.5030 0.4428	0.5680 0.4722	0.5940	0.5152	0.5397	Ave		0.5193				10.2		20.0			
Trichlorofluoromethane	0.3268 0.3453	0.3604 0.3396	0.4397	0.3931	0.3866	Ave		0.3702			0.1000	10.6		20.0			
Ethyl ether	0.2806 0.2195	0.2731 0.2304	0.2439	0.2265	0.2396	Ave		0.2448				9.6		20.0			
Acrolein	0.0484 0.0390	0.0495 0.0396	0.0457	0.0375	0.0421	Ave		0.0431				11.1		20.0			
1,1-Dichloroethene	0.3208 0.2792	0.3335 0.2796	0.2959	0.2954	0.2984	Ave		0.3004			0.1000	6.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2437 0.2201	0.2604 0.1950	0.2496	0.2212	0.2132	Ave		0.2290			0.0500	10.0		20.0			
Acetone	+++++ 0.0637	0.1438 0.0637	0.0926	0.0651	0.0701	Lin1	0.1566	0.0624			0.0100	5.8			0.9990		0.9900
Iodomethane	0.5416 0.4448	0.5186 0.4764	0.4958	0.4659	0.5067	Ave		0.4928				6.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.9690 0.9136	1.0655 0.9489	0.9496	0.9521	0.9843	Ave		0.9690			0.1000	4.9		20.0			
3-Chloro-1-propene	0.2440 0.1717	0.1943 0.1884	0.1793	0.1689	0.1927	Ave		0.1913				13.2		20.0			
Methyl acetate	0.1742 0.1519	0.1992 0.1566	0.1478	0.1569	0.1644	Ave		0.1644			0.1000	10.7		20.0			
Methylene Chloride	+++++ 0.2947	0.6881 0.3153	0.4543	0.3368	0.3324	Lin1	0.3854	0.3013			0.1000	3.6			0.9980		0.9900
2-Methyl-2-propanol	0.0163 0.0160	0.0181 0.0175	0.0150	0.0157	0.0169	Ave		0.0165				6.5		20.0			
Acrylonitrile	0.0815 0.0817	0.0838 0.0855	0.0819	0.0792	0.0844	Ave		0.0826				2.6		20.0			
Methyl tert-butyl ether	0.7638 0.7660	0.8713 0.8283	0.7609	0.7279	0.8121	Ave		0.7901			0.1000	6.2		20.0			
trans-1,2-Dichloroethene	0.3446 0.3042	0.3018 0.3264	0.3040	0.2893	0.3234	Ave		0.3134			0.1000	6.0		20.0			
Hexane	0.3277 0.2857	0.2446 0.2465	0.2959	0.2809	0.2469	Ave		0.2754				11.4		20.0			
1,1-Dichloroethane	0.4973 0.4777	0.5460 0.5154	0.4921	0.4784	0.5186	Ave		0.5036			0.2000	4.9		20.0			
Vinyl acetate	0.3880 0.3806	0.3892 0.4137	0.3550	0.3595	0.3881	Ave		0.3820				5.2		20.0			
cis-1,2-Dichloroethene	0.3513 0.3278	0.3525 0.3511	0.3417	0.3319	0.3564	Ave		0.3447			0.1000	3.2		20.0			
2,2-Dichloropropane	0.0568 0.0764	0.0739 0.0806	0.0781	0.0794	0.0786	Ave		0.0748				11.0		20.0			
2-Butanone (MEK)	0.1142 0.0822	0.0953 0.0855	0.0960	0.0796	0.0872	Ave		0.0914			0.0100	12.9		20.0			
Chlorobromomethane	0.1555 0.1435	0.1762 0.1559	0.1547	0.1453	0.1582	Ave		0.1556				6.9		20.0			
Tetrahydrofuran	+++++ 0.0525	0.0697 0.0551	0.0556	0.0535	0.0529	Ave		0.0565				11.6		20.0			
Chloroform	0.4954 0.4727	0.5458 0.5183	0.5032	0.4783	0.5226	Ave		0.5052			0.2000	5.1		20.0			
1,1,1-Trichloroethane	0.3898 0.4107	0.4303 0.4229	0.4216	0.4177	0.4397	Ave		0.4189			0.1000	3.8		20.0			
Cyclohexane	0.4857 0.4471	0.4095 0.4022	0.4553	0.4546	0.4319	Ave		0.4409			0.1000	6.5		20.0			
1,1-Dichloropropene	0.3907 0.3664	0.3653 0.3752	0.3467	0.3782	0.3831	Ave		0.3722				3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.4098 0.3502	0.3512 0.3495	0.3768	0.3462	0.3718	Ave		0.3651			0.1000	6.3		20.0			
Isobutyl alcohol	0.0043 0.0052	0.0053 0.0055	0.0049	0.0054	0.0054	Ave		0.0052				8.1		20.0			
Benzene	1.1616 1.0898	1.1692 1.2051	1.1021	1.1147	1.1883	Ave		1.1473			0.5000	3.9		20.0			
1,2-Dichloroethane	0.3378 0.3351	0.3657 0.3630	0.3439	0.3376	0.3592	Ave		0.3489			0.1000	3.8		20.0			
n-Heptane	+++++ 0.1373	0.7992 +++++	0.3631	0.1739	0.1330	Lin1	0.6620	0.1128				16.7			0.9900		0.9900
Trichloroethene	0.2827 0.2697	0.2768 0.2930	0.2937	0.2786	0.2977	Ave		0.2846			0.1500	3.7		20.0			
Methylcyclohexane	0.4059 0.4090	0.4240 0.3604	0.4155	0.4118	0.3696	Ave		0.3995			0.1000	6.1		20.0			
1,2-Dichloropropane	0.2235 0.2299	0.2276 0.2485	0.2264	0.2298	0.2434	Ave		0.2327			0.1000	4.0		20.0			
Dibromomethane	0.1396 0.1422	0.1821 0.1519	0.1457	0.1427	0.1512	Ave		0.1508				9.7		20.0			
1,4-Dioxane	+++++ 0.0021	0.0028 0.0022	0.0022	0.0019	0.0022	Ave		0.0022				12.6		20.0			
Dichlorobromomethane	0.3636 0.3226	0.3196 0.3575	0.3248	0.3183	0.3542	Ave		0.3372			0.1500	6.0		20.0			
2-Chloroethyl vinyl ether	+++++ 0.0985	0.0965 0.1094	0.0831	0.0929	0.1046	Ave		0.0975				9.4		20.0			
cis-1,3-Dichloropropene	0.2691 0.3292	0.2826 0.3726	0.2914	0.3126	0.3463	Ave		0.3148			0.1500	11.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.1539 0.1624	0.1542 0.1739	0.1483	0.1596	0.1682	Ave		0.1601			0.0500	5.5		20.0			
Toluene	1.5309 1.5062	1.5266 1.6706	1.4947	1.5486	1.6547	Ave		1.5617			0.4000	4.6		20.0			
trans-1,3-Dichloropropene	0.4136 0.4007	0.3971 0.4415	0.3756	0.3858	0.4197	Ave		0.4048			0.1000	5.5		20.0			
Ethyl methacrylate	0.3261 0.3223	0.3139 0.3566	0.2810	0.3138	0.3430	Ave		0.3224				7.5		20.0			
1,1,2-Trichloroethane	0.2543 0.2542	0.2917 0.2744	0.2525	0.2625	0.2687	Ave		0.2655			0.1000	5.3		20.0			
Tetrachloroethene	0.3586 0.2699	0.2864 0.2838	0.2715	0.2845	0.2981	Ave		0.2933			0.1500	10.4		20.0			
1,3-Dichloropropane	0.4275 0.4299	0.4285 0.4724	0.4262	0.4420	0.4728	Ave		0.4428				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.1204 0.1306	0.1459 0.1376	0.1202	0.1355	0.1418	Ave		0.1332			0.0500	7.5		20.0			
Chlorodibromomethane	0.2848 0.2976	0.2711 0.3228	0.2718	0.2872	0.3156	Ave		0.2930				6.9		20.0			
Ethylene Dibromide	0.2408 0.2487	0.2558 0.2690	0.2530	0.2395	0.2687	Ave		0.2537				4.7		20.0			
Chlorobenzene	1.0584 0.9045	0.9096 1.0051	0.9120	0.9351	1.0024	Ave		0.9610			0.3000	6.3		20.0			
1,1,1,2-Tetrachloroethane	0.3892 0.3698	0.3878 0.4053	0.3327	0.3757	0.4060	Ave		0.3809				6.6		20.0			
Ethylbenzene	0.4688 0.5060	0.4859 0.5583	0.4617	0.5112	0.5577	Ave		0.5071				7.7		20.0			
m-Xylene & p-Xylene	0.6018 0.6240	0.5689 0.6923	0.5928	0.6286	0.6977	Ave		0.6295				7.8		20.0			
o-Xylene	0.7570 0.6929	0.6550 0.7588	0.6145	0.6956	0.7628	Ave		0.7052				8.2		20.0			
Styrene	0.9001 1.0678	0.9753 1.1915	1.0063	1.0653	1.1583	Ave		1.0521			0.3000	9.7		20.0			
Bromoform	0.1961 0.1858	0.1948 0.2025	0.1757	0.1856	0.1963	Ave		0.1910			0.1000	4.7		20.0			
Isopropylbenzene	1.7361 1.7088	1.6138 1.8575	1.5686	1.7297	1.8865	Ave		1.7287			0.1000	6.7		20.0			
1,1,2,2-Tetrachloroethane	0.5988 0.5767	0.5417 0.6107	0.5710	0.5747	0.6113	Ave		0.5836			0.3000	4.3		20.0			
Bromobenzene	0.6349 0.6235	0.6073 0.6885	0.6520	0.6164	0.6936	Ave		0.6452				5.3		20.0			
1,2,3-Trichloropropane	0.2499 0.1788	0.1712 0.1899	0.1861	0.1693	0.1787	Ave		0.1891				14.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1309	0.0880 0.1449	0.1180	0.1327	0.1428	Ave		0.1262				16.7		20.0			
N-Propylbenzene	0.7783 0.6730	0.5989 0.7191	0.6399	0.6583	0.7239	Ave		0.6845				8.8		20.0			
2-Chlorotoluene	0.6194 0.6277	0.6307 0.6941	0.6351	0.6259	0.6839	Ave		0.6453				4.7		20.0			
1,3,5-Trimethylbenzene	1.9610 2.2274	1.9011 2.4387	1.9426	2.1636	2.4582	Ave		2.1561				10.8		20.0			
4-Chlorotoluene	0.7381 0.6292	0.6667 0.6906	0.6065	0.6213	0.6820	Ave		0.6621				7.0		20.0			
tert-Butylbenzene	1.8332 1.9431	1.8843 2.2793	1.8522	1.8574	2.2762	Ave		1.9894				10.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.1843 2.3707	2.1358 2.6286	2.1658	2.3127	2.5973	Ave		2.3422				8.7		20.0			
sec-Butylbenzene	2.2114 2.4973	2.1601 2.6704	2.2317	2.4053	2.7215	Ave		2.4140				9.4		20.0			
1,3-Dichlorobenzene	1.2597 1.3172	1.3986 1.4380	1.2844	1.3397	1.4586	Ave		1.3566			0.6000	5.6		20.0			
4-Isopropyltoluene	1.8476 2.2063	1.8283 2.3974	1.9085	2.1681	2.4122	Ave		2.1098				11.9		20.0			
1,4-Dichlorobenzene	1.3937 1.3681	1.5405 1.4780	1.3548	1.3925	1.5085	Ave		1.4337			0.5000	5.2		20.0			
n-Butylbenzene	2.0548 1.8809	1.8464 2.0111	1.6273	1.8214	2.0640	Ave		1.9009				8.2		20.0			
1,2-Dichlorobenzene	1.5240 1.3386	1.4461 1.4364	1.3243	1.3317	1.4954	Ave		1.4138			0.4000	5.8		20.0			
1,2-Dibromo-3-Chloropropane	0.1180 0.1232	0.1301 0.1331	0.1168	0.1149	0.1288	Ave		0.1236			0.0500	5.8		20.0			
1,2,4-Trichlorobenzene	0.7101 0.7291	0.7473 0.7797	0.6590	0.6958	0.8054	Ave		0.7323			0.2000	6.8		20.0			
Hexachlorobutadiene	0.3644 0.2886	0.3606 0.3018	0.2870	0.2873	0.3120	Ave		0.3145				10.8		20.0			
Naphthalene	1.6880 2.0616	1.7593 2.2025	1.7282	1.8680	2.1906	Ave		1.9283				11.4		20.0			
1,2,3-Trichlorobenzene	0.6737 0.6663	0.7123 0.7145	0.6469	0.6565	0.7339	Ave		0.6863				4.9		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2401	0.2724 0.2650	0.2498	0.2375	0.2626	Ave		0.2546				5.6		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2767	0.2878 0.2930	0.2976	0.2832	0.3073	Ave		0.2909				3.7		20.0			
Toluene-d8 (Surr)	+++++ 1.2641	1.2721 1.3862	1.2678	1.2713	1.3471	Ave		1.3014				4.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4325	0.4596 0.4818	0.4358	0.4325	0.4694	Ave		0.4519				4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-297419/9	UXM6334.D
Level 2	STD8260 240-297419/10	UXM6335.D
Level 3	STD8260 240-297419/11	UXM6336.D
Level 4	STD8260 240-297419/12	UXM6337.D
Level 5	ICIS 240-297419/13	UXM6338.D
Level 6	STD8260 240-297419/14	UXM6339.D
Level 7	STD8260L7 240-297419/15	UXM6340.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	6268 616054	11277 914424	38299	161656	283048	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Chloromethane	FB	Ave	8015 599771	14671 1011349	43459	156195	327751	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Vinyl chloride	FB	Ave	8657 697568	14646 1100805	47205	186868	363465	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Butadiene	FB	Ave	8419 709853	17091 1088421	47229	190809	352907	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromomethane	FB	Ave	5949 464416	10522 791580	31434	118362	253928	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Chloroethane	FB	Ave	6431 459127	10386 768287	30742	117870	235799	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dichlorofluoromethane	FB	Ave	12819 1056232	27048 1763650	74107	290263	585560	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Trichlorofluoromethane	FB	Ave	8328 823572	17162 1268274	54861	221473	419512	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethyl ether	FB	Ave	7151 523674	13006 860521	30427	127625	260018	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Acrolein	FB	Ave	6171 464717	11782 738920	28528	105619	228484	2.50 200	5.00 300	12.5	50.0	100
1,1-Dichloroethene	FB	Ave	8176 665929	15882 1044326	36924	166443	323777	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	6212 524977	12400 728181	31142	124614	231332	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Acetone	FB	Lin1	+++++ 303800	13693 476147	23117	73342	152020	+++++ 80.0	2.00 120	5.00	20.0	40.0
Iodomethane	FB	Ave	13803 1061136	24695 1779244	61866	262510	549782	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Carbon disulfide	FB	Ave	24696 2179210	50737 3544018	118478	536438	1068006	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	6219 409680	9253 703617	22368	95156	209066	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Methyl acetate	FB	Ave	8878 724563	18968 1169526	36885	176755	356834	1.00 80.0	2.00 120	5.00	20.0	40.0
Methylene Chloride	FB	Lin1	+++++ 702925	32763 1177453	56680	189742	360684	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
2-Methyl-2-propanol	FB	Ave	4154 380717	8626 652608	18725	88606	183108	5.00 400	10.0 600	25.0	100	200
Acrylonitrile	FB	Ave	20781 1948102	39915 3194780	102228	446160	916261	5.00 400	10.0 600	25.0	100	200
Methyl tert-butyl ether	FB	Ave	19467 1827292	41490 3093794	94936	410125	881161	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	8782 725614	14369 1219098	37931	162990	350890	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Hexane	FB	Ave	8351 681428	11645 920727	36915	158253	267879	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1-Dichloroethane	FB	Ave	12675 1139385	25997 1924857	61396	269539	562663	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Vinyl acetate	FB	Ave	9890 907808	18534 1545224	44288	202525	421145	0.500 40.0	1.00 60.0	2.50	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	8953 781957	16783 1311332	42638	186988	386718	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2,2-Dichloropropane	FB	Ave	1448 182345	3521 300897	9739	44721	85252	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Butanone (MEK)	FB	Ave	5819 391987	9080 638516	23953	89667	189216	1.00 80.0	2.00 120	5.00	20.0	40.0
Chlorobromomethane	FB	Ave	3964 342195	8390 582225	19307	81839	171676	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Tetrahydrofuran	FB	Ave	+++++ 250295	6636 411284	13869	60338	114789	+++++ 80.0	2.00 120	5.00	20.0	40.0
Chloroform	FB	Ave	12627 1127570	25988 1935632	62788	269493	567018	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	9934 979648	20491 1579323	52606	235331	477044	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Cyclohexane	FB	Ave	12378 1066535	19500 1502258	56810	256158	468668	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1-Dichloropropene	FB	Ave	9958 873939	17394 1401323	43254	213099	415632	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Carbon tetrachloride	FB	Ave	10445 835412	16721 1305500	47014	195087	403435	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Isobutyl alcohol	FB	Ave	2758 312736	6311 517266	15423	76538	147411	12.5 1000	25.0 1500	62.5	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	29606 2599520	55672 4501045	137508	628048	1289361	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloroethane	FB	Ave	8609 799309	17411 1355792	42908	190212	389711	0.500 40.0	1.00 60.0	2.50	10.0	20.0
n-Heptane	FB	Lin1	+++++ 327622	38057 +++++	45301	97964	144337	+++++ 40.0	1.00 +++++	2.50	10.0	20.0
Trichloroethene	FB	Ave	7205 643234	13180 1094413	36639	156978	322997	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Methylcyclohexane	FB	Ave	10346 975623	20189 1346127	51842	232012	401062	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloropropane	FB	Ave	5696 548338	10838 928017	28242	129487	264140	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dibromomethane	FB	Ave	3557 339278	8670 567344	18179	80425	164089	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 98866	2630 167553	5498	21786	47482	+++++ 800	20.0 1200	50.0	200	400
Dichlorobromomethane	FB	Ave	9267 769508	15219 1335138	40528	179326	384298	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 470128	9190 817202	20727	104703	226914	+++++ 80.0	2.00 120	5.00	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	6858 785344	13457 1391546	36358	176104	375717	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	7844 774602	14688 1298638	37005	179839	365077	1.00 80.0	2.00 120	5.00	20.0	40.0
Toluene	CBNZ d5	Ave	25814 2448121	49083 4286732	123707	577721	1201971	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	6974 651236	12766 1133000	31088	143929	304845	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	5499 523868	10093 915063	23254	117073	249186	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4288 413182	9379 704092	20898	97942	195208	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	6047 438707	9208 728263	22468	106153	216509	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	7209 698784	13777 1212196	35271	164897	343443	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Hexanone	CBNZ d5	Ave	4061 424490	9384 706416	19899	101105	205966	1.00 80.0	2.00 120	5.00	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	4803 483684	8715 828348	22497	107126	229246	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	4061 404247	8225 690356	20940	89356	195157	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	17846 1470111	29244 2579177	75481	348866	728151	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6563 600981	12468 1039927	27532	140147	294891	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	7905 822404	15623 1432648	38214	190693	405096	0.500 40.0	1.00 60.0	2.50	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	10148 1014271	18292 1776387	49061	234509	506846	0.500 40.0	1.00 60.0	2.50	10.0	20.0
o-Xylene	CBNZ d5	Ave	12764 1126222	21059 1947229	50860	259496	554141	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Styrene	CBNZ d5	Ave	15178 1735500	31359 3057449	83285	397413	841378	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromoform	CBNZ d5	Ave	3306 301966	6263 519496	14542	69249	142569	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	29273 2777456	51888 4766445	129830	645268	1370345	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6686 605298	11696 999793	31897	142410	289805	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Bromobenzene	DCBd 4	Ave	7089 654493	13112 1127151	36423	152746	328830	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	2790 187633	3697 310884	10396	41957	84715	0.500 40.0	1.00 60.0	2.50	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 137383	1901 237173	6591	32881	67708	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	8690 706431	12930 1177191	35748	163108	343193	0.500 40.0	1.00 60.0	2.50	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	6916 658897	13617 1136325	35478	155092	324232	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	21895 2338051	41045 3992428	108514	536117	1165401	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	8241 660416	14395 1130515	33878	153952	323327	0.500 40.0	1.00 60.0	2.50	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	20468 2039648	40683 3731481	103465	460244	1079083	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	24388 2488419	46113 4303202	120986	573053	1231327	0.500 40.0	1.00 60.0	2.50	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	24690 2621371	46638 4371654	124666	595996	1290217	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	14065 1382584	30197 2354096	71749	331966	691502	0.500 40.0	1.00 60.0	2.50	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	20629 2315891	39473 3924747	106610	537217	1143583	0.500 40.0	1.00 60.0	2.50	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	15561 1436062	33260 2419583	75678	345045	715160	0.500 40.0	1.00 60.0	2.50	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	22942 1974321	39865 3292320	90904	451311	978511	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	17015 1405056	31222 2351535	73978	329972	708936	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1318 129331	2809 217923	6527	28469	61077	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	7928 765368	16135 1276372	36814	172402	381829	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	4068 302932	7786 494054	16033	71186	147931	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Naphthalene	DCBd 4	Ave	18847 2164004	37983 3605700	96540	462853	1038493	0.500 40.0	1.00 60.0	2.50	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7522 699374	15379 1169690	36134	162664	347922	0.500 40.0	1.00 60.0	2.50	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 572684	12970 989819	31163	133831	284975	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 660113	13702 1094461	37128	159543	333400	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 2054651	40899 3557024	104927	474272	978529	+++++ 40.0	1.00 60.0	2.50	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 703005	14778 1236409	36070	161352	340966	+++++ 40.0	1.00 60.0	2.50	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2629	0.2734	0.1000	0.0208	0.0200	4.0	30.0
Chloromethane	Ave	0.2961	0.2972	0.1000	0.0201	0.0200	0.4	30.0
Vinyl chloride	Ave	0.3256	0.3316	0.1000	0.0204	0.0200	1.8	30.0
Butadiene	Ave	0.3315	0.3265		0.0197	0.0200	-1.5	30.0
Bromomethane	Ave	0.2224	0.2222	0.0500	0.0200	0.0200	-0.0	30.0
Chloroethane	Ave	0.2202	0.2215	0.0500	0.0201	0.0200	0.6	30.0
Dichlorofluoromethane	Ave	0.5193	0.5397		0.0208	0.0200	3.9	30.0
Trichlorofluoromethane	Ave	0.3702	0.3847	0.1000	0.0208	0.0200	3.9	30.0
Ethyl ether	Ave	0.2448	0.2415		0.0197	0.0200	-1.3	30.0
Acrolein	Ave	0.0431	0.0400		0.0927	0.100	-7.3	50.0
1,1-Dichloroethene	Ave	0.3004	0.2842	0.1000	0.0189	0.0200	-5.4	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2290	0.2106	0.0500	0.0184	0.0200	-8.0	30.0
Acetone	Lin1		0.0672	0.0100	0.0406	0.0400	1.4	50.0
Iodomethane	Ave	0.4928	0.4835		0.0196	0.0200	-1.9	30.0
Carbon disulfide	Ave	0.9690	0.9411	0.1000	0.0194	0.0200	-2.9	30.0
3-Chloro-1-propene	Ave	0.1913	0.1776		0.0186	0.0200	-7.2	30.0
Methyl acetate	Ave	0.1644	0.1530	0.1000	0.0372	0.0400	-6.9	30.0
Methylene Chloride	Lin1		0.3310	0.1000	0.0207	0.0200	3.4	50.0
2-Methyl-2-propanol	Ave	0.0165	0.0172		0.209	0.200	4.4	50.0
Acrylonitrile	Ave	0.0826	0.0835		0.202	0.200	1.1	30.0
Methyl tert-butyl ether	Ave	0.7901	0.7986	0.1000	0.0202	0.0200	1.1	30.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3187	0.1000	0.0203	0.0200	1.7	30.0
Hexane	Ave	0.2754	0.2486		0.0181	0.0200	-9.7	30.0
1,1-Dichloroethane	Ave	0.5036	0.5122	0.2000	0.0203	0.0200	1.7	30.0
Vinyl acetate	Ave	0.3820	0.4053		0.0212	0.0200	6.1	50.0
2,2-Dichloropropane	Ave	0.0748	0.0764		0.0204	0.0200	2.1	30.0
2-Butanone (MEK)	Ave	0.0914	0.0835	0.0100	0.0365	0.0400	-8.7	30.0
cis-1,2-Dichloroethene	Ave	0.3447	0.3472	0.1000	0.0201	0.0200	0.7	30.0
Chlorobromomethane	Ave	0.1556	0.1536		0.0197	0.0200	-1.3	30.0
Tetrahydrofuran	Ave	0.0565	0.0532		0.0376	0.0400	-5.9	30.0
Chloroform	Ave	0.5052	0.5201	0.2000	0.0206	0.0200	2.9	30.0
1,1,1-Trichloroethane	Ave	0.4189	0.4188	0.1000	0.0200	0.0200	-0.0	30.0
Cyclohexane	Ave	0.4409	0.4136	0.1000	0.0188	0.0200	-6.2	30.0
1,1-Dichloropropene	Ave	0.3722	0.3608		0.0194	0.0200	-3.1	30.0
Carbon tetrachloride	Ave	0.3651	0.3452	0.1000	0.0189	0.0200	-5.4	30.0
Isobutyl alcohol	Ave	0.0052	0.0054		0.524	0.500	4.8	30.0
1,2-Dichloroethane	Ave	0.3489	0.3550	0.1000	0.0203	0.0200	1.7	30.0
Benzene	Ave	1.147	1.149	0.5000	0.0200	0.0200	0.1	30.0
n-Heptane	Lin1		0.1268		0.0166	0.0200	-16.9	30.0
Trichloroethene	Ave	0.2846	0.2800	0.1500	0.0197	0.0200	-1.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3995	0.3535	0.1000	0.0177	0.0200	-11.5	30.0
1,2-Dichloropropane	Ave	0.2327	0.2504	0.1000	0.0215	0.0200	7.6	30.0
Dibromomethane	Ave	0.1508	0.1478		0.0196	0.0200	-2.0	30.0
1,4-Dioxane	Ave	0.0022	0.0020		0.362	0.400	-9.4	50.0
Dichlorobromomethane	Ave	0.3372	0.3375	0.1500	0.0200	0.0200	0.0	30.0
2-Chloroethyl vinyl ether	Ave	0.0975	0.1022		0.0210	0.0200	4.8	30.0
cis-1,3-Dichloropropene	Ave	0.3148	0.3502	0.1500	0.0222	0.0200	11.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1601	0.1637	0.0500	0.0409	0.0400	2.2	30.0
Toluene	Ave	1.562	1.595	0.4000	0.0204	0.0200	2.1	30.0
trans-1,3-Dichloropropene	Ave	0.4048	0.4038	0.1000	0.0199	0.0200	-0.3	30.0
Ethyl methacrylate	Ave	0.3224	0.3399		0.0211	0.0200	5.4	30.0
1,1,2-Trichloroethane	Ave	0.2655	0.2737	0.1000	0.0206	0.0200	3.1	30.0
1,3-Dichloropropane	Ave	0.4428	0.4579		0.0207	0.0200	3.4	30.0
Tetrachloroethene	Ave	0.2933	0.2836	0.1500	0.0193	0.0200	-3.3	30.0
2-Hexanone	Ave	0.1332	0.1405	0.0500	0.0422	0.0400	5.5	30.0
Chlorodibromomethane	Ave	0.2930	0.3030		0.0207	0.0200	3.4	30.0
Ethylene Dibromide	Ave	0.2537	0.2673		0.0211	0.0200	5.4	30.0
Chlorobenzene	Ave	0.9610	0.9772	0.3000	0.0203	0.0200	1.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3809	0.3966		0.0208	0.0200	4.1	30.0
Ethylbenzene	Ave	0.5071	0.5317		0.0210	0.0200	4.9	30.0
m-Xylene & p-Xylene	Ave	0.6295	0.6749		0.0214	0.0200	7.2	30.0
o-Xylene	Ave	0.7052	0.7318		0.0208	0.0200	3.8	30.0
Styrene	Ave	1.052	1.117	0.3000	0.0212	0.0200	6.2	30.0
Bromoform	Ave	0.1910	0.1895	0.1000	0.0198	0.0200	-0.8	30.0
Isopropylbenzene	Ave	1.729	1.791	0.1000	0.0207	0.0200	3.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5836	0.5941	0.3000	0.0204	0.0200	1.8	30.0
Bromobenzene	Ave	0.6452	0.6715		0.0208	0.0200	4.1	30.0
1,2,3-Trichloropropane	Ave	0.1891	0.1866		0.0197	0.0200	-1.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1262	0.1441		0.0228	0.0200	14.2	30.0
N-Propylbenzene	Ave	0.6845	0.6899		0.0202	0.0200	0.8	30.0
2-Chlorotoluene	Ave	0.6453	0.6591		0.0204	0.0200	2.1	30.0
1,3,5-Trimethylbenzene	Ave	2.156	2.285		0.0212	0.0200	6.0	30.0
4-Chlorotoluene	Ave	0.6621	0.6697		0.0202	0.0200	1.2	30.0
tert-Butylbenzene	Ave	1.989	2.089		0.0210	0.0200	5.0	30.0
1,2,4-Trimethylbenzene	Ave	2.342	2.419		0.0207	0.0200	3.3	30.0
sec-Butylbenzene	Ave	2.414	2.550		0.0211	0.0200	5.6	30.0
1,3-Dichlorobenzene	Ave	1.357	1.396	0.6000	0.0206	0.0200	2.9	30.0
4-Isopropyltoluene	Ave	2.110	2.267		0.0215	0.0200	7.4	30.0
1,4-Dichlorobenzene	Ave	1.434	1.447	0.5000	0.0202	0.0200	0.9	30.0
n-Butylbenzene	Ave	1.901	1.922		0.0202	0.0200	1.1	30.0
1,2-Dichlorobenzene	Ave	1.414	1.422	0.4000	0.0201	0.0200	0.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297419/16 Calibration Date: 10/03/2017 18:52

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6341.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1236	0.1125	0.0500	0.0182	0.0200	-8.9	50.0
1,2,4-Trichlorobenzene	Ave	0.7323	0.7715	0.2000	0.0211	0.0200	5.3	50.0
Hexachlorobutadiene	Ave	0.3145	0.3424		0.0218	0.0200	8.9	30.0
Naphthalene	Ave	1.928	2.081		0.0216	0.0200	7.9	50.0
1,2,3-Trichlorobenzene	Ave	0.6863	0.7072		0.0206	0.0200	3.0	30.0
Dibromofluoromethane (Surr)	Ave	0.2546	0.2442		0.0192	0.0200	-4.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2807		0.0193	0.0200	-3.5	30.0
Toluene-d8 (Surr)	Ave	1.301	1.316		0.0202	0.0200	1.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4760		0.0211	0.0200	5.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297419/25 Calibration Date: 10/03/2017 22:22

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6350.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2546	0.2603		0.0204	0.0200	2.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2759		0.0190	0.0200	-5.2	30.0
Toluene-d8 (Surr)	Ave	1.301	1.257		0.0193	0.0200	-3.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4710		0.0208	0.0200	4.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297419/25 Calibration Date: 10/03/2017 22:22

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 20:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 21:59

Lab File ID: UXM6350.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0260	0.0236		0.182	0.200	-9.2	30.0
Isopropyl ether	Ave	0.2633	0.2750		0.0209	0.0200	4.4	30.0
2-Chloro-1,3-butadiene	Ave	0.4473	0.4394		0.0196	0.0200	-1.8	30.0
Tert-butyl ethyl ether	Ave	0.8428	0.8447		0.0200	0.0200	0.2	30.0
Ethyl acetate	Ave	0.1413	0.1388		0.0393	0.0400	-1.8	50.0
Propionitrile	Ave	0.0289	0.0277		0.191	0.200	-4.4	30.0
Methacrylonitrile	Ave	0.1161	0.1119		0.193	0.200	-3.6	30.0
Tert-amyl methyl ether	Ave	0.8176	0.8063		0.0197	0.0200	-1.4	30.0
n-Butanol	Ave	0.0040	0.0042		0.518	0.500	3.6	30.0
Ethyl acrylate	Ave	0.1598	0.1540		0.0193	0.0200	-3.7	30.0
Methyl methacrylate	Ave	0.1179	0.1187		0.0403	0.0400	0.6	30.0
2-Nitropropane	Ave	0.0348	0.0350		0.0402	0.0400	0.6	30.0
n-Butyl acetate	Ave	0.1988	0.1995		0.0201	0.0200	0.3	30.0
1-Chlorohexane	Ave	0.3427	0.3299		0.0193	0.0200	-3.7	30.0
Cyclohexanone	Ave	0.0113	0.0121		0.213	0.200	6.5	30.0
Pentachloroethane	Ave	0.2496	0.2437		0.0390	0.0400	-2.4	30.0
1,2,3-Trimethylbenzene	Ave	2.430	2.441		0.0201	0.0200	0.5	30.0
Benzyl chloride	Lin1		0.1923		0.0170	0.0200	-15.1	30.0
1,3,5-Trichlorobenzene	Ave	0.8028	0.8072		0.0201	0.0200	0.5	30.0
2-Methylnaphthalene	Lin1		0.9906		0.0383	0.0400	-4.1	30.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: BFB5433.D BFB Injection Date: 10/20/2017

Instrument ID: A3UX16 BFB Injection Time: 08:46

Analysis Batch No.: 299922

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	79.9	
175	5.0 - 9.0 % of mass 174	6.5	(8.1) 1
176	95.0 - 101.0 % of mass 174	76.7	(96.0) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-299922/3	UXM6954.D	10/20/2017	09:10
	CCV 240-299922/4	UXM6955.D	10/20/2017	09:32
	LCS 240-299922/5	UXM6956.D	10/20/2017	09:55
	MB 240-299922/7	UXM6958.D	10/20/2017	10:41
MRC-MW117B-100917	240-86291-2	UXM6967.D	10/20/2017	14:23
MRC-MW121A-101017	240-86291-3	UXM6968.D	10/20/2017	14:45
MRC-MW120B-101017	240-86291-4	UXM6969.D	10/20/2017	15:08
	240-86300-B-4 MS	UXM6979.D	10/20/2017	19:04
	240-86300-B-4 MSD	UXM6980.D	10/20/2017	19:28

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 240-299922/3 Calibration Date: 10/20/2017 09:10

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6954.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2629	0.2737	0.1000	0.0208	0.0200	4.1	20.0
Chloromethane	Ave	0.2961	0.2974	0.1000	0.0201	0.0200	0.4	20.0
Vinyl chloride	Ave	0.3256	0.3490	0.1000	0.0214	0.0200	7.2	20.0
Butadiene	Ave	0.3315	0.3088		0.0186	0.0200	-6.8	20.0
Bromomethane	Ave	0.2224	0.2468	0.0500	0.0222	0.0200	10.9	20.0
Chloroethane	Ave	0.2202	0.2378	0.0500	0.0216	0.0200	8.0	20.0
Dichlorofluoromethane	Ave	0.5193	0.5698		0.0219	0.0200	9.7	20.0
Trichlorofluoromethane	Ave	0.3702	0.4196	0.1000	0.0227	0.0200	13.3	20.0
Ethyl ether	Ave	0.2448	0.2340		0.0191	0.0200	-4.4	20.0
Acrolein	Ave	0.0431	0.0368		0.0853	0.100	-14.7	50.0
1,1-Dichloroethene	Ave	0.3004	0.3232	0.1000	0.0215	0.0200	7.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2290	0.2323	0.0500	0.0203	0.0200	1.4	20.0
Acetone	Lin1		0.0696	0.0100	0.0421	0.0400	5.3	50.0
Iodomethane	Ave	0.4928	0.5955		0.0242	0.0200	20.8*	20.0
Carbon disulfide	Ave	0.9690	1.103	0.1000	0.0228	0.0200	13.8	20.0
3-Chloro-1-propene	Ave	0.1913	0.1981		0.0207	0.0200	3.5	20.0
Methyl acetate	Ave	0.1644	0.1646	0.1000	0.0400	0.0400	0.0	20.0
Methylene Chloride	Lin1		0.3511	0.1000	0.0220	0.0200	10.1	50.0
2-Methyl-2-propanol	Ave	0.0165	0.0202		0.245	0.200	22.7	50.0
Acrylonitrile	Ave	0.0826	0.0884		0.214	0.200	7.0	20.0
Methyl tert-butyl ether	Ave	0.7901	0.8822	0.1000	0.0223	0.0200	11.7	20.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3587	0.1000	0.0229	0.0200	14.5	20.0
Hexane	Ave	0.2754	0.2185		0.0159	0.0200	-20.7*	20.0
1,1-Dichloroethane	Ave	0.5036	0.5408	0.2000	0.0215	0.0200	7.4	20.0
Vinyl acetate	Ave	0.3820	0.3446		0.0180	0.0200	-9.8	50.0
2,2-Dichloropropane	Ave	0.0748	0.0941		0.0252	0.0200	25.8*	20.0
2-Butanone (MEK)	Ave	0.0914	0.0843	0.0100	0.0369	0.0400	-7.8	20.0
cis-1,2-Dichloroethene	Ave	0.3447	0.3866	0.1000	0.0224	0.0200	12.2	20.0
Chlorobromomethane	Ave	0.1556	0.1774		0.0228	0.0200	14.0	20.0
Tetrahydrofuran	Ave	0.0565	0.0534		0.0377	0.0400	-5.6	20.0
Chloroform	Ave	0.5052	0.5762	0.2000	0.0228	0.0200	14.1	20.0
1,1,1-Trichloroethane	Ave	0.4189	0.4894	0.1000	0.0234	0.0200	16.8	20.0
Cyclohexane	Ave	0.4409	0.3871	0.1000	0.0176	0.0200	-12.2	20.0
1,1-Dichloropropene	Ave	0.3722	0.4029		0.0216	0.0200	8.2	20.0
Carbon tetrachloride	Ave	0.3651	0.4076	0.1000	0.0223	0.0200	11.6	20.0
Isobutyl alcohol	Ave	0.0052	0.0058		0.563	0.500	12.6	20.0
Benzene	Ave	1.147	1.241	0.5000	0.0216	0.0200	8.1	20.0
1,2-Dichloroethane	Ave	0.3489	0.3737	0.1000	0.0214	0.0200	7.1	20.0
n-Heptane	Lin1		0.1097		0.0136	0.0200	-32.1*	20.0
Trichloroethene	Ave	0.2846	0.3369	0.1500	0.0237	0.0200	18.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 240-299922/3 Calibration Date: 10/20/2017 09:10

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6954.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3995	0.3652	0.1000	0.0183	0.0200	-8.6	20.0
1,2-Dichloropropane	Ave	0.2327	0.2463	0.1000	0.0212	0.0200	5.8	20.0
Dibromomethane	Ave	0.1508	0.1654		0.0219	0.0200	9.7	20.0
1,4-Dioxane	Ave	0.0022	0.0027		0.477	0.400	19.3	50.0
Dichlorobromomethane	Ave	0.3372	0.3599	0.1500	0.0213	0.0200	6.7	20.0
2-Chloroethyl vinyl ether	Ave	0.0975	0.1095		0.0449	0.0400	12.3	20.0
cis-1,3-Dichloropropene	Ave	0.3148	0.3629	0.1500	0.0231	0.0200	15.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1601	0.1695	0.0500	0.0424	0.0400	5.9	20.0
Toluene	Ave	1.562	1.491	0.4000	0.0191	0.0200	-4.5	20.0
trans-1,3-Dichloropropene	Ave	0.4048	0.3822	0.1000	0.0189	0.0200	-5.6	20.0
Ethyl methacrylate	Ave	0.3224	0.3242		0.0201	0.0200	0.6	20.0
1,1,2-Trichloroethane	Ave	0.2655	0.2506	0.1000	0.0189	0.0200	-5.6	20.0
1,3-Dichloropropane	Ave	0.4428	0.4325		0.0195	0.0200	-2.3	20.0
Tetrachloroethene	Ave	0.2933	0.2749	0.1500	0.0187	0.0200	-6.3	20.0
2-Hexanone	Ave	0.1332	0.1285	0.0500	0.0386	0.0400	-3.5	20.0
Chlorodibromomethane	Ave	0.2930	0.2997		0.0205	0.0200	2.3	20.0
Ethylene Dibromide	Ave	0.2537	0.2602		0.0205	0.0200	2.6	20.0
Chlorobenzene	Ave	0.9610	0.9605	0.3000	0.0200	0.0200	-0.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3809	0.3801		0.0200	0.0200	-0.2	20.0
Ethylbenzene	Ave	0.5071	0.5363		0.0212	0.0200	5.8	20.0
m-Xylene & p-Xylene	Ave	0.6295	0.6615		0.0210	0.0200	5.1	20.0
o-Xylene	Ave	0.7052	0.7091		0.0201	0.0200	0.5	20.0
Styrene	Ave	1.052	1.098	0.3000	0.0209	0.0200	4.4	20.0
Bromoform	Ave	0.1910	0.2008	0.1000	0.0210	0.0200	5.2	20.0
Isopropylbenzene	Ave	1.729	1.662	0.1000	0.0192	0.0200	-3.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5836	0.5424	0.3000	0.0186	0.0200	-7.1	20.0
Bromobenzene	Ave	0.6452	0.6083		0.0189	0.0200	-5.7	20.0
1,2,3-Trichloropropane	Ave	0.1891	0.1769		0.0187	0.0200	-6.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1262	0.1172		0.0186	0.0200	-7.1	20.0
N-Propylbenzene	Ave	0.6845	0.6572		0.0192	0.0200	-4.0	20.0
2-Chlorotoluene	Ave	0.6453	0.6183		0.0192	0.0200	-4.2	20.0
1,3,5-Trimethylbenzene	Ave	2.156	2.047		0.0190	0.0200	-5.1	20.0
4-Chlorotoluene	Ave	0.6621	0.6238		0.0188	0.0200	-5.8	20.0
tert-Butylbenzene	Ave	1.989	1.678		0.0169	0.0200	-15.7	20.0
1,2,4-Trimethylbenzene	Ave	2.342	2.184		0.0187	0.0200	-6.7	20.0
sec-Butylbenzene	Ave	2.414	2.140		0.0177	0.0200	-11.4	20.0
1,3-Dichlorobenzene	Ave	1.357	1.258	0.6000	0.0186	0.0200	-7.2	20.0
4-Isopropyltoluene	Ave	2.110	1.976		0.0187	0.0200	-6.4	20.0
1,4-Dichlorobenzene	Ave	1.434	1.269	0.5000	0.0177	0.0200	-11.5	20.0
n-Butylbenzene	Ave	1.901	1.597		0.0168	0.0200	-16.0	20.0
1,2-Dichlorobenzene	Ave	1.414	1.267	0.4000	0.0179	0.0200	-10.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 240-299922/3 Calibration Date: 10/20/2017 09:10

Instrument ID: A3UX16 Calib Start Date: 10/03/2017 16:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/03/2017 18:29

Lab File ID: UXM6954.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1236	0.1238	0.0500	0.0200	0.0200	0.2	50.0
1,2,4-Trichlorobenzene	Ave	0.7323	0.6793	0.2000	0.0186	0.0200	-7.2	50.0
Hexachlorobutadiene	Ave	0.3145	0.2415		0.0154	0.0200	-23.2*	20.0
Naphthalene	Ave	1.928	1.961		0.0203	0.0200	1.7	50.0
1,2,3-Trichlorobenzene	Ave	0.6863	0.6312		0.0184	0.0200	-8.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2546	0.2944		0.0231	0.0200	15.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2909	0.2954		0.0203	0.0200	1.6	20.0
Toluene-d8 (Surr)	Ave	1.301	1.283		0.0197	0.0200	-1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4519	0.4469		0.0198	0.0200	-1.1	20.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: BFB3774.D BFB Injection Date: 08/28/2017

Instrument ID: A3UX9 BFB Injection Time: 15:15

Analysis Batch No.: 292814

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.2	
175	5.0 - 9.0 % of mass 174	6.1	(7.8) 1
176	95.0 - 101.0 % of mass 174	76.3	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-292814/9	UX965278.D	08/28/2017	15:40
	STD8260 240-292814/10	UX965279.D	08/28/2017	16:05
	STD8260 240-292814/11	UX965280.D	08/28/2017	16:29
	ICIS 240-292814/12	UX965281.D	08/28/2017	16:53
	STD8260 240-292814/13	UX965282.D	08/28/2017	17:20
	STD8260 240-292814/14	UX965283.D	08/28/2017	17:44
	ICV 240-292814/15	UX965284.D	08/28/2017	18:09

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-292814/9	UX965278.D
Level 2	STD8260 240-292814/10	UX965279.D
Level 3	STD8260 240-292814/11	UX965280.D
Level 4	ICIS 240-292814/12	UX965281.D
Level 5	STD8260 240-292814/13	UX965282.D
Level 6	STD8260 240-292814/14	UX965283.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2667 0.3580	0.3045	0.3492	0.3527	0.3423	Ave		0.3289			0.1000	10.9		20.0			
Chloromethane	+++++ 0.2308	0.2557	0.2683	0.2331	0.2346	Ave		0.2445			0.1000	6.8		20.0			
Vinyl chloride	0.3162 0.2758	0.2613	0.2912	0.2872	0.2711	Ave		0.2838			0.1000	6.8		20.0			
Butadiene	0.3541 0.2747	0.3319	0.2835	0.2838	0.2701	Ave		0.2997				11.6		20.0			
Bromomethane	0.2586 0.2581	0.2280	0.2465	0.2334	0.2191	Ave		0.2406			0.0500	6.8		20.0			
Chloroethane	0.1767 0.2121	0.2145	0.2189	0.1960	0.2009	Ave		0.2032			0.0500	7.7		20.0			
Dichlorofluoromethane	0.5198 0.4820	0.5344	0.5419	0.4779	0.5015	Ave		0.5096				5.3		20.0			
Trichlorofluoromethane	0.4054 0.4861	0.4585	0.4771	0.4708	0.4867	Ave		0.4641			0.1000	6.6		20.0			
Ethyl ether	0.2042 0.1798	0.2028	0.1949	0.1737	0.1827	Ave		0.1897				6.7		20.0			
Acrolein	0.0235 0.0217	0.0240	0.0241	0.0219	0.0225	Ave		0.0229				4.6		20.0			
1,1-Dichloroethene	0.4608 0.3974	0.3729	0.4058	0.3900	0.4186	Ave		0.4076			0.1000	7.4		20.0			
Acetone	+++++ 0.0638	0.1337	0.0746	0.0664	0.0594	Lin1	0.1534	0.0613			0.0100	7.8			0.9970		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2633 0.2906	0.3033	0.2719	0.2830	0.3039	Ave		0.2860			0.0500	5.8		20.0			
Iodomethane	0.4546 0.4386	0.4220	0.4805	0.4414	0.4613	Ave		0.4497				4.5		20.0			
Carbon disulfide	0.9377 0.6307	0.7945	0.6928	0.6495	0.6743	Ave		0.7299			0.1000	16.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.3595 0.2698	0.3212	0.2717	0.2590	0.2442	Ave		0.2876				15.2		20.0			
Methyl acetate	0.1918 0.1415	0.1763	0.1534	0.1461	0.1470	Ave		0.1593			0.1000	12.6		20.0			
Methylene Chloride	+++++ 0.2755	0.3957	0.3151	0.2589	0.2863	Ave		0.3063			0.1000	17.6		20.0			
2-Methyl-2-propanol	0.0173 0.0190	0.0207	0.0193	0.0192	0.0174	Ave		0.0188				6.8		20.0			
Acrylonitrile	0.0803 0.0742	0.0909	0.0802	0.0759	0.0757	Ave		0.0795				7.7		20.0			
Methyl tert-butyl ether	0.7591 0.7212	0.7483	0.7592	0.7214	0.7485	Ave		0.7430			0.1000	2.4		20.0			
trans-1,2-Dichloroethene	0.2698 0.2983	0.3083	0.3122	0.2938	0.3038	Ave		0.2977			0.1000	5.1		20.0			
Hexane	0.2289 0.2639	0.2630	0.2183	0.2574	0.2609	Ave		0.2487				8.0		20.0			
1,1-Dichloroethane	0.3675 0.3708	0.3745	0.3736	0.3513	0.3667	Ave		0.3674			0.2000	2.3		20.0			
Vinyl acetate	0.2940 0.3138	0.3085	0.2967	0.2869	0.3094	Ave		0.3016				3.5		20.0			
2-Butanone (MEK)	0.0956 0.0850	0.0960	0.0919	0.0851	0.0860	Ave		0.0899			0.0100	5.8		20.0			
cis-1,2-Dichloroethene	0.3169 0.2753	0.2829	0.2883	0.2609	0.2763	Ave		0.2834			0.1000	6.6		20.0			
2,2-Dichloropropane	0.1841 0.2038	0.2226	0.1919	0.1889	0.2012	Ave		0.1988				7.0		20.0			
Chlorobromomethane	0.1817 0.1599	0.1759	0.1838	0.1603	0.1686	Ave		0.1717				6.1		20.0			
Tetrahydrofuran	+++++ 0.0515	0.0614	0.0587	0.0527	0.0540	Ave		0.0557				7.6		20.0			
Chloroform	0.4166 0.4104	0.4191	0.4289	0.4018	0.4142	Ave		0.4152			0.2000	2.2		20.0			
1,1,1-Trichloroethane	0.2310 0.3619	0.3581	0.3436	0.3511	0.3433	Ave		0.3315			0.1000	15.0		20.0			
Cyclohexane	0.3898 0.4056	0.4376	0.3701	0.3848	0.3972	Ave		0.3975			0.1000	5.8		20.0			
1,1-Dichloropropene	0.3995 0.3378	0.3118	0.3345	0.3255	0.3350	Ave		0.3407				8.9		20.0			
Carbon tetrachloride	0.2492 0.3235	0.2261	0.2886	0.2866	0.3133	Ave		0.2812			0.1000	13.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0043 0.0040	0.0036	0.0036	0.0031	0.0031	Ave		0.0036				13.2		20.0			
1,2-Dichloroethane	0.3304 0.3427	0.3818	0.3704	0.3442	0.3465	Ave		0.3526			0.1000	5.5		20.0			
Benzene	0.9670 0.9515	1.0258	1.0052	0.9246	0.9544	Ave		0.9714			0.5000	3.8		20.0			
n-Heptane	+++++ 0.1893	0.3175	0.1578	0.1855	0.1906	Lin1	0.1022	0.1838				15.2			0.9960		0.9900
Trichloroethene	0.3753 0.2985	0.2908	0.3110	0.2872	0.2915	Ave		0.3091			0.1500	10.9		20.0			
Methylcyclohexane	0.3243 0.3998	0.3368	0.3422	0.3780	0.3862	Ave		0.3612			0.1000	8.5		20.0			
1,2-Dichloropropane	0.2207 0.2136	0.2133	0.2107	0.1993	0.2109	Ave		0.2114			0.1000	3.3		20.0			
Dibromomethane	0.1767 0.1771	0.1931	0.1851	0.1730	0.1784	Ave		0.1806				4.0		20.0			
1,4-Dioxane	+++++ 0.0035	0.0024	0.0035	0.0027	0.0018	Ave		0.0028				26.2	*	20.0			
Dichlorobromomethane	0.2739 0.3160	0.2582	0.2990	0.2840	0.3154	Ave		0.2911			0.1500	8.0		20.0			
2-Chloroethyl vinyl ether	0.1462 0.1551	0.1460	0.1586	0.1501	0.1535	Ave		0.1516				3.3		20.0			
cis-1,3-Dichloropropene	0.2888 0.3687	0.2675	0.3249	0.3301	0.3601	Ave		0.3234			0.1500	12.2		20.0			
4-Methyl-2-pentanone (MIBK)	0.1574 0.1801	0.1842	0.1943	0.1777	0.1811	Ave		0.1791			0.0500	6.8		20.0			
Toluene	1.2974 1.2430	1.3018	1.3247	1.2225	1.2457	Ave		1.2725			0.4000	3.2		20.0			
trans-1,3-Dichloropropene	0.3268 0.4000	0.2952	0.3400	0.3424	0.3843	Ave		0.3481			0.1000	11.0		20.0			
Ethyl methacrylate	0.2669 0.3513	0.2781	0.3168	0.3195	0.3384	Ave		0.3118				10.6		20.0			
1,1,2-Trichloroethane	0.2654 0.2601	0.2716	0.2741	0.2546	0.2611	Ave		0.2645			0.1000	2.8		20.0			
1,3-Dichloropropane	0.4636 0.4553	0.4813	0.4862	0.4497	0.4647	Ave		0.4668				3.1		20.0			
Tetrachloroethene	0.3483 0.3115	0.3380	0.3231	0.3076	0.3110	Ave		0.3233			0.1500	5.1		20.0			
2-Hexanone	0.0980 0.1450	0.1523	0.1491	0.1455	0.1448	Ave		0.1391			0.0500	14.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2248 0.2779	0.2204	0.2485	0.2358	0.2696	Ave		0.2462				9.6		20.0			
Ethylene Dibromide	0.2719 0.2860	0.3184	0.2978	0.2804	0.2914	Ave		0.2910				5.5		20.0			
Chlorobenzene	1.0111 0.8982	0.9177	0.9617	0.8843	0.9077	Ave		0.9301			0.3000	5.1		20.0			
1,1,1,2-Tetrachloroethane	0.1999 0.2978	0.2526	0.2761	0.2649	0.2909	Ave		0.2637				13.4		20.0			
Ethylbenzene	0.4719 0.4843	0.4708	0.5044	0.4559	0.4785	Ave		0.4776				3.4		20.0			
m-Xylene & p-Xylene	0.5941 0.6058	0.5620	0.5926	0.5621	0.6063	Ave		0.5871				3.5		20.0			
o-Xylene	0.5592 0.5905	0.5582	0.5974	0.5704	0.5860	Ave		0.5770				2.9		20.0			
Styrene	0.8902 1.0393	0.8455	1.0133	0.9537	1.0269	Ave		0.9615			0.3000	8.3		20.0			
Bromoform	+++++ 0.1652	0.0959	0.1279	0.1334	0.1562	Ave		0.1357			0.1000	20.0		20.0			
Isopropylbenzene	1.3507 1.4574	1.2219	1.4603	1.3823	1.4500	Ave		1.3871			0.1000	6.7		20.0			
1,1,2,2-Tetrachloroethane	0.6885 0.6446	0.6573	0.6674	0.6432	0.6471	Ave		0.6580			0.3000	2.7		20.0			
Bromobenzene	0.7718 0.7016	0.7753	0.7383	0.6883	0.7214	Ave		0.7328				4.9		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1490	0.1138	0.1042	0.1138	0.1347	Ave		0.1231				14.8		20.0			
1,2,3-Trichloropropane	0.2062 0.2512	0.2980	0.2786	0.2521	0.2552	Ave		0.2569				12.1		20.0			
N-Propylbenzene	0.7981 0.7663	0.7624	0.7460	0.7326	0.7540	Ave		0.7599				2.9		20.0			
2-Chlorotoluene	0.6495 0.6780	0.6827	0.6878	0.6634	0.6825	Ave		0.6740				2.2		20.0			
1,3,5-Trimethylbenzene	1.8581 2.2405	1.9159	2.1456	2.1564	2.2261	Ave		2.0904				7.8		20.0			
4-Chlorotoluene	0.7579 0.7331	0.7026	0.7389	0.6937	0.7410	Ave		0.7279				3.4		20.0			
tert-Butylbenzene	1.8339 2.1950	1.7323	1.9743	2.1074	2.1977	Ave		2.0067				9.7		20.0			
1,2,4-Trimethylbenzene	2.1138 2.3815	2.1477	2.3096	2.2435	2.3570	Ave		2.2588				4.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	0.5081 0.6079	0.5170	0.5751	0.5826	0.5961	Ave		0.5645				7.4		20.0			
1,3-Dichlorobenzene	1.4254 1.3692	1.3704	1.4152	1.3314	1.3805	Ave		1.3820			0.6000	2.5		20.0			
4-Isopropyltoluene	2.0316 2.3944	1.9116	2.3288	2.2643	2.4164	Ave		2.2245				9.3		20.0			
1,4-Dichlorobenzene	1.5587 1.4268	1.4528	1.4599	1.3892	1.4437	Ave		1.4552			0.5000	3.9		20.0			
n-Butylbenzene	1.8336 1.9530	1.6838	1.8461	1.8181	1.9039	Ave		1.8397				5.0		20.0			
1,2-Dichlorobenzene	1.6168 1.3270	1.4725	1.3520	1.3299	1.3486	Ave		1.4078			0.4000	8.2		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1479	0.1247	0.1230	0.1331	0.1357	Ave		0.1329			0.0500	7.5		20.0			
1,2,4-Trichlorobenzene	0.9108 0.8218	0.8031	0.8013	0.7738	0.7794	Ave		0.8150			0.2000	6.1		20.0			
Hexachlorobutadiene	0.3323 0.2931	0.2348	0.2958	0.2786	0.2840	Ave		0.2864				11.0		20.0			
Naphthalene	2.3389 2.4919	2.2285	2.4380	2.3996	2.4112	Ave		2.3847				3.8		20.0			
1,2,3-Trichlorobenzene	0.7323 0.7742	0.7009	0.8014	0.7516	0.7374	Ave		0.7496				4.7		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2355	0.2374	0.2513	0.2257	0.2404	Ave		0.2381				3.9		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2893	0.2824	0.2946	0.2732	0.2823	Ave		0.2844				2.9		20.0			
Toluene-d8 (Surr)	+++++ 1.1017	1.1137	1.1673	1.0744	1.1092	Ave		1.1133				3.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4489	0.4705	0.4506	0.4235	0.4565	Ave		0.4500				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-292814/9	UX965278.D
Level 2	STD8260 240-292814/10	UX965279.D
Level 3	STD8260 240-292814/11	UX965280.D
Level 4	ICIS 240-292814/12	UX965281.D
Level 5	STD8260 240-292814/13	UX965282.D
Level 6	STD8260 240-292814/14	UX965283.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	5685 954174	12378	136552	289057	581630	0.500 60.0	1.00	10.0	20.0	40.0
Chloromethane	FB	Ave	+++++ 615136	10392	104910	191021	398602	+++++ 60.0	1.00	10.0	20.0	40.0
Vinyl chloride	FB	Ave	6739 735166	10622	113884	235431	460702	0.500 60.0	1.00	10.0	20.0	40.0
Butadiene	FB	Ave	7547 732013	13491	110867	232575	458915	0.500 60.0	1.00	10.0	20.0	40.0
Bromomethane	FB	Ave	5512 687979	9266	96383	191310	372251	0.500 60.0	1.00	10.0	20.0	40.0
Chloroethane	FB	Ave	3767 565421	8718	85590	160656	341394	0.500 60.0	1.00	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	11079 1284692	21721	211885	391742	852179	0.500 60.0	1.00	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	8641 1295651	18635	186542	385924	827035	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl ether	FB	Ave	4353 479245	8245	76227	142342	310442	0.500 60.0	1.00	10.0	20.0	40.0
Acrolein	FB	Ave	2503 289086	4876	47125	89835	190881	2.50 300	5.00	50.0	100	200
1,1-Dichloroethene	FB	Ave	9821 1059146	15156	158659	319662	711321	0.500 60.0	1.00	10.0	20.0	40.0
Acetone	FB	Lin1	+++++ 340149	10865	58331	108888	201888	+++++ 120	2.00	20.0	40.0	80.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	5613 774542	12328	106304	231996	516432	0.500 60.0	1.00	10.0	20.0	40.0
Iodomethane	FB	Ave	9689 1169071	17155	187900	361809	783840	0.500 60.0	1.00	10.0	20.0	40.0
Carbon disulfide	FB	Ave	19988 1680853	32292	270904	532378	1145809	0.500 60.0	1.00	10.0	20.0	40.0
3-Chloro-1-propene	FB	Ave	7663 719023	13057	106257	212295	415028	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	8178 754267	14329	119928	239509	499522	1.00 120	2.00	20.0	40.0	80.0
Methylene Chloride	FB	Ave	+++++ 734339	16084	123196	212240	486473	+++++ 60.0	1.00	10.0	20.0	40.0
2-Methyl-2-propanol	FB	Ave	3686 506975	8418	75539	157415	296012	5.00 600	10.0	100	200	400
Acrylonitrile	FB	Ave	17112 1977634	36956	313787	621852	1286685	5.00 600	10.0	100	200	400
Methyl tert-butyl ether	FB	Ave	16180 1922112	30416	296884	591260	1272043	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	5750 795108	12530	122089	240843	516246	0.500 60.0	1.00	10.0	20.0	40.0
Hexane	FB	Ave	4879 703376	10689	85360	210946	443346	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	7833 988199	15221	146082	287950	623166	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl acetate	FB	Ave	6267 836371	12541	116005	235138	525830	0.500 60.0	1.00	10.0	20.0	40.0
2-Butanone (MEK)	FB	Ave	4075 452955	7804	71845	139542	292187	1.00 120	2.00	20.0	40.0	80.0
cis-1,2-Dichloroethene	FB	Ave	6754 733633	11498	112717	213866	469522	0.500 60.0	1.00	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	3924 543218	9050	75049	154791	341978	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	3872 426075	7148	71863	131428	286428	0.500 60.0	1.00	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	+++++ 274513	4995	45927	86469	183449	+++++ 120	2.00	20.0	40.0	80.0
Chloroform	FB	Ave	8879 1093735	17036	167728	329349	703921	0.500 60.0	1.00	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	4924 964535	14554	134365	287807	583384	0.500 60.0	1.00	10.0	20.0	40.0
Cyclohexane	FB	Ave	8308 1080919	17789	144706	315372	674900	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	8516 900336	12674	130796	266804	569359	0.500 60.0	1.00	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	5311 862298	9192	112851	234881	532376	0.500 60.0	1.00	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	2290 269233	3696	35000	63142	133659	12.5 1500	25.0	250	500	1000
1,2-Dichloroethane	FB	Ave	7042 913249	15519	144844	282093	588758	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	20611 2536080	41695	393060	757865	1621801	0.500 60.0	1.00	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 504588	12906	61687	152078	323815	+++++ 60.0	1.00	10.0	20.0	40.0
Trichloroethene	FB	Ave	8000 795508	11822	121619	235427	495274	0.500 60.0	1.00	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	6912 1065533	13690	133819	309799	656360	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	4705 569330	8671	82371	163330	358410	0.500 60.0	1.00	10.0	20.0	40.0
Dibromomethane	FB	Ave	3767 472005	7848	72370	141785	303231	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	+++++ 185404	1985	27483	44916	60659	+++++ 1200	20.0	200	400	800
Dichlorobromomethane	FB	Ave	5839 842151	10497	116933	232780	535968	0.500 60.0	1.00	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	6234 826693	11870	124040	246030	521829	1.00 120	2.00	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	6156 982634	10874	127060	270597	611882	0.500 60.0	1.00	10.0	20.0	40.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	6711 959962	14977	151936	291354	615351	1.00 120	2.00	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	24057 3002786	45089	461223	895701	1909735	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	6060 966376	10224	118376	250874	589175	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	4949 848557	9632	110296	234093	518799	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4921 628230	9407	95428	186554	400214	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	8597 1099943	16672	169277	329461	712483	0.500 60.0	1.00	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	6459 752572	11708	112485	225365	476804	0.500 60.0	1.00	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	3636 700551	10548	103835	213161	443956	1.00 120	2.00	20.0	40.0	80.0
Chlorodibromomethane	CBNZ d5	Ave	4169 671343	7634	86516	172770	413340	0.500 60.0	1.00	10.0	20.0	40.0
Ethylene Dibromide	CBNZ d5	Ave	5042 691008	11029	103684	205480	446671	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobenzene	CBNZ d5	Ave	18748 2169768	31784	334854	647930	1391627	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3707 719462	8748	96122	194074	446005	0.500 60.0	1.00	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	8750 1169909	16308	175603	334004	733598	0.500 60.0	1.00	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	11015 1463466	19465	206310	411858	929521	0.500 60.0	1.00	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	10369 1426538	19335	207982	417945	898344	0.500 60.0	1.00	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	16506 2510679	29285	352807	698775	1574232	0.500 60.0	1.00	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	+++++ 399164	3323	44548	97758	239400	+++++ 60.0	1.00	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	25044 3520791	42323	508420	1012795	2223003	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6856 871047	11622	131337	257657	553435	0.500 60.0	1.00	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	7685 948089	13709	145299	275705	617007	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 201317	2012	20509	45570	115205	+++++ 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	2053 339514	5270	54828	100993	218290	0.500 60.0	1.00	10.0	20.0	40.0
N-Propylbenzene	DCBd 4	Ave	7947 1035475	13481	146818	293453	644900	0.500 60.0	1.00	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	6467 916196	12072	135357	265753	583727	0.500 60.0	1.00	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	18502 3027571	33877	422263	863781	1903943	0.500 60.0	1.00	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	7547 990666	12424	145417	277885	633723	0.500 60.0	1.00	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	18261 2966171	30630	388541	844144	1879588	0.500 60.0	1.00	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	21048 3218159	37976	454521	898687	2015831	0.500 60.0	1.00	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	5059 821422	9141	113182	233388	509809	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	14194 1850163	24232	278515	533337	1180712	0.500 60.0	1.00	10.0	20.0	40.0
4-Isopropyltoluene	DCBd 4	Ave	20230 3235579	33800	458308	907013	2066628	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dichlorobenzene	DCBd 4	Ave	15521 1928110	25689	287314	556455	1234710	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 292814

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2017 15:40 Calibration End Date: 08/28/2017 17:44 Calibration ID: 41275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	18258 2639097	29773	363310	728277	1628376	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	16099 1793215	26036	266075	532709	1153426	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 199908	2205	24199	53334	116027	+++++ 60.0	1.00	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	9069 1110491	14201	157691	309942	666615	0.500 60.0	1.00	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	3309 396045	4152	58217	111601	242882	0.500 60.0	1.00	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	23290 3367367	39404	479800	961214	2062242	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7292 1046191	12393	157712	301061	630635	0.500 60.0	1.00	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 627787	9651	98261	184979	408478	+++++ 60.0	1.00	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 771109	11478	115207	223928	479649	+++++ 60.0	1.00	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 2661561	38574	406417	787192	1700544	+++++ 60.0	1.00	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 1084379	16296	156882	310270	699868	+++++ 60.0	1.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-292814/15 | Calibration Date: 08/28/2017 18:09

Instrument ID: A3UX9 | Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) | Calib End Date: 08/28/2017 17:44

Lab File ID: UX965284.D | Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3289	0.3697	0.1000	0.0225	0.0200	12.4	30.0
Chloromethane	Ave	0.2445	0.2680	0.1000	0.0219	0.0200	9.6	30.0
Vinyl chloride	Ave	0.2838	0.3016	0.1000	0.0213	0.0200	6.3	30.0
Butadiene	Ave	0.2997	0.2693		0.0180	0.0200	-10.1	30.0
Bromomethane	Ave	0.2406	0.2322	0.0500	0.0193	0.0200	-3.5	30.0
Chloroethane	Ave	0.2032	0.2132	0.0500	0.0210	0.0200	4.9	30.0
Dichlorofluoromethane	Ave	0.5096	0.5110		0.0201	0.0200	0.3	30.0
Trichlorofluoromethane	Ave	0.4641	0.4932	0.1000	0.0213	0.0200	6.3	30.0
Ethyl ether	Ave	0.1897	0.1855		0.0196	0.0200	-2.2	30.0
Acrolein	Ave	0.0229	0.0276		0.120	0.100	20.1	50.0
1,1-Dichloroethene	Ave	0.4076	0.3981	0.1000	0.0195	0.0200	-2.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2860	0.2706	0.0500	0.0189	0.0200	-5.4	30.0
Acetone	Lin1		0.0605	0.0100	0.0370	0.0400	-7.5	50.0
Iodomethane	Ave	0.4497	0.4491		0.0200	0.0200	-0.1	30.0
Carbon disulfide	Ave	0.7299	0.6466	0.1000	0.0177	0.0200	-11.4	30.0
3-Chloro-1-propene	Ave	0.2876	0.2414		0.0168	0.0200	-16.1	30.0
Methyl acetate	Ave	0.1593	0.1376	0.1000	0.0345	0.0400	-13.7	30.0
Methylene Chloride	Ave	0.3063	0.2837	0.1000	0.0185	0.0200	-7.4	50.0
2-Methyl-2-propanol	Ave	0.0188	0.0199		0.211	0.200	5.4	50.0
Acrylonitrile	Ave	0.0795	0.0712		0.179	0.200	-10.5	30.0
Methyl tert-butyl ether	Ave	0.7430	0.7140	0.1000	0.0192	0.0200	-3.9	30.0
trans-1,2-Dichloroethene	Ave	0.2977	0.3117	0.1000	0.0209	0.0200	4.7	30.0
Hexane	Ave	0.2487	0.2304		0.0185	0.0200	-7.4	30.0
1,1-Dichloroethane	Ave	0.3674	0.3688	0.2000	0.0201	0.0200	0.4	30.0
Vinyl acetate	Ave	0.3016	0.3403		0.0226	0.0200	12.8	50.0
2-Butanone (MEK)	Ave	0.0899	0.0809	0.0100	0.0360	0.0400	-10.1	30.0
cis-1,2-Dichloroethene	Ave	0.2834	0.2811	0.1000	0.0198	0.0200	-0.8	30.0
2,2-Dichloropropane	Ave	0.1988	0.2077		0.0209	0.0200	4.5	30.0
Chlorobromomethane	Ave	0.1717	0.1649		0.0192	0.0200	-3.9	30.0
Tetrahydrofuran	Ave	0.0557	0.0521		0.0374	0.0400	-6.5	30.0
Chloroform	Ave	0.4152	0.4198	0.2000	0.0202	0.0200	1.1	30.0
1,1,1-Trichloroethane	Ave	0.3315	0.3598	0.1000	0.0217	0.0200	8.5	30.0
Cyclohexane	Ave	0.3975	0.3736	0.1000	0.0188	0.0200	-6.0	30.0
1,1-Dichloropropene	Ave	0.3407	0.3331		0.0196	0.0200	-2.2	30.0
Carbon tetrachloride	Ave	0.2812	0.3125	0.1000	0.0222	0.0200	11.1	30.0
Isobutyl alcohol	Ave	0.0036	0.0038		0.518	0.500	3.5	30.0
1,2-Dichloroethane	Ave	0.3526	0.3531	0.1000	0.0200	0.0200	0.1	30.0
Benzene	Ave	0.9714	0.9658	0.5000	0.0199	0.0200	-0.6	30.0
n-Heptane	Lin1		0.1710		0.0181	0.0200	-9.7	30.0
Trichloroethene	Ave	0.3091	0.3023	0.1500	0.0196	0.0200	-2.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-292814/15 Calibration Date: 08/28/2017 18:09

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3612	0.3619	0.1000	0.0200	0.0200	0.2	30.0
1,2-Dichloropropane	Ave	0.2114	0.2169	0.1000	0.0205	0.0200	2.6	30.0
1,4-Dioxane	Ave	0.0028	0.0034		0.490	0.400	22.6	50.0
Dibromomethane	Ave	0.1806	0.1733		0.0192	0.0200	-4.0	30.0
Dichlorobromomethane	Ave	0.2911	0.3100	0.1500	0.0213	0.0200	6.5	30.0
2-Chloroethyl vinyl ether	Ave	0.1516	0.1511		0.0199	0.0200	-0.3	30.0
cis-1,3-Dichloropropene	Ave	0.3234	0.3611	0.1500	0.0223	0.0200	11.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1791	0.1740	0.0500	0.0389	0.0400	-2.9	30.0
Toluene	Ave	1.273	1.282	0.4000	0.0201	0.0200	0.7	30.0
trans-1,3-Dichloropropene	Ave	0.3481	0.3749	0.1000	0.0215	0.0200	7.7	30.0
Ethyl methacrylate	Ave	0.3118	0.3339		0.0214	0.0200	7.1	30.0
1,1,2-Trichloroethane	Ave	0.2645	0.2722	0.1000	0.0206	0.0200	2.9	30.0
1,3-Dichloropropane	Ave	0.4668	0.4676		0.0200	0.0200	0.2	30.0
Tetrachloroethene	Ave	0.3233	0.3132	0.1500	0.0194	0.0200	-3.1	30.0
2-Hexanone	Ave	0.1391	0.1378	0.0500	0.0396	0.0400	-0.9	30.0
Chlorodibromomethane	Ave	0.2462	0.2774		0.0225	0.0200	12.7	30.0
Ethylene Dibromide	Ave	0.2910	0.2841		0.0195	0.0200	-2.4	30.0
Chlorobenzene	Ave	0.9301	0.9309	0.3000	0.0200	0.0200	0.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.2637	0.2991		0.0227	0.0200	13.4	30.0
Ethylbenzene	Ave	0.4776	0.4828		0.0202	0.0200	1.1	30.0
m-Xylene & p-Xylene	Ave	0.5871	0.6137		0.0209	0.0200	4.5	30.0
o-Xylene	Ave	0.5770	0.6009		0.0208	0.0200	4.2	30.0
Styrene	Ave	0.9615	0.9896	0.3000	0.0206	0.0200	2.9	30.0
Bromoform	Ave	0.1357	0.1459	0.1000	0.0215	0.0200	7.5	30.0
Isopropylbenzene	Ave	1.387	1.482	0.1000	0.0214	0.0200	6.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6580	0.6425	0.3000	0.0195	0.0200	-2.4	30.0
Bromobenzene	Ave	0.7328	0.7365		0.0201	0.0200	0.5	30.0
1,2,3-Trichloropropane	Ave	0.2569	0.2656		0.0207	0.0200	3.4	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.1233		0.0200	0.0200	0.1	30.0
N-Propylbenzene	Ave	0.7599	0.7566		0.0199	0.0200	-0.4	30.0
2-Chlorotoluene	Ave	0.6740	0.6859		0.0204	0.0200	1.8	30.0
1,3,5-Trimethylbenzene	Ave	2.090	2.266		0.0217	0.0200	8.4	30.0
4-Chlorotoluene	Ave	0.7279	0.7538		0.0207	0.0200	3.6	30.0
tert-Butylbenzene	Ave	2.007	2.088		0.0208	0.0200	4.0	30.0
1,2,4-Trimethylbenzene	Ave	2.259	2.370		0.0210	0.0200	4.9	30.0
sec-Butylbenzene	Ave	0.5645	0.6107		0.0216	0.0200	8.2	30.0
1,3-Dichlorobenzene	Ave	1.382	1.411	0.6000	0.0204	0.0200	2.1	30.0
4-Isopropyltoluene	Ave	2.225	2.498		0.0225	0.0200	12.3	30.0
1,4-Dichlorobenzene	Ave	1.455	1.443	0.5000	0.0198	0.0200	-0.9	30.0
n-Butylbenzene	Ave	1.840	2.037		0.0221	0.0200	10.7	30.0
1,2-Dichlorobenzene	Ave	1.408	1.364	0.4000	0.0194	0.0200	-3.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-292814/15 Calibration Date: 08/28/2017 18:09

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX965284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1329	0.1362	0.0500	0.0205	0.0200	2.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8150	0.8632	0.2000	0.0212	0.0200	5.9	50.0
Hexachlorobutadiene	Ave	0.2864	0.3359		0.0235	0.0200	17.3	30.0
Naphthalene	Ave	2.385	2.490		0.0209	0.0200	4.4	50.0
1,2,3-Trichlorobenzene	Ave	0.7496	0.8347		0.0223	0.0200	11.3	30.0
Dibromofluoromethane (Surr)	Ave	0.2381	0.2237		0.0188	0.0200	-6.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2844	0.2696		0.0190	0.0200	-5.2	30.0
Toluene-d8 (Surr)	Ave	1.113	1.105		0.0198	0.0200	-0.8	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4500	0.4548		0.0202	0.0200	1.1	30.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: BFB3830.D BFB Injection Date: 10/22/2017

Instrument ID: A3UX9 BFB Injection Time: 17:01

Analysis Batch No.: 300098

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.8	
75	30.0 - 60.0 % of mass 95	49.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	90.3	
175	5.0 - 9.0 % of mass 174	7.4	(8.2) 1
176	95.0 - 101.0 % of mass 174	88.3	(97.8) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-300098/3	UX966573.D	10/22/2017	17:32
	LCS 240-300098/4	UX966574.D	10/22/2017	17:55
	CCV 240-300098/5	UX966575.D	10/22/2017	18:19
	MB 240-300098/7	UX966577.D	10/22/2017	19:05
MRC-MW119B-101017	240-86291-5	UX966578.D	10/22/2017	19:26
MRC-MW122A-101017	240-86291-6	UX966579.D	10/22/2017	19:49
TRIP BLANK	240-86291-7	UX966580.D	10/22/2017	20:10
	240-86388-A-10 MS	UX966598.D	10/23/2017	03:08
	240-86388-A-10 MSD	UX966599.D	10/23/2017	03:31

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 240-300098/3 Calibration Date: 10/22/2017 17:32

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX966573.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3289	0.3049	0.1000	0.0185	0.0200	-7.3	20.0
Chloromethane	Ave	0.2445	0.2697	0.1000	0.0221	0.0200	10.3	20.0
Vinyl chloride	Ave	0.2838	0.2977	0.1000	0.0210	0.0200	4.9	20.0
Butadiene	Ave	0.2997	0.2594		0.0173	0.0200	-13.4	20.0
Bromomethane	Ave	0.2406	0.2376	0.0500	0.0197	0.0200	-1.3	20.0
Chloroethane	Ave	0.2032	0.2266	0.0500	0.0223	0.0200	11.5	20.0
Dichlorofluoromethane	Ave	0.5096	0.5688		0.0223	0.0200	11.6	20.0
Trichlorofluoromethane	Ave	0.4641	0.5165	0.1000	0.0223	0.0200	11.3	20.0
Ethyl ether	Ave	0.1897	0.1947		0.0205	0.0200	2.6	20.0
Acrolein	Ave	0.0229	0.0315		0.137	0.100	37.3	50.0
1,1-Dichloroethene	Ave	0.4076	0.4405	0.1000	0.0216	0.0200	8.1	20.0
Acetone	Lin1		0.0651	0.0100	0.0400	0.0400	0.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2860	0.3052	0.0500	0.0213	0.0200	6.7	20.0
Iodomethane	Ave	0.4497	0.4566		0.0203	0.0200	1.5	20.0
Carbon disulfide	Ave	0.7299	0.6026	0.1000	0.0165	0.0200	-17.4	20.0
3-Chloro-1-propene	Ave	0.2876	0.2877		0.0200	0.0200	0.0	20.0
Methyl acetate	Ave	0.1593	0.1663	0.1000	0.0417	0.0400	4.4	20.0
Methylene Chloride	Ave	0.3063	0.3176	0.1000	0.0207	0.0200	3.7	50.0
2-Methyl-2-propanol	Ave	0.0188	0.0179		0.190	0.200	-4.8	50.0
Acrylonitrile	Ave	0.0795	0.0805		0.202	0.200	1.2	20.0
Methyl tert-butyl ether	Ave	0.7430	0.7149	0.1000	0.0192	0.0200	-3.8	20.0
trans-1,2-Dichloroethene	Ave	0.2977	0.3051	0.1000	0.0205	0.0200	2.5	20.0
Hexane	Ave	0.2487	0.2753		0.0221	0.0200	10.7	20.0
1,1-Dichloroethane	Ave	0.3674	0.3940	0.2000	0.0214	0.0200	7.2	20.0
Vinyl acetate	Ave	0.3016	0.3179		0.0211	0.0200	5.4	50.0
2-Butanone (MEK)	Ave	0.0899	0.0965	0.0100	0.0429	0.0400	7.3	20.0
cis-1,2-Dichloroethene	Ave	0.2834	0.3066	0.1000	0.0216	0.0200	8.2	20.0
2,2-Dichloropropane	Ave	0.1988	0.2398		0.0241	0.0200	20.6*	20.0
Chlorobromomethane	Ave	0.1717	0.1978		0.0230	0.0200	15.2	20.0
Tetrahydrofuran	Ave	0.0557	0.0579		0.0416	0.0400	4.0	20.0
Chloroform	Ave	0.4152	0.4500	0.2000	0.0217	0.0200	8.4	20.0
1,1,1-Trichloroethane	Ave	0.3315	0.3732	0.1000	0.0225	0.0200	12.6	20.0
Cyclohexane	Ave	0.3975	0.3291	0.1000	0.0166	0.0200	-17.2	20.0
1,1-Dichloropropene	Ave	0.3407	0.3686		0.0216	0.0200	8.2	20.0
Carbon tetrachloride	Ave	0.2812	0.3452	0.1000	0.0245	0.0200	22.7*	20.0
Isobutyl alcohol	Ave	0.0036	0.0061		0.838	0.500	67.6*	20.0
1,2-Dichloroethane	Ave	0.3526	0.3680	0.1000	0.0209	0.0200	4.3	20.0
Benzene	Ave	0.9714	1.086	0.5000	0.0224	0.0200	11.8	20.0
n-Heptane	Lin1		0.1993		0.0211	0.0200	5.7	20.0
Trichloroethene	Ave	0.3091	0.3203	0.1500	0.0207	0.0200	3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 240-300098/3 Calibration Date: 10/22/2017 17:32

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX966573.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3612	0.3995	0.1000	0.0221	0.0200	10.6	20.0
1,2-Dichloropropane	Ave	0.2114	0.2420	0.1000	0.0229	0.0200	14.4	20.0
1,4-Dioxane	Ave	0.0028	0.0036		0.512	0.400	27.9	50.0
Dibromomethane	Ave	0.1806	0.2013		0.0223	0.0200	11.5	20.0
Dichlorobromomethane	Ave	0.2911	0.3476	0.1500	0.0239	0.0200	19.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1516	0.1612		0.0425	0.0400	6.3	20.0
cis-1,3-Dichloropropene	Ave	0.3234	0.4085	0.1500	0.0253	0.0200	26.3*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1791	0.2026	0.0500	0.0452	0.0400	13.1	20.0
Toluene	Ave	1.273	1.291	0.4000	0.0203	0.0200	1.5	20.0
trans-1,3-Dichloropropene	Ave	0.3481	0.3857	0.1000	0.0222	0.0200	10.8	20.0
Ethyl methacrylate	Ave	0.3118	0.3210		0.0206	0.0200	2.9	20.0
1,1,2-Trichloroethane	Ave	0.2645	0.2629	0.1000	0.0199	0.0200	-0.6	20.0
1,3-Dichloropropane	Ave	0.4668	0.4698		0.0201	0.0200	0.6	20.0
Tetrachloroethene	Ave	0.3233	0.3159	0.1500	0.0195	0.0200	-2.3	20.0
2-Hexanone	Ave	0.1391	0.1457	0.0500	0.0419	0.0400	4.7	20.0
Chlorodibromomethane	Ave	0.2462	0.2652		0.0215	0.0200	7.7	20.0
Ethylene Dibromide	Ave	0.2910	0.2853		0.0196	0.0200	-2.0	20.0
Chlorobenzene	Ave	0.9301	0.9210	0.3000	0.0198	0.0200	-1.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2637	0.2936		0.0223	0.0200	11.3	20.0
Ethylbenzene	Ave	0.4776	0.4824		0.0202	0.0200	1.0	20.0
m-Xylene & p-Xylene	Ave	0.5871	0.5963		0.0203	0.0200	1.6	20.0
o-Xylene	Ave	0.5770	0.5855		0.0203	0.0200	1.5	20.0
Styrene	Ave	0.9615	1.003	0.3000	0.0209	0.0200	4.3	20.0
Bromoform	Ave	0.1357	0.1759	0.1000	0.0259	0.0200	29.6*	20.0
Isopropylbenzene	Ave	1.387	1.413	0.1000	0.0204	0.0200	1.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6580	0.6216	0.3000	0.0189	0.0200	-5.5	20.0
Bromobenzene	Ave	0.7328	0.6954		0.0190	0.0200	-5.1	20.0
1,2,3-Trichloropropane	Ave	0.2569	0.2387		0.0186	0.0200	-7.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1231	0.1533		0.0249	0.0200	24.5*	20.0
N-Propylbenzene	Ave	0.7599	0.7213		0.0190	0.0200	-5.1	20.0
2-Chlorotoluene	Ave	0.6740	0.6611		0.0196	0.0200	-1.9	20.0
1,3,5-Trimethylbenzene	Ave	2.090	2.108		0.0202	0.0200	0.9	20.0
4-Chlorotoluene	Ave	0.7279	0.7197		0.0198	0.0200	-1.1	20.0
tert-Butylbenzene	Ave	2.007	1.887		0.0188	0.0200	-6.0	20.0
1,2,4-Trimethylbenzene	Ave	2.259	2.199		0.0195	0.0200	-2.6	20.0
sec-Butylbenzene	Ave	0.5645	0.5614		0.0199	0.0200	-0.5	20.0
1,3-Dichlorobenzene	Ave	1.382	1.326	0.6000	0.0192	0.0200	-4.0	20.0
4-Isopropyltoluene	Ave	2.225	2.239		0.0201	0.0200	0.7	20.0
1,4-Dichlorobenzene	Ave	1.455	1.402	0.5000	0.0193	0.0200	-3.7	20.0
n-Butylbenzene	Ave	1.840	1.793		0.0195	0.0200	-2.6	20.0
1,2-Dichlorobenzene	Ave	1.408	1.333	0.4000	0.0189	0.0200	-5.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 240-300098/3 Calibration Date: 10/22/2017 17:32

Instrument ID: A3UX9 Calib Start Date: 08/28/2017 15:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/28/2017 17:44

Lab File ID: UX966573.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1329	0.1195	0.0500	0.0180	0.0200	-10.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8150	0.8013	0.2000	0.0197	0.0200	-1.7	50.0
Hexachlorobutadiene	Ave	0.2864	0.3255		0.0227	0.0200	13.6	20.0
Naphthalene	Ave	2.385	2.107		0.0177	0.0200	-11.6	50.0
1,2,3-Trichlorobenzene	Ave	0.7496	0.7299		0.0195	0.0200	-2.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2381	0.2507		0.0211	0.0200	5.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2844	0.2822		0.0198	0.0200	-0.8	20.0
Toluene-d8 (Surr)	Ave	1.113	1.107		0.0199	0.0200	-0.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4500	0.4645		0.0206	0.0200	3.2	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: UXM6958.D Lab Sample ID: MB 240-299922/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 10/20/2017 10:41

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-299922/5	UXM6956.D	10/20/2017 09:55
MRC-MW117B-100917	240-86291-2	UXM6967.D	10/20/2017 14:23
MRC-MW121A-101017	240-86291-3	UXM6968.D	10/20/2017 14:45
MRC-MW120B-101017	240-86291-4	UXM6969.D	10/20/2017 15:08
	240-86300-B-4 MS	UXM6979.D	10/20/2017 19:04
	240-86300-B-4 MSD	UXM6980.D	10/20/2017 19:28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299922/7

Matrix: Water | Lab File ID: UXM6958.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 10:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299922/7

Matrix: Water | Lab File ID: UXM6958.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 10:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		73-120
1868-53-7	Dibromofluoromethane (Surr)	114		69-124
460-00-4	4-Bromofluorobenzene (Surr)	98		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		61-138

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6956.D

Lab ID: LCS 240-299922/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	23.7	118	64-147	
1,1,2,2-Tetrachloroethane	20.0	17.1	86	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	24.0	120	65-144	
1,1,2-Trichloroethane	20.0	17.6	88	76-121	
1,1-Dichloroethane	20.0	20.3	102	74-120	
1,1-Dichloroethene	20.0	23.3	117	65-127	
1,2,4-Trichlorobenzene	20.0	18.6	93	34-141	
1,2-Dibromo-3-Chloropropane	20.0	17.7	89	50-130	
Ethylene Dibromide	20.0	18.5	92	80-120	
1,2-Dichlorobenzene	20.0	18.0	90	80-120	
1,2-Dichloroethane	20.0	19.0	95	68-133	
1,2-Dichloropropane	20.0	19.6	98	78-127	
1,3-Dichlorobenzene	20.0	18.7	94	80-120	
1,4-Dichlorobenzene	20.0	18.1	91	80-120	
2-Butanone (MEK)	40.0	30.1	75	43-149	
2-Hexanone	40.0	31.8	80	28-169	
4-Methyl-2-pentanone (MIBK)	40.0	36.8	92	53-144	
Acetone	40.0	33.0	82	35-131	
Benzene	20.0	20.5	103	79-120	
Dichlorobromomethane	20.0	19.6	98	79-125	
Bromoform	20.0	17.3	87	55-145	
Bromomethane	20.0	24.7	123	17-158	
Carbon disulfide	20.0	22.9	114	49-141	
Carbon tetrachloride	20.0	23.1	115	55-171	
Chlorobenzene	20.0	18.9	95	80-120	
Chloroethane	20.0	21.8	109	10-149	
Chloroform	20.0	21.5	108	80-120	
Chloromethane	20.0	23.5	117	59-124	
cis-1,2-Dichloroethene	20.0	21.8	109	77-120	
cis-1,3-Dichloropropene	20.0	21.0	105	75-120	
Cyclohexane	20.0	20.2	101	66-135	
Chlorodibromomethane	20.0	18.6	93	64-129	
Dichlorodifluoromethane	20.0	29.9	150	42-141	*
Ethylbenzene	20.0	20.1	100	80-120	
Isopropylbenzene	20.0	18.6	93	80-128	
Methyl acetate	40.0	34.7	87	63-137	
Methyl tert-butyl ether	20.0	20.4	102	73-120	
Methylcyclohexane	20.0	20.6	103	63-141	
Methylene Chloride	20.0	22.1	110	64-140	
Styrene	20.0	19.5	97	80-121	
Tetrachloroethene	20.0	17.8	89	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6956.D

Lab ID: LCS 240-299922/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	17.7	89	78-120	
trans-1,2-Dichloroethene	20.0	24.3	122	74-124	
trans-1,3-Dichloropropene	20.0	16.0	80	67-120	
Trichloroethene	20.0	21.0	105	76-124	
Trichlorofluoromethane	20.0	26.7	133	27-176	
Vinyl chloride	20.0	24.3	121	65-124	
Xylenes, Total	40.0	38.6	97	80-120	
m-Xylene & p-Xylene	20.0	19.7	99	80-120	
o-Xylene	20.0	18.9	95	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: UX966577.D Lab Sample ID: MB 240-300098/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX9 Date Analyzed: 10/22/2017 19:05

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-300098/4	UX966574.D	10/22/2017 17:55
MRC-MW119B-101017	240-86291-5	UX966578.D	10/22/2017 19:26
MRC-MW122A-101017	240-86291-6	UX966579.D	10/22/2017 19:49
TRIP BLANK	240-86291-7	UX966580.D	10/22/2017 20:10
	240-86388-A-10 MS	UX966598.D	10/23/2017 03:08
	240-86388-A-10 MSD	UX966599.D	10/23/2017 03:31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-300098/7

Matrix: Water | Lab File ID: UX966577.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 19:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-300098/7

Matrix: Water | Lab File ID: UX966577.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/22/2017 19:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300098 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.601	J	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		69-124
460-00-4	4-Bromofluorobenzene (Surr)	93		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		61-138

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966574.D

Lab ID: LCS 240-300098/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	23.4	117	64-147	
1,1,2,2-Tetrachloroethane	20.0	20.2	101	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.9	115	65-144	
1,1,2-Trichloroethane	20.0	20.5	103	76-121	
1,1-Dichloroethane	20.0	21.8	109	74-120	
1,1-Dichloroethene	20.0	22.4	112	65-127	
1,2,4-Trichlorobenzene	20.0	20.0	100	34-141	
1,2-Dibromo-3-Chloropropane	20.0	19.0	95	50-130	
Ethylene Dibromide	20.0	20.0	100	80-120	
1,2-Dichlorobenzene	20.0	19.2	96	80-120	
1,2-Dichloroethane	20.0	20.8	104	68-133	
1,2-Dichloropropane	20.0	22.7	113	78-127	
1,3-Dichlorobenzene	20.0	19.1	96	80-120	
1,4-Dichlorobenzene	20.0	19.3	97	80-120	
2-Butanone (MEK)	40.0	43.9	110	43-149	
2-Hexanone	40.0	44.4	111	28-169	
4-Methyl-2-pentanone (MIBK)	40.0	46.6	117	53-144	
Acetone	40.0	41.5	104	35-131	
Benzene	20.0	22.0	110	79-120	
Dichlorobromomethane	20.0	23.1	116	79-125	
Bromoform	20.0	25.7	128	55-145	
Bromomethane	20.0	22.4	112	17-158	
Carbon disulfide	20.0	17.7	88	49-141	
Carbon tetrachloride	20.0	24.5	123	55-171	
Chlorobenzene	20.0	19.7	98	80-120	
Chloroethane	20.0	24.9	124	10-149	
Chloroform	20.0	21.6	108	80-120	
Chloromethane	20.0	26.9	135	59-124	*
cis-1,2-Dichloroethene	20.0	20.9	105	77-120	
cis-1,3-Dichloropropene	20.0	25.6	128	75-120	*
Cyclohexane	20.0	17.5	88	66-135	
Chlorodibromomethane	20.0	22.4	112	64-129	
Dichlorodifluoromethane	20.0	25.2	126	42-141	
Ethylbenzene	20.0	19.9	99	80-120	
Isopropylbenzene	20.0	20.8	104	80-128	
Methyl acetate	40.0	43.2	108	63-137	
Methyl tert-butyl ether	20.0	20.4	102	73-120	
Methylcyclohexane	20.0	22.9	115	63-141	
Methylene Chloride	20.0	20.6	103	64-140	
Styrene	20.0	20.5	102	80-121	
Tetrachloroethene	20.0	19.8	99	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966574.D

Lab ID: LCS 240-300098/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	20.3	102	78-120	
trans-1,2-Dichloroethene	20.0	22.0	110	74-124	
trans-1,3-Dichloropropene	20.0	22.1	110	67-120	
Trichloroethene	20.0	20.8	104	76-124	
Trichlorofluoromethane	20.0	26.0	130	27-176	
Vinyl chloride	20.0	24.6	123	65-124	
Xylenes, Total	40.0	40.8	102	80-120	
m-Xylene & p-Xylene	20.0	20.2	101	80-120	
o-Xylene	20.0	20.6	103	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6979.D

Lab ID: 240-86300-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	200	550	733	93	57-156	E
1,1-Dichloroethane	200	75	273	99	69-122	
1,1-Dichloroethene	200	5.6 J	223	109	62-127	
Benzene	200	2.8 U	204	102	69-127	
Chloroethane	200	4.1 U	240	120	10-141	
cis-1,2-Dichloroethene	200	110	321	108	69-127	
Ethylbenzene	200	2.6 U	199	100	72-121	
Tetrachloroethene	200	3.0 U	173	86	69-126	
Toluene	200	2.3 U	179	90	69-125	
trans-1,2-Dichloroethene	200	7.2 J	242	117	66-131	
Trichloroethene	200	5.9 J	210	102	68-129	
Vinyl chloride	200	430	600	87	55-123	E
Xylenes, Total	400	2.4 U	381	95	71-122	
m-Xylene & p-Xylene	200	2.4 U	194	97	70-121	
o-Xylene	200	2.8 U	187	94	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966598.D

Lab ID: 240-86388-A-10 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	500	5.8 U	529	106	57-156	
1,1-Dichloroethane	500	6.3 U	535	107	69-122	
1,1-Dichloroethene	500	6.8 U	474	95	62-127	
Benzene	500	7.0 U	534	107	69-127	
Chloroethane	500	10 U	562	112	10-141	
cis-1,2-Dichloroethene	500	860	1380	105	69-127	
Ethylbenzene	500	6.5 U	448	90	72-121	
Tetrachloroethene	500	7.5 U	469	94	69-126	
Toluene	500	5.8 U	470	94	69-125	
trans-1,2-Dichloroethene	500	14 J	540	105	66-131	
Trichloroethene	500	8.3 U	482	96	68-129	
Vinyl chloride	500	150	682	106	55-123	
Xylenes, Total	1000	6.0 U	931	93	71-122	
m-Xylene & p-Xylene	500	6.0 U	459	92	70-121	
o-Xylene	500	7.0 U	472	94	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM6980.D

Lab ID: 240-86300-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	200	775	114	6	13	57-156	E
1,1-Dichloroethane	200	283	104	4	11	69-122	
1,1-Dichloroethene	200	256	125	14	14	62-127	
Benzene	200	211	105	3	10	69-127	
Chloroethane	200	235	117	2	35	10-141	
cis-1,2-Dichloroethene	200	331	112	3	11	69-127	
Ethylbenzene	200	201	100	1	15	72-121	
Tetrachloroethene	200	176	88	2	18	69-126	
Toluene	200	179	89	0	14	69-125	
trans-1,2-Dichloroethene	200	260	126	7	11	66-131	
Trichloroethene	200	226	110	7	12	68-129	
Vinyl chloride	200	665	120	10	12	55-123	E
Xylenes, Total	400	397	99	4	14	71-122	
m-Xylene & p-Xylene	200	201	101	4	15	70-121	
o-Xylene	200	196	98	4	15	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX966599.D

Lab ID: 240-86388-A-10 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	500	522	104	1	13	57-156	
1,1-Dichloroethane	500	543	109	2	11	69-122	
1,1-Dichloroethene	500	481	96	1	14	62-127	
Benzene	500	526	105	1	10	69-127	
Chloroethane	500	552	110	2	35	10-141	
cis-1,2-Dichloroethene	500	1380	105	0	11	69-127	
Ethylbenzene	500	456	91	2	15	72-121	
Tetrachloroethene	500	454	91	3	18	69-126	
Toluene	500	466	93	1	14	69-125	
trans-1,2-Dichloroethene	500	539	105	0	11	66-131	
Trichloroethene	500	475	95	1	12	68-129	
Vinyl chloride	500	695	109	2	12	55-123	
Xylenes, Total	1000	910	91	2	14	71-122	
m-Xylene & p-Xylene	500	452	90	1	15	70-121	
o-Xylene	500	458	92	3	15	71-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MRC-MW117B-100917	240-86291-2	117	103	90	100
MRC-MW121A-101017	240-86291-3	112	103	91	99
MRC-MW120B-101017	240-86291-4	121	108	91	103
MRC-MW119B-101017	240-86291-5	106	106	101	94
MRC-MW122A-101017	240-86291-6	102	106	101	93
TRIP BLANK	240-86291-7	101	102	99	92
	MB 240-299922/7	114	102	89	98
	MB 240-300098/7	106	106	101	93
	LCS 240-299922/5	113	95	91	101
	LCS 240-300098/4	106	108	101	103
	240-86300-B-4 MS	111	95	91	103
	240-86388-A-10 MS	105	107	100	100
	240-86300-B-4 MSD	116	108	93	104
	240-86388-A-10 MSD	106	106	100	102

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	69-124
DCA = 1,2-Dichloroethane-d4 (Surr)	61-138
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	69-120

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: ICIS 240-297419/13 Date Analyzed: 10/03/2017 17:42

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6338.D Heated Purge: (Y/N) N

Calibration ID: 41708

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1085046	5.82	726412	8.51	474078	10.75
UPPER LIMIT		2170092	6.32	1452824	9.01	948156	11.25
LOWER LIMIT		542523	5.32	363206	8.01	237039	10.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297419/16		1187854	5.82	799475	8.51	529764	10.75
ICV 240-297419/25		982434	5.82	676071	8.51	463968	10.75
CCVIS 240-299922/3		872258	5.82	714623	8.51	486415	10.75

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCVIS 240-299922/3 Date Analyzed: 10/20/2017 09:10

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6954.D Heated Purge: (Y/N) N

Calibration ID: 41742

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		872258	5.82	714623	8.51	486415	10.75
UPPER LIMIT		1744516	6.32	1429246	9.01	972830	11.25
LOWER LIMIT		436129	5.32	357312	8.01	243208	10.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-299922/4		762321	5.82	620366	8.51	418499	10.75
LCS 240-299922/5		827835	5.82	690361	8.51	448145	10.75
MB 240-299922/7		709832	5.82	620254	8.51	420478	10.75
240-86291-2	MRC-MW117B-100917	680418	5.82	591702	8.51	385274	10.75
240-86291-3	MRC-MW121A-101017	720804	5.82	618940	8.51	402515	10.75
240-86291-4	MRC-MW120B-101017	684036	5.82	611304	8.51	391256	10.75
240-86300-B-4 MS		788361	5.82	657204	8.51	444464	10.75
240-86300-B-4 MSD		741848	5.82	636069	8.51	442871	10.75

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: ICIS 240-292814/12 Date Analyzed: 08/28/2017 16:53

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX965281.D Heated Purge: (Y/N) N

Calibration ID: 41275

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		819642	5.72	732704	8.41	400571	10.65
UPPER LIMIT		1639284	6.22	1465408	8.91	801142	11.15
LOWER LIMIT		409821	5.22	366352	7.91	200286	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-292814/15		908730	5.73	806211	8.41	448303	10.65
CCVIS 240-300098/3		841804	5.73	834316	8.41	491823	10.65

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCVIS 240-300098/3 Date Analyzed: 10/22/2017 17:32

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX966573.D Heated Purge: (Y/N) N

Calibration ID: 41278

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		841804	5.73	834316	8.41	491823	10.65
UPPER LIMIT		1683608	6.23	1668632	8.91	983646	11.15
LOWER LIMIT		420902	5.23	417158	7.91	245912	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-300098/4		849544	5.72	811412	8.41	479552	10.65
CCV 240-300098/5		857749	5.72	794941	8.41	421096	10.65
MB 240-300098/7		834423	5.72	758771	8.41	403764	10.65
240-86291-5	MRC-MW119B-101017	834637	5.73	768737	8.41	402659	10.65
240-86291-6	MRC-MW122A-101017	818664	5.73	749745	8.41	396859	10.65
240-86291-7	TRIP BLANK	871512	5.72	813400	8.41	444295	10.65
240-86388-A-10 MS		857204	5.72	811208	8.41	463822	10.65
240-86388-A-10 MSD		861164	5.72	826230	8.41	474649	10.65

FB = Fluorobenzene
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
DCBd4 = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

SAMPLE IDENTIFICATION	MRC-MW117B-100917
COMPOUND	Trichloroethene
COMPOUND AREA	74020
INTERNAL STANDARD AMOUNT (ug)	20
DILUTION FACTOR	1
INTERNAL STANDARD AREA	680418
AVERAGE RRF	0.2846

74020 x 20 / 680418 x 0.2846 = 7.6 ug/L

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: UXM6967.D

Analysis Method: 8260C | Date Collected: 10/09/2017 16:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	16		10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	5.1		1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	1.1		1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	2.4		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U *	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW117B-100917 | Lab Sample ID: 240-86291-2

Matrix: Water | Lab File ID: UXM6967.D

Analysis Method: 8260C | Date Collected: 10/09/2017 16:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299922 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.27	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	7.6	✓	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		73-120
1868-53-7	Dibromofluoromethane (Surr)	117		69-124
460-00-4	4-Bromofluorobenzene (Surr)	100		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		61-138

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation - Page 4

Data File: \\ChromNA\Canton\ChromData\A3UX16\20171020-69875.b\UXM6967.D
Lims ID: 240-86291-B-2
Client ID: MRC-MW117B-100917
Sample Type: Client
Inject. Date: 20-Oct-2017 14:23:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069875-016
Operator ID: 001765 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20171020-69875.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Oct-2017 07:30:20 Calib Date: 03-Oct-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20171003-69287.b\UXM6349.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: bosworthh Date: 21-Oct-2017 07:15:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.817	5.817	0.000	99	680418	20.0	
* 2 Chlorobenzene-d5	117	8.509	8.509	0.000	85	591702	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.750	10.750	0.000	94	385274	20.0	
$ 4 Dibromofluoromethane (Surr	113	5.236	5.235	0.001	93	203292	23.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.520	5.520	0.000	98	203781	20.6	
$ 6 Toluene-d8 (Surr)	98	7.192	7.192	0.000	93	693414	18.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.623	9.611	0.012	89	266334	19.9	
9 Dichlorodifluoromethane	85		1.785				ND	
10 Chloromethane	50		1.927				ND	
11 Vinyl chloride	62		2.046				ND	
13 Bromomethane	94		2.401				ND	
14 Chloroethane	64		2.508				ND	
16 Trichlorofluoromethane	101		2.781				ND	
19 1,1-Dichloroethene	96		3.255				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.291				ND	
21 Acetone	43	3.303	3.303	0.000	97	38860	15.8	
24 Carbon disulfide	76	3.469	3.469	0.000	99	167940	5.09	
27 Methyl acetate	43		3.611				ND	
28 Methylene Chloride	84		3.706				ND	
32 trans-1,2-Dichloroethene	96		3.955				ND	
31 Methyl tert-butyl ether	73		3.955				ND	
34 1,1-Dichloroethane	63		4.322				ND	
39 cis-1,2-Dichloroethene	96	4.832	4.832	0.000	76	28092	2.40	
40 2-Butanone (MEK)	43	4.832	4.832	0.000	26	2566	0.8251	
47 Chloroform	83	5.093	5.093	0.000	93	19267	1.12	
48 1,1,1-Trichloroethane	97		5.271				ND	
49 Cyclohexane	56		5.319				ND	
51 Carbon tetrachloride	117		5.413				ND	
54 Benzene	78		5.579				ND	
53 1,2-Dichloroethane	62		5.591				ND	
58 Trichloroethene	130	6.125	6.125	0.000	97	74020	7.65	
60 Methylcyclohexane	83		6.303				ND	

Report Date: 21-Oct-2017 07:31:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Canton\ChromData\A3UX16\20171020-69875.b\UXM6967.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63		6.326				ND	
65 Dichlorobromomethane	83		6.552				ND	
68 cis-1,3-Dichloropropene	75		6.943				ND	
69 4-Methyl-2-pentanone (MIBK	43		7.062				ND	
70 Toluene	91	7.252	7.251	0.001	95	12534	0.2713	
71 trans-1,3-Dichloropropene	75		7.429				ND	
73 1,1,2-Trichloroethane	97		7.595				ND	
75 Tetrachloroethene	164		7.749				ND	
76 2-Hexanone	43		7.809				ND	
78 Chlorodibromomethane	129		7.963				ND	
80 Ethylene Dibromide	107		8.082				ND	
82 Chlorobenzene	112		8.532				ND	
84 Ethylbenzene	106		8.627				ND	
85 m-Xylene & p-Xylene	106		8.734				ND	
86 o-Xylene	106		9.113				ND	
87 Styrene	104		9.125				ND	
88 Bromoform	173		9.315				ND	
89 Isopropylbenzene	105		9.469				ND	
92 1,1,2,2-Tetrachloroethane	83		9.742				ND	
106 1,3-Dichlorobenzene	146		10.690				ND	
108 1,4-Dichlorobenzene	146		10.773				ND	
112 1,2-Dichlorobenzene	146		11.153				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.924				ND	
115 1,2,4-Trichlorobenzene	180		12.754				ND	
S 133 Xylenes, Total	106		16.950				ND	

Reagents:

vm100ss_stk_00027	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00101	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297419

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/03/2017 16:10 Calibration End Date: 10/03/2017 18:29 Calibration ID: 41708

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.4098 0.3502	0.3512 0.3495	0.3768	0.3462	0.3718	Ave		0.3651			0.1000	6.3		20.0			
Isobutyl alcohol	0.0043 0.0052	0.0053 0.0055	0.0049	0.0054	0.0054	Ave		0.0052				8.1		20.0			
Benzene	1.1616 1.0898	1.1692 1.2051	1.1021	1.1147	1.1883	Ave		1.1473			0.5000	3.9		20.0			
1,2-Dichloroethane	0.3378 0.3351	0.3657 0.3630	0.3439	0.3376	0.3592	Ave		0.3489			0.1000	3.8		20.0			
n-Heptane	+++++ 0.1373	0.7992 +++++	0.3631	0.1739	0.1330	Lin1	0.6620	0.1128				16.7			0.9900		0.9900
Trichloroethene	0.2827 0.2697	0.2768 0.2930	0.2937	0.2786	0.2977	Ave		0.2846			0.1500	3.7		20.0			
Methylcyclohexane	0.4059 0.4090	0.4240 0.3604	0.4155	0.4118	0.3696	Ave		0.3995			0.1000	6.1		20.0			
1,2-Dichloropropane	0.2235 0.2299	0.2276 0.2485	0.2264	0.2298	0.2434	Ave		0.2327			0.1000	4.0		20.0			
Dibromomethane	0.1396 0.1422	0.1821 0.1519	0.1457	0.1427	0.1512	Ave		0.1508				9.7		20.0			
1,4-Dioxane	+++++ 0.0021	0.0028 0.0022	0.0022	0.0019	0.0022	Ave		0.0022				12.6		20.0			
Dichlorobromomethane	0.3636 0.3226	0.3196 0.3575	0.3248	0.3183	0.3542	Ave		0.3372			0.1500	6.0		20.0			
2-Chloroethyl vinyl ether	+++++ 0.0985	0.0965 0.1094	0.0831	0.0929	0.1046	Ave		0.0975				9.4		20.0			
cis-1,3-Dichloropropene	0.2691 0.3292	0.2826 0.3726	0.2914	0.3126	0.3463	Ave		0.3148			0.1500	11.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.1539 0.1624	0.1542 0.1739	0.1483	0.1596	0.1682	Ave		0.1601			0.0500	5.5		20.0			
Toluene	1.5309 1.5062	1.5266 1.6706	1.4947	1.5486	1.6547	Ave		1.5617			0.4000	4.6		20.0			
trans-1,3-Dichloropropene	0.4136 0.4007	0.3971 0.4415	0.3756	0.3858	0.4197	Ave		0.4048			0.1000	5.5		20.0			
Ethyl methacrylate	0.3261 0.3223	0.3139 0.3566	0.2810	0.3138	0.3430	Ave		0.3224				7.5		20.0			
1,1,2-Trichloroethane	0.2543 0.2542	0.2917 0.2744	0.2525	0.2625	0.2687	Ave		0.2655			0.1000	5.3		20.0			
Tetrachloroethene	0.3586 0.2699	0.2864 0.2838	0.2715	0.2845	0.2981	Ave		0.2933			0.1500	10.4		20.0			
1,3-Dichloropropane	0.4275 0.4299	0.4285 0.4724	0.4262	0.4420	0.4728	Ave		0.4428				4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: 71004001.D DFTPP Injection Date: 10/04/2017

Instrument ID: A4HP7 DFTPP Injection Time: 10:14

Analysis Batch No.: 297506

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.5	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	43.8	
70	Less than 2.0% of mass 69	0.2	(0.6) 1
127	25.0 - 75.0% of mass 198	48.1	
197	Less than 1.0% of mass 198	0.4	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	26.0	
365	Greater than 0.75% of mass 198	2.8	
441	Present, but less than mass 443	8.4	
442	40.0 - 110.0% of mass 198	56.6	
443	15.0 - 24.0% of mass 442	10.2	(18.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-297506/2	71004002.D	10/04/2017	10:36
	STD4 240-297506/3	71004003.D	10/04/2017	11:00
	STD3 240-297506/4	71004004.D	10/04/2017	11:24
	STD2 240-297506/5	71004005.D	10/04/2017	11:47
	STD1 240-297506/6	71004006.D	10/04/2017	12:11
	STD9 240-297506/7	71004007.D	10/04/2017	12:34
	STD8 240-297506/8	71004008.D	10/04/2017	12:58
	STD7 240-297506/9	71004009.D	10/04/2017	13:21
	STD6 240-297506/10	71004010.D	10/04/2017	13:45
	ICV 240-297506/11	71004011.D	10/04/2017	14:08

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4992	0.5748 0.5083	0.6324 0.5395	0.5206 0.5451	0.5493	Ave		0.5462				7.8		20.0			
N-Nitrosodimethylamine	0.6999	0.7110 0.7306	0.7923 0.7479	0.7515 0.7657	0.6620	Ave		0.7326				5.6		20.0			
Pyridine	1.4702 1.3973	1.3259 1.4312	1.3422 1.4341	1.3870 1.4747	1.3909	Ave		1.4060				3.7		20.0			
Benzaldehyde	1.3418 1.1061	1.1460 1.0608	1.1236 1.0627	1.1259 1.0187	1.0957	Ave		1.1202			0.0100	8.2		20.0			
Phenol	1.6347	1.5388 1.6263	1.7341 1.7260	1.6338 1.7079	1.7784	Ave		1.6725			0.8000	4.6		20.0			
Aniline	2.0192	1.8225 2.0278	1.8766 2.1134	2.0187 2.1299	2.0339	Ave		2.0053				5.3		20.0			
Bis(2-chloroethyl)ether	1.2201	1.2288 1.2200	1.2183 1.2823	1.2140 1.2640	1.2614	Ave		1.2386			0.7000	2.1		20.0			
2-Chlorophenol	1.3148	1.0751 1.3346	1.2274 1.3745	1.2755 1.3793	1.3058	Ave		1.2859			0.8000	7.7		20.0			
n-Decane	1.4332	1.3682 1.4265	1.4633 1.4812	1.4535 1.4890	1.5025	Ave		1.4522				3.0		20.0			
1,3-Dichlorobenzene	1.4916	1.3903 1.4926	1.4887 1.5383	1.5031 1.5742	1.5044	Ave		1.4979				3.5		20.0			
1,4-Dichlorobenzene	1.5003	1.5311 1.5506	1.5331 1.5763	1.5614 1.6091	1.5778	Ave		1.5549				2.2		20.0			
Benzyl alcohol	0.7755	0.6629 0.8150	0.6559 0.8372	0.6916 0.8598	0.7572	Ave		0.7569				10.5		20.0			
1,2-Dichlorobenzene	1.4185	1.4010 1.4457	1.3757 1.4899	1.4510 1.4871	1.4657	Ave		1.4418				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	1.2006	1.0371 1.1805	1.1384 1.2454	1.1469 1.2559	1.2020	Ave		1.1759			0.7000	5.9		20.0			
bis (2-chloroisopropyl) ether	1.6437	1.6919 1.6674	1.7801 1.7248	1.7770 1.7792	1.7037	Ave		1.7210				3.1		20.0			
Indene	2.4711	2.3348 2.5008	2.4441 2.6322	2.4516 2.7286	2.4764	Ave		2.5049				4.9		20.0			
N-Nitrosodi-n-propylamine	0.9398	0.7244 0.9449	0.7753 1.0203	0.8919 1.0096	0.9191	Ave		0.9032			0.5000	11.6		20.0			
3 & 4 Methylphenol	1.2471	0.9704 1.2756	1.0916 1.3374	1.1892 1.4067	1.2206	Ave		1.2173				11.3		20.0			
Acetophenone	1.8773	1.7032 1.8929	1.7944 2.0084	1.8985 2.0760	1.8798	Ave		1.8913			0.0100	6.1		20.0			
Hexachloroethane	0.6021	0.7115 0.6258	0.6762 0.6544	0.5949 0.6621	0.6475	Ave		0.6468			0.3000	6.0		20.0			
Nitrobenzene	0.4041	0.3733 0.4095	0.3643 0.4189	0.4046 0.4149	0.4305	Ave		0.4025			0.2000	5.6		20.0			
Isophorone	0.6775	0.5291 0.7053	0.6013 0.7228	0.6238 0.7268	0.6871	Ave		0.6592			0.4000	10.5		20.0			
2-Nitrophenol	0.1751	0.1288 0.1849	0.1572 0.1886	0.1648 0.1850	0.1728	Ave		0.1697			0.1000	11.6		20.0			
2,4-Dimethylphenol	0.3762	0.3043 0.3880	0.3382 0.3951	0.3594 0.4018	0.3691	Ave		0.3665			0.2000	8.8		20.0			
Benzoic acid	0.1610	+++++ 0.1931	0.0944 0.2002	0.1212 0.2030	0.1436	Lin1	-0.297	0.2010							0.9930		0.9900
Bis(2-chloroethoxy)methane	0.3950	0.3698 0.4175	0.3757 0.4248	0.4036 0.4254	0.4062	Ave		0.4023			0.3000	5.2		20.0			
2,4-Dichlorophenol	0.2981	0.2020 0.3081	0.2494 0.3130	0.2659 0.3161	0.2915	Ave		0.2805			0.2000	14.0		20.0			
1,2,4-Trichlorobenzene	0.3499	0.3369 0.3482	0.3161 0.3554	0.3497 0.3642	0.3445	Ave		0.3456				4.1		20.0			
Naphthalene	1.0610 1.0026	0.8885 1.0289	0.9995 1.0546	0.9545 1.0751	1.0123	Ave		1.0086			0.7000	5.8		20.0			
4-Chloroaniline	0.4286	0.3651 0.4384	0.3965 0.4451	0.4041 0.4579	0.4228	Ave		0.4198			0.0100	7.2		20.0			
2,6-Dichlorophenol	0.3001	0.2303 0.2991	0.2786 0.3057	0.2709 0.3144	0.2962	Ave		0.2869				9.4		20.0			
Hexachlorobutadiene	0.2357	0.1870 0.2405	0.2262 0.2392	0.2319 0.2457	0.2427	Ave		0.2311			0.0100	8.2		20.0			
Caprolactam	0.1291 0.0976	0.0756 0.1012	0.0802 0.1021	0.0900 +++++	0.0981	Ave		0.0967			0.0100	16.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3304	0.2500 0.3351	0.2470 0.3419	0.2797 0.3523	0.3211	Ave		0.3072			0.2000	13.7		20.0			
2-Methylnaphthalene	0.7439 0.7247	0.6309 0.7246	0.7004 0.7526	0.6788 0.7866	0.7135	Ave		0.7173			0.4000	6.3		20.0			
1-Methylnaphthalene	0.6090 0.6610	0.5776 0.6748	0.6087 0.6907	0.5915 0.7101	0.6667	Ave		0.6433				7.4		20.0			
Hexachlorocyclopentadiene	0.3717	0.2703 0.3982	0.2891 0.4195	0.3198 0.4282	0.3615	Ave		0.3573			0.0500	16.5		20.0			
1,2,4,5-Tetrachlorobenzene	0.6023	0.5540 0.5893	0.5828 0.6136	0.5743 0.6223	0.5633	Ave		0.5878			0.0100	4.1		20.0			
2,4,6-Trichlorophenol	0.3597	0.2941 0.3620	0.3135 0.3762	0.3015 0.3766	0.3503	Ave		0.3417			0.2000	9.8		20.0			
2,4,5-Trichlorophenol	0.3658	0.2427 0.3752	0.2975 0.3864	0.3138 0.3845	0.3615	Ave		0.3409			0.2000	15.1		20.0			
1,1'-Biphenyl	1.1640 1.3617	1.3244 1.3687	1.2761 1.4254	1.2643 1.4390	1.3414	Ave		1.3294			0.0100	6.4		20.0			
2-Chloronaphthalene	1.0003 1.0081	0.9524 1.0328	0.9140 1.0434	0.9900 1.0618	0.9893	Ave		0.9991			0.8000	4.6		20.0			
2-Nitroaniline	0.3716	0.2871 0.3769	0.2991 0.3988	0.3316 0.3935	0.3664	Ave		0.3531			0.0100	12.0		20.0			
Dimethyl phthalate	1.1910	1.1059 1.2241	1.1610 1.2571	1.1856 1.2681	1.1895	Ave		1.1978			0.0100	4.4		20.0			
1,3-Dinitrobenzene	0.2003	0.0898 0.2008	0.1551 0.2068	0.1854 0.2056	0.1730	Lin1	-0.059	0.2064							0.9990		0.9900
2,6-Dinitrotoluene	0.2846	0.2264 0.2902	0.2463 0.3010	0.2421 0.3078	0.2679	Ave		0.2708				11.0		20.0			
Acenaphthylene	1.2420 1.5918	1.4218 1.6531	1.4699 1.7132	1.4645 1.7032	1.5416	Ave		1.5335			0.9000	9.9		20.0			
3-Nitroaniline	0.2810	0.1739 0.2996	0.2514 0.3035	0.2490 0.2963	0.2727	Ave		0.2659			0.0100	16.0		20.0			
2,4-Dinitrophenol	0.1524	+++++ 0.1780	0.0667 0.1863	0.0856 0.1957	0.1274	Qua	-0.266	0.1520	0.0010012		0.0100				0.9990		0.9900
Acenaphthene	0.8054 1.1136	1.0422 1.1394	1.0544 1.1901	1.0471 1.2087	1.0741	Ave		1.0750			0.9000	11.0		20.0			
4-Nitrophenol	0.2345	0.1231 0.2379	0.1576 0.2429	0.1887 0.2404	0.2191	Lin1	-0.152	0.2431							1.0000		0.9900
2,4-Dinitrotoluene	0.3846	0.2848 0.3987	0.3103 0.4006	0.3370 0.4158	0.3705	Ave		0.3628			0.2000	13.0		20.0			
Dibenzofuran	1.4352 1.5627	1.4118 1.5741	1.5624 1.6157	1.4618 1.6453	1.5413	Ave		1.5344			0.8000	5.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.3392	0.2562 0.3511	0.2630 0.3585	0.2982 0.3653	0.3185	Ave		0.3187			0.0100	13.3		20.0			
Diethyl phthalate	1.2333	1.1698 1.2791	1.1857 1.3077	1.1582 1.3395	1.2207	Ave		1.2367			0.0100	5.4		20.0			
Hexadecane	0.7454	0.6359 0.7671	0.6779 0.7901	0.6996 0.8054	0.7478	Ave		0.7336				7.9		20.0			
4-Chlorophenyl phenyl ether	0.6474	0.6491 0.6694	0.6108 0.6861	0.6327 0.6976	0.6367	Ave		0.6537			0.4000	4.4		20.0			
4-Nitroaniline	0.3050	0.2237 0.3124	0.2445 0.3283	0.2621 0.3426	0.2765	Ave		0.2869			0.0100	14.6		20.0			
Fluorene	1.0130 1.2345	1.1508 1.3018	1.2158 1.3464	1.1602 1.4091	1.2372	Ave		1.2299			0.9000	9.5		20.0			
4,6-Dinitro-2-methylphenol	0.1161	0.0542 0.1298	0.0846 0.1360	0.0960 0.1361	0.1024	Lin1	-0.107	0.1334			0.0100				0.9950		0.9900
Diphenylamine	0.5489	0.4828 0.5795	0.5513 0.5838	0.5502 0.5741	0.5293	Ave		0.5500				6.0		20.0			
N-Nitrosodiphenylamine	0.4667	0.4105 0.4927	0.4687 0.4963	0.4678 0.4881	0.4500	Ave		0.4676			0.0100	6.0		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.6896	0.5619 0.7104	0.6721 0.7382	0.6920 0.7232	0.6779	Ave		0.6831				7.9		20.0			
Azobenzene	0.6895	0.5619 0.7104	0.6721 0.7382	0.6926 0.7232	0.6771	Ave		0.6831				7.9		20.0			
4-Bromophenyl phenyl ether	0.1914	0.1649 0.2015	0.1902 0.2058	0.2048 0.2124	0.1896	Ave		0.1951			0.1000	7.6		20.0			
Hexachlorobenzene	0.2305 0.1826	0.1724 0.1891	0.1988 0.1944	0.1833 0.1940	0.1744	Lin1	0.0006	0.1901			0.1000				0.9990		0.9900
Atrazine	0.1607 0.1955	0.1659 0.2124	0.1963 0.2121	0.1994 0.2062	0.1972	Ave		0.1940			0.0100	9.6		20.0			
n-Octadecane	0.3927	0.3232 0.4157	0.3680 0.4352	0.3900 0.4326	0.3850	Ave		0.3928				9.3		20.0			
Pentachlorophenol	0.1182	0.0587 0.1307	0.0817 0.1381	0.0942 0.1426	0.1088	Lin1	-0.113	0.1371			0.0500				0.9950		0.9900
Phenanthrene	0.8447 0.9928	0.9443 1.0203	1.0270 1.0532	0.9851 1.0493	0.9533	Ave		0.9855			0.7000	6.6		20.0			
Anthracene	0.7948 0.9869	0.8323 1.0309	0.9235 1.0726	0.9659 1.0638	0.9635	Ave		0.9593			0.7000	10.0		20.0			
Carbazole	0.8901	0.7829 0.9250	0.8846 0.9464	0.8588 0.9474	0.8751	Ave		0.8888			0.0100	6.1		20.0			
Di-n-butyl phthalate	1.0212	0.7239 1.0877	0.9584 1.1189	0.9895 1.1305	1.0083	Ave		1.0048			0.0100	12.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	0.9648 1.1342	0.9770 1.1924	1.1392 1.2288	1.0882 1.2265	1.1039	Ave		1.1172			0.6000	8.7		20.0			
Benzidine	0.4657	0.2690 0.5008	0.3995 0.4842	0.4542 0.4720	0.4742	Ave		0.4399				17.1		20.0			
Pyrene	0.9536 1.0421	0.8498 1.1022	1.0440 1.1145	0.9836 1.1012	1.0597	Ave		1.0279			0.6000	8.4		20.0			
Butyl benzyl phthalate	0.4235	0.2971 0.4510	0.3900 0.4571	0.3732 0.4453	0.4129	Ave		0.4063			0.0100	13.1		20.0			
Bis(2-ethylhexyl) phthalate	0.5657	0.3779 0.6172	0.4640 0.6338	0.4572 0.6361	0.5550	Ave		0.5384			0.0100	17.7		20.0			
3,3'-Dichlorobenzidine	0.3482	0.2501 0.3675	0.3083 0.3822	0.2987 0.3829	0.3405	Ave		0.3348			0.0100	13.8		20.0			
Benzo[a]anthracene	0.9781 1.0286	0.8689 1.0669	1.0099 1.0767	0.9787 1.0778	1.0440	Ave		1.0144			0.8000	6.6		20.0			
Chrysene	0.8537 0.9699	0.9048 1.0258	1.0248 1.0486	0.9569 1.0344	1.0068	Ave		0.9806			0.7000	6.7		20.0			
Di-n-octyl phthalate	1.2032	0.7925 1.2596	0.9274 1.3357	0.8920 1.3639	1.0605	Ave		1.1044			0.0100	19.7		20.0			
Benzo[b]fluoranthene	0.9243 1.2447	1.0226 1.2408	1.0992 1.2531	1.0205 1.3125	1.1157	Ave		1.1370			0.7000	11.7		20.0			
Benzo[k]fluoranthene	0.6804 1.2493	0.9796 1.2820	1.2643 1.3272	1.1918 1.3089	1.1937	Ave		1.1641			0.7000	17.9		20.0			
Benzo[a]pyrene	0.5811 1.1675	0.8719 1.1705	1.0367 1.2223	0.9781 1.2547	1.0876	Lin1	-0.108	1.2079			0.7000				0.9980		0.9900
Indeno[1,2,3-cd]pyrene	1.0209 1.3011	1.0209 1.3245	1.1333 1.3766	1.1191 1.3942	1.2018	Ave		1.2103			0.5000	12.0		20.0			
Dibenz(a,h)anthracene	0.9523 1.0789	0.7934 1.1095	0.9300 1.1629	0.9223 1.2077	1.0150	Ave		1.0191			0.4000	13.0		20.0			
Benzo[g,h,i]perylene	1.1524 1.0906	0.8642 1.1089	1.0138 1.1442	0.9826 1.1512	1.0374	Ave		1.0606			0.5000	9.1		20.0			
2-Fluorophenol (Surr)	1.1732	0.9158 1.1887	1.1098 1.2162	1.0871 1.2196	1.1908	Ave		1.1376				8.9		20.0			
Phenol-d5 (Surr)	1.5057	1.3831 1.5399	1.4256 1.5661	1.5599 1.5979	1.5087	Ave		1.5109				4.8		20.0			
Nitrobenzene-d5 (Surr)	0.3712 0.4029	0.3420 0.4107	0.3917 0.4137	0.3838 0.4130	0.4092	Ave		0.3931				6.1		20.0			
2-Fluorobiphenyl (Surr)	1.1469 1.1691	1.1541 1.2122	1.1967 1.2360	1.1579 1.2370	1.1845	Ave		1.1883				2.9		20.0			
2,4,6-Tribromophenol (Surr)	0.1485	+++++ 0.1524	0.1202 0.1572	0.1317 0.1646	0.1423	Ave		0.1453				10.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Terphenyl-d14 (Surr)	0.6445 0.6621	0.6337 0.7027	0.6724 0.7063	0.6388 0.6926	0.6771	Ave		0.6700				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCBd 4	Ave	155799	8200 240867	18913 324762	30826 383406	78004	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCBd 4	Ave	218412	10142 346180	23695 450238	44497 538503	93996	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCBd 4	Ave	8769 872123	37827 1356254	80278 1726767	164250 2074390	394988	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzaldehyde	DCBd 4	Ave	8003 690373	32695 1005307	67205 1279497	133332 1432956	311173	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCBd 4	Ave	510175	21950 770613	51859 1039115	96734 1201187	252517	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCBd 4	Ave	630161	25997 960835	56122 1272339	119524 1497945	288806	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCBd 4	Ave	380773	17529 578086	36433 771962	71879 888990	179105	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCBd 4	Ave	410313	15336 632367	36707 827496	75524 970065	185413	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
n-Decane	DCBd 4	Ave	447275	19517 675912	43762 891715	86062 1047194	213350	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	465508	19832 707230	44519 926087	88997 1107152	213620	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	468209	21840 734706	45847 948946	92447 1131665	224033	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCBd 4	Ave	242034	9456 386154	19615 504031	40949 604673	107523	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	442691	19985 685006	41141 896946	85914 1045891	208123	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCBd 4	Ave	374691	14794 559369	34044 749760	67909 883277	170671	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
bis (2-chloroisopropyl) ether	DCBd 4	Ave	512964	24135 790063	53235 1038349	105214 1251352	241921	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indene	DCBd 4	Ave	1542378	66611 2369913	146186 3169265	290312 3838025	703263	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodi-n-propylamine	DCBd 4	Ave	293293	10334 447732	23187 614230	52809 710080	130512	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3 & 4 Methylphenol	DCBd 4	Ave	389197	13842 604425	32645 805155	70412 989329	173316	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCBd 4	Ave	585870	24296 896917	53663 1209126	112408 1460032	266913	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCBd 4	Ave	187908	10149 296509	20221 393960	35222 465674	91942	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	474833	20292 723338	41464 969068	93246 1139001	230870	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	796086	28761 1245869	68433 1671863	143757 1995297	368478	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	205753	7003 326576	17888 436229	37982 507971	92654	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	442002	16542 685474	38489 913855	82821 1102981	197901	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Lin1	378422	+++++ 682251	21486 926274	55876 1114336	154023	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	464094	20104 737590	42755 982600	93016 1167843	217835	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	350204	10980 544244	28380 724111	61277 867701	156317	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	411119	18312 615024	35980 822115	80595 999674	184743	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	11891 1178033	48301 1817569	113761 2439393	219950 2951300	542855	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	503613	19845 774445	45128 1029657	93123 1257063	226721	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	352649	12521 528316	31706 707148	62417 863040	158826	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	276977	10167 424857	25749 553388	53439 674479	130161	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	2894 229327	8214 357495	18254 472269	41497 +++++	105200	0.200 20.0	1.00 30.0	2.00 40.0	4.00 +++++	10.0
4-Chloro-3-methylphenol	NPT	Ave	388225	13591 592047	28112 790787	64455 967076	172168	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	8337 851459	34297 1280089	79715 1740926	156418 2159215	382629	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1-Methylnaphthalene	NPT	Ave	6825 776629	31400 1192045	69278 1597684	136314 1949329	357506	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorocyclopentadiene	ANT	Ave	 282994	9020 458664	21153 632443	46946 789181	127709	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	 458585	18490 678765	42646 925036	84317 1146948	198986	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	 273845	9814 416915	22937 567169	44267 694124	123726	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	 278470	8099 432150	21773 582571	46076 708653	127687	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	8249 1036769	44198 1576418	93377 2148826	185610 2652322	473819	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	7089 767557	31785 1189546	66885 1573070	145340 1957025	349438	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	 282947	9580 434071	21888 601147	48683 725240	129407	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	 906787	36906 1409826	84960 1895186	174065 2337250	420162	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Lin1	 152491	2997 231225	11349 311803	27223 378952	61105	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	 216644	7556 334242	18024 453802	35544 567368	94647	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	8802 1211952	47448 1903998	107563 2582814	215011 3139265	544529	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	 213917	5804 345061	18398 457604	36557 546181	96310	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Qua	 231985	+++++ 409936	9760 561686	25125 721239	90005	 20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	5708 847851	34782 1312346	77156 1794208	153721 2227743	379396	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Lin1	 357136	8213 547991	23065 732281	55409 886326	154807	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	 292802	9504 459215	22703 603999	49472 766309	130859	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	10171 1189751	47114 1812967	114327 2435800	214604 3032385	544426	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	 258276	8549 404328	19243 540456	43780 673347	112492	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	 938974	39039 1473225	86761 1971470	170040 2468842	431188	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexadecane	ANT	Ave	 567535	21221 883458	49607 1191120	102713 1484470	264139	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Chlorophenyl phenyl ether	ANT	Ave	492933	21661 771007	44695 1034382	92885 1285767	224917	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	232181	7467 359783	17894 494986	38479 631499	97657	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	7179 939867	38404 1499408	88963 2029776	170333 2597191	437031	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	344640	6881 574293	23046 784900	52197 989882	143104	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Diphenylamine	PHN	Ave	692455	26051 1090343	63866 1431991	127170 1775067	314331	8.50	0.425 12.8	0.850 17.0	1.70 21.3	4.25
N-Nitrosodiphenylamine	PHN	Ave	692455	26051 1090343	63866 1431991	127170 1775067	314331	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	1023229	35658 1572053	91588 2129932	188138 2630051	473580	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	1023139	35658 1572053	91588 2129932	188279 2630051	472988	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	284071	10464 446017	25921 593676	55684 772489	132442	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Lin1	3120 270983	10943 418527	27090 561003	49837 705449	121824	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	4350 580038	21055 940253	53513 1224099	108420 1500060	275449	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
n-Octadecane	PHN	Ave	582625	20510 919860	50141 1255710	106035 1573277	268940	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Lin1	350815	7454 578474	22266 797070	51213 1036945	151980	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	11435 1473126	59924 2257937	139948 3038587	267812 3815929	665926	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	10760 1464399	52817 2281330	125840 3094591	262584 3868950	673052	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	1320702	49685 2047120	120548 2730700	233473 3445490	611290	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	1515259	45943 2407022	130606 3228158	269004 4111487	704369	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	13061 1682964	62000 2638719	155233 3545476	295839 4460565	771159	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	1515439	37173 2420807	120088 3099062	277583 3869429	707596	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	13559 1695568	58728 2663764	156895 3566825	300574 4513702	790698	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	688994	20528 1089953	58605 1462968	114050 1825432	308067	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bis(2-ethylhexyl) phthalate	CRY	Ave	920454	26118 1491673	69727 2028413	139692 2607117	414141	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	1133177	34564 1776400	92667 2446125	182578 3139127	508101	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	13907 1673585	60044 2578454	151766 3445968	299058 4417897	778986	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	12138 1578035	62525 2479102	154019 3355820	292402 4239803	751251	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	1458692	41295 2344925	108845 3239603	208342 4149021	631644	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	9942 1509015	53286 2309976	129006 3039199	238341 3992487	664542	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	7319 1514553	51044 2386658	148389 3218942	278363 3981504	710991	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Lin1	6250 1415444	45432 2179089	121671 2964559	228438 3816637	647833	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	10981 1577390	53199 2465702	133015 3338910	261389 4241122	715827	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	10243 1307982	41344 2065476	109151 2820560	215405 3673614	604541	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	12395 1322192	45031 2064390	118986 2775151	229497 3501712	617903	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCBd 4	Ave	366140	13063 563228	33188 732200	64365 857722	169091	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCBd 4	Ave	469910	19729 729643	42632 942805	92359 1123847	214232	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	4160 473401	18589 725575	44580 956902	88438 1133704	219421	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	8128 890082	38516 1396167	87571 1863334	169988 2280003	418399	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	113088	+++++ 175568	8799 236981	19340 303462	50259	10.0	+++++ 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	9164 1077309	43789 1698368	101054 2260424	195205 2838933	505243	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.4853		8.88	10.0	-11.2	30.0
N-Nitrosodimethylamine	Ave	0.7326	0.6375		8.70	10.0	-13.0	30.0
Pyridine	Ave	1.406	1.300		18.5	20.0	-7.5	30.0
Benzaldehyde	Ave	1.120	1.075	0.0100	19.2	20.0	-4.0	30.0
Phenol	Ave	1.673	1.578	0.8000	9.43	10.0	-5.7	30.0
Aniline	Ave	2.005	1.816		9.06	10.0	-9.4	30.0
Bis(2-chloroethyl)ether	Ave	1.239	1.169	0.7000	9.44	10.0	-5.6	30.0
2-Chlorophenol	Ave	1.286	1.290	0.8000	10.0	10.0	0.3	30.0
n-Decane	Ave	1.452	1.364		9.39	10.0	-6.1	30.0
1,3-Dichlorobenzene	Ave	1.498	1.453		9.70	10.0	-3.0	30.0
1,4-Dichlorobenzene	Ave	1.555	1.491		9.59	10.0	-4.1	30.0
Benzyl alcohol	Ave	0.7569	0.7637		10.1	10.0	0.9	30.0
1,2-Dichlorobenzene	Ave	1.442	1.370		9.50	10.0	-5.0	30.0
2-Methylphenol	Ave	1.176	1.125	0.7000	9.56	10.0	-4.4	30.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.494		8.68	10.0	-13.2	30.0
Indene	Ave	2.505	2.263		18.1	20.0	-9.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.8606	0.5000	9.53	10.0	-4.7	30.0
3 & 4 Methylphenol	Ave	1.217	1.211		9.95	10.0	-0.5	30.0
Acetophenone	Ave	1.891	1.747	0.0100	9.24	10.0	-7.6	30.0
Hexachloroethane	Ave	0.6468	0.5917	0.3000	9.15	10.0	-8.5	30.0
Nitrobenzene	Ave	0.4025	0.3854	0.2000	9.57	10.0	-4.3	30.0
Isophorone	Ave	0.6592	0.6512	0.4000	9.88	10.0	-1.2	30.0
2-Nitrophenol	Ave	0.1697	0.1684	0.1000	9.92	10.0	-0.8	30.0
2,4-Dimethylphenol	Ave	0.3665	0.2941	0.2000	8.03	10.0	-19.7	30.0
Benzoic acid	Lin1		0.1686		18.2	20.0	-8.8	30.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3789	0.3000	9.42	10.0	-5.8	30.0
2,4-Dichlorophenol	Ave	0.2805	0.2833	0.2000	10.1	10.0	1.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3199		9.26	10.0	-7.4	30.0
Naphthalene	Ave	1.009	0.9504	0.7000	9.42	10.0	-5.8	30.0
4-Chloroaniline	Ave	0.4198	0.3833	0.0100	9.13	10.0	-8.7	30.0
2,6-Dichlorophenol	Ave	0.2869	0.2753		9.60	10.0	-4.0	30.0
Hexachlorobutadiene	Ave	0.2311	0.2244	0.0100	9.71	10.0	-2.9	30.0
Caprolactam	Ave	0.0967	0.0976	0.0100	20.2	20.0	0.9	30.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3079	0.2000	10.0	10.0	0.2	30.0
2-Methylnaphthalene	Ave	0.7173	0.6659	0.4000	9.28	10.0	-7.2	30.0
1-Methylnaphthalene	Ave	0.6433	0.6467		10.1	10.0	0.5	30.0
Hexachlorocyclopentadiene	Ave	0.3573	0.2954	0.0500	8.27	10.0	-17.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5413	0.0100	9.21	10.0	-7.9	30.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3348	0.2000	9.80	10.0	-2.0	30.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3521	0.2000	10.3	10.0	3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.280	0.0100	9.63	10.0	-3.7	30.0
2-Chloronaphthalene	Ave	0.999	0.9518	0.8000	9.53	10.0	-4.7	30.0
2-Nitroaniline	Ave	0.3531	0.3461	0.0100	9.80	10.0	-2.0	30.0
Dimethyl phthalate	Ave	1.198	1.143	0.0100	9.54	10.0	-4.6	30.0
1,3-Dinitrobenzene	Lin1		0.1864		9.32	10.0	-6.8	30.0
2,6-Dinitrotoluene	Ave	0.2708	0.2748		10.1	10.0	1.5	30.0
Acenaphthylene	Ave	1.533	1.536	0.9000	10.0	10.0	0.1	30.0
3-Nitroaniline	Ave	0.2659	0.2703	0.0100	10.2	10.0	1.6	30.0
2,4-Dinitrophenol	Qua		0.1562	0.0100	19.7	20.0	-1.3	30.0
Acenaphthene	Ave	1.075	1.032	0.9000	9.60	10.0	-4.0	30.0
4-Nitrophenol	Lin1		0.2219		18.9	20.0	-5.6	30.0
2,4-Dinitrotoluene	Ave	0.3628	0.3747	0.2000	10.3	10.0	3.3	30.0
Dibenzofuran	Ave	1.534	1.448	0.8000	9.44	10.0	-5.6	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.3082	0.0100	9.67	10.0	-3.3	30.0
Diethyl phthalate	Ave	1.237	1.179	0.0100	9.53	10.0	-4.7	30.0
Hexadecane	Ave	0.7336	0.7020		9.57	10.0	-4.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.6098	0.4000	9.33	10.0	-6.7	30.0
4-Nitroaniline	Ave	0.2869	0.2769	0.0100	9.65	10.0	-3.5	30.0
Fluorene	Ave	1.230	1.180	0.9000	9.60	10.0	-4.0	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1211	0.0100	18.9	20.0	-5.3	30.0
Diphenylamine	Ave	0.5500	0.5216		8.07	8.51	-5.2	30.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4439	0.0100	9.49	10.0	-5.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6700		9.81	10.0	-1.9	30.0
Azobenzene	Ave	0.6831	0.6696		9.80	10.0	-2.0	30.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.1814	0.1000	9.30	10.0	-7.0	30.0
Hexachlorobenzene	Lin1		0.1744	0.1000	9.17	10.0	-8.3	30.0
Atrazine	Ave	0.1940	0.2025	0.0100	20.9	20.0	4.4	30.0
n-Octadecane	Ave	0.3928	0.3838		9.77	10.0	-2.3	30.0
Pentachlorophenol	Lin1		0.1227	0.0500	18.7	20.0	-6.4	30.0
Phenanthrene	Ave	0.9855	0.9442	0.7000	9.58	10.0	-4.2	30.0
Anthracene	Ave	0.9593	0.9454	0.7000	9.85	10.0	-1.5	30.0
Carbazole	Ave	0.8888	0.8550	0.0100	9.62	10.0	-3.8	30.0
Di-n-butyl phthalate	Ave	1.005	1.023	0.0100	10.2	10.0	1.8	30.0
Fluoranthene	Ave	1.117	1.091	0.6000	9.77	10.0	-2.3	30.0
Benzidine	Ave	0.4399	0.4387		19.9	20.0	-0.3	30.0
Pyrene	Ave	1.028	1.002	0.6000	9.75	10.0	-2.5	30.0
Butyl benzyl phthalate	Ave	0.4063	0.3972	0.0100	9.78	10.0	-2.2	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.5435	0.0100	10.1	10.0	1.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3370	0.0100	20.1	20.0	0.7	30.0
Benzo[a]anthracene	Ave	1.014	0.9574	0.8000	9.44	10.0	-5.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9371	0.7000	9.56	10.0	-4.4	30.0
Di-n-octyl phthalate	Ave	1.104	1.106	0.0100	10.0	10.0	0.2	30.0
Benzo[b]fluoranthene	Ave	1.137	1.148	0.7000	10.1	10.0	1.0	30.0
Benzo[k]fluoranthene	Ave	1.164	1.169	0.7000	10.0	10.0	0.4	30.0
Benzo[a]pyrene	Lin1		1.048	0.7000	8.76	10.0	-12.4	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.167	0.5000	9.64	10.0	-3.6	30.0
Dibenz(a,h)anthracene	Ave	1.019	1.009	0.4000	9.90	10.0	-1.0	30.0
Benzo[g,h,i]perylene	Ave	1.061	0.9738	0.5000	9.18	10.0	-8.2	30.0
2-Fluorophenol (Surr)	Ave	1.138	1.290		11.3	10.0	13.4	30.0
Phenol-d5 (Surr)	Ave	1.511	1.672		11.1	10.0	10.7	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.4373		11.1	10.0	11.2	30.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.248		10.5	10.0	5.0	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1663		11.4	10.0	14.4	30.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.7194		10.7	10.0	7.4	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: 71015001.D DFTPP Injection Date: 10/15/2017

Instrument ID: A4HP7 DFTPP Injection Time: 12:01

Analysis Batch No.: 299079

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	40.4	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	39.9	
70	Less than 2.0% of mass 69	0.2	(0.5) 1
127	25.0 - 75.0% of mass 198	46.5	
197	Less than 1.0% of mass 198	0.4	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	24.0	
365	Greater than 0.75% of mass 198	2.4	
441	Present, but less than mass 443	8.5	
442	40.0 - 110.0% of mass 198	56.3	
443	15.0 - 24.0% of mass 442	10.4	(18.4) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-299079/2	71015002.D	10/15/2017	12:20
	MB 240-298708/21-A	71015003.D	10/15/2017	13:12
	LCS 240-298708/22-A	71015004.D	10/15/2017	13:36
MRC-MW117B-100917	240-86291-2	71015026.D	10/15/2017	22:21

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID (1): CCV 240-299079/2 CCVIS Instrument ID (1): A4HP7

GC Column (1): RXI-5SILMS ID: 0.25(mm) Date Analyzed (1): 10/15/2017 12:20

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	2.40	100.0
2-Fluorophenol (Surr)	4.82	100.0
Phenol-d5 (Surr)	5.73	100.0
Nitrobenzene-d5 (Surr)	6.56	100.0
2-Fluorobiphenyl (Surr)	8.10	100.0
2,4,6-Tribromophenol (Surr)	9.36	100.0
Terphenyl-d14 (Surr)	11.30	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299079/2 Calibration Date: 10/15/2017 12:20

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71015002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.4957		9.07	10.0	-9.3	20.0
N-Nitrosodimethylamine	Ave	0.7326	0.7467		10.2	10.0	1.9	20.0
Pyridine	Ave	1.406	1.298		18.5	20.0	-7.7	20.0
Benzaldehyde	Ave	1.120	0.9592	0.0100	17.1	20.0	-14.4	20.0
Phenol	Ave	1.673	1.418	0.8000	8.48	10.0	-15.2	20.0
Aniline	Ave	2.005	1.939		9.67	10.0	-3.3	20.0
Bis(2-chloroethyl)ether	Ave	1.239	1.192	0.7000	9.62	10.0	-3.8	20.0
2-Chlorophenol	Ave	1.286	1.222	0.8000	9.51	10.0	-4.9	20.0
n-Decane	Ave	1.452	1.356		9.34	10.0	-6.6	20.0
1,3-Dichlorobenzene	Ave	1.498	1.444		9.64	10.0	-3.6	20.0
1,4-Dichlorobenzene	Ave	1.555	1.466		9.43	10.0	-5.7	20.0
Benzyl alcohol	Ave	0.7569	0.3190		4.21	10.0	-57.9*	20.0
1,2-Dichlorobenzene	Ave	1.442	1.382		9.58	10.0	-4.2	20.0
2-Methylphenol	Ave	1.176	1.227	0.7000	10.4	10.0	4.4	20.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.563		9.08	10.0	-9.2	20.0
Indene	Ave	2.505	2.342		18.7	20.0	-6.5	20.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.9195	0.5000	10.2	10.0	1.8	20.0
3 & 4 Methylphenol	Ave	1.217	1.127		9.26	10.0	-7.4	20.0
Acetophenone	Ave	1.891	1.723	0.0100	9.11	10.0	-8.9	20.0
Hexachloroethane	Ave	0.6468	0.5776	0.3000	8.93	10.0	-10.7	20.0
Nitrobenzene	Ave	0.4025	0.3868	0.2000	9.61	10.0	-3.9	20.0
Isophorone	Ave	0.6592	0.6513	0.4000	9.88	10.0	-1.2	20.0
2-Nitrophenol	Ave	0.1697	0.1774	0.1000	10.5	10.0	4.6	20.0
2,4-Dimethylphenol	Ave	0.3665	0.3496	0.2000	9.54	10.0	-4.6	20.0
Benzoic acid	Lin1		0.1597		17.4	20.0	-13.2	20.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3955	0.3000	9.83	10.0	-1.7	20.0
2,4-Dichlorophenol	Ave	0.2805	0.2879	0.2000	10.3	10.0	2.6	20.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3376		9.77	10.0	-2.3	20.0
Naphthalene	Ave	1.009	1.013	0.7000	10.0	10.0	0.5	20.0
4-Chloroaniline	Ave	0.4198	0.4105	0.0100	9.78	10.0	-2.2	20.0
2,6-Dichlorophenol	Ave	0.2869	0.2816		9.82	10.0	-1.8	20.0
Hexachlorobutadiene	Ave	0.2311	0.2283	0.0100	9.88	10.0	-1.2	20.0
Caprolactam	Ave	0.0967	0.0946	0.0100	19.6	20.0	-2.2	20.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3048	0.2000	9.92	10.0	-0.8	20.0
2-Methylnaphthalene	Ave	0.7173	0.6944	0.4000	9.68	10.0	-3.2	20.0
1-Methylnaphthalene	Ave	0.6433	0.6408		9.96	10.0	-0.4	20.0
Hexachlorocyclopentadiene	Ave	0.3573	0.3355	0.0500	9.39	10.0	-6.1	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5895	0.0100	10.0	10.0	0.3	20.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3468	0.2000	10.1	10.0	1.5	20.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3550	0.2000	10.4	10.0	4.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299079/2 Calibration Date: 10/15/2017 12:20

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71015002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.303	0.0100	9.80	10.0	-2.0	20.0
2-Chloronaphthalene	Ave	0.999	0.997	0.8000	9.98	10.0	-0.2	20.0
2-Nitroaniline	Ave	0.3531	0.3340	0.0100	9.46	10.0	-5.4	20.0
Dimethyl phthalate	Ave	1.198	1.203	0.0100	10.0	10.0	0.4	20.0
1,3-Dinitrobenzene	Lin1		0.1936		9.67	10.0	-3.3	20.0
2,6-Dinitrotoluene	Ave	0.2708	0.2711		10.0	10.0	0.1	20.0
Acenaphthylene	Ave	1.533	1.561	0.9000	10.2	10.0	1.8	20.0
3-Nitroaniline	Ave	0.2659	0.2685	0.0100	10.1	10.0	1.0	20.0
2,4-Dinitrophenol	Qua		0.1688	0.0100	21.0	20.0	5.2	20.0
Acenaphthene	Ave	1.075	1.064	0.9000	9.89	10.0	-1.1	20.0
4-Nitrophenol	Lin1		0.1814		15.6	20.0	-22.2*	20.0
2,4-Dinitrotoluene	Ave	0.3628	0.3237	0.2000	8.92	10.0	-10.8	20.0
Dibenzofuran	Ave	1.534	1.302	0.8000	8.48	10.0	-15.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.2720	0.0100	8.53	10.0	-14.7	20.0
Diethyl phthalate	Ave	1.237	1.051	0.0100	8.50	10.0	-15.0	20.0
Hexadecane	Ave	0.7336	0.5846		7.97	10.0	-20.3*	20.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.5443	0.4000	8.33	10.0	-16.7	20.0
4-Nitroaniline	Ave	0.2869	0.2449	0.0100	8.54	10.0	-14.6	20.0
Fluorene	Ave	1.230	1.077	0.9000	8.76	10.0	-12.4	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1245	0.0100	19.5	20.0	-2.7	20.0
Diphenylamine	Ave	0.5500	0.5692		8.80	8.50	3.5	20.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4839	0.0100	10.3	10.0	3.5	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6273		9.18	10.0	-8.2	20.0
Azobenzene	Ave	0.6831	0.6273		9.18	10.0	-8.2	20.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.2113	0.1000	10.8	10.0	8.3	20.0
Hexachlorobenzene	Lin1		0.1939	0.1000	10.2	10.0	2.0	20.0
Atrazine	Ave	0.1940	0.1954	0.0100	20.1	20.0	0.7	20.0
n-Octadecane	Ave	0.3928	0.3707		9.44	10.0	-5.6	20.0
Pentachlorophenol	Lin1		0.1192	0.0500	18.2	20.0	-9.0	20.0
Phenanthrene	Ave	0.9855	1.011	0.7000	10.3	10.0	2.6	20.0
Anthracene	Ave	0.9593	1.012	0.7000	10.5	10.0	5.5	20.0
Carbazole	Ave	0.8888	0.8908	0.0100	10.0	10.0	0.2	20.0
Di-n-butyl phthalate	Ave	1.005	1.028	0.0100	10.2	10.0	2.3	20.0
Fluoranthene	Ave	1.117	1.189	0.6000	10.6	10.0	6.4	20.0
Benzidine	Ave	0.4399	0.5034		22.9	20.0	14.4	20.0
Pyrene	Ave	1.028	1.033	0.6000	10.1	10.0	0.5	20.0
Butyl benzyl phthalate	Ave	0.4063	0.4021	0.0100	9.90	10.0	-1.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.5360	0.0100	9.96	10.0	-0.4	20.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3482	0.0100	20.8	20.0	4.0	20.0
Benzo[a]anthracene	Ave	1.014	1.025	0.8000	10.1	10.0	1.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299079/2 Calibration Date: 10/15/2017 12:20

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71015002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9917	0.7000	10.1	10.0	1.1	20.0
Di-n-octyl phthalate	Ave	1.104	1.097	0.0100	9.94	10.0	-0.6	20.0
Benzo[b]fluoranthene	Ave	1.137	1.181	0.7000	10.4	10.0	3.9	20.0
Benzo[k]fluoranthene	Ave	1.164	1.253	0.7000	10.8	10.0	7.7	20.0
Benzo[a]pyrene	Lin1		1.107	0.7000	9.25	10.0	-7.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.210	0.5000	10.0	10.0	-0.0	20.0
Dibenz(a,h)anthracene	Ave	1.019	1.000	0.4000	9.82	10.0	-1.8	20.0
Benzo[g,h,i]perylene	Ave	1.061	1.021	0.5000	9.62	10.0	-3.8	20.0
2-Fluorophenol (Surr)	Ave	1.138	1.107		9.73	10.0	-2.7	20.0
Phenol-d5 (Surr)	Ave	1.511	1.382		9.15	10.0	-8.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.3746		9.53	10.0	-4.7	20.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.160		9.76	10.0	-2.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1268		8.73	10.0	-12.7	20.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.6647		9.92	10.0	-0.8	20.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: 71017001.D DFTPP Injection Date: 10/17/2017

Instrument ID: A4HP7 DFTPP Injection Time: 07:58

Analysis Batch No.: 299324

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	38.5	
68	Less than 2.0% of mass 69	0.1	(0.3) 1
69	Mass 69 relative abundance	39.3	
70	Less than 2.0% of mass 69	0.4	(1.0) 1
127	25.0 - 75.0% of mass 198	45.2	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.5	
275	10.0- 30.0% of mass 198	24.6	
365	Greater than 0.75% of mass 198	2.5	
441	Present, but less than mass 443	9.5	
442	40.0 - 110.0% of mass 198	64.6	
443	15.0 - 24.0% of mass 442	11.8	(18.3) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-299324/2	71017002.D	10/17/2017	08:18
MRC-MW121A-101017	240-86291-3	71017018.D	10/17/2017	14:37
MRC-MW120B-101017	240-86291-4	71017019.D	10/17/2017	15:01
MRC-MW119B-101017	240-86291-5	71017020.D	10/17/2017	15:25

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID (1): CCV 240-299324/2 CCVIS Instrument ID (1): A4HP7

GC Column (1): RXI-5SILMS ID: 0.25(mm) Date Analyzed (1): 10/17/2017 08:18

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	2.63	100.0
2-Fluorophenol (Surr)	4.89	100.0
Phenol-d5 (Surr)	5.77	100.0
Nitrobenzene-d5 (Surr)	6.60	100.0
2-Fluorobiphenyl (Surr)	8.14	100.0
2,4,6-Tribromophenol (Surr)	9.39	100.0
Terphenyl-d14 (Surr)	11.35	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299324/2 Calibration Date: 10/17/2017 08:18

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71017002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.5328		9.75	10.0	-2.5	20.0
N-Nitrosodimethylamine	Ave	0.7326	0.7530		10.3	10.0	2.8	20.0
Pyridine	Ave	1.406	1.398		19.9	20.0	-0.6	20.0
Benzaldehyde	Ave	1.120	1.037	0.0100	18.5	20.0	-7.4	20.0
Phenol	Ave	1.673	1.573	0.8000	9.41	10.0	-5.9	20.0
Aniline	Ave	2.005	2.024		10.1	10.0	1.0	20.0
Bis(2-chloroethyl)ether	Ave	1.239	1.159	0.7000	9.36	10.0	-6.4	20.0
2-Chlorophenol	Ave	1.286	1.333	0.8000	10.4	10.0	3.7	20.0
n-Decane	Ave	1.452	1.437		9.90	10.0	-1.0	20.0
1,3-Dichlorobenzene	Ave	1.498	1.523		10.2	10.0	1.7	20.0
1,4-Dichlorobenzene	Ave	1.555	1.518		9.76	10.0	-2.4	20.0
Benzyl alcohol	Ave	0.7569	0.5674		7.50	10.0	-25.0*	20.0
1,2-Dichlorobenzene	Ave	1.442	1.420		9.85	10.0	-1.5	20.0
2-Methylphenol	Ave	1.176	1.258	0.7000	10.7	10.0	7.0	20.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.582		9.19	10.0	-8.1	20.0
Indene	Ave	2.505	2.402		19.2	20.0	-4.1	20.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.9470	0.5000	10.5	10.0	4.9	20.0
3 & 4 Methylphenol	Ave	1.217	1.248		10.3	10.0	2.6	20.0
Acetophenone	Ave	1.891	1.786	0.0100	9.44	10.0	-5.6	20.0
Hexachloroethane	Ave	0.6468	0.6096	0.3000	9.43	10.0	-5.7	20.0
Nitrobenzene	Ave	0.4025	0.3736	0.2000	9.28	10.0	-7.2	20.0
Isophorone	Ave	0.6592	0.6595	0.4000	10.0	10.0	0.0	20.0
2-Nitrophenol	Ave	0.1697	0.1728	0.1000	10.2	10.0	1.9	20.0
2,4-Dimethylphenol	Ave	0.3665	0.3655	0.2000	9.97	10.0	-0.3	20.0
Benzoic acid	Lin1		0.1456		16.0	20.0	-20.2*	20.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3826	0.3000	9.51	10.0	-4.9	20.0
2,4-Dichlorophenol	Ave	0.2805	0.2956	0.2000	10.5	10.0	5.4	20.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3414		9.88	10.0	-1.2	20.0
Naphthalene	Ave	1.009	0.9933	0.7000	9.85	10.0	-1.5	20.0
4-Chloroaniline	Ave	0.4198	0.4237	0.0100	10.1	10.0	0.9	20.0
2,6-Dichlorophenol	Ave	0.2869	0.2884		10.1	10.0	0.5	20.0
Hexachlorobutadiene	Ave	0.2311	0.2316	0.0100	10.0	10.0	0.2	20.0
Caprolactam	Ave	0.0967	0.0931	0.0100	19.2	20.0	-3.8	20.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3106	0.2000	10.1	10.0	1.1	20.0
2-Methylnaphthalene	Ave	0.7173	0.7025	0.4000	9.79	10.0	-2.1	20.0
1-Methylnaphthalene	Ave	0.6433	0.6320		9.82	10.0	-1.8	20.0
Hexachlorocyclopentadiene	Ave	0.3573	0.3349	0.0500	9.37	10.0	-6.3	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5816	0.0100	9.89	10.0	-1.1	20.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3444	0.2000	10.1	10.0	0.8	20.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3514	0.2000	10.3	10.0	3.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299324/2 | Calibration Date: 10/17/2017 08:18

Instrument ID: A4HP7 | Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) | Calib End Date: 10/04/2017 13:45

Lab File ID: 71017002.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.348	0.0100	10.1	10.0	1.4	20.0
2-Chloronaphthalene	Ave	0.999	0.9857	0.8000	9.87	10.0	-1.3	20.0
2-Nitroaniline	Ave	0.3531	0.3219	0.0100	9.12	10.0	-8.8	20.0
Dimethyl phthalate	Ave	1.198	1.199	0.0100	10.0	10.0	0.0	20.0
1,3-Dinitrobenzene	Lin1		0.1875		9.37	10.0	-6.3	20.0
2,6-Dinitrotoluene	Ave	0.2708	0.2688		9.93	10.0	-0.7	20.0
Acenaphthylene	Ave	1.533	1.606	0.9000	10.5	10.0	4.7	20.0
3-Nitroaniline	Ave	0.2659	0.2742	0.0100	10.3	10.0	3.1	20.0
2,4-Dinitrophenol	Qua		0.1500	0.0100	19.1	20.0	-4.6	20.0
Acenaphthene	Ave	1.075	1.054	0.9000	9.81	10.0	-1.9	20.0
4-Nitrophenol	Lin1		0.1896		16.2	20.0	-18.9	20.0
2,4-Dinitrotoluene	Ave	0.3628	0.3773	0.2000	10.4	10.0	4.0	20.0
Dibenzofuran	Ave	1.534	1.527	0.8000	9.95	10.0	-0.5	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.3274	0.0100	10.3	10.0	2.7	20.0
Diethyl phthalate	Ave	1.237	1.179	0.0100	9.53	10.0	-4.7	20.0
Hexadecane	Ave	0.7336	0.7061		9.62	10.0	-3.8	20.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.6438	0.4000	9.85	10.0	-1.5	20.0
4-Nitroaniline	Ave	0.2869	0.2858	0.0100	9.96	10.0	-0.4	20.0
Fluorene	Ave	1.230	1.226	0.9000	9.96	10.0	-0.4	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1104	0.0100	17.3	20.0	-13.3	20.0
Diphenylamine	Ave	0.5500	0.5799		8.96	8.50	5.4	20.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4930	0.0100	10.5	10.0	5.4	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6555		9.60	10.0	-4.1	20.0
Azobenzene	Ave	0.6831	0.6554		9.59	10.0	-4.1	20.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.2067	0.1000	10.6	10.0	5.9	20.0
Hexachlorobenzene	Lin1		0.1896	0.1000	9.97	10.0	-0.3	20.0
Atrazine	Ave	0.1940	0.2003	0.0100	20.7	20.0	3.3	20.0
n-Octadecane	Ave	0.3928	0.3818		9.72	10.0	-2.8	20.0
Pentachlorophenol	Lin1		0.1177	0.0500	18.0	20.0	-10.0	20.0
Phenanthrene	Ave	0.9855	1.017	0.7000	10.3	10.0	3.2	20.0
Anthracene	Ave	0.9593	1.032	0.7000	10.8	10.0	7.6	20.0
Carbazole	Ave	0.8888	0.8840	0.0100	9.95	10.0	-0.5	20.0
Di-n-butyl phthalate	Ave	1.005	1.047	0.0100	10.4	10.0	4.2	20.0
Fluoranthene	Ave	1.117	1.126	0.6000	10.1	10.0	0.8	20.0
Benzidine	Ave	0.4399	0.5253		23.9	20.0	19.4	20.0
Pyrene	Ave	1.028	1.017	0.6000	9.89	10.0	-1.1	20.0
Butyl benzyl phthalate	Ave	0.4063	0.4227	0.0100	10.4	10.0	4.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.5775	0.0100	10.7	10.0	7.3	20.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3599	0.0100	21.5	20.0	7.5	20.0
Benzo[a]anthracene	Ave	1.014	1.022	0.8000	10.1	10.0	0.7	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299324/2 Calibration Date: 10/17/2017 08:18

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71017002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9695	0.7000	9.89	10.0	-1.1	20.0
Di-n-octyl phthalate	Ave	1.104	1.221	0.0100	11.1	10.0	10.6	20.0
Benzo[b]fluoranthene	Ave	1.137	1.191	0.7000	10.5	10.0	4.8	20.0
Benzo[k]fluoranthene	Ave	1.164	1.156	0.7000	9.93	10.0	-0.7	20.0
Benzo[a]pyrene	Lin1		1.099	0.7000	9.19	10.0	-8.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.203	0.5000	9.94	10.0	-0.6	20.0
Dibenz(a,h)anthracene	Ave	1.019	1.026	0.4000	10.1	10.0	0.6	20.0
Benzo[g,h,i]perylene	Ave	1.061	0.995	0.5000	9.38	10.0	-6.2	20.0
2-Fluorophenol (Surr)	Ave	1.138	1.160		10.2	10.0	2.0	20.0
Phenol-d5 (Surr)	Ave	1.511	1.509		9.99	10.0	-0.1	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.3700		9.41	10.0	-5.9	20.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.180		9.93	10.0	-0.7	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1371		9.44	10.0	-5.6	20.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.6813		10.2	10.0	1.7	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab File ID: 71015003.D Lab Sample ID: MB 240-298708/21-A

Matrix: Water Date Extracted: 10/12/2017 08:37

Instrument ID: A4HP7 Date Analyzed: 10/15/2017 13:12

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-298708/22-A	71015004.D	10/15/2017 13:36
MRC-MW117B-100917	240-86291-2	71015026.D	10/15/2017 22:21
MRC-MW121A-101017	240-86291-3	71017018.D	10/17/2017 14:37
MRC-MW120B-101017	240-86291-4	71017019.D	10/17/2017 15:01
MRC-MW119B-101017	240-86291-5	71017020.D	10/17/2017 15:25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-298708/21-A

Matrix: Water | Lab File ID: 71015003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 10/12/2017 08:37

Sample wt/vol: 1000(mL) | Date Analyzed: 10/15/2017 13:12

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299079 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.49	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	119		23-127
4165-62-2	Phenol-d5 (Surr)	37		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	99		32-120
367-12-4	2-Fluorophenol (Surr)	62		10-120
321-60-8	2-Fluorobiphenyl (Surr)	100		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	85		28-120

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 71015004.D

Lab ID: LCS 240-298708/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	7.77	39	10-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
MRC-MW117B-100917	240-86291-2	34	19	59	80	91	111
MRC-MW121A-101017	240-86291-3	33	19	54	73	83	89
MRC-MW120B-101017	240-86291-4	33	19	56	72	70	88
MRC-MW119B-101017	240-86291-5	34	19	50	64	70	82
	MB 240-298708/21-A	62	37	99	100	85	119
	LCS 240-298708/22-A	66	46	76	93	95	84

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-120
PHL = Phenol-d5 (Surr)	10-120
NBZ = Nitrobenzene-d5 (Surr)	32-120
FBP = 2-Fluorobiphenyl (Surr)	38-120
TBP = 2,4,6-Tribromophenol (Surr)	28-120
TPHL = Terphenyl-d14 (Surr)	23-127

Column to be used to flag recovery values

FORM II 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: STD6 240-297506/10 Date Analyzed: 10/04/2017 13:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71004010.D Heated Purge: (Y/N) N

Calibration ID: 41776

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124833	6.10	469993	7.22	304542	8.71
UPPER LIMIT		249666	6.60	939986	7.72	609084	9.21
LOWER LIMIT		62417	5.60	234997	6.72	152271	8.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297506/11		124508	6.10	479747	7.22	315567	8.71
CCV 240-299079/2 CCVIS		91435	6.08	325161	7.20	207222	8.70
CCV 240-299324/2 CCVIS		81663	6.12	307694	7.23	198216	8.73

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: STD6 240-297506/10 Date Analyzed: 10/04/2017 13:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71004010.D Heated Purge: (Y/N) N

Calibration ID: 41776

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		593523	9.96	650805	12.55	484933	14.67
UPPER LIMIT		1187046	10.46	1301610	13.05	969866	15.17
LOWER LIMIT		296762	9.46	325403	12.05	242467	14.17
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297506/11		603100	9.96	675755	12.55	512426	14.67
CCV 240-299079/2 CCVIS		337840	9.95	383893	12.54	303333	14.65
CCV 240-299324/2 CCVIS		362362	9.99	405512	12.60	324484	14.73

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCV 240-299079/2 Date Analyzed: 10/15/2017 12:20

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71015002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		91435	6.08	325161	7.20	207222	8.70
UPPER LIMIT		182870	6.58	650322	7.70	414444	9.20
LOWER LIMIT		45718	5.58	162581	6.70	103611	8.20
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-298708/21-A		90305	6.08	281610	7.20	153436	8.70
LCS 240-298708/22-A		73519	6.08	277231	7.20	146860	8.70
240-86291-2	MRC-MW117B-100917	80437	6.08	283864	7.20	154705	8.70

DCBd4 = 1,4-Dichlorobenzene-d4
DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
NPT = Naphthalene-d8
Area Limit = 50%-200% of internal standard area
ANT = Acenaphthene-d10
RT Limit = ± 0.5 minutes of internal standard RT
ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCV 240-299079/2 Date Analyzed: 10/15/2017 12:20

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71015002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		337840	9.95	383893	12.54	303333	14.65
UPPER LIMIT		675680	10.45	767786	13.04	606666	15.15
LOWER LIMIT		168920	9.45	191947	12.04	151667	14.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-298708/21-A		309124	9.95	319643	12.54	259169	14.65
LCS 240-298708/22-A		306943	9.95	409025	12.54	328531	14.65
240-86291-2	MRC-MW117B-100917	328712	9.95	347557	12.54	291843	14.65

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
PRY = Perylene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCV 240-299324/2 Date Analyzed: 10/17/2017 08:18

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71017002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		81663	6.12	307694	7.23	198216	8.73
UPPER LIMIT		163326	6.62	615388	7.73	396432	9.23
LOWER LIMIT		40832	5.62	153847	6.73	99108	8.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-86291-3	MRC-MW121A-101017	85190	6.11	310237	7.23	167914	8.72
240-86291-4	MRC-MW120B-101017	77292	6.11	292438	7.23	151054	8.73
240-86291-5	MRC-MW119B-101017	76232	6.11	290150	7.23	152372	8.72

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCV 240-299324/2 Date Analyzed: 10/17/2017 08:18

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71017002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		362362	9.99	405512	12.60	324484	14.73
UPPER LIMIT		724724	10.49	811024	13.10	648968	15.23
LOWER LIMIT		181181	9.49	202756	12.10	162242	14.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-86291-3	MRC-MW121A-101017	339091	9.99	365003	12.59	313881	14.72
240-86291-4	MRC-MW120B-101017	315985	9.98	332221	12.59	293543	14.73
240-86291-5	MRC-MW119B-101017	319174	9.98	330557	12.60	295381	14.73

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

SAMPLE CALCULATION - 1,4-DIOXANE	WATER	
SAMPLE IDENTIFICATION	MRC-MW120B-101017	
COMPOUND	1,4-Dioxane	
COMPOUND AREA	54467	
INTERNAL STANDARD AMOUNT (ng)	4	
INTERNAL STANDARD AREA	77292	
AVERAGE RRF	0.5462	
54467 x 4 x 1 / 77292 x 0.5462	5.1607	ng/uL
DILUTION FACTOR	1	
SAMPLE VOLUME (uL)	1000000	
VOLUME EXTRACT (uL)	2000	
uL in 1 mL	1000	
5.16068327003071 x 1 x 1000 x 2000 / (1000000)	10.3	ug/L

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1
SDG No.:
Client Sample ID: MRC-MW120B-101017 | Lab Sample ID: 240-86291-4
Matrix: Water | Lab File ID: 71017019.D
Analysis Method: 8270D | Date Collected: 10/10/2017 11:55
Extract. Method: 3510C | Date Extracted: 10/12/2017 08:37
Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2017 15:01
Con. Extract Vol.: 2(mL) | Dilution Factor: 1
Injection Volume: 1(uL) | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 299324 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10		1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		23-127
4165-62-2	Phenol-d5 (Surr)	19		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	56		32-120
367-12-4	2-Fluorophenol (Surr)	33		10-120
321-60-8	2-Fluorobiphenyl (Surr)	72		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	70		28-120

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation - Page 3

Data File: \\ChromNA\Canton\ChromData\A4HP7\20171017-69739.b\71017019.D
Lims ID: 240-86291-N-4-A
Client ID: MRC-MW120B-101017
Sample Type: Client
Inject. Date: 17-Oct-2017 15:01:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069739-019
Misc. Info.: 240-86291-N-4-A
Operator ID: 001710 Instrument ID: A4HP7

Method: \\ChromNA\Canton\ChromData\A4HP7\20171017-69739.b\8270_hp7.m
Limit Group: MSS 8270D ICAL
Last Update: 18-Oct-2017 10:41:44 Calib Date: 09-Oct-2017 12:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A4HP7\20171009-69473.b\71009009.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: gruberj Date: 18-Oct-2017 10:30:13

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.114	6.120	-0.006	97	77292	4.00	
*	2 Naphthalene-d8	136	7.232	7.232	0.000	100	292438	4.00	
*	3 Acenaphthene-d10	164	8.725	8.730	-0.005	96	151054	4.00	
*	4 Phenanthrene-d10	188	9.981	9.987	-0.006	98	315985	4.00	
*	5 Chrysene-d12	240	12.592	12.597	-0.005	98	332221	4.00	
*	6 Perylene-d12	264	14.726	14.731	-0.005	99	293543	4.00	
$	7 2-Fluorophenol	112	4.890	4.889	0.001	94	72052	3.28	
$	8 Phenol-d5	99	5.777	5.772	0.005	95	55433	1.90	
$	9 Nitrobenzene-d5	82	6.601	6.601	0.000	93	161369	5.61	
$	10 2-Fluorobiphenyl (Surr)	172	8.131	8.136	-0.005	100	323120	7.20	
$	11 2,4,6-Tribromophenol	330	9.393	9.393	0.000	92	38220	6.97	
$	12 Terphenyl-d14	244	11.345	11.345	0.000	99	490164	8.81	
	24 1,4-Dioxane	88	2.632	2.632	0.000	96	54467	5.16	

Reagents:

SMIS80PPMW_00016 Amount Added: 5.00 Units: uL Run Reagent

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4992	0.5748 0.5083	0.6324 0.5395	0.5206 0.5451	0.5493	Ave		0.5462				7.8		20.0			
N-Nitrosodimethylamine	0.6999	0.7110 0.7306	0.7923 0.7479	0.7515 0.7657	0.6620	Ave		0.7326				5.6		20.0			
Pyridine	1.4702 1.3973	1.3259 1.4312	1.3422 1.4341	1.3870 1.4747	1.3909	Ave		1.4060				3.7		20.0			
Benzaldehyde	1.3418 1.1061	1.1460 1.0608	1.1236 1.0627	1.1259 1.0187	1.0957	Ave		1.1202			0.0100	8.2		20.0			
Phenol	1.6347	1.5388 1.6263	1.7341 1.7260	1.6338 1.7079	1.7784	Ave		1.6725			0.8000	4.6		20.0			
Aniline	2.0192	1.8225 2.0278	1.8766 2.1134	2.0187 2.1299	2.0339	Ave		2.0053				5.3		20.0			
Bis(2-chloroethyl)ether	1.2201	1.2288 1.2200	1.2183 1.2823	1.2140 1.2640	1.2614	Ave		1.2386			0.7000	2.1		20.0			
2-Chlorophenol	1.3148	1.0751 1.3346	1.2274 1.3745	1.2755 1.3793	1.3058	Ave		1.2859			0.8000	7.7		20.0			
n-Decane	1.4332	1.3682 1.4265	1.4633 1.4812	1.4535 1.4890	1.5025	Ave		1.4522				3.0		20.0			
1,3-Dichlorobenzene	1.4916	1.3903 1.4926	1.4887 1.5383	1.5031 1.5742	1.5044	Ave		1.4979				3.5		20.0			
1,4-Dichlorobenzene	1.5003	1.5311 1.5506	1.5331 1.5763	1.5614 1.6091	1.5778	Ave		1.5549				2.2		20.0			
Benzyl alcohol	0.7755	0.6629 0.8150	0.6559 0.8372	0.6916 0.8598	0.7572	Ave		0.7569				10.5		20.0			
1,2-Dichlorobenzene	1.4185	1.4010 1.4457	1.3757 1.4899	1.4510 1.4871	1.4657	Ave		1.4418				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

Method 680

Polychlorinated Biphenyls (PCBs) (GC/MS) by Method 680

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Instrument ID: CMSX Start Date: 07/13/2017 21:27

Analysis Batch Number: 487683 End Date: 07/14/2017 09:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-487683/1		07/13/2017 21:27	1	xG1317.D	HP-5MS 0.25(mm)
WDM 680-487683/2		07/13/2017 22:00	1		HP-5MS 0.25(mm)
ICISAV 680-487683/3		07/13/2017 22:31	1	xG1319.D	HP-5MS 0.25(mm)
IC 680-487683/4		07/13/2017 23:00	1	xG1320.D	HP-5MS 0.25(mm)
IC 680-487683/5		07/13/2017 23:28	1	xG1321.D	HP-5MS 0.25(mm)
IC 680-487683/6		07/13/2017 23:57	1	xG1322.D	HP-5MS 0.25(mm)
IC 680-487683/7		07/14/2017 00:26	1	xG1323.D	HP-5MS 0.25(mm)
ICV 680-487683/8		07/14/2017 00:55	1	xG1324.D	HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 01:52	5		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 02:21	5		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 03:19	5		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 04:16	100		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 04:45	5		HP-5MS 0.25(mm)
CCV 680-487683/17		07/14/2017 05:13	1		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 05:42	1		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 06:11	1		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 06:39	1		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 07:08	1		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 08:06	50		HP-5MS 0.25(mm)
ZZZZZ		07/14/2017 08:35	10		HP-5MS 0.25(mm)
CCV 680-487683/25		07/14/2017 09:03	1		HP-5MS 0.25(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Instrument ID: CMSX Start Date: 10/18/2017 14:12

Analysis Batch Number: 499041 End Date: 10/18/2017 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-499041/1		10/18/2017 14:12	1	xj1802.D	HP-5MS 0.25(mm)
WDM 680-499041/2		10/18/2017 14:43	1	xj1803.D	HP-5MS 0.25(mm)
CCVIS 680-499041/3		10/18/2017 15:13	1	xj1804.D	HP-5MS 0.25(mm)
MB 680-498449/7-A		10/18/2017 16:11	1	xj1806.D	HP-5MS 0.25(mm)
LCS 680-498449/8-A		10/18/2017 16:39	1	xj1807.D	HP-5MS 0.25(mm)
ZZZZZ		10/18/2017 17:08	1		HP-5MS 0.25(mm)
ZZZZZ		10/18/2017 17:37	1		HP-5MS 0.25(mm)
ZZZZZ		10/18/2017 18:05	1		HP-5MS 0.25(mm)
240-86291-2		10/18/2017 18:34	1	xj1811.D	HP-5MS 0.25(mm)
240-86291-3		10/18/2017 19:02	1	xj1812.D	HP-5MS 0.25(mm)
240-86291-4		10/18/2017 19:31	1	xj1813.D	HP-5MS 0.25(mm)
240-86291-5		10/18/2017 20:00	1	xj1814.D	HP-5MS 0.25(mm)
CCV 680-499041/14		10/18/2017 20:29	1	xj1825.D	HP-5MS 0.25(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Instrument ID: CMSX Start Date: 10/19/2017 16:19

Analysis Batch Number: 499172 End Date: 10/19/2017 21:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-499172/1		10/19/2017 16:19	1	xj1904.D	HP-5MS 0.25(mm)
WDM 680-499172/2		10/19/2017 16:50	1	xj1905.D	HP-5MS 0.25(mm)
CCVIS 680-499172/3		10/19/2017 17:20	1	xj1906.D	HP-5MS 0.25(mm)
LCSD 680-498449/9-A		10/19/2017 18:18	1	xj1908.D	HP-5MS 0.25(mm)
ZZZZZ		10/19/2017 18:47	1		HP-5MS 0.25(mm)
ZZZZZ		10/19/2017 19:15	1		HP-5MS 0.25(mm)
ZZZZZ		10/19/2017 19:44	1		HP-5MS 0.25(mm)
ZZZZZ		10/19/2017 20:12	1		HP-5MS 0.25(mm)
ZZZZZ		10/19/2017 20:41	1		HP-5MS 0.25(mm)
ZZZZZ		10/19/2017 21:10	1		HP-5MS 0.25(mm)
CCV 680-499172/12		10/19/2017 21:39	1	xj1915.D	HP-5MS 0.25(mm)

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab File ID: xG1317.D DFTPP Injection Date: 07/13/2017

Instrument ID: CMSX DFTPP Injection Time: 21:27

Analysis Batch No.: 487683

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	55.2
197	Less than 1 % of mass 198	1.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	5.9
275	10 - 30% of mass 198	24.5
365	Greater than 1% of mass 198	3.5
441	Present but less than mass 443	9.5 (99.6) 2
442	Greater than 40% of mass 198	55.7
443	17 - 23% of mass 442	9.6 (17.2) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICISAV 680-487683/3	xG1319.D	07/13/2017	22:31
	IC 680-487683/4	xG1320.D	07/13/2017	23:00
	IC 680-487683/5	xG1321.D	07/13/2017	23:28
	IC 680-487683/6	xG1322.D	07/13/2017	23:57
	IC 680-487683/7	xG1323.D	07/14/2017	00:26
	ICV 680-487683/8	xG1324.D	07/14/2017	00:55

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 240-86291-1 Analy Batch No.: 487683

SDG No.:

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/13/2017 22:31 Calibration End Date: 07/14/2017 00:26 Calibration ID: 53004

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-487683/7	xG1323.D
Level 2	IC 680-487683/6	xG1322.D
Level 3	ICISAV 680-487683/3	xG1319.D
Level 4	IC 680-487683/5	xG1321.D
Level 5	IC 680-487683/4	xG1320.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Monochlorobiphenyl	0.6383	0.5922	0.6105	0.7179	0.5678	Ave		0.6253				9.2		20.0			
Dichlorobiphenyl	0.5120	0.4834	0.4971	0.5815	0.4625	Ave		0.5073				8.9		20.0			
Trichlorobiphenyl	0.3459	0.3378	0.3417	0.4008	0.3427	Ave		0.3538				7.5		20.0			
PCB-104			0.3009			Ave		0.3009						30.0			
Tetrachlorobiphenyl	0.2481	0.2303	0.2447	0.2794	0.2260	Ave		0.2457				8.6		20.0			
Pentachlorobiphenyl	0.2088	0.1975	0.2148	0.2409	0.2021	Ave		0.2128				8.0		20.0			
PCB-77			0.3717			Ave		0.3717						30.0			
Hexachlorobiphenyl	0.2057	0.1931	0.2108	0.2326	0.1918	Ave		0.2068				8.0		20.0			
Heptachlorobiphenyl	0.1742	0.1706	0.1866	0.2033	0.1713	Ave		0.1812				7.7		20.0			
Octachlorobiphenyl	0.1692	0.1568	0.1705	0.1889	0.1683	Ave		0.1707				6.8		20.0			
PCB-208			0.0606			Ave		0.0606						30.0			
Nonachlorobiphenyl			0.0485			Ave		0.0347				7.2		20.0			
DCB Decachlorobiphenyl	0.0323	0.0325	0.0362	0.0382	0.0342	Ave		0.0347				7.2		20.0			
Decachlorobiphenyl-13C12	0.0384	0.0375	0.0424	0.0430	0.0384	Ave		0.0399				6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 240-86291-1 Analy Batch No.: 487683

SDG No.:

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/13/2017 22:31 Calibration End Date: 07/14/2017 00:26 Calibration ID: 53004

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-487683/7	xG1323.D
Level 2	IC 680-487683/6	xG1322.D
Level 3	ICISAV 680-487683/3	xG1319.D
Level 4	IC 680-487683/5	xG1321.D
Level 5	IC 680-487683/4	xG1320.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Monochlorobiphenyl	CRY	Ave	5953	33261	54288	123580	355219	0.100	0.500	1.00	2.00	5.00
Dichlorobiphenyl	CRY	Ave	4775	27148	44207	100107	289315	0.100	0.500	1.00	2.00	5.00
Trichlorobiphenyl	CRY	Ave	3226	18973	30385	68995	214412	0.100	0.500	1.00	2.00	5.00
PCB-104	CRY	Ave			53519					2.00		
Tetrachlorobiphenyl	CRY	Ave	4628	25875	43516	96195	282720	0.200	1.00	2.00	4.00	10.0
Pentachlorobiphenyl	CRY	Ave	3894	22188	38201	82935	252835	0.200	1.00	2.00	4.00	10.0
PCB-77	CRY	Ave			66099					2.00		
Hexachlorobiphenyl	CRY	Ave	3837	21690	37491	80096	240032	0.200	1.00	2.00	4.00	10.0
Heptachlorobiphenyl	CRY	Ave	4875	28752	49769	104994	321447	0.300	1.50	3.00	6.00	15.0
Octachlorobiphenyl	CRY	Ave	4734	26417	45478	97547	315841	0.300	1.50	3.00	6.00	15.0
PCB-208	CRY	Ave			21552					4.00		
Nonachlorobiphenyl	CRY	Ave			21552					5.00		
DCB Decachlorobiphenyl	CRY	Ave	1507	9117	16083	32857	106822	0.500	2.50	5.00	10.0	25.0
Decachlorobiphenyl-13C12	CRY	Ave	1792	10523	18871	36978	96182	0.500	2.50	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD

FORM VII
PCBS CONTINUING CALIBRATION DATA

No environmental samples affected

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 680-487683/8 Calibration Date: 07/14/2017 00:55

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xG1324.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.6032		0.965	1.00	-3.5	20.0
Dichlorobiphenyl	Ave	0.5073	0.4501		0.887	1.00	-11.3	20.0
Trichlorobiphenyl	Ave	0.3538	0.3464		0.979	1.00	-2.1	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2404		1.96	2.00	-2.2	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2082		1.96	2.00	-2.2	20.0
Hexachlorobiphenyl	Ave	0.2068	0.1933		1.87	2.00	-6.5	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1748		2.89	3.00	-3.5	20.0
Octachlorobiphenyl	Ave	0.1707	0.1673		2.94	3.00	-2.0	20.0
Nonachlorobiphenyl	Ave	0.0485	0.0604		6.97	4.00	24.5*	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0330		4.77	5.00	-4.7	20.0

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab File ID: xj1802.D DFTPP Injection Date: 10/18/2017

Instrument ID: CMSX DFTPP Injection Time: 14:12

Analysis Batch No.: 499041

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.7
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.3
275	10 - 30% of mass 198	30.0
365	Greater than 1% of mass 198	6.7
441	Present but less than mass 443	18.1 (95.9) 2
442	Greater than 40% of mass 198	105.6
443	17 - 23% of mass 442	18.9 (17.9) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	WDM 680-499041/2	xj1803.D	10/18/2017	14:43
	CCVIS 680-499041/3	xj1804.D	10/18/2017	15:13
	MB 680-498449/7-A	xj1806.D	10/18/2017	16:11
	LCS 680-498449/8-A	xj1807.D	10/18/2017	16:39
MRC-MW117B-100917	240-86291-2	xj1811.D	10/18/2017	18:34
MRC-MW121A-101017	240-86291-3	xj1812.D	10/18/2017	19:02
MRC-MW120B-101017	240-86291-4	xj1813.D	10/18/2017	19:31
MRC-MW119B-101017	240-86291-5	xj1814.D	10/18/2017	20:00
	CCV 680-499041/14	xj1825.D	10/18/2017	20:29

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 680-499041/3 Calibration Date: 10/18/2017 15:13

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1804.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5086		0.813	1.00	-18.7	20.0
Dichlorobiphenyl	Ave	0.5073	0.4327		0.853	1.00	-14.7	20.0
Trichlorobiphenyl	Ave	0.3538	0.3259		0.921	1.00	-7.9	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2276		1.85	2.00	-7.4	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2087		1.96	2.00	-1.9	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2011		1.94	2.00	-2.8	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1843		3.05	3.00	1.7	20.0
Octachlorobiphenyl	Ave	0.1707	0.1708		3.00	3.00	0.0	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0330		4.75	5.00	-4.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0398		4.98	5.00	-0.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 680-499041/14 Calibration Date: 10/18/2017 20:29

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1825.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5142		0.822	1.00	-17.8	20.0
Dichlorobiphenyl	Ave	0.5073	0.4298		0.847	1.00	-15.3	20.0
Trichlorobiphenyl	Ave	0.3538	0.3193		0.903	1.00	-9.7	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2220		1.81	2.00	-9.6	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2013		1.89	2.00	-5.4	20.0
Hexachlorobiphenyl	Ave	0.2068	0.1878		1.82	2.00	-9.2	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1747		2.89	3.00	-3.6	20.0
Octachlorobiphenyl	Ave	0.1707	0.1552		2.73	3.00	-9.1	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0293		4.22	5.00	-15.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0354		4.43	5.00	-11.5	20.0

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab File ID: xj1904.D DFTPP Injection Date: 10/19/2017

Instrument ID: CMSX DFTPP Injection Time: 16:19

Analysis Batch No.: 499172

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	48.8
197	Less than 1 % of mass 198	0.5
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.8
365	Greater than 1% of mass 198	7.2
441	Present but less than mass 443	17.9 (91.9) 2
442	Greater than 40% of mass 198	109.9
443	17 - 23% of mass 442	19.5 (17.7) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	WDM 680-499172/2	xj1905.D	10/19/2017	16:50
	CCVIS 680-499172/3	xj1906.D	10/19/2017	17:20
	LCSD 680-498449/9-A	xj1908.D	10/19/2017	18:18
	CCV 680-499172/12	xj1915.D	10/19/2017	21:39

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVIS 680-499172/3 Calibration Date: 10/19/2017 17:20

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1906.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5839		0.934	1.00	-6.6	20.0
Dichlorobiphenyl	Ave	0.5073	0.4790		0.944	1.00	-5.6	20.0
Trichlorobiphenyl	Ave	0.3538	0.3631		1.03	1.00	2.6	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2694		2.19	2.00	9.6	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2287		2.15	2.00	7.5	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2225		2.15	2.00	7.6	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1965		3.25	3.00	8.4	20.0
Octachlorobiphenyl	Ave	0.1707	0.1855		3.26	3.00	8.7	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0332		4.79	5.00	-4.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0414		5.19	5.00	3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 680-499172/12 Calibration Date: 10/19/2017 21:39

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1915.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5339		0.854	1.00	-14.6	20.0
Dichlorobiphenyl	Ave	0.5073	0.4357		0.859	1.00	-14.1	20.0
Trichlorobiphenyl	Ave	0.3538	0.3267		0.923	1.00	-7.7	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2238		1.82	2.00	-8.9	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2097		1.97	2.00	-1.5	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2008		1.94	2.00	-2.9	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1805		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1707	0.1607		2.82	3.00	-5.9	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0307		4.43	5.00	-11.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0384		4.81	5.00	-3.8	20.0

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Lab File ID: xj1806.D Lab Sample ID: MB 680-498449/7-A

Matrix: Water Date Extracted: 10/13/2017 15:40

Instrument ID: CMSX Date Analyzed: 10/18/2017 16:11

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-498449/8-A	xj1807.D	10/18/2017 16:39
MRC-MW117B-100917	240-86291-2	xj1811.D	10/18/2017 18:34
MRC-MW121A-101017	240-86291-3	xj1812.D	10/18/2017 19:02
MRC-MW120B-101017	240-86291-4	xj1813.D	10/18/2017 19:31
MRC-MW119B-101017	240-86291-5	xj1814.D	10/18/2017 20:00
	LCSD 680-498449/9-A	xj1908.D	10/19/2017 18:18

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-498449/7-A

Matrix: Water | Lab File ID: xj1806.D

Analysis Method: 680 | Date Collected:

Extract. Method: 680 | Date Extracted: 10/13/2017 15:40

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2017 16:11

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499041 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.030	U	0.30	0.030
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.049	U	0.50	0.049
55722-26-4	Octachlorobiphenyl	0.038	U	0.30	0.038
27323-18-8	Monochlorobiphenyl	0.0056	U	0.10	0.0056
2051-24-3	DCB Decachlorobiphenyl	0.070	U	0.50	0.070
25512-42-9	Dichlorobiphenyl	0.0054	U	0.10	0.0054
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0065	U	0.10	0.0065

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	83		25-113

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: xj1807.D

Lab ID: LCS 680-498449/8-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Heptachlorobiphenyl	6.00	4.24	71	62-130	
Hexachlorobiphenyl	4.00	2.67	67	62-130	
Nonachlorobiphenyl	10.0	12.9	129	70-195	
Octachlorobiphenyl	6.00	4.21	70	64-130	
Monochlorobiphenyl	2.00	1.00	50	42-130	
DCB Decachlorobiphenyl	10.0	6.63	66	59-130	
Dichlorobiphenyl	2.00	1.11	55	49-130	
Pentachlorobiphenyl	4.00	2.68	67	63-130	
Tetrachlorobiphenyl	4.00	2.41	60	54-130	
Trichlorobiphenyl	2.00	1.16	58	51-130	

Column to be used to flag recovery and RPD values

FORM III 680

FORM III
PCBS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: xj1908.D

Lab ID: LCSD 680-498449/9-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Heptachlorobiphenyl	6.00	4.16	69	2	40	62-130	
Hexachlorobiphenyl	4.00	2.71	68	1	40	62-130	
Nonachlorobiphenyl	10.0	13.9	139	7	40	70-195	
Octachlorobiphenyl	6.00	4.33	72	3	40	64-130	
Monochlorobiphenyl	2.00	0.914	46	9	40	42-130	
DCB Decachlorobiphenyl	10.0	6.80	68	3	40	59-130	
Dichlorobiphenyl	2.00	0.996	50	11	40	49-130	
Pentachlorobiphenyl	4.00	2.65	66	1	40	63-130	
Tetrachlorobiphenyl	4.00	2.28	57	5	40	54-130	
Trichlorobiphenyl	2.00	1.14	57	2	40	51-130	

Column to be used to flag recovery and RPD values

FORM III 680

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): HP-5MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	13CDCB #
MRC-MW117B-100917	240-86291-2	67
MRC-MW121A-101017	240-86291-3	73
MRC-MW120B-101017	240-86291-4	68
MRC-MW119B-101017	240-86291-5	74
	MB 680-498449/7-A	83
	LCS 680-498449/8-A	70
	LCSD 680-498449/9-A	72

	QC LIMITS
13CDCB = Decachlorobiphenyl-13C12	25-113

Column to be used to flag recovery values

FORM II 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Instrument ID: CMSX Calibration Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calibration End Date: 07/14/2017 00:26

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		61690	9.78	75856	15.84		
UPPER LIMIT		92535	10.28	113784	16.34		
LOWER LIMIT		30845	9.28	37928	15.34		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-487683/8		66010	9.77	83301	15.84		
CCVIS 680-499041/3		44827	9.49	66470	15.52		
MB 680-498449/7-A		50875	9.49	69141	15.52		
LCS 680-498449/8-A		50860	9.49	75122	15.52		
240-86291-2	MRC-MW117B-100917	57694	9.47	85202	15.50		
240-86291-3	MRC-MW121A-101017	59107	9.47	85868	15.50		
240-86291-4	MRC-MW120B-101017	62257	9.49	85693	15.50		
240-86291-5	MRC-MW119B-101017	58347	9.47	83577	15.50		
CCV 680-499041/14		55078	9.49	79673	15.52		
CCVIS 680-499172/3		47919	9.50	64864	15.54		
LCSD 680-498449/9-A		54874	9.49	74852	15.52		
CCV 680-499172/12		51968	9.50	75368	15.52		

PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Sample No.: CCVIS 680-499041/3 Date Analyzed: 10/18/2017 15:13

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): xj1804.D Heated Purge: (Y/N) N

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		44827	9.49	66470	15.52		
UPPER LIMIT		58275	9.99	86411	16.02		
LOWER LIMIT		31379	8.99	46529	15.02		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-498449/7-A		50875	9.49	69141	15.52		
LCS 680-498449/8-A		50860	9.49	75122	15.52		
240-86291-2	MRC-MW117B-100917	57694	9.47	85202	15.50		
240-86291-3	MRC-MW121A-101017	59107	9.47	85868	15.50		
240-86291-4	MRC-MW120B-101017	62257	9.49	85693	15.50		
240-86291-5	MRC-MW119B-101017	58347	9.47	83577	15.50		
CCV 680-499041/14		55078	9.49	79673	15.52		

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
Area Limit = 70%-130% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86291-1

SDG No.:

Sample No.: CCVIS 680-499172/3 Date Analyzed: 10/19/2017 17:20

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): xj1906.D Heated Purge: (Y/N) N

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		47919	9.50	64864	15.54		
UPPER LIMIT		62295	10.00	84323	16.04		
LOWER LIMIT		33543	9.00	45405	15.04		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCSD 680-498449/9-A		54874	9.49	74852	15.52		
CCV 680-499172/12		51968	9.50	75368	15.52		

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
Area Limit = 70%-130% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: A2HP14R Start Date: 09/14/2017 15:50

Analysis Batch Number: 294860 End Date: 09/15/2017 01:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-294860/6		09/14/2017 15:50	1		Rxi-5HT 0.53(mm)
STD1 240-294860/7 IC		09/14/2017 17:00	1	P14R091407.D	Rxi-5HT 0.53(mm)
STD2 240-294860/8 IC		09/14/2017 17:28	1	P14R091408.D	Rxi-5HT 0.53(mm)
STD3 240-294860/9 ICRT		09/14/2017 17:55	1	P14R091409.D	Rxi-5HT 0.53(mm)
STD4 240-294860/10 IC		09/14/2017 18:22	1	P14R091410.D	Rxi-5HT 0.53(mm)
STD5 240-294860/11 IC		09/14/2017 18:49	1	P14R091411.D	Rxi-5HT 0.53(mm)
ICV 240-294860/12		09/14/2017 19:16	1	P14R091412.D	Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 19:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 20:11	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 20:38	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:05	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:59	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 22:27	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 22:54	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 23:21	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 23:48	1		Rxi-5HT 0.53(mm)
CCV 240-294860/23		09/15/2017 00:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/15/2017 00:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/15/2017 01:10	1		Rxi-5HT 0.53(mm)
CCV 240-294860/26		09/15/2017 01:37	1		Rxi-5HT 0.53(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: A2HP14R Start Date: 10/17/2017 11:50

Analysis Batch Number: 299263 End Date: 10/17/2017 19:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-299263/4		10/17/2017 11:50	1	P14R101704.D	Rxi-5HT 0.53(mm)
CCV 240-299263/5 CCVRT		10/17/2017 13:33	1	P14R101704a.D	Rxi-5HT 0.53(mm)
MB 240-299156/13-A		10/17/2017 14:00	1	P14R101705a.D	Rxi-5HT 0.53(mm)
LCS 240-299156/14-A		10/17/2017 14:27	1	P14R101706.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 14:55	1		Rxi-5HT 0.53(mm)
CCV 240-299263/9		10/17/2017 15:22	1	P14R101708.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 15:49	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 16:16	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 16:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 17:10	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 17:37	1		Rxi-5HT 0.53(mm)
240-86291-2		10/17/2017 18:04	1	P14R101714.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 18:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/17/2017 18:59	1		Rxi-5HT 0.53(mm)
CCV 240-299263/18		10/17/2017 19:26	1	P14R101717.D	Rxi-5HT 0.53(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: A2HP14R Start Date: 10/18/2017 13:39

Analysis Batch Number: 299612 End Date: 10/19/2017 02:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-299612/2		10/18/2017 13:39	1	P14R101802.D	Rxi-5HT 0.53(mm)
CCV 240-299612/3 CCVRT		10/18/2017 14:06	1	P14R101803.D	Rxi-5HT 0.53(mm)
CCV 240-299612/8		10/18/2017 16:22	1	P14R101808.D	Rxi-5HT 0.53(mm)
240-86291-3		10/18/2017 16:49	1	P14R101809.D	Rxi-5HT 0.53(mm)
240-86291-4		10/18/2017 17:16	1	P14R101810.D	Rxi-5HT 0.53(mm)
240-86291-5		10/18/2017 17:43	1	P14R101811.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 18:10	1		Rxi-5HT 0.53(mm)
CCV 240-299612/13		10/18/2017 18:38	1	P14R101813.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 19:05	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 19:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 19:59	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 20:27	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 20:54	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 21:21	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 21:48	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 22:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 22:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 23:10	1		Rxi-5HT 0.53(mm)
CCV 240-299612/24		10/18/2017 23:37	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:04	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:31	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:58	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 01:26	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 01:53	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 02:20	1		Rxi-5HT 0.53(mm)
CCV 240-299612/31		10/19/2017 02:47	1		Rxi-5HT 0.53(mm)

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: STD3 240-294860/9 Date Analyzed: 09/14/2017 17:55

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R091409.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
INITIAL CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-294860/9 ICRT		09/14/2017 17:55	P14R091409.D	8.49		

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCV 240-299263/5 Date Analyzed: 10/17/2017 13:33

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R101704a.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-299263/5 CCVRT		10/17/2017 13:33	P14R101704a.D	8.49		
MB 240-299156/13-A		10/17/2017 14:00	P14R101705a.D	8.49		
LCS 240-299156/14-A		10/17/2017 14:27	P14R101706.D	8.49		
CCV 240-299263/9		10/17/2017 15:22	P14R101708.D	8.49		
240-86291-2	MRC-MW117B-100917	10/17/2017 18:04	P14R101714.D	8.49		
CCV 240-299263/18		10/17/2017 19:26	P14R101717.D	8.49		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCV 240-299612/3 Date Analyzed: 10/18/2017 14:06

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R101803.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-299612/3 CCVRT		10/18/2017 14:06	P14R101803.D	8.49		
CCV 240-299612/8		10/18/2017 16:22	P14R101808.D	8.49		
240-86291-3	MRC-MW121A-101017	10/18/2017 16:49	P14R101809.D	8.49		
240-86291-4	MRC-MW120B-101017	10/18/2017 17:16	P14R101810.D	8.49		
240-86291-5	MRC-MW119B-101017	10/18/2017 17:43	P14R101811.D	8.49		
CCV 240-299612/13		10/18/2017 18:38	P14R101813.D	8.49		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	7.683	7.683	7.683	7.683	7.683						3.479 - 11.888	7.683
o-Terphenyl (Surr)	8.489	8.490	8.491	8.493	8.497						8.389 - 8.589	8.492

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	903481 808073	804607	814100	861600	Ave		838372.398				5.1		20.0			
o-Terphenyl (Surr)	890646 905743	900616	924945	970715	Ave		918532.994				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]	Ave	18069625	32184297	81409987	172320075	323229227	20.0	40.0	100	200	400
o-Terphenyl (Surr)	Ave	1425034	2881972	7399560	15531436	28983767	1.60	3.20	8.00	16.0	32.0

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-294860/12 Calibration Date: 09/14/2017 19:16

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R091412.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	818178		97900	100000	-2.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-294860/12 Calibration Date: 09/14/2017 19:16

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R091412.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.48	11.89

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299263/5 Calibration Date: 10/17/2017 13:33

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101704a.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	932851		111000	100000	11.3	20.0
o-Terphenyl (Surr)	Ave	918533	1053325		9170	8000	14.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299263/5 Calibration Date: 10/17/2017 13:33

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101704a.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299263/9 Calibration Date: 10/17/2017 15:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101708.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	944066		113000	100000	12.6	20.0
o-Terphenyl (Surr)	Ave	918533	1092475		9510	8000	18.9	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299263/9 Calibration Date: 10/17/2017 15:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101708.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299263/18 Calibration Date: 10/17/2017 19:26

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101717.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	984564		117000	100000	17.4	20.0
o-Terphenyl (Surr)	Ave	918533	1202647		10500	8000	30.9*	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299263/18 Calibration Date: 10/17/2017 19:26

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101717.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299612/3 Calibration Date: 10/18/2017 14:06

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101803.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	795286		94900	100000	-5.1	20.0
o-Terphenyl (Surr)	Ave	918533	897155		7810	8000	-2.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299612/3 Calibration Date: 10/18/2017 14:06

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101803.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299612/8 Calibration Date: 10/18/2017 16:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101808.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	784254		93500	100000	-6.5	20.0
o-Terphenyl (Surr)	Ave	918533	907434		7900	8000	-1.2	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299612/8 Calibration Date: 10/18/2017 16:22

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101808.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299612/13 Calibration Date: 10/18/2017 18:38

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101813.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	787362		93900	100000	-6.1	20.0
o-Terphenyl (Surr)	Ave	918533	912207		7940	8000	-0.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299612/13 Calibration Date: 10/18/2017 18:38

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101813.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: RTC 240-299263/4 Date Analyzed: 10/17/2017 11:50

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID: P14R101704.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: RTC 240-299612/2 Date Analyzed: 10/18/2017 13:39

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID: P14R101802.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: MB 240-299156/13-A

Matrix: Water Date Extracted: 10/16/2017 09:27

Lab File ID:(1) P14R101705a.D Lab File ID:(2)

Date Analyzed:(1) 10/17/2017 14:00 Date Analyzed:(2)

Instrument ID:(1) A2HP14R Instrument ID:(2)

GC Column:(1) Rxi-5HT ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-299156/14-A	10/17/2017 14:27	
MRC-MW117B-100917	240-86291-2	10/17/2017 18:04	
MRC-MW121A-101017	240-86291-3	10/18/2017 16:49	
MRC-MW120B-101017	240-86291-4	10/18/2017 17:16	
MRC-MW119B-101017	240-86291-5	10/18/2017 17:43	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299156/13-A

Matrix: Water | Lab File ID: P14R101705a.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 250(mL) | Date Analyzed: 10/17/2017 14:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299263 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	230	U	500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	85		37-130

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P14R101706.D

Lab ID: LCS 240-299156/14-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2000	1480	74	56-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5HT ID: 0.53(mm)

Client Sample ID	Lab Sample ID	OTPH1 #
MRC-MW117B-100917	240-86291-2	91
MRC-MW121A-101017	240-86291-3	88
MRC-MW120B-101017	240-86291-4	85
MRC-MW119B-101017	240-86291-5	82
	MB 240-299156/13-A	85
	LCS 240-299156/14-A	89

	QC LIMITS
OTPH = o-Terphenyl (Surr)	37-130

Column to be used to flag recovery values

FORM II 8015C

SAMPLE IDENTIFICATION	MRC-MW121A-101017	
COMPOUND	DRO	
COMPOUND AREA	32197971	
AVERAGE RRF	838372.398	
32197971 / 838372.398	38.4	ng/ul
SAMPLE VOLUME (ml)	250	
VOLUME EXTRACT (µl)	5	
VOLUME INJECTED (µl)	1	
DILUTION FACTOR	1	
CONVERSION FACTOR	1000	
38.4053328530503 x 1 x 5 x 1000/ (250 x 1)	768	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: MRC-MW121A-101017 | Lab Sample ID: 240-86291-3

Matrix: Water | Lab File ID: P14R101809.D

Analysis Method: 8015C | Date Collected: 10/10/2017 09:15

Extraction Method: 3520C | Date Extracted: 10/16/2017 09:27

Sample wt/vol: 250(mL) | Date Analyzed: 10/18/2017 16:49

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	770	✓	500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	88		37-130

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP14R\20171018-69803.b\P14R101809.D
Lims ID: 240-86291-G-3-A
Client ID: MRC-MW121A-101017
Sample Type: Client
Inject. Date: 18-Oct-2017 16:49:34 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: A2HP14R

Method: \\ChromNA\Canton\ChromData\A2HP14R\20171018-69803.b\TPH14RLVI.m
Limit Group: GC 8015C-D TPH LVI ICAL
Last Update: 19-Oct-2017 11:19:30 Calib Date: 14-Sep-2017 18:49:43
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP14R\20170914-68708.b\P14R091411.D

Column 1 : Det: GC FID1A
Process Host: XAWRK024

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
A	32 Diesel					
	7.675	(3.468-11.883)		20962205	25.0	
A	36 C10-C32					
	8.331	(3.468-13.195)		32197971	38.4	
$	37 o-Terphenyl					
	8.485	8.487	-0.002	6447808	7.02	

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	903481 808073	804607	814100	861600	Ave		838372.398				5.1		20.0			
o-Terphenyl (Surr)	890646 905743	900616	924945	970715	Ave		918532.994				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

Method 8015C - GRO

Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: AFID Start Date: 09/21/2017 13:19

Analysis Batch Number: 295712 End Date: 09/21/2017 18:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-295712/4 IC		09/21/2017 13:19	1	A0092104.D	RTX-VRX 0.45(mm)
STD2 240-295712/5 IC		09/21/2017 13:57	1	A0092105.D	RTX-VRX 0.45(mm)
STD3 240-295712/6 IC		09/21/2017 14:35	1	A0092106.D	RTX-VRX 0.45(mm)
STD4 240-295712/7 IC		09/21/2017 15:14	1	A0092107.D	RTX-VRX 0.45(mm)
STD5 240-295712/8 IC		09/21/2017 15:53	1	A0092108.D	RTX-VRX 0.45(mm)
STD6 240-295712/9 IC		09/21/2017 16:32	1	A0092109.D	RTX-VRX 0.45(mm)
STD7 240-295712/10 IC		09/21/2017 17:10	1	A0092110.D	RTX-VRX 0.45(mm)
STD8 240-295712/11 IC		09/21/2017 17:48	1	A0092111.D	RTX-VRX 0.45(mm)
ICV 240-295712/12		09/21/2017 18:25	1	A0092112.D	RTX-VRX 0.45(mm)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: AFID Start Date: 10/17/2017 07:39

Analysis Batch Number: 299293 End Date: 10/18/2017 04:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-299293/4		10/17/2017 07:39	1	A0101704.D	RTX-VRX 0.45(mm)
MB 240-299293/5		10/17/2017 08:15	1	A0101705.D	RTX-VRX 0.45(mm)
LCS 240-299293/6		10/17/2017 08:51	1	A0101706.D	RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 09:27	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 10:03	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 10:40	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 11:17	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 11:54	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 12:31	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 13:08	1		RTX-VRX 0.45(mm)
CCV 240-299293/14		10/17/2017 13:45	1	A0101714.D	RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 14:23	2		RTX-VRX 0.45(mm)
240-86291-2		10/17/2017 15:00	1	A0101716.D	RTX-VRX 0.45(mm)
240-86291-3		10/17/2017 15:37	1	A0101717.D	RTX-VRX 0.45(mm)
240-86291-4		10/17/2017 16:14	1	A0101718.D	RTX-VRX 0.45(mm)
240-86291-5		10/17/2017 16:50	1	A0101719.D	RTX-VRX 0.45(mm)
240-86291-6		10/17/2017 17:27	1	A0101720.D	RTX-VRX 0.45(mm)
240-86291-6 MS		10/17/2017 18:04	1	A0101721.D	RTX-VRX 0.45(mm)
240-86291-6 MSD		10/17/2017 18:41	1	A0101722.D	RTX-VRX 0.45(mm)
CCV 240-299293/24		10/17/2017 19:55	1	A0101724.D	RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 20:33	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 21:10	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 21:46	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 22:22	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 22:59	1		RTX-VRX 0.45(mm)
ZZZZZ		10/17/2017 23:36	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 00:13	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 00:50	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 01:26	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 02:03	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 02:40	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 03:17	1		RTX-VRX 0.45(mm)
ZZZZZ		10/18/2017 03:54	1		RTX-VRX 0.45(mm)
CCV 240-299293/38		10/18/2017 04:30	1		RTX-VRX 0.45(mm)

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Sample No.: CCVRT 240-299293/4 Date Analyzed: 10/17/2017 07:39

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): A0101704.D Heated Purge: (Y/N) N

Calibration ID: 41480

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT		
				RT #		
CONTINUING CALIBRATION SURROGATE				10.49		
UPPER LIMIT				10.59		
LOWER LIMIT				10.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-299293/4		10/17/2017 07:39	A0101704.D	10.49		
MB 240-299293/5		10/17/2017 08:15	A0101705.D	10.49		
LCS 240-299293/6		10/17/2017 08:51	A0101706.D	10.49		
CCV 240-299293/14		10/17/2017 13:45	A0101714.D	10.49		
240-86291-2	MRC-MW117B-100917	10/17/2017 15:00	A0101716.D	10.49		
240-86291-3	MRC-MW121A-101017	10/17/2017 15:37	A0101717.D	10.49		
240-86291-4	MRC-MW120B-101017	10/17/2017 16:14	A0101718.D	10.49		
240-86291-5	MRC-MW119B-101017	10/17/2017 16:50	A0101719.D	10.48		
240-86291-6	MRC-MW122A-101017	10/17/2017 17:27	A0101720.D	10.49		
240-86291-6 MS	MRC-MW122A-101017 MS	10/17/2017 18:04	A0101721.D	10.49		
240-86291-6 MSD	MRC-MW122A-101017 MSD	10/17/2017 18:41	A0101722.D	10.49		
CCV 240-299293/24		10/17/2017 19:55	A0101724.D	10.49		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Gasoline Range Organics [C6 - C10]	11.715	11.715	11.715	11.715	11.715	11.715	11.715	11.715			6.295 - 17.134	11.715
C6-C12	12.973	12.973	12.973	12.973	12.973	12.973	12.973	12.973			6.295 - 19.651	12.973
Trifluorotoluene (Surr)	10.493	10.488	10.487	10.489	10.489	10.489	10.489	10.491			10.439 - 10.539	10.489

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Gasoline Range Organics [C6 - C10]	467028 327734	404314 334335	358289 313395	333580 313854	Lin	21092163.3	309478.633							1.0000		0.9900
C6-C12	566060 358191	461616 365844	400114 341675	367288 341189	Lin	27740274.7	335538.951							1.0000		0.9900
Trifluorotoluene (Surr)	433595 352666	377792 367389	352227 323612	340107 337329	Ave		360589.558				9.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Gasoline Range Organics [C6 - C10]	Lin	46702752 534936239	80862842 1002863362	143315431 1506499199	266864076	393280590	100 1600	200 3200	400 4800	800	1200
C6-C12	Lin	56606036 585350085	92323209 1093361306	160045434 1637705499	293830549	429829177	100 1600	200 3200	400 4800	800	1200
Trifluorotoluene (Surr)	Ave	1734381 73477715	3022335 142389161	7044548 215890352	13604270	28213297	4.00 200	8.00 440	20.0 640	40.0	80.0

Curve Type Legend:

Ave = Average
Lin = Linear

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-295712/12 Calibration Date: 09/21/2017 18:25

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0092112.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		343843		821	800	2.6	20.0
C6-C12	Lin		379123		821	800	2.7	20.0
Trifluorotoluene (Surr)	Ave	360590	363207		40.3	40.0	0.7	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICV 240-295712/12 Calibration Date: 09/21/2017 18:25

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0092112.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.72	6.30	17.13
C6-C12	12.97	6.30	19.65
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVRT 240-299293/4 Calibration Date: 10/17/2017 07:39

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101704.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		319129		757	800	-5.4	20.0
C6-C12	Lin		348731		749	800	-6.4	20.0
Trifluorotoluene (Surr)	Ave	360590	380416		42.2	40.0	5.5	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCVRT 240-299293/4 Calibration Date: 10/17/2017 07:39

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101704.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.74	6.32	17.14
C6-C12	12.98	6.32	19.64
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299293/14 Calibration Date: 10/17/2017 13:45

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101714.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		316241		749	800	-6.3	20.0
C6-C12	Lin		344542		739	800	-7.7	20.0
Trifluorotoluene (Surr)	Ave	360590	338628		37.6	40.0	-6.1	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299293/14 Calibration Date: 10/17/2017 13:45

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101714.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.74	6.32	17.14
C6-C12	12.98	6.32	19.64
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299293/24 Calibration Date: 10/17/2017 19:55

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101724.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		323656		768	800	-3.9	20.0
C6-C12	Lin		353930		761	800	-4.9	20.0
Trifluorotoluene (Surr)	Ave	360590	344931		38.3	40.0	-4.3	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: CCV 240-299293/24 Calibration Date: 10/17/2017 19:55

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101724.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.73	6.32	17.14
C6-C12	12.98	6.32	19.64
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: MB 240-299293/5

Matrix: Water Date Extracted: 10/17/2017 08:15

Lab File ID:(1) A0101705.D Lab File ID:(2)

Date Analyzed:(1) 10/17/2017 08:15 Date Analyzed:(2)

Instrument ID:(1) AFID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-299293/6	10/17/2017 08:51	
MRC-MW117B-100917	240-86291-2	10/17/2017 15:00	
MRC-MW121A-101017	240-86291-3	10/17/2017 15:37	
MRC-MW120B-101017	240-86291-4	10/17/2017 16:14	
MRC-MW119B-101017	240-86291-5	10/17/2017 16:50	
MRC-MW122A-101017	240-86291-6	10/17/2017 17:27	
MRC-MW122A-101017 MS	240-86291-6 MS	10/17/2017 18:04	
MRC-MW122A-101017 MSD	240-86291-6 MSD	10/17/2017 18:41	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86291-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299293/5

Matrix: Water | Lab File ID: A0101705.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/17/2017 08:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299293 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	96		56-120

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101706.D

Lab ID: LCS 240-299293/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	843	105	73-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101721.D

Lab ID: 240-86291-6 MS Client ID: MRC-MW122A-101017 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	49 U	828	103	61-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101722.D

Lab ID: 240-86291-6 MSD Client ID: MRC-MW122A-101017 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	870	109	5	23	61-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45(mm)

Client Sample ID	Lab Sample ID	TFT1 #
MRC-MW117B-100917	240-86291-2	92
MRC-MW121A-101017	240-86291-3	89
MRC-MW120B-101017	240-86291-4	94
MRC-MW119B-101017	240-86291-5	97
MRC-MW122A-101017	240-86291-6	93
	MB 240-299293/5	96
	LCS 240-299293/6	102
MRC-MW122A-101017 MS	240-86291-6 MS	104
MRC-MW122A-101017 MSD	240-86291-6 MSD	97

	QC LIMITS
TFT = Trifluorotoluene (Surr)	56-120

Column to be used to flag recovery values

FORM II 8015C

SAMPLE CALCULATION - GRO	WATER
SAMPLE IDENTIFICATION	MRC-MW120B-101017
COMPOUND	GRO
COMPOUND AREA	157106703
INTERNAL STANDARD AREA	1
INTERNAL STANDARD AMOUND (ng)	1
AVERAGE RRF	309478.633
Y-INTERCEPT	21092163.3

157106703 / 309478.633 = 439 ng/ul

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-86291-1
SDG No.:
Client Sample ID: MRC-MW120B-101017 Lab Sample ID: 240-86291-4
Matrix: Water Lab File ID: A0101718.D
Analysis Method: 8015C Date Collected: 10/10/2017 11:55
Sample wt/vol: 5(mL) Date Analyzed: 10/17/2017 16:14
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 299293 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	440		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	94		56-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\AFID\20171017-69730.b\A0101718.D
Lims ID: 240-86291-A-4
Client ID: MRC-MW120B-101017
Sample Type: Client
Inject. Date: 17-Oct-2017 16:14:11 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069730-018
Operator ID: Instrument ID: AFID

Method: \\ChromNA\Canton\ChromData\AFID\20171017-69730.b\A80218015.m
Limit Group: GCV 8015C GRO ICAL
Last Update: 18-Oct-2017 07:44:23 Calib Date: 21-Sep-2017 17:48:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\AFID\20170921-68899.b\A0092111.D

Column 1 : Det: GC FID1A
Process Host: XAWRK015

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	10.491	10.487	0.004	13536461	37.5	
A 5 C6-C10	11.735	(6.322-17.142)		157106703	439.5	

Reagents:

VGGASURROGATE_00044 Amount Added: 1.00 Units: uL Run Reagent

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86291-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Gasoline Range Organics [C6 - C10]	467028 327734	404314 334335	358289 313395	333580 313854	Lin	21092163.3	309478.633							1.0000		0.9900
C6-C12	566060 358191	461616 365844	400114 341675	367288 341189	Lin	27740274.7	335538.951							1.0000		0.9900
Trifluorotoluene (Surr)	433595 352666	377792 367389	352227 323612	340107 337329	Ave		360589.558				9.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG No.:

Project: MRC Block I GW Sampling

Client Sample ID	Lab Sample ID
MRC-MW117B-101017	240-86291-1
MRC-MW117B-100917	240-86291-2
MRC-MW121A-101017	240-86291-3
MRC-MW120B-101017	240-86291-4
MRC-MW119B-101017	240-86291-5

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	ICV 240-299155/7 10/13/2017 12:05				CCV 240-299155/54 10/13/2017 15:47				CCV 240-299155/66 10/13/2017 16:43			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	42.3		40.0	106	49.7		50.0	99	51.0		50.0	102
Arsenic	41.9		40.0	105	49.1		50.0	98	49.8		50.0	100
Barium	41.6		40.0	104	48.6		50.0	97	49.0		50.0	98
Beryllium	41.1		40.0	103	49.4		50.0	99	49.8		50.0	100
Cadmium	41.0		40.0	103	50.4		50.0	101	50.9		50.0	102
Chromium	41.9		40.0	105	51.0		50.0	102	51.0		50.0	102
Cobalt	41.7		40.0	104	50.9		50.0	102	51.2		50.0	102
Copper	43.5		40.0	109	51.1		50.0	102	52.0		50.0	104
Iron	10400		10000	104	12700		12500	102	12900		12500	103
Lead	41.4		40.0	103	49.2		50.0	98	48.6		50.0	97
Manganese	207		200	103	251		250	100	254		250	101
Molybdenum	41.0		40.0	103	50.6		50.0	101	50.3		50.0	101
Nickel	40.5		40.0	101	51.0		50.0	102	49.2		50.0	98
Selenium	41.5		40.0	104	48.5		50.0	97	49.1		50.0	98
Silver	41.3		40.0	103	50.0		50.0	100	49.9		50.0	100
Thallium	41.3		40.0	103	49.3		50.0	99	48.4		50.0	97
Vanadium	41.0		40.0	103	50.7		50.0	101	50.7		50.0	101
Zinc	41.9		40.0	105	48.8		50.0	98	49.6		50.0	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTMSCRI6020AW_00062 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	ICVL 240-299155/9 10/13/2017 12:14				CCV 240-299155/54 10/13/2017 15:47				CCV 240-299155/66 10/13/2017 16:43			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	2.00		2.00	100	49.7		50.0	99	51.0		50.0	102
Arsenic	5.09		5.00	102	49.1		50.0	98	49.8		50.0	100
Barium	4.87	J	5.00	97	48.6		50.0	97	49.0		50.0	98
Beryllium	0.951	J	1.00	95	49.4		50.0	99	49.8		50.0	100
Cadmium	0.998	J	1.00	100	50.4		50.0	101	50.9		50.0	102
Chromium	2.00		2.00	100	51.0		50.0	102	51.0		50.0	102
Cobalt	0.996	J	1.00	100	50.9		50.0	102	51.2		50.0	102
Copper	2.16		2.00	108	51.1		50.0	102	52.0		50.0	104
Iron	112		100	112	12700		12500	102	12900		12500	103
Lead	1.06		1.00	106	49.2		50.0	98	48.6		50.0	97
Manganese	4.57	J	5.00	91	251		250	100	254		250	101
Molybdenum	4.82	J	5.00	96	50.6		50.0	101	50.3		50.0	101
Nickel	2.04		2.00	102	51.0		50.0	102	49.2		50.0	98
Selenium	5.19		5.00	104	48.5		50.0	97	49.1		50.0	98
Silver	0.983	J	1.00	98	50.0		50.0	100	49.9		50.0	100
Thallium	1.05		1.00	105	49.3		50.0	99	48.4		50.0	97
Vanadium	5.11		5.00	102	50.7		50.0	101	50.7		50.0	101
Zinc	20.2		20.0	101	48.8		50.0	98	49.6		50.0	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	ICV 240-299325/7 10/16/2017 16:31				CCV 240-299325/15 10/16/2017 17:10				CCV 240-299325/25 10/16/2017 17:55			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	40.6		40.0	102	50.9		50.0	102	50.9		50.0	102
Arsenic	40.5		40.0	101	50.1		50.0	100	49.6		50.0	99
Barium	42.0		40.0	105	49.1		50.0	98	47.8		50.0	96
Beryllium	39.8		40.0	99	49.7		50.0	99	49.9		50.0	100
Cadmium	41.4		40.0	104	50.4		50.0	101	50.2		50.0	100
Chromium	40.9		40.0	102	50.7		50.0	101	50.9		50.0	102
Cobalt	41.5		40.0	104	51.6		50.0	103	51.7		50.0	103
Copper	42.6		40.0	106	51.8		50.0	104	52.0		50.0	104
Lead	40.4		40.0	101	49.7		50.0	99	49.5		50.0	99
Molybdenum	40.4		40.0	101	50.4		50.0	101	47.9		50.0	96
Nickel	42.1		40.0	105	48.2		50.0	96	45.2		50.0	90
Selenium	39.2		40.0	98	49.9		50.0	100	48.9		50.0	98
Silver	39.8		40.0	100	51.8		50.0	104	51.2		50.0	102
Thallium	40.0		40.0	100	49.9		50.0	100	49.7		50.0	99
Vanadium	40.3		40.0	101	50.3		50.0	101	50.3		50.0	101
Zinc	40.5		40.0	101	50.5		50.0	101	49.9		50.0	100
Iron	10200		10000	102	12700		12500	102	12700		12500	102
Manganese	200		200	100	247		250	99	248		250	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTMSCRI6020AW_00062 Concentration Units: ug/L

CCV Source: MTMSCRI6020AW_00062

Analyte	ICVL 240-299325/9 10/16/2017 16:40				CCVL 240-299325/27 10/16/2017 18:05							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	1.95	J	2.00	98	2.08		2.00	104				
Arsenic	5.23		5.00	105	5.14		5.00	103				
Barium	4.92	J	5.00	98	4.68	J	5.00	94				
Beryllium	0.998	J	1.00	100	0.997	J	1.00	100				
Cadmium	1.02		1.00	102	0.988	J	1.00	99				
Chromium	2.07		2.00	104	2.08		2.00	104				
Cobalt	1.06		1.00	106	1.10		1.00	110				
Copper	2.33		2.00	117	2.23		2.00	112				
Lead	1.02		1.00	102	1.00		1.00	100				
Molybdenum	5.04	J	5.00	101	4.84	J	5.00	97				
Nickel	1.99	J	2.00	100	1.95	J	2.00	97				
Selenium	5.49		5.00	110	5.29		5.00	106				
Silver	1.03		1.00	103	1.03		1.00	103				
Thallium	1.03		1.00	103	1.00		1.00	100				
Vanadium	5.01		5.00	100	4.82	J	5.00	96				
Zinc	21.2		20.0	106	21.1		20.0	105				
Iron	117		100	117	116		100	116				
Manganese	4.83	J	5.00	97	4.81	J	5.00	96				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	ICV 240-299542/5 10/17/2017 12:03				CCV 240-299542/48 10/17/2017 16:42				CCV 240-299542/60 10/17/2017 18:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	40.1		40.0	100	52.7		50.0	105	51.6		50.0	103
Arsenic	40.6		40.0	101	51.9		50.0	104	51.1		50.0	102
Barium	40.8		40.0	102	52.0		50.0	104	51.8		50.0	104
Beryllium	40.9		40.0	102	52.6		50.0	105	55.4		50.0	111
Cadmium	40.9		40.0	102	53.1		50.0	106	52.2		50.0	104
Chromium	41.4		40.0	103	52.8		50.0	106	52.6		50.0	105
Cobalt	41.3		40.0	103	53.5		50.0	107	52.4		50.0	105
Copper	42.6		40.0	107	53.7		50.0	107	53.3		50.0	107
Lead	41.4		40.0	103	53.0		50.0	106	53.0		50.0	106
Molybdenum	39.3		40.0	98	53.7		50.0	107	57.2		50.0	114
Nickel	41.2		40.0	103	53.3		50.0	107	53.4		50.0	107
Selenium	39.8		40.0	100	49.4		50.0	99	50.0		50.0	100
Silver	41.4		40.0	103	54.2		50.0	108	53.5		50.0	107
Thallium	40.8		40.0	102	52.4		50.0	105	52.4		50.0	105
Vanadium	41.4		40.0	104	53.1		50.0	106	52.7		50.0	105
Zinc	41.7		40.0	104	52.3		50.0	105	52.3		50.0	105
Iron	10300		10000	103	13100		12500	104	12900		12500	103
Manganese	204		200	102	263		250	105	274		250	110

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTMSCRI6020AW_00062 Concentration Units: ug/L

CCV Source: MTMSCRI6020AW_00062

Analyte	ICVL 240-299542/7 10/17/2017 12:16				CCVL 240-299542/62 10/17/2017 18:13							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	1.93	J	2.00	96	2.06		2.00	103				
Arsenic	5.05		5.00	101	5.37		5.00	107				
Barium	5.05		5.00	101	5.26		5.00	105				
Beryllium	1.06		1.00	106	1.07		1.00	107				
Cadmium	1.03		1.00	103	1.13		1.00	113				
Chromium	2.08		2.00	104	2.23		2.00	111				
Cobalt	1.04		1.00	104	1.08		1.00	108				
Copper	2.33		2.00	116	2.36		2.00	118				
Lead	1.11		1.00	111	1.16		1.00	116				
Molybdenum	4.81	J	5.00	96	5.79	J	5.00	116				
Nickel	2.10		2.00	105	2.41		2.00	120				
Selenium	4.94	J	5.00	99	5.23		5.00	105				
Silver	1.07		1.00	107	1.10		1.00	110				
Thallium	1.03		1.00	103	1.06		1.00	106				
Vanadium	5.19		5.00	104	5.24		5.00	105				
Zinc	21.9		20.0	110	23.2		20.0	116				
Iron	106		100	106	115		100	115				
Manganese	5.22		5.00	104	5.36		5.00	107				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTHgICV_00001_00240 Concentration Units: ug/L

CCV Source: MTHGCALW_01641

Analyte	ICV 240-298950/7-A 10/13/2017 12:35				CCV 240-298950/10-A 10/13/2017 12:41				CCV 240-298950/10-A 10/13/2017 13:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.73		5.00	95	5.17		5.00	103	5.24		5.00	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICV Source: MTHgICV_00001_00240 Concentration Units: ug/L

CCV Source: MTHGCALW_01641

Analyte	CCV 240-298950/10-A 10/13/2017 13:29											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.22		5.00	104								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Method: 7470A Instrument ID: H3

Lab Sample ID: CRA 240-298950/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01641

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.178	J	89	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299155/8 10/13/2017 12:09		CCB 240-299155/55 10/13/2017 15:52		CCB 240-299155/67 10/13/2017 16:48			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.57	U	0.57	U	0.57	U		
Arsenic	5.0	0.75	U	0.75	U	0.75	U		
Barium	5.0	2.2	U	2.2	U	2.2	U		
Beryllium	1.0	0.31	U	0.31	U	0.31	U		
Cadmium	1.0	0.21	U	0.21	U	0.21	U		
Chromium	2.0	0.98	U	0.98	U	0.98	U		
Cobalt	1.0	0.19	U	0.19	U	0.19	U		
Copper	2.0	1.7	U	1.7	U	1.7	U		
Iron	100	47	U	47	U	47	U		
Lead	1.0	0.45	U	0.45	U	0.45	U		
Manganese	5.0	2.1	U	2.1	U	2.1	U		
Molybdenum	10	1.1	U	1.1	U	1.1	U		
Nickel	2.0	1.5	U	1.5	U	1.5	U		
Selenium	5.0	0.89	U	0.89	U	0.89	U		
Silver	1.0	0.053	U	0.053	U	0.053	U		
Thallium	1.0	0.20	U	0.20	U	0.20	U		
Vanadium	5.0	0.82	U	0.82	U	0.82	U		
Zinc	20	15	U	15	U	15	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299325/8 10/16/2017 16:36		CCB 240-299325/16 10/16/2017 17:14		CCB 240-299325/26 10/16/2017 18:00			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.57	U	0.57	U	0.57	U		
Arsenic	5.0	0.75	U	0.75	U	0.75	U		
Barium	5.0	2.2	U	2.2	U	2.2	U		
Beryllium	1.0	0.31	U	0.31	U	0.31	U		
Cadmium	1.0	0.21	U	0.21	U	0.21	U		
Chromium	2.0	0.98	U	0.98	U	0.98	U		
Cobalt	1.0	0.19	U	0.19	U	0.19	U		
Copper	2.0	1.7	U	1.7	U	1.7	U		
Lead	1.0	0.45	U	0.45	U	0.45	U		
Molybdenum	10	1.1	U	1.1	U	1.1	U		
Nickel	2.0	1.5	U	1.5	U	1.5	U		
Selenium	5.0	0.89	U	0.89	U	0.89	U		
Silver	1.0	0.053	U	0.053	U	0.053	U		
Thallium	1.0	0.20	U	0.20	U	0.20	U		
Vanadium	5.0	0.82	U	0.82	U	0.82	U		
Zinc	20	15	U	15	U	15	U		
Iron	100	47	U	47	U	47	U		
Manganese	5.0	2.1	U	2.1	U	2.1	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299542/6 10/17/2017 12:10		CCB 240-299542/49 10/17/2017 16:49		CCB 240-299542/61 10/17/2017 18:07			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.57	U	0.57	U	0.57	U		
Arsenic	5.0	0.75	U	0.75	U	0.75	U		
Barium	5.0	2.2	U	2.2	U	2.2	U		
Beryllium	1.0	0.31	U	0.31	U	0.31	U		
Cadmium	1.0	0.21	U	0.21	U	0.21	U		
Chromium	2.0	0.98	U	0.98	U	0.98	U		
Cobalt	1.0	0.19	U	0.19	U	0.19	U		
Copper	2.0	1.7	U	1.7	U	1.7	U		
Lead	1.0	0.45	U	0.45	U	0.45	U		
Molybdenum	10	1.1	U	1.1	U	1.1	U		
Nickel	2.0	1.5	U	1.5	U	1.5	U		
Selenium	5.0	0.89	U	0.89	U	0.89	U		
Silver	1.0	0.053	U	0.053	U	0.053	U		
Thallium	1.0	0.20	U	0.20	U	0.20	U		
Vanadium	5.0	0.82	U	0.82	U	0.82	U		
Zinc	20	15	U	15	U	15	U		
Iron	100	47	U	47	U	47	U		
Manganese	5.0	2.1	U	2.1	U	2.1	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-298950/8-A 10/13/2017 12:38		CCB 240-298950/11-A 10/13/2017 12:43		CCB 240-298950/11-A 10/13/2017 13:08		CCB 240-298950/11-A 10/13/2017 13:31	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.13	U	0.13	U	0.13	U	0.13	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-298773/1-A

Instrument Code: I10 Batch No.: 299155

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.75	U		6020A
7440-39-3	Barium	2.2	U		6020A
7440-41-7	Beryllium	0.31	U		6020A
7440-43-9	Cadmium	0.21	U		6020A
7440-48-4	Cobalt	0.19	U		6020A
7440-47-3	Chromium	0.98	U		6020A
7440-50-8	Copper	1.7	U		6020A
7439-89-6	Iron	47	U		6020A
7439-96-5	Manganese	2.1	U		6020A
7439-98-7	Molybdenum	1.1	U		6020A
7440-02-0	Nickel	1.5	U		6020A
7439-92-1	Lead	0.45	U		6020A
7440-36-0	Antimony	0.57	U		6020A
7782-49-2	Selenium	0.89	U		6020A
7440-62-2	Vanadium	0.82	U		6020A
7440-66-6	Zinc	15	U		6020A
7440-22-4	Silver	0.053	U		6020A
7440-28-0	Thallium	0.20	U		6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-298776/1-A

Instrument Code: H3 Batch No.: 299232

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.13	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICSA 240-299155/10 Instrument ID: I10

Lab File ID: 022ICSA.d ICS Source: MTMSICSAW_00082

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0750**	
Arsenic		**0.0500**	
Barium		**-0.0230**	
Beryllium		**0.0000**	
Cadmium		**0.168**	
Chromium		**0.575**	
Cobalt		**0.0020**	
Copper		**0.124**	
Iron	**50000**	**50523**	**101**
Lead		**0.0310**	
Manganese		**-0.687**	
Molybdenum	**1000**	**990**	**99**
Nickel		**0.0970**	
Selenium		**-0.126**	
Silver		**0.0070**	
Thallium		**0.0010**	
Vanadium		**-0.0700**	
Zinc		**-0.716**	
Aluminum	*50000*	*52170*	*104*
Boron		*0.830*	
Calcium	*50000*	*49983*	*100*
Lithium		*0.0960*	
Magnesium	*50000*	*50982*	*102*
Potassium	*50000*	*49328*	*99*
Sodium	*50000*	*50592*	*101*
Strontium		*0.439*	
Tin		*0.0260*	
Titanium	*1000*	*1006*	*101*
Tungsten		*0.182*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICSAB 240-299155/11 Instrument ID: I10

Lab File ID: 023ICAB.d ICS Source: MTMSICSABW_00079

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**102**	**102**
Arsenic	**100**	**104**	**104**
Barium	**100**	**102**	**102**
Beryllium	**100**	**103**	**103**
Cadmium	**100**	**102**	**102**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**105**	**105**
Copper	**100**	**106**	**106**
Iron	**50000**	**50741**	**101**
Lead	**100**	**103**	**103**
Manganese	**100**	**104**	**104**
Molybdenum	**1100**	**1076**	**98**
Nickel	**100**	**100.0**	**100**
Selenium	**100**	**101**	**101**
Silver	**100**	**101**	**101**
Thallium	**100**	**102**	**102**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**102**	**102**
Aluminum	*50000*	*51509*	*103*
Boron	*100*	*99.6*	*100*
Calcium	*50000*	*49625*	*99*
Lithium	*100*	*108*	*108*
Magnesium	*50000*	*50095*	*100*
Potassium	*50000*	*49030*	*98*
Sodium	*50000*	*49953*	*100*
Strontium	*100*	*100*	*100*
Tin	*100*	*100*	*100*
Titanium	*1100*	*1101*	*100*
Tungsten	*100*	*102*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICSA 240-299325/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00082

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0860**	
Arsenic		**0.0830**	
Barium		**-0.0030**	
Beryllium		**0.0120**	
Cadmium		**0.137**	
Chromium		**0.622**	
Cobalt		**0.0110**	
Copper		**0.131**	
Lead		**0.0530**	
Molybdenum	**1000**	**961**	**96**
Nickel		**0.0690**	
Selenium		**0.0260**	
Silver		**0.0110**	
Thallium		**0.0040**	
Vanadium		**0.0370**	
Zinc		**1.26**	
Aluminum	*50000*	*50824*	*102*
Boron		*0.184*	
Calcium	*50000*	*49742*	*99*
Iron	*50000*	*50937*	*102*
Lithium		*0.248*	
Magnesium	*50000*	*50742*	*101*
Manganese		*-0.190*	
Potassium	*50000*	*49345*	*99*
Sodium	*50000*	*50549*	*101*
Strontium		*0.449*	
Tin		*0.0260*	
Titanium	*1000*	*1015*	*101*
Tungsten		*0.165*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICSAB 240-299325/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00079

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**104**	**104**
Arsenic	**100**	**105**	**105**
Barium	**100**	**97.4**	**97**
Beryllium	**100**	**105**	**105**
Cadmium	**100**	**101**	**101**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**105**	**105**
Copper	**100**	**105**	**105**
Lead	**100**	**101**	**101**
Molybdenum	**1100**	**1072**	**97**
Nickel	**100**	**96.0**	**96**
Selenium	**100**	**102**	**102**
Silver	**100**	**104**	**104**
Thallium	**100**	**101**	**101**
Vanadium	**100**	**104**	**104**
Zinc	**100**	**105**	**105**
Aluminum	*50000*	*50108*	*100*
Boron	*100*	*101*	*101*
Calcium	*50000*	*49731*	*99*
Iron	*50000*	*50622*	*101*
Lithium	*100*	*103*	*103*
Magnesium	*50000*	*49835*	*100*
Manganese	*100*	*103*	*103*
Potassium	*50000*	*49016*	*98*
Sodium	*50000*	*50458*	*101*
Strontium	*100*	*98.0*	*98*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1110*	*101*
Tungsten	*100*	*95.9*	*96*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICSA 240-299542/8 Instrument ID: I11

Lab File ID: I11101717A.csv ICS Source: MTMSICSAW_00082

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-0.0330**	
Arsenic		**0.0930**	
Barium		**0.0370**	
Beryllium		**-0.0430**	
Cadmium		**0.437**	
Chromium		**0.654**	
Cobalt		**0.0670**	
Copper		**0.145**	
Lead		**0.0510**	
Molybdenum	**1000**	**1057**	**106**
Nickel		**0.152**	
Selenium		**0.0270**	
Silver		**0.0130**	
Thallium		**-0.0380**	
Vanadium		**-0.266**	
Zinc		**0.654**	
Aluminum	*50000*	*49670*	*99*
Boron		*-0.486*	
Calcium	*50000*	*46860*	*94*
Iron	*50000*	*53150*	*106*
Magnesium	*50000*	*51380*	*103*
Manganese		*0.151*	
Potassium	*50000*	*47780*	*96*
Sodium	*50000*	*51320*	*103*
Strontium		*0.452*	
Tin		*-0.0370*	
Titanium	*1000*	*1046*	*105*
Tungsten		*-8.24*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Lab Sample ID: ICSAB 240-299542/9 Instrument ID: I11

Lab File ID: I11101717A.csv ICS Source: MTMSICSABW_00079

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**108**	**108**
Arsenic	**100**	**108**	**108**
Barium	**100**	**106**	**106**
Beryllium	**100**	**112**	**112**
Cadmium	**100**	**108**	**108**
Chromium	**100**	**109**	**109**
Cobalt	**100**	**108**	**108**
Copper	**100**	**109**	**109**
Lead	**100**	**109**	**109**
Molybdenum	**1100**	**1184**	**108**
Nickel	**100**	**109**	**109**
Selenium	**100**	**101**	**101**
Silver	**100**	**109**	**109**
Thallium	**100**	**109**	**109**
Vanadium	**100**	**108**	**108**
Zinc	**100**	**106**	**106**
Aluminum	*50000*	*50470*	*101*
Boron	*100*	*107*	*107*
Calcium	*50000*	*58740*	*117*
Iron	*50000*	*53900*	*108*
Magnesium	*50000*	*51350*	*103*
Manganese	*100*	*123*	*123*
Potassium	*50000*	*57810*	*116*
Sodium	*50000*	*51710*	*103*
Strontium	*100*	*106*	*106*
Tin	*100*	*105*	*105*
Titanium	*1100*	*1139*	*104*
Tungsten	*100*	*106*	*106*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-86274-I-1-B MS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	1030		0.85	J	1000	103	75-125		6020A
Barium	1040		8.1		1000	104	75-125		6020A
Beryllium	1110		0.31	U	1000	111	75-125		6020A
Cadmium	1020		0.36	J	1000	102	75-125		6020A
Cobalt	1060		0.19	U	1000	106	75-125		6020A
Chromium	1060		0.98	U	1000	106	75-125		6020A
Copper	1250		220		1000	102	75-125		6020A
Iron	10500		47	U	10000	105	75-125		6020A
Manganese	1060		2.1	U	1000	106	75-125		6020A
Molybdenum	97.0		1.1	U	100	97	75-125		6020A
Nickel	929		1.5	U	1000	93	75-125		6020A
Lead	950		0.56	J	1000	95	75-125		6020A
Antimony	103		1.1	J	100	102	75-125		6020A
Selenium	995		1.1	J	1000	99	75-125		6020A
Vanadium	1050		1.3	J	1000	105	75-125		6020A
Zinc	1050		15	U	1000	105	75-125		6020A
Silver	102		0.053	U	100	102	75-125		6020A
Thallium	234		0.20	U	250	94	75-125		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 240-86255-C-2-E MS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.920		0.13	U	1.00	92	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-86274-I-1-C MSD

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	1020		1000	102	75-125	1	20		6020A
Barium	1030		1000	102	75-125	2	20		6020A
Beryllium	1040		1000	104	75-125	7	20		6020A
Cadmium	994		1000	99	75-125	3	20		6020A
Cobalt	1060		1000	106	75-125	0	20		6020A
Chromium	1060		1000	106	75-125	0	20		6020A
Copper	1230		1000	101	75-125	1	20		6020A
Iron	10500		10000	105	75-125	1	20		6020A
Manganese	1040		1000	104	75-125	2	20		6020A
Molybdenum	97.6		100	98	75-125	1	20		6020A
Nickel	912		1000	91	75-125	2	20		6020A
Lead	918		1000	92	75-125	3	20		6020A
Antimony	101		100	100	75-125	2	20		6020A
Selenium	990		1000	99	75-125	1	20		6020A
Vanadium	1040		1000	104	75-125	1	20		6020A
Zinc	1040		1000	104	75-125	2	20		6020A
Silver	102		100	102	75-125	1	20		6020A
Thallium	232		250	93	75-125	1	20		6020A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-86255-C-2-F MSD

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.778		1.00	78	80-120	17	20	F1	7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-298773/2-A

Lab Name: TestAmerica Canton Job No.: 240-86291-1

Sample Matrix: Water LCS Source: MTICPMSA_00032

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	1000	1010		101	80	120		6020A
Barium	1000	972		97	80	120		6020A
Beryllium	1000	1050		105	80	120		6020A
Cadmium	1000	1010		101	80	120		6020A
Cobalt	1000	1030		103	80	120		6020A
Chromium	1000	1010		101	80	120		6020A
Copper	1000	1040		104	80	120		6020A
Iron	10000	10100		101	80	120		6020A
Manganese	1000	1040		104	80	120		6020A
Molybdenum	100	94.3		94	80	120		6020A
Nickel	1000	931		93	80	120		6020A
Lead	1000	955		96	80	120		6020A
Antimony	100	96.9		97	80	120		6020A
Selenium	1000	992		99	80	120		6020A
Vanadium	1000	996		100	80	120		6020A
Zinc	1000	1030		103	80	120		6020A
Silver	100	98.9		99	80	120		6020A
Thallium	250	239		95	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-298776/2-A

Lab Name: TestAmerica Canton Job No.: 240-86291-1

Sample Matrix: Water LCS Source: MTHGCALW_01640

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.63		93	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-86274-I-1-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-86291-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	0.85	J	3.8	U	NC		6020A
Barium	8.1		11	U	NC		6020A
Beryllium	0.31	U	1.5	U	NC		6020A
Cadmium	0.36	J	1.1	U	NC		6020A
Cobalt	0.19	U	0.95	U	NC		6020A
Chromium	0.98	U	4.9	U	NC		6020A
Copper	220		227		2.1		6020A
Iron	47	U	240	U	NC		6020A
Manganese	2.1	U	10	U	NC		6020A
Molybdenum	1.1	U	5.4	U	NC		6020A
Nickel	1.5	U	7.4	U	NC		6020A
Lead	0.56	J	2.3	U	NC		6020A
Antimony	1.1	J	2.9	U	NC		6020A
Selenium	1.1	J	4.5	U	NC		6020A
Vanadium	1.3	J	4.1	U	NC		6020A
Zinc	15	U	75	U	NC		6020A
Silver	0.053	U	0.27	U	NC		6020A
Thallium	0.20	U	1.0	U	NC		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: I11

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: I11

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86291-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-86291-1

SDG No.:

Instrument ID: I10 Date: 09/29/2017 10:30

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Arsenic		10000	6020A
Barium		10000	6020A
Beryllium		2000	6020A
Cadmium		4000	6020A
Cobalt		5000	6020A
Chromium		10000	6020A
Copper		10000	6020A
Molybdenum		2000	6020A
Nickel		10000	6020A
Lead		4000	6020A
Antimony		200	6020A
Selenium		10000	6020A
Vanadium		10000	6020A
Zinc		10000	6020A
Silver		300	6020A
Thallium		2000	6020A

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-86291-1

SDG No.:

Instrument ID: I11 Date: 06/23/2017 12:22

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Silver		500	6020A
Arsenic		10000	6020A
Barium		10000	6020A
Beryllium		2000	6020A
Cadmium		4000	6020A
Cobalt		5000	6020A
Chromium		10000	6020A
Copper		10000	6020A
Molybdenum		2000	6020A
Nickel		10000	6020A
Lead		4000	6020A
Antimony		1000	6020A
Selenium		10000	6020A
Vanadium		10000	6020A
Zinc		10000	6020A
Thallium		500	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-298773/1-A	10/12/2017 14:00	298773		50	50
LCS 240-298773/2-A	10/12/2017 14:00	298773		50	50
240-86274-I-1-B MS	10/12/2017 14:00	298773		50	50
240-86274-I-1-C MSD	10/12/2017 14:00	298773		50	50
240-86291-1	10/12/2017 14:00	298773		50	50
240-86291-2	10/12/2017 14:00	298773		50	50
240-86291-3	10/12/2017 14:00	298773		50	50
240-86291-3	10/12/2017 14:00	298773		50	50
240-86291-4	10/12/2017 14:00	298773		50	50
240-86291-4	10/12/2017 14:00	298773		50	50
240-86291-5	10/12/2017 14:00	298773		50	50
240-86291-5	10/12/2017 14:00	298773		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-298776/1-A	10/12/2017 14:00	298776		50	50
LCS 240-298776/2-A	10/12/2017 14:00	298776		50	50
240-86255-C-2-E MS	10/12/2017 14:00	298776		50	50
240-86255-C-2-F MSD	10/12/2017 14:00	298776		50	50
240-86291-1	10/12/2017 14:00	298776		50	50
240-86291-2	10/12/2017 14:00	298776		50	50
240-86291-3	10/12/2017 14:00	298776		50	50
240-86291-3	10/12/2017 14:00	298776		50	50
240-86291-4	10/12/2017 14:00	298776		50	50
240-86291-4	10/12/2017 14:00	298776		50	50
240-86291-5	10/12/2017 14:00	298776		50	50
240-86291-5	10/12/2017 14:00	298776		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/13/2017 11:37 End Date: 10/14/2017 04:07

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			11:37																									
ICIS 240-299155/2			11:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD1 240-299155/3 IC	1		11:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 240-299155/4 IC	1		11:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 240-299155/5 IC	1		11:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD4 240-299155/6 IC	1		12:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 240-299155/7	1		12:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 240-299155/8	1		12:09	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X								
ICVL 240-299155/9	1		12:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 240-299155/10	1		12:18	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X								
ICSAB 240-299155/11	1		12:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 240-299155/12			12:27																									
CCB 240-299155/13			12:32																									
CCV 240-299155/14			12:38																									
CCB 240-299155/15			12:42																									
ZZZZZZ			12:47																									
ZZZZZZ			12:51																									
ZZZZZZ			12:56																									
ZZZZZZ			13:01																									
ZZZZZZ			13:05																									
ZZZZZZ			13:10																									
ZZZZZZ			13:14																									
ZZZZZZ			13:19																									
ZZZZZZ			13:23																									
CCV 240-299155/25			13:28																									
CCB 240-299155/26			13:33																									
ZZZZZZ			13:37																									
ZZZZZZ			13:42																									
ZZZZZZ			13:47																									
ZZZZZZ			13:51																									
ZZZZZZ			13:56																									
ZZZZZZ			14:00																									
ZZZZZZ			14:05																									
ZZZZZZ			14:09																									
ZZZZZZ			14:14																									
ZZZZZZ			14:19																									
CCV 240-299155/37			14:23																									
CCB 240-299155/38			14:28																									
ZZZZZZ			14:32																									
ZZZZZZ			14:37																									
ZZZZZZ			14:42																									
ZZZZZZ			14:46																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/13/2017 11:37 End Date: 10/14/2017 04:07

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			14:51																									
ZZZZZZ			14:55																									
ZZZZZZ			15:00																									
ZZZZZZ			15:05																									
ZZZZZZ			15:09																									
ZZZZZZ			15:14																									
CCV 240-299155/49			15:18																									
CCB 240-299155/50			15:23																									
ZZZZZZ			15:27																									
CCV 240-299155/52			15:38																									
CCB 240-299155/53			15:43																									
CCV 240-299155/54	1		15:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-299155/55	1		15:52	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
MB 240-298773/1-A	1	R	15:57	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
LCS 240-298773/2-A	1	R	16:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ZZZZZZ			16:07																									
240-86274-I-1-A SD ^5	5	R	16:11	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
240-86274-I-1-B MS	1	R	16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
240-86274-I-1-C MSD	1	R	16:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ZZZZZZ			16:25																									
ZZZZZZ			16:29																									
ZZZZZZ			16:34																									
ZZZZZZ			16:39																									
CCV 240-299155/66	1		16:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-299155/67	1		16:48	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X							
ZZZZZZ			16:52																									
ZZZZZZ			16:57																									
ZZZZZZ			17:01																									
ZZZZZZ			17:06																									
ZZZZZZ			17:11																									
ZZZZZZ			17:15																									
ZZZZZZ			17:20																									
ZZZZZZ			17:24																									
ZZZZZZ			17:29																									
CCV 240-299155/77			17:33																									
CCB 240-299155/78			17:38																									
CCVL 240-299155/79			17:43																									
ZZZZZZ			17:47																									
ZZZZZZ			17:52																									
ZZZZZZ			17:56																									
ZZZZZZ			18:01																									
ZZZZZZ			18:06																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/13/2017 11:37 End Date: 10/14/2017 04:07

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn									
ZZZZZZ			18:10																											
ZZZZZZ			18:15																											
ZZZZZZ			18:19																											
ZZZZZZ			18:24																											
CCV 240-299155/89			18:29																											
CCB 240-299155/90			18:33																											
ZZZZZZ			18:38																											
ZZZZZZ			18:42																											
ZZZZZZ			18:47																											
ZZZZZZ			18:51																											
ZZZZZZ			18:56																											
ZZZZZZ			19:01																											
ZZZZZZ			19:05																											
ZZZZZZ			19:10																											
ZZZZZZ			19:14																											
ZZZZZZ			19:19																											
CCV 240-299155/101			19:23																											
CCB 240-299155/102			19:28																											
ZZZZZZ			19:32																											
ZZZZZZ			19:37																											
ZZZZZZ			19:42																											
ZZZZZZ			19:46																											
ZZZZZZ			19:51																											
ZZZZZZ			19:55																											
ZZZZZZ			20:00																											
ZZZZZZ			20:05																											
ZZZZZZ			20:09																											
ZZZZZZ			20:14																											
CCV 240-299155/113			20:18																											
CCB 240-299155/114			20:23																											
ZZZZZZ			20:27																											
ZZZZZZ			20:32																											
ZZZZZZ			20:37																											
ZZZZZZ			20:41																											
ZZZZZZ			20:46																											
ZZZZZZ			20:50																											
ZZZZZZ			20:55																											
ZZZZZZ			20:59																											
ZZZZZZ			21:04																											
ZZZZZZ			21:09																											
CCV 240-299155/125			21:13																											
CCB 240-299155/126			21:18																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/13/2017 11:37 End Date: 10/14/2017 04:07

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			21:22																										
ZZZZZZ			21:27																										
ZZZZZZ			21:32																										
ZZZZZZ			21:36																										
ZZZZZZ			21:41																										
ZZZZZZ			21:45																										
ZZZZZZ			21:50																										
ZZZZZZ			21:54																										
ZZZZZZ			21:59																										
ZZZZZZ			22:04																										
CCV 240-299155/137			22:08																										
CCB 240-299155/138			22:13																										
ZZZZZZ			22:17																										
ZZZZZZ			22:22																										
ZZZZZZ			22:27																										
ZZZZZZ			22:31																										
CCV 240-299155/143			22:36																										
CCB 240-299155/144			22:40																										
CCVL 240-299155/145			22:45																										
ZZZZZZ			22:50																										
ZZZZZZ			22:54																										
ZZZZZZ			22:59																										
ZZZZZZ			23:03																										
ZZZZZZ			23:08																										
ZZZZZZ			23:12																										
ZZZZZZ			23:17																										
ICSA 240-299155/153			23:22																										
ICSAB 240-299155/154			23:26																										
ZZZZZZ			23:31																										
ZZZZZZ			23:35																										
CCV 240-299155/157			23:40																										
CCB 240-299155/158			23:44																										
ZZZZZZ			23:49																										
ZZZZZZ			23:54																										
ZZZZZZ			23:58																										
ZZZZZZ			00:03																										
ZZZZZZ			00:07																										
ZZZZZZ			00:12																										
ZZZZZZ			00:16																										
ZZZZZZ			00:21																										
ZZZZZZ			00:26																										
ZZZZZZ			00:30																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/13/2017 11:37 End Date: 10/14/2017 04:07

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
CCV 240-299155/169			00:35																										
CCB 240-299155/170			00:39																										
ZZZZZZ			00:44																										
ZZZZZZ			00:49																										
ZZZZZZ			00:53																										
ZZZZZZ			00:58																										
ZZZZZZ			01:02																										
ZZZZZZ			01:07																										
ZZZZZZ			01:12																										
CCV 240-299155/178			01:16																										
CCB 240-299155/179			01:21																										
CCVL 240-299155/180			01:25																										
ZZZZZZ			01:30																										
ZZZZZZ			01:35																										
ZZZZZZ			01:39																										
ZZZZZZ			01:44																										
ZZZZZZ			01:49																										
ZZZZZZ			01:53																										
ZZZZZZ			01:58																										
ZZZZZZ			02:02																										
ZZZZZZ			02:07																										
CCV 240-299155/190			02:11																										
CCB 240-299155/191			02:16																										
ZZZZZZ			02:21																										
ZZZZZZ			02:25																										
ZZZZZZ			02:30																										
ZZZZZZ			02:35																										
ZZZZZZ			02:39																										
ZZZZZZ			02:44																										
ZZZZZZ			02:48																										
ZZZZZZ			02:53																										
ZZZZZZ			02:58																										
ZZZZZZ			03:02																										
CCV 240-299155/202			03:07																										
CCB 240-299155/203			03:11																										
ZZZZZZ			03:16																										
ZZZZZZ			03:21																										
ZZZZZZ			03:25																										
ZZZZZZ			03:30																										
ZZZZZZ			03:35																										
ZZZZZZ			03:39																										
ZZZZZZ			03:44																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/13/2017 11:37 End Date: 10/14/2017 04:07

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn									
CCV 240-299155/211			03:48																											
CCB 240-299155/212			03:53																											
CCVL 240-299155/213			03:58																											
CCV 240-299155/214			04:02																											
CCB 240-299155/215			04:07																											

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/16/2017 16:04 End Date: 10/16/2017 21:27

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn										
ZZZZZZ			16:04																										
ICIS 240-299325/2			16:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
STD1 240-299325/3 IC	1		16:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
STD2 240-299325/4 IC	1		16:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
STD3 240-299325/5 IC	1		16:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
STD4 240-299325/6 IC	1		16:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ICV 240-299325/7	1		16:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ICB 240-299325/8	1		16:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ICVL 240-299325/9	1		16:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ICSA 240-299325/10	1		16:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ICSAB 240-299325/11	1		16:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCV 240-299325/12			16:54																										
CCB 240-299325/13			16:59																										
ZZZZZZ			17:05																										
CCV 240-299325/15	1		17:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCB 240-299325/16	1		17:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-2	1	R	17:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-3	1	R	17:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-3	1	D	17:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-4	1	R	17:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-4	1	D	17:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-5	1	R	17:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
240-86291-5	1	D	17:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ZZZZZZ			17:51																										
CCV 240-299325/25	1		17:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCB 240-299325/26	1		18:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
CCVL 240-299325/27	1		18:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
ZZZZZZ			18:09																										
ZZZZZZ			18:14																										
ZZZZZZ			18:18																										
ZZZZZZ			18:23																										
ZZZZZZ			18:28																										
ZZZZZZ			18:32																										
ZZZZZZ			18:37																										
ZZZZZZ			18:41																										
ZZZZZZ			18:46																										
CCV 240-299325/37			18:51																										
CCB 240-299325/38			18:55																										
ZZZZZZ			19:00																										
ZZZZZZ			19:04																										
ZZZZZZ			19:09																										
ZZZZZZ			19:13																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/16/2017 16:04 End Date: 10/16/2017 21:27

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn									
ZZZZZZ			19:18																									
ZZZZZZ			19:23																									
ZZZZZZ			19:27																									
ZZZZZZ			19:32																									
ZZZZZZ			19:36																									
ZZZZZZ			19:41																									
CCV 240-299325/49			19:46																									
CCB 240-299325/50			19:50																									
ZZZZZZ			19:55																									
ZZZZZZ			19:59																									
ZZZZZZ			20:04																									
ZZZZZZ			20:09																									
ZZZZZZ			20:13																									
ZZZZZZ			20:18																									
ZZZZZZ			20:22																									
ZZZZZZ			20:27																									
ZZZZZZ			20:32																									
ZZZZZZ			20:36																									
CCV 240-299325/61			20:41																									
CCB 240-299325/62			20:45																									
ZZZZZZ			20:50																									
ZZZZZZ			20:55																									
ZZZZZZ			20:59																									
ZZZZZZ			21:04																									
CCV 240-299325/67			21:08																									
CCB 240-299325/68			21:13																									
CCVL 240-299325/69			21:18																									
CCV 240-299325/70			21:22																									
CCB 240-299325/71			21:27																									

Prep Types:
D = Dissolved
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I11 Analysis Method: 6020A

Start Date: 10/17/2017 11:37 End Date: 10/18/2017 00:25

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ICIS 240-299542/1			11:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 240-299542/2 IC	1		11:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 240-299542/3 IC	1		11:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD4 240-299542/4 IC	1		11:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 240-299542/5	1		12:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 240-299542/6	1		12:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICVL 240-299542/7	1		12:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 240-299542/8	1		12:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 240-299542/9	1		12:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 240-299542/10			12:36																								
CCB 240-299542/11			12:42																								
CCV 240-299542/12			12:49																								
CCB 240-299542/13			12:55																								
ZZZZZZ			13:02																								
ZZZZZZ			13:08																								
ZZZZZZ			13:15																								
ZZZZZZ			13:21																								
ZZZZZZ			13:28																								
ZZZZZZ			13:34																								
ZZZZZZ			13:41																								
ZZZZZZ			13:47																								
ZZZZZZ			13:54																								
ZZZZZZ			14:00																								
CCV 240-299542/24			14:07																								
CCB 240-299542/25			14:13																								
ZZZZZZ			14:20																								
ZZZZZZ			14:26																								
ZZZZZZ			14:33																								
ZZZZZZ			14:39																								
ZZZZZZ			14:45																								
ZZZZZZ			14:52																								
ZZZZZZ			14:58																								
ZZZZZZ			15:05																								
ZZZZZZ			15:11																								
ZZZZZZ			15:18																								
CCV 240-299542/36			15:24																								
CCB 240-299542/37			15:31																								
ZZZZZZ			15:37																								
ZZZZZZ			15:44																								
ZZZZZZ			15:50																								
ZZZZZZ			15:57																								
ZZZZZZ			16:03																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I11 Analysis Method: 6020A

Start Date: 10/17/2017 11:37 End Date: 10/18/2017 00:25

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			16:10																								
ZZZZZZ			16:16																								
ZZZZZZ			16:23																								
ZZZZZZ			16:29																								
ZZZZZZ			16:36																								
CCV 240-299542/48	1		16:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-299542/49	1		16:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCVL 240-299542/50			16:55																								
240-86291-1	1	D	17:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			17:08																								
ZZZZZZ			17:15																								
ZZZZZZ			17:21																								
ZZZZZZ			17:28																								
ZZZZZZ			17:34																								
ZZZZZZ			17:41																								
ZZZZZZ			17:47																								
ZZZZZZ			17:54																								
CCV 240-299542/60	1		18:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-299542/61	1		18:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCVL 240-299542/62	1		18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			18:20																								
ZZZZZZ			18:26																								
ZZZZZZ			18:33																								
ZZZZZZ			18:39																								
ZZZZZZ			18:46																								
ZZZZZZ			18:52																								
ZZZZZZ			18:59																								
ZZZZZZ			19:05																								
ZZZZZZ			19:12																								
ZZZZZZ			19:18																								
CCV 240-299542/73			19:25																								
CCB 240-299542/74			19:31																								
ZZZZZZ			19:38																								
ZZZZZZ			19:44																								
ZZZZZZ			19:51																								
ZZZZZZ			19:57																								
ZZZZZZ			20:04																								
ZZZZZZ			20:10																								
ZZZZZZ			20:17																								
ZZZZZZ			20:23																								
ZZZZZZ			20:30																								
ZZZZZZ			20:37																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: I11 Analysis Method: 6020A

Start Date: 10/17/2017 11:37 End Date: 10/18/2017 00:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn									
CCV 240-299542/85			20:43																									
CCB 240-299542/86			20:50																									
ZZZZZZ			20:56																									
ZZZZZZ			21:03																									
ZZZZZZ			21:09																									
CCV 240-299542/90			21:16																									
CCB 240-299542/91			21:22																									
CCVL 240-299542/92			21:29																									
ZZZZZZ			21:35																									
ZZZZZZ			21:42																									
ZZZZZZ			21:48																									
ZZZZZZ			21:55																									
ZZZZZZ			22:01																									
ZZZZZZ			22:08																									
ZZZZZZ			22:14																									
ZZZZZZ			22:21																									
ZZZZZZ			22:27																									
ZZZZZZ			22:34																									
ZZZZZZ			22:40																									
ZZZZZZ			22:47																									
CCV 240-299542/105			22:53																									
CCB 240-299542/106			23:00																									
ZZZZZZ			23:06																									
ZZZZZZ			23:13																									
ZZZZZZ			23:19																									
ZZZZZZ			23:26																									
ZZZZZZ			23:32																									
ZZZZZZ			23:39																									
ZZZZZZ			23:45																									
ZZZZZZ			23:52																									
ZZZZZZ			23:59																									
ZZZZZZ			00:05																									
CCV 240-299542/117			00:12																									
CCB 240-299542/118			00:18																									
CCVL 240-299542/119			00:25																									

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/13/2017 11:51 End Date: 10/13/2017 18:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-298950/1-A			11:51	X																								
IC 240-298950/2-A			11:52	X																								
IC 240-298950/3-A			11:54	X																								
IC 240-298950/4-A			11:56	X																								
IC 240-298950/5-A			11:58	X																								
IC 240-298950/6-A			12:00	X																								
ICV 240-298950/7-A	1		12:35	X																								
ICB 240-298950/8-A	1		12:38	X																								
CRA 240-298950/9-A	1		12:40	X																								
CCV 240-298950/10-A	1		12:41	X																								
CCB 240-298950/11-A	1		12:43	X																								
MB 240-298776/1-A	1	T	12:46	X																								
LCS 240-298776/2-A	1	T	12:48	X																								
ZZZZZZ			12:50																									
240-86255-C-2-E MS	1	T	12:52	X																								
240-86255-C-2-F MSD	1	T	12:54	X																								
ZZZZZZ			12:56																									
ZZZZZZ			12:58																									
240-86291-1	1	D	13:00	X																								
240-86291-2	1	T	13:02	X																								
240-86291-3	1	T	13:04	X																								
CCV 240-298950/10-A	1		13:06	X																								
CCB 240-298950/11-A	1		13:08	X																								
240-86291-3	1	D	13:10	X																								
240-86291-4	1	T	13:12	X																								
240-86291-4	1	D	13:14	X																								
240-86291-5	1	T	13:16	X																								
240-86291-5	1	D	13:18	X																								
ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
ZZZZZZ			13:24																									
ZZZZZZ			13:26																									
ZZZZZZ			13:27																									
CCV 240-298950/10-A	1		13:29	X																								
CCB 240-298950/11-A	1		13:31	X																								
ZZZZZZ			13:34																									
ZZZZZZ			13:36																									
ZZZZZZ			13:38																									
ZZZZZZ			13:40																									
ZZZZZZ			13:42																									
ZZZZZZ			13:45																									
ZZZZZZ			13:47																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/13/2017 11:51 End Date: 10/13/2017 18:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
CCV 240-298950/10-A			13:54																									
CCB 240-298950/11-A			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:07																									
ZZZZZZ			14:09																									
ZZZZZZ			14:11																									
ZZZZZZ			14:13																									
ZZZZZZ			14:15																									
CCV 240-298950/10-A			14:17																									
CCB 240-298950/11-A			14:19																									
CCV 240-298950/10-A			15:57																									
CCB 240-298950/11-A			15:59																									
ZZZZZZ			16:01																									
CCV 240-298950/10-A			16:03																									
CCB 240-298950/11-A			16:05																									
ZZZZZZ			16:08																									
ZZZZZZ			16:10																									
ZZZZZZ			16:11																									
ZZZZZZ			16:14																									
ZZZZZZ			16:16																									
ZZZZZZ			16:18																									
ZZZZZZ			16:21																									
ZZZZZZ			16:23																									
ZZZZZZ			16:24																									
ZZZZZZ			16:26																									
CCV 240-298950/10-A			16:28																									
CCB 240-298950/11-A			16:30																									
ZZZZZZ			16:33																									
ZZZZZZ			16:35																									
ZZZZZZ			16:36																									
ZZZZZZ			16:38																									
ZZZZZZ			16:40																									
ZZZZZZ			16:42																									
ZZZZZZ			16:44																									
ZZZZZZ			16:46																									
ZZZZZZ			16:48																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/13/2017 11:51 End Date: 10/13/2017 18:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			16:50																									
CCV 240-298950/10-A			16:53																									
CCB 240-298950/11-A			16:55																									
ZZZZZZ			16:58																									
ZZZZZZ			17:00																									
ZZZZZZ			17:02																									
ZZZZZZ			17:04																									
ZZZZZZ			17:05																									
ZZZZZZ			17:07																									
ZZZZZZ			17:09																									
ZZZZZZ			17:11																									
ZZZZZZ			17:13																									
ZZZZZZ			17:18																									
CCV 240-298950/10-A			17:20																									
CCB 240-298950/11-A			17:23																									
ZZZZZZ			17:25																									
ZZZZZZ			17:27																									
ZZZZZZ			17:29																									
ZZZZZZ			17:31																									
ZZZZZZ			17:33																									
ZZZZZZ			17:35																									
ZZZZZZ			17:37																									
ZZZZZZ			17:39																									
ZZZZZZ			17:41																									
ZZZZZZ			17:43																									
CCV 240-298950/10-A			17:45																									
CCB 240-298950/11-A			17:47																									
ZZZZZZ			17:49																									
ZZZZZZ			17:51																									
ZZZZZZ			17:53																									
ZZZZZZ			17:55																									
ZZZZZZ			17:57																									
ZZZZZZ			17:59																									
ZZZZZZ			18:01																									
ZZZZZZ			18:04																									
CCV 240-298950/10-A			18:06																									
CCB 240-298950/11-A			18:08																									

Prep Types:
D = Dissolved
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/13/2017 End Date: 10/13/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-299155/3 I	11:46	96		96		96		95		97	
STD2 240-299155/4 I	11:51	99		101		103		95		98	
STD3 240-299155/5 I	11:55	103		102		103		96		98	
STD4 240-299155/6 I	12:00	101		105		101		104		107	
ICV 240-299155/7	12:05	102		102		105		99		102	
ICB 240-299155/8	12:09	109		111		111		110		111	
ICVL 240-299155/9	12:14	108		108		109		107		108	
ICSA 240-299155/10	12:18	96		93		97		92		94	
ICSAB 240-299155/11	12:23	91		92		97		91		92	
CCV 240-299155/54	15:47	118		121		124		114		114	
CCB 240-299155/55	15:52	120		125		125		121		118	
MB 240-298773/1-A	15:57	104		114		114		116		111	
LCS 240-298773/2-A	16:02	92		102		105		105		102	
240-86274-I-1-A SD	16:11	105		116		118		117		118	
240-86274-I-1-B MS	16:16	89		100		102		106		103	
240-86274-I-1-C MSD	16:20	91		99		104		106		104	
CCV 240-299155/66	16:43	112		121		124		119		117	
CCB 240-299155/67	16:48	121		122		123		124		119	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/13/2017 End Date: 10/13/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-299155/3 I	11:46	98		97		97					
STD2 240-299155/4 I	11:51	101		99		96					
STD3 240-299155/5 I	11:55	101		100		94					
STD4 240-299155/6 I	12:00	106		107		103					
ICV 240-299155/7	12:05	104		106		98					
ICB 240-299155/8	12:09	111		111		103					
ICVL 240-299155/9	12:14	108		107		101					
ICSA 240-299155/10	12:18	99		99		92					
ICSAB 240-299155/11	12:23	98		99		93					
CCV 240-299155/54	15:47	114		112		102					
CCB 240-299155/55	15:52	116		117		109					
MB 240-298773/1-A	15:57	111		109		107					
LCS 240-298773/2-A	16:02	108		106		100					
240-86274-I-1-A SD	16:11	115		114		112					
240-86274-I-1-B MS	16:16	113		113		105					
240-86274-I-1-C MSD	16:20	117		116		107					
CCV 240-299155/66	16:43	120		119		107					
CCB 240-299155/67	16:48	117		115		107					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/16/2017 End Date: 10/16/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-299325/3 I	16:13	97		99		97		97		97	
STD2 240-299325/4 I	16:17	100		99		100		93		90	
STD3 240-299325/5 I	16:22	105		101		102		89		88	
STD4 240-299325/6 I	16:27	96		101		97		92		84	
ICV 240-299325/7	16:31	99		98		101		86		80	
ICB 240-299325/8	16:36	100		99		98		95		89	
ICVL 240-299325/9	16:40	97		97		95		96		93	
ICSA 240-299325/10	16:45	88		86		89		83		84	
ICSAB 240-299325/11	16:49	86		86		87		85		87	
CCV 240-299325/15	17:10	98		96		98		92		92	
CCB 240-299325/16	17:14	102		99		99		101		98	
240-86291-2	17:19	91		92		98		88		85	
240-86291-3	17:24	86		89		93		79		74	
240-86291-3	17:28	87		87		92		79		74	
240-86291-4	17:33	87		86		91		86		80	
240-86291-4	17:37	87		88		93		89		87	
240-86291-5	17:42	88		88		96		87		87	
240-86291-5	17:46	87		91		94		92		92	
CCV 240-299325/25	17:55	88		86		89		88		88	
CCB 240-299325/26	18:00	89		86		86		90		89	
CCVL 240-299325/27	18:05	85		84		84		87		86	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/16/2017 End Date: 10/16/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-299325/3 I	16:13	102		100		99					
STD2 240-299325/4 I	16:17	97		94		87					
STD3 240-299325/5 I	16:22	95		93		84					
STD4 240-299325/6 I	16:27	92		93		94					
ICV 240-299325/7	16:31	89		87		85					
ICB 240-299325/8	16:36	95		95		91					
ICVL 240-299325/9	16:40	97		92		90					
ICSA 240-299325/10	16:45	87		83		79					
ICSAB 240-299325/11	16:49	92		88		82					
CCV 240-299325/15	17:10	100		98		87					
CCB 240-299325/16	17:14	101		96		97					
240-86291-2	17:19	93		91		93					
240-86291-3	17:24	87		86		81					
240-86291-3	17:28	85		82		80					
240-86291-4	17:33	88		86		82					
240-86291-4	17:37	95		90		85					
240-86291-5	17:42	93		92		81					
240-86291-5	17:46	99		99		85					
CCV 240-299325/25	17:55	94		93		84					
CCB 240-299325/26	18:00	94		89		87					
CCVL 240-299325/27	18:05	89		86		84					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICP-MS Instrument ID: I11 Start Date: 10/17/2017 End Date: 10/17/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-299542/2 I	11:44	95		98		105		101		98	
STD3 240-299542/3 I	11:50	91		96		103		100		97	
STD4 240-299542/4 I	11:57	102		102		108		106		104	
ICV 240-299542/5	12:03	99		99		105		101		99	
ICB 240-299542/6	12:10	100		99		103		103		103	
ICVL 240-299542/7	12:16	99		99		105		103		103	
ICSA 240-299542/8	12:23	96		103		96		96		95	
ICSAB 240-299542/9	12:29	87		95		93		94		95	
CCV 240-299542/48	16:42	92		95		96		93		90	
CCB 240-299542/49	16:49	96		96		100		97		96	
240-86291-1	17:02	95		97		91		89		89	
CCV 240-299542/60	18:00	89		92		96		94		92	
CCB 240-299542/61	18:07	96		96		99		96		96	
CCVL 240-299542/62	18:13	95		96		99		97		97	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

ICP-MS Instrument ID: I11 Start Date: 10/17/2017 End Date: 10/17/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-299542/2 I	11:44			97							
STD3 240-299542/3 I	11:50			96							
STD4 240-299542/4 I	11:57			101							
ICV 240-299542/5	12:03			99							
ICB 240-299542/6	12:10			102							
ICVL 240-299542/7	12:16			101							
ICSA 240-299542/8	12:23			99							
ICSAB 240-299542/9	12:29			99							
CCV 240-299542/48	16:42			92							
CCB 240-299542/49	16:49			96							
240-86291-1	17:02			94							
CCV 240-299542/60	18:00			95							
CCB 240-299542/61	18:07			97							
CCVL 240-299542/62	18:13			96							

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Batch Number: 298773 Batch Start Date: 10/12/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 10/12/17 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00031	MTICPMSA 00032	MTICPMSB 00032	MTTMHCL 00173
MB 240-298773/1		3005A, 6020A		50 mL	50 mL				2.5 mL
LCS 240-298773/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86274-I-1 MS		3005A, 6020A	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86274-I-1 MSD		3005A, 6020A	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86291-A-1	MRC-MW117B-101017	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86291-I-2	MRC-MW117B-100917	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86291-I-3	MRC-MW121A-101017	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86291-J-3	MRC-MW121A-101017	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86291-I-4	MRC-MW120B-101017	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86291-J-4	MRC-MW120B-101017	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86291-I-5	MRC-MW119B-101017	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86291-J-5	MRC-MW119B-101017	3005A, 6020A	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132	AnalysisComment				
MB 240-298773/1		3005A, 6020A		1 mL					
LCS 240-298773/2		3005A, 6020A		1 mL					
240-86274-I-1 MS		3005A, 6020A	R	1 mL	parent on line 19				
240-86274-I-1 MSD		3005A, 6020A	R	1 mL	parent on line 19				
240-86291-A-1	MRC-MW117B-101017	3005A, 6020A	D	1 mL					
240-86291-I-2	MRC-MW117B-100917	3005A, 6020A	R	1 mL					
240-86291-I-3	MRC-MW121A-101017	3005A, 6020A	R	1 mL					
240-86291-J-3	MRC-MW121A-101017	3005A, 6020A	D	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Batch Number: 298773 Batch Start Date: 10/12/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 10/12/17 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132	AnalysisComment				
240-86291-I-4	MRC-MW120B-101017	3005A, 6020A	R	1 mL					
240-86291-J-4	MRC-MW120B-101017	3005A, 6020A	D	1 mL					
240-86291-I-5	MRC-MW119B-101017	3005A, 6020A	R	1 mL					
240-86291-J-5	MRC-MW119B-101017	3005A, 6020A	D	1 mL					

Batch Notes	
Filter Paper ID	60412103
Pipette/Syringe/Dispenser ID	mp3
Digestion Tube/Cup ID	1705110

Basis	Basis Description
R	Total Recoverable
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Batch Number: 298776 Batch Start Date: 10/12/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/12/17 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01640	MTKMN04W 00143
MB 240-298776/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-298776/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-86255-C-2 MS		7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-86255-C-2 MSD		7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-86291-A-1	MRC-MW117B-101017	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-I-2	MRC-MW117B-100917	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-I-3	MRC-MW121A-101017	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-J-3	MRC-MW121A-101017	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-I-4	MRC-MW120B-101017	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-J-4	MRC-MW120B-101017	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-I-5	MRC-MW119B-101017	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86291-J-5	MRC-MW119B-101017	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
MB 240-298776/1		7470A, 7470A		1.25 mL					
LCS 240-298776/2		7470A, 7470A		1.25 mL					
240-86255-C-2 MS		7470A, 7470A	T	1.25 mL					
240-86255-C-2 MSD		7470A, 7470A	T	1.25 mL					
240-86291-A-1	MRC-MW117B-101017	7470A, 7470A	D	1.25 mL					
240-86291-I-2	MRC-MW117B-100917	7470A, 7470A	T	1.25 mL					
240-86291-I-3	MRC-MW121A-101017	7470A, 7470A	T	1.25 mL					
240-86291-J-3	MRC-MW121A-101017	7470A, 7470A	D	1.25 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Batch Number: 298776 Batch Start Date: 10/12/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/12/17 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
240-86291-I-4	MRC-MW120B-101017	7470A, 7470A	T	1.25 mL					
240-86291-J-4	MRC-MW120B-101017	7470A, 7470A	D	1.25 mL					
240-86291-I-5	MRC-MW119B-101017	7470A, 7470A	T	1.25 mL					
240-86291-J-5	MRC-MW119B-101017	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	take out temps within range
Hot Block ID	B1
Pipette/Syringe/Dispenser ID	mp2/3
Digestion Tube/Cup ID	1705110

Basis	Basis Description
T	Total/NA
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG No.:

Batch Number: 298950 Batch Start Date: 10/13/17 09:15 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 10/13/17 11:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01641	MTHgICV_00001 00240
ICV 240-298950/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-298950/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-298950/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-298950/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-298950/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00144	MTTMHNO3 00132				
ICV 240-298950/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-298950/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-298950/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-298950/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-298950/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	takeout temp in range (90-95* Celsius)
Hot Block ID	C1
Pipette/Syringe/Dispenser ID	MP1, MP2, A8, A5, MP5
Digestion Tube/Cup ID	1703076

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Sample Calculation - Page 1

Client Sample ID: MRC-MW117B-100917 Lab Sample ID: 240-86291-2

Lab Name: TestAmerica Canton Job No.: 240-86291-1

SDG ID.:

Matrix: Water Date Sampled: 10/09/2017 16:00

Reporting Basis: WET Date Received: 10/11/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	50	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	16	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	5.4	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	1.7	2.0	1.7	ug/L	U		1	6020A
7439-98-7	Molybdenum	1.1	10	1.1	ug/L	U		1	6020A
7440-02-0	Nickel	17	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	0.93	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	20	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

Sample Report

Sample Table

Sample Name	240-86291-i-2-a
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10101617D.b
Acq Date Time	2017-10-16T17:19:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	69.019	69.019	3.53	1743829	0.00	10000	
Be	9	45	2	NoGas	0.101	0.101	5.72	817	0.01	2000	
B	11	45	2	NoGas	31.959	31.959	2.76	169531	0.02	300	
Na	23	45	1	He	26364.125	26364.125	1.17	32111140	0.08	500000	
Mg	24	45	1	He	2315.770	2315.770	1.18	1646793	0.14	500000	
Al	27	45	1	He	111.945	111.945	5.94	45133	0.25	200000	
K	39	45	1	He	48763.930	48763.930	1.74	36368486	0.13	500000	
Ca	44	45	1	He	5101.519	5101.519	2.07	205123	2.49	500000	
Ti	47	45	1	He	5.632	5.632	5.67	1288	0.44	2500	
V	51	45	1	He	0.927	0.927	13.85	5479	0.02	10000	
Cr	52	45	1	He	5.402	5.402	1.02	36049	0.01	10000	
Mn	55	45	1	He	376.632	376.632	1.36	1871666	0.02	10000	
Fe	56	45	1	He	6220.771	6220.771	1.17	33755702	0.02	200000	
Co	59	45	1	He	16.126	16.126	0.37	145417	0.01	5000	
Ni	60	103	1	He	16.931	16.931	1.94	40811	0.04	10000	
Cu	63	45	1	He	1.222	1.222	2.83	7441	0.02	10000	
Zn	66	45	1	He	20.393	20.393	1.12	26379	0.08	10000	
As	75	45	1	He	0.567	0.567	2.63	697	0.08	10000	
Se	78	45	1	He	0.430	0.430	4.16	106	0.41	10000	
Sr	88	103	1	He	137.503	137.503	1.11	836893	0.02	10000	
Mo	95	103	1	He	0.823	0.823	5.34	2485	0.03	2000	
Ag	107	103	1	He	0.009	0.009	13.41	80	0.01	100	
Cd	111	115	1	He	0.057	0.057	1.29	68	0.08	4000	
Sn	118	115	1	He	1.029	1.029	11.16	3080	0.03	2000	
Sb	123	115	1	He	0.561	0.561	0.96	1538	0.04	200	
Ba	137	115	1	He	50.495	50.495	1.22	38713	0.13	10000	
W	182	159	1	He	0.079	0.079	30.40	568	0.01	2500	
Tl	205	209	1	He	0.050	0.050	6.68	531	0.01	2000	
Pb	208	209	1	He	0.364	0.364	2.77	5079	0.01	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2899788	3.17	3182815	91.11	60	120	
Sc	45	1	He	1129810	0.83	1223917	92.31	60	120	
Sc	45	2	NoGas	14234880	1.48	14600962	97.49	60	120	
Rh	103	1	He	2475358	2.18	2812842	88.00	60	120	
In	115	1	He	1245330	1.65	1466447	84.92	60	120	
Tb	159	1	He	2048188	3.14	2210373	92.66	60	120	
Ho	165	1	He	1904373	1.12	2102424	90.58	60	120	
Bi	209	1	He	1436934	3.51	1551176	92.64	60	120	

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **NOVEMBER 21, 2017**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / 1,4-DIOXANE / PCB HOMOLOGS / DRO / GRO / TOTAL AND DISSOLVED METALS**
MRC- FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-86380-1

SAMPLES: 5 / Aqueous / VOC / 1,4-Dioxane / PCB Homologs / DRO / GRO / Total and Dissolved Metals

MRC-MW118A-101117 MRC-MW118B-101117 MRC-MW119A-101117*
MRC-MW120A-101117
TRIP BLANK**

*Analyzed for VOC and GRO only.
**Analyzed for VOC only.

OVERVIEW

The sample set for MRC SDG 240-86380-1, consists of four (4) aqueous environmental samples and one (1) trip blank. Environmental samples were analyzed for volatile organic compounds (VOC), 1,4-dioxane, polychlorinated biphenyl (PCB) homologs, diesel range organics (DRO), gasoline range organics (GRO), and total and dissolved metals. Sample MRC-MW119A-101117 was analyzed for VOCs and GRO only. No field duplicate pairs are included in this SDG.

The samples were collected by Tetra Tech on October 11, 2017, and analyzed by TestAmerica. Analyses were conducted in accordance with SW-846 Methods 8260C (for VOC), 8207D (for 1,4-dioxane), 8015C (for DRO and GRO), 7470A (for mercury), and 6020A (for metals other than mercury) as well as EPA Method 680 (for PCB homologs) analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, ICP/MS tuning, initial/continuing calibrations, laboratory method/trip blank results, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate results, matrix spike/matrix spike duplicate results, interference check sample results, serial dilution results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern with respect to data quality are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The VOC continuing calibration performed on 10/20/17 at 17:54 on instrument A3UX12 had percent differences (%Ds) for acetone, 2-butanone, and 2-hexanone that were greater than the 20% quality control limit. All VOC samples were associated with this calibration. Detected and non-detected results for these analytes were qualified as estimated (J and UJ, respectively) in all VOC samples.

- Detected results below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Sample TRIP BLANK was not listed on the chain of custody. No action was taken.

Sample MRC-MW118A-101117 was listed as MRC-MW188A-101117 in the laboratory report and in the database. The database and the Form I reports were changed to MRC-MW118A-101117 to match the chain of custody by the data validator.

Non-detected results were reported to the MDL.

The PCB homologs internal standard areas for chrysene-d12 in samples MRC-MW118B-101117 and MRC-MW118A-101117 were greater than the laboratory quality control limits based on the continuing calibration performed on 10/19/17 at 17:20. The internal standard areas in these samples were within the laboratory quality control limits based on the initial calibration performed on 07/13/17, as noted in the laboratory case narrative report. No qualification was necessary because all PCB homologs results were non-detected in the affected samples.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Some detected and non-detected VOC results were qualified due to calibration noncompliance.

Other Factors Affecting Data Quality: Detected results below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017) and National Functional Guidelines for Inorganic Superfund Methods Data Review" (January 2017). The text of this report has been formulated to address only those problem areas affecting data quality.

Leigh A. Ciofani

Tetra Tech
Leigh A. Ciofani
Environmental Scientist/Data Validator

Joseph A. Samchuck

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW119A-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-2			240-86380-1		
FRACTION: OV	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1.6			0.23	U		0.23	U		0.23	U	
1,1,2,2-TETRACHLOROETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,1,2-TRICHLOROETHANE		0.34	U		0.34	U		0.34	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.48	J	P	0.25	U		0.25	U		0.25	U	
1,1-DICHLOROETHENE		0.27	U		0.27	U		0.33	J	P	0.46	J	P
1,2,4-TRICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2-DIBROMOETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
1,2-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,2-DICHLOROPROPANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,3-DICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,4-DICHLOROBENZENE		0.23	U		0.23	U		0.23	U		0.23	U	
2-BUTANONE		1	UJ	C	1	UJ	C	4.3	J	CP	1	UJ	C
2-HEXANONE		1.2	UJ	C	1.2	UJ	C	1.2	UJ	C	1.2	UJ	C
4-METHYL-2-PENTANONE		0.71	U		0.71	U		0.71	U		0.71	U	
ACETONE		5.6	J	CP	13	J	C	43	J	C	51	J	C
BENZENE		0.28	U		0.28	U		0.53	J	P	9.6		
BROMODICHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
BROMOFORM		0.43	U		0.43	U		0.43	U		0.43	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
CARBON DISULFIDE		0.37	J	P	8.1			12			0.34	U	
CARBON TETRACHLORIDE		0.35	U		0.35	U		0.35	U		0.35	U	
CHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
CHLOROFORM		1.8			0.34	J	P	0.61	J	P	0.31	U	
CHLOROMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CIS-1,2-DICHLOROETHENE		0.3	U		0.3	U		4.6			1		
CIS-1,3-DICHLOROPROPENE		0.26	U		0.26	U		0.26	U		0.26	U	
CYCLOHEXANE		0.44	U		0.44	U		0.44	U		4.6		
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
ISOPROPYLBENZENE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 08109	NSAMPLE	TRIP BLANK		
SDG: 240-86380-1	LAB_ID	240-86380-5		
FRACTION: OV	SAMP_DATE	10/11/2017		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.23	U	
1,1,2,2-TETRACHLOROETHANE		0.32	U	
1,1,2-TRICHLOROETHANE		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U	
1,1-DICHLOROETHANE		0.25	U	
1,1-DICHLOROETHENE		0.27	U	
1,2,4-TRICHLOROBENZENE		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.47	U	
1,2-DIBROMOETHANE		0.23	U	
1,2-DICHLOROBENZENE		0.26	U	
1,2-DICHLOROETHANE		0.3	U	
1,2-DICHLOROPROPANE		0.3	U	
1,3-DICHLOROBENZENE		0.32	U	
1,4-DICHLOROBENZENE		0.23	U	
2-BUTANONE		1	UJ	C
2-HEXANONE		1.2	UJ	C
4-METHYL-2-PENTANONE		0.71	U	
ACETONE		1.8	UJ	C
BENZENE		0.28	U	
BROMODICHLOROMETHANE		0.3	U	
BROMOFORM		0.43	U	
BROMOMETHANE		0.42	U	
CARBON DISULFIDE		0.34	U	
CARBON TETRACHLORIDE		0.35	U	
CHLOROBENZENE		0.32	U	
CHLORODIBROMOMETHANE		0.25	U	
CHLOROETHANE		0.41	U	
CHLOROFORM		0.31	U	
CHLOROMETHANE		0.43	U	
CIS-1,2-DICHLOROETHENE		0.3	U	
CIS-1,3-DICHLOROPROPENE		0.26	U	
CYCLOHEXANE		0.44	U	
DICHLORODIFLUOROMETHANE		0.5	U	
ETHYLBENZENE		0.26	U	
ISOPROPYLBENZENE		0.21	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW119A-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-2			240-86380-1		
FRACTION: OV	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U		1.4	U		1.4	U		1.4	U	
METHYL CYCLOHEXANE		0.45	U		0.45	U		0.45	U		1.8		
METHYL TERT-BUTYL ETHER		0.27	U		0.27	U		0.27	J	P	0.27	U	
METHYLENE CHLORIDE		0.53	U		0.53	U		0.72	J	P	0.53	U	
STYRENE		0.23	U		0.23	U		0.23	U		0.23	U	
TETRACHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TOLUENE		0.23	U		1.2			2.7			0.24	J	P
TOTAL XYLENES		0.24	U		0.24	U		0.24	U		2.1		
TRANS-1,2-DICHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TRANS-1,3-DICHLOROPROPENE		0.31	U		0.31	U		0.31	U		0.31	U	
TRICHLOROETHENE		4.3			0.33	U		8.4			3.4		
TRICHLOROFLUOROMETHANE		4.9			0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.45	U		0.45	U		0.45	U		0.45	U	

PROJ_NO: 08109	NSAMPLE	TRIP BLANK		
SDG: 240-86380-1	LAB_ID	240-86380-5		
FRACTION: OV	SAMP_DATE	10/11/2017		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
METHYL ACETATE		1.4	U	
METHYL CYCLOHEXANE		0.45	U	
METHYL TERT-BUTYL ETHER		0.27	U	
METHYLENE CHLORIDE		0.53	U	
STYRENE		0.23	U	
TETRACHLOROETHENE		0.3	U	
TOLUENE		0.23	U	
TOTAL XYLENES		0.24	U	
TRANS-1,2-DICHLOROETHENE		0.29	U	
TRANS-1,3-DICHLOROPROPENE		0.31	U	
TRICHLOROETHENE		0.33	U	
TRICHLOROFLUOROMETHANE		0.5	U	
VINYL CHLORIDE		0.45	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-1		
FRACTION: OS	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.5	U		0.49	U		2.7		

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-1		
FRACTION: PCB	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL		0.069	U		0.071	U		0.073	U	
DICHLOROBIPHENYLS		0.0053	U		0.0055	U		0.0056	U	
HEPTACHLOROBIPHENYLS		0.029	U		0.03	U		0.031	U	
HEXACHLOROBIPHENYLS		0.015	U		0.015	U		0.016	U	
MONOCHLOROBIPHENYLS		0.0055	U		0.0057	U		0.0058	U	
NONACHLOROBIPHENYLS		0.048	U		0.049	U		0.051	U	
OCTACHLOROBIPHENYLS		0.037	U		0.038	U		0.04	U	
PENTACHLOROBIPHENYLS		0.014	U		0.014	U		0.015	U	
TETRACHLOROBIPHENYLS		0.013	U		0.013	U		0.014	U	
TRICHLOROBIPHENYLS		0.0064	U		0.0066	U		0.0068	U	

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW119A-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-2			240-86380-1		
FRACTION: PET	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		49	U		49	U		49	U		220		
TPH (C10-C32)		280	J	P	220	U					1200		

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-1		
FRACTION: M	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.57	U		0.57	U		0.57	U	
ARSENIC		0.82	J	P	1.4	J	P	3.5	J	P
BARIUM		170			34			710		
BERYLLIUM		0.31	U		0.75	J	P	0.38	J	P
CADMIUM		2			0.21	U		0.37	J	P
CHROMIUM		57			5.5			3.9		
COBALT		14			12			160		
COPPER		1.7	J	P	140			2		
LEAD		0.45	U		2.1			0.96	J	P
MERCURY		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.5	J	P	4.7	J	P	20		
NICKEL		15			13			25		
SELENIUM		3.3	J	P	0.89	U		1.1	J	P
SILVER		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.24	J	P
VANADIUM		1.5	J	P	6.3			2.7	J	P
ZINC		15	U		97			20		

PROJ_NO: 08109	NSAMPLE	MRC-MW118A-101117			MRC-MW118B-101117			MRC-MW120A-101117		
SDG: 240-86380-1	LAB_ID	240-86380-4			240-86380-3			240-86380-1		
FRACTION: MF	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.57	U		0.57	U		0.57	U	
ARSENIC		0.75	U		0.75	U		2	J	P
BARIUM		170			28			480		
BERYLLIUM		0.31	U		0.46	J	P	0.31	U	
CADMIUM		2.1			0.21	U		0.21	U	
CHROMIUM		57			1.5	J	P	5.5		
COBALT		13			9.3			90		
COPPER		2.7			26			1.7	U	
LEAD		0.45	U		0.46	J	P	0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.2	J	P	2.5	J	P	3.5	J	P
NICKEL		15			9.8			38		
SELENIUM		3.4	J	P	0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U	
VANADIUM		1.5	J	P	0.97	J	P	0.82	U	
ZINC		15	U		26			15	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.: MRC-MW118A-101117 L.C 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ | Lab Sample ID: 240-86380-4

Matrix: Water | Lab File ID: U1260632.D

Analysis Method: 8260C | Date Collected: 10/11/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 20:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.6		1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.48	J	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	5.6	J	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.37	J	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	1.8		1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW188A-101117 | Lab Sample ID: 240-86380-4

Matrix: Water | Lab File ID: U1260632.D

Analysis Method: 8260C | Date Collected: 10/11/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 20:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	4.3		1.0	0.33
75-69-4	Trichlorofluoromethane	4.9		1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		69-124
460-00-4	4-Bromofluorobenzene (Surr)	95		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW118B-101117 | Lab Sample ID: 240-86380-3

Matrix: Water | Lab File ID: U1260631.D

Analysis Method: 8260C | Date Collected: 10/11/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 20:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	13		10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	8.1		1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.34	J	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW118B-101117 | Lab Sample ID: 240-86380-3

Matrix: Water | Lab File ID: U1260631.D

Analysis Method: 8260C | Date Collected: 10/11/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 20:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	1.2		1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		69-124
460-00-4	4-Bromofluorobenzene (Surr)	93		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW119A-101117 | Lab Sample ID: 240-86380-2

Matrix: Water | Lab File ID: U1260630.D

Analysis Method: 8260C | Date Collected: 10/11/2017 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 20:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.33	J	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	4.3	J	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	43		10	1.8
71-43-2	Benzene	0.53	J	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	12		1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.61	J	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	4.6		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW119A-101117 | Lab Sample ID: 240-86380-2

Matrix: Water | Lab File ID: U1260630.D

Analysis Method: 8260C | Date Collected: 10/11/2017 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 20:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	J	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.72	J	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	2.7		1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	8.4		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		69-124
460-00-4	4-Bromofluorobenzene (Surr)	93		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: U1260629.D

Analysis Method: 8260C | Date Collected: 10/11/2017 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 19:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.46	J	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	51		10	1.8
71-43-2	Benzene	9.6		1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	1.0		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	4.6		1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: U1260629.D

Analysis Method: 8260C | Date Collected: 10/11/2017 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 19:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	1.8		1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.24	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	3.4		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	2.1		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		69-124
460-00-4	4-Bromofluorobenzene (Surr)	94		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		61-138

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-86380-5

Matrix: Water | Lab File ID: U1260633.D

Analysis Method: 8260C | Date Collected: 10/11/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 21:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-86380-5

Matrix: Water | Lab File ID: U1260633.D

Analysis Method: 8260C | Date Collected: 10/11/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 21:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		69-124
460-00-4	4-Bromofluorobenzene (Surr)	95		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		61-138

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.: MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ | Lab Sample ID: 240-86380-4

Matrix: Water | Lab File ID: 71020012.D

Analysis Method: 8270D | Date Collected: 10/11/2017 13:45

Extract. Method: 3510C | Date Extracted: 10/17/2017 07:35

Sample wt/vol: 980(mL) | Date Analyzed: 10/20/2017 13:43

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299931 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.50	U	1.0	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	100		23-127
4165-62-2	Phenol-d5 (Surr)	23		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	62		32-120
367-12-4	2-Fluorophenol (Surr)	40		10-120
321-60-8	2-Fluorobiphenyl (Surr)	78		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	90		28-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW118B-101117 | Lab Sample ID: 240-86380-3

Matrix: Water | Lab File ID: 71020013.D

Analysis Method: 8270D | Date Collected: 10/11/2017 11:50

Extract. Method: 3510C | Date Extracted: 10/17/2017 07:35

Sample wt/vol: 990(mL) | Date Analyzed: 10/20/2017 14:07

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299931 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.49	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	91		23-127
4165-62-2	Phenol-d5 (Surr)	25		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	60		32-120
367-12-4	2-Fluorophenol (Surr)	40		10-120
321-60-8	2-Fluorobiphenyl (Surr)	77		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	93		28-120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: 71020011.D

Analysis Method: 8270D | Date Collected: 10/11/2017 09:05

Extract. Method: 3510C | Date Extracted: 10/17/2017 07:35

Sample wt/vol: 990(mL) | Date Analyzed: 10/20/2017 13:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299931 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.7		1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	56		23-127
4165-62-2	Phenol-d5 (Surr)	23		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	58		32-120
367-12-4	2-Fluorophenol (Surr)	38		10-120
321-60-8	2-Fluorobiphenyl (Surr)	71		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	82		28-120

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86380-1

SDG No.: MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW108A-101117~~ | Lab Sample ID: 240-86380-4

Matrix: Water | Lab File ID: xj1914.D

Analysis Method: 680 | Date Collected: 10/11/2017 13:45

Extract. Method: 680 | Date Extracted: 10/18/2017 12:35

Sample wt/vol: 1018.7(mL) | Date Analyzed: 10/19/2017 21:10

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499172 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.029	U	0.29	0.029
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.048	U	0.49	0.048
55722-26-4	Octachlorobiphenyl	0.037	U	0.29	0.037
27323-18-8	Monochlorobiphenyl	0.0055	U	0.098	0.0055
2051-24-3	DCB Decachlorobiphenyl	0.069	U	0.49	0.069
25512-42-9	Dichlorobiphenyl	0.0053	U	0.098	0.0053
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0064	U	0.098	0.0064

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	78		25-113

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW118B-101117 | Lab Sample ID: 240-86380-3

Matrix: Water | Lab File ID: xj1913.D

Analysis Method: 680 | Date Collected: 10/11/2017 11:50

Extract. Method: 680 | Date Extracted: 10/18/2017 12:35

Sample wt/vol: 990.5(mL) | Date Analyzed: 10/19/2017 20:41

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499172 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.030	U	0.30	0.030
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.049	U	0.50	0.049
55722-26-4	Octachlorobiphenyl	0.038	U	0.30	0.038
27323-18-8	Monochlorobiphenyl	0.0057	U	0.10	0.0057
2051-24-3	DCB Decachlorobiphenyl	0.071	U	0.50	0.071
25512-42-9	Dichlorobiphenyl	0.0055	U	0.10	0.0055
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0066	U	0.10	0.0066

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	70		25-113

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: xj1912.D

Analysis Method: 680 | Date Collected: 10/11/2017 09:05

Extract. Method: 680 | Date Extracted: 10/18/2017 12:35

Sample wt/vol: 958.5(mL) | Date Analyzed: 10/19/2017 20:12

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499172 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.031	U	0.31	0.031
26601-64-9	Hexachlorobiphenyl	0.016	U	0.21	0.016
53742-07-7	Nonachlorobiphenyl	0.051	U	0.52	0.051
55722-26-4	Octachlorobiphenyl	0.040	U	0.31	0.040
27323-18-8	Monochlorobiphenyl	0.0058	U	0.10	0.0058
2051-24-3	DCB Decachlorobiphenyl	0.073	U	0.52	0.073
25512-42-9	Dichlorobiphenyl	0.0056	U	0.10	0.0056
25429-29-2	Pentachlorobiphenyl	0.015	U	0.21	0.015
26914-33-0	Tetrachlorobiphenyl	0.014	U	0.21	0.014
25323-68-6	Trichlorobiphenyl	0.0068	U	0.10	0.0068

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	68		25-113

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.: MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ | Lab Sample ID: 240-86380-4

Matrix: Water | Lab File ID: P14R101818.D

Analysis Method: 8015C | Date Collected: 10/11/2017 13:45

Extraction Method: 3520C | Date Extracted: 10/17/2017 09:58

Sample wt/vol: 250(mL) | Date Analyzed: 10/18/2017 20:54

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	280	J	500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	90		37-130

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW118B-101117 | Lab Sample ID: 240-86380-3

Matrix: Water | Lab File ID: P14R101817.D

Analysis Method: 8015C | Date Collected: 10/11/2017 11:50

Extraction Method: 3520C | Date Extracted: 10/17/2017 09:58

Sample wt/vol: 260(mL) | Date Analyzed: 10/18/2017 20:27

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	220	U	480	220

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	83		37-130

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: P14R101816.D

Analysis Method: 8015C | Date Collected: 10/11/2017 09:05

Extraction Method: 3520C | Date Extracted: 10/17/2017 09:58

Sample wt/vol: 260(mL) | Date Analyzed: 10/18/2017 19:59

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1200		480	220

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	95		37-130

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.: MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ | Lab Sample ID: 240-86380-4

Matrix: Water | Lab File ID: A0101914.D

Analysis Method: 8015C | Date Collected: 10/11/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 14:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299683 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	103		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW118B-101117 | Lab Sample ID: 240-86380-3

Matrix: Water | Lab File ID: A0101913.D

Analysis Method: 8015C | Date Collected: 10/11/2017 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 13:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299683 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	104		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW119A-101117 | Lab Sample ID: 240-86380-2

Matrix: Water | Lab File ID: A0101912.D

Analysis Method: 8015C | Date Collected: 10/11/2017 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 12:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299683 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	101		56-120

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: A0101911.D

Analysis Method: 8015C | Date Collected: 10/11/2017 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 12:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299683 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	220		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	106		56-120

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ Lab Sample ID: 240-86380-4

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 13:45

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ Lab Sample ID: 240-86380-4

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 13:45

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	0.82	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	170	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	2.0	1.0	0.21	ug/L			1	6020A
7440-48-4	Cobalt	14	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	57	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	1.7	2.0	1.7	ug/L	J		1	6020A
7439-98-7	Molybdenum	1.5	10	1.1	ug/L	J		1	6020A
7440-02-0	Nickel	15	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7782-49-2	Selenium	3.3	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	1.5	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	15	20	15	ug/L	U		1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

MRC-MW118A-101117 L.C. 11/21/17

Client Sample ID: ~~MRC-MW188A-101117~~ Lab Sample ID: 240-86380-4

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 13:45

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	170	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	2.1	1.0	0.21	ug/L			1	6020A
7440-48-4	Cobalt	13	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	57	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	2.7	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	1.2	10	1.1	ug/L	J		1	6020A
7440-02-0	Nickel	15	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	3.4	5.0	0.89	ug/L	J		1	6020A
7440-62-2	Vanadium	1.5	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	15	20	15	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW118B-101117 Lab Sample ID: 240-86380-3

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 11:50

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW118B-101117 Lab Sample ID: 240-86380-3

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 11:50

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	1.4	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	34	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.75	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	12	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	5.5	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	140	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	4.7	10	1.1	ug/L	J		1	6020A
7440-02-0	Nickel	13	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	2.1	1.0	0.45	ug/L			1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7440-62-2	Vanadium	6.3	5.0	0.82	ug/L			1	6020A
7440-66-6	Zinc	97	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW118B-101117 Lab Sample ID: 240-86380-3

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 11:50

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	0.75	5.0	0.75	ug/L	U		1	6020A
7440-39-3	Barium	28	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.46	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	9.3	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	1.5	2.0	0.98	ug/L	J		1	6020A
7440-50-8	Copper	26	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	2.5	10	1.1	ug/L	J		1	6020A
7440-02-0	Nickel	9.8	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.46	1.0	0.45	ug/L	J		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-62-2	Vanadium	0.97	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	26	20	15	ug/L			1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MRC-MW120A-101117 Lab Sample ID: 240-86380-1

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 09:05

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW120A-101117 Lab Sample ID: 240-86380-1

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 09:05

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	3.5	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	710	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.38	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.37	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	160	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	3.9	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	2.0	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	20	10	1.1	ug/L			1	6020A
7440-02-0	Nickel	25	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.96	1.0	0.45	ug/L	J		1	6020A
7782-49-2	Selenium	1.1	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.24	1.0	0.20	ug/L	J		1	6020A
7440-62-2	Vanadium	2.7	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	20	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MRC-MW120A-101117 Lab Sample ID: 240-86380-1

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 09:05

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A
7440-38-2	Arsenic	2.0	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	480	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.31	1.0	0.31	ug/L	U		1	6020A
7440-43-9	Cadmium	0.21	1.0	0.21	ug/L	U		1	6020A
7440-48-4	Cobalt	90	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	5.5	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	1.7	2.0	1.7	ug/L	U		1	6020A
7439-98-7	Molybdenum	3.5	10	1.1	ug/L	J		1	6020A
7440-02-0	Nickel	38	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.45	1.0	0.45	ug/L	U		1	6020A
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7782-49-2	Selenium	0.89	5.0	0.89	ug/L	U		1	6020A
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	U		1	6020A
7440-66-6	Zinc	15	20	15	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	1.0	0.20	ug/L	U		1	6020A
7439-97-6	Mercury	0.13	0.20	0.13	ug/L	U		1	7470A

APPENDIX C

SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: LMC Groundwater Sampling

Report Number: 240-86380-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 680 Polychlorinated Biphenyls analysis was performed at the TestAmerica Savannah Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 10/12/2017 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.8º C and 1.6º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW119A-101117 (240-86380-2), MRC-MW118B-101117 (240-86380-3), MRC-MW188A-101117 (240-86380-4) and TRIP BLANK (240-86380-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 10/20/2017.

The continuing calibration verification (CCV) analyzed in batch 240-300032 was outside the method criteria for the following analytes: 2-butanone, and 2-hexanone. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Batch 240-300032 is reported without a matrix spike/matrix spike duplicate (MS/MSD), because the MS/MSD was performed on a sample that had to be re-run for dilution. The MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/17/2017 and analyzed on 10/20/2017.

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

GASOLINE RANGE ORGANICS (GRO)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW119A-101117 (240-86380-2), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 10/19/2017.

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

POLYCHLORINATED BIPHENYLS (PCBS)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 10/18/2017 and analyzed on 10/19/2017.

The internal standard response for the following samples was outside of acceptance limits when compared to the area of the CCVIS (continuing calibration verification internal standard). The 680 method allows that the sample also be compared to the average internal standard area of the calibration (ICISAV). Due to limitations in the software, when the areas of the sample are out of control for either the CCVIS or the ICISAV both are flagged. Although a * flag appears on the data, the sample is within the area range for the average internal standard area of the calibration (ICISAV): MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 680-498935.

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

DIESEL RANGE ORGANICS (DRO)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 10/17/2017 and analyzed on 10/18/2017.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-299363.

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

DISSOLVED METALS (ICPMS)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 10/13/2017 and analyzed on 10/18/2017.

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

TOTAL RECOVERABLE METALS (ICPMS)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/13/2017 and analyzed on 10/18/2017.

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

DISSOLVED MERCURY (CVAA)
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/13/2017 and analyzed on 10/16/2017.

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

TOTAL MERCURY
Samples MRC-MW120A-101117 (240-86380-1), MRC-MW118B-101117 (240-86380-3) and MRC-MW188A-101117 (240-86380-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/13/2017 and analyzed on 10/16/2017.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: LMC Groundwater Sampling

TestAmerica Job ID: 240-86380-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
680	Polychlorinated Biphenyls (PCBs) (GC/MS)	EPA	TAL SAV
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL CAN
6020A	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: LMC Groundwater Sampling

TestAmerica Job ID: 240-86380-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-86380-1	MRC-MW120A-101117	Water	10/11/17 09:05	10/12/17 09:15
240-86380-2	MRC-MW119A-101117	Water	10/11/17 10:15	10/12/17 09:15
240-86380-3	MRC-MW118B-101117	Water	10/11/17 11:50	10/12/17 09:15
240-86380-4	MRC-MW188A-101117	Water	10/11/17 13:45	10/12/17 09:15
240-86380-5	TRIP BLANK	Water	10/11/17 00:00	10/12/17 09:15

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

1.6/C1.6
0.8/C0.8

Chain of Custody Record

000621

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: TONY APANAVAGE	Site Contact: Mike Wilks	Date:	COC No: -
Company Name: Tetra Tech	Tel/Fax: 301-233-8230	Lab Contact: KEN IVES	Carrier:	___ of ___ COCs
Address: 20251 Century Blvd #200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown, MD	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 301-528-5552	TAT if different from Below ___			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: LMC Groundwater Sampling	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO# 1125C08109	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8015C - DRO	6020A - Metals	8260C - TCL VOA	8015C - GRO	8270D - 1,4 dioxane	6020A - Diss. metals	680	8260C - TCL VOA TB	Sample Specific Notes:
MRC-MW120A-101117	10/11	0905	G	W	14	N	N	✓	✓	✓	✓	✓	✓	✓	✓	
MRC-MW119A-101117	↓	1015	↓	↓	6					✓	✓				✓	
MRC-MW118B-101117	↓	1150	↓	↓				✓	✓	✓	✓	✓	✓	✓	✓	
MRC-MW118A-101117	↓	1345	↓	↓				✓	✓	✓	✓	✓	✓	✓	✓	

240-86380 Chain of Custody

180325

BALTIMORE

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ___

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ___ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:
Relinquished by: J. Michael Willis	Company: Tetra Tech	Date/Time: 10/11/17	Received by:	Company: T.A	Date/Time: 10-11-2017 15:15
Relinquished by:	Company: T.A	Date/Time: 10-11-17 1052	Received by: POP	Company: TAL	Date/Time: 10-12-17 915
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 86380

Client TETRA TECH Site Name —

Cooler unpacked by: POP

Cooler Received on 10-12-17 Opened on 10-12-17

FedEx: 1st Grd ~~Exp~~ UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ~~X~~ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF +0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN # 627 (CF -1.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC697954
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # COOLER	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Rec'd 6x40ml HCL Trip Blanks
will log. 8260C x3 and 8015C x3 last.

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # : 86380**
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CLIENT	8	0.8	0.8	Ice
1		1.6	1.6	1

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MRC-MW120A-101117	240-86380-G-1	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW120A-101117	240-86380-H-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW118B-101117	240-86380-G-3	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW118B-101117	240-86380-H-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
MRC-MW188A-101117	240-86380-G-4	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____
MRC-MW188A-101117	240-86380-H-4	Plastic 500ml - with Nitric Acid	<2	_____	_____

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab File ID: BFB3686.D BFB Injection Date: 10/19/2017

Instrument ID: A3UX12 BFB Injection Time: 17:36

Analysis Batch No.: 299859

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.1	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	50.0 - 120.00 % of mass 95	74.3	
175	5.0 - 9.0 % of mass 174	5.4	(7.3) 1
176	95.0 - 101.0 % of mass 174	71.9	(96.7) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-299859/8	U1260606.D	10/19/2017	18:03
	STD8260 240-299859/9	U1260607.D	10/19/2017	18:25
	STD8260 240-299859/10	U1260608.D	10/19/2017	18:48
	ICIS 240-299859/11	U1260609.D	10/19/2017	19:10
	STD8260 240-299859/12	U1260610.D	10/19/2017	19:33
	STD8260 240-299859/13	U1260611.D	10/19/2017	19:55
	ICV 240-299859/14	U1260612.D	10/19/2017	20:18

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-299859/8	U1260606.D
Level 2	STD8260 240-299859/9	U1260607.D
Level 3	STD8260 240-299859/10	U1260608.D
Level 4	ICIS 240-299859/11	U1260609.D
Level 5	STD8260 240-299859/12	U1260610.D
Level 6	STD8260 240-299859/13	U1260611.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3866 0.4682	0.4029	0.5023	0.4946	0.4655	Ave		0.4534			0.1000	10.6		20.0			
Chloromethane	0.7011 0.4936	0.5676	0.5444	0.5386	0.5187	Ave		0.5607			0.1000	13.1		20.0			
Butadiene	0.7352 0.5346	0.5447	0.6241	0.5821	0.5520	Ave		0.5955				12.7		20.0			
Vinyl chloride	0.6721 0.5296	0.4507	0.5581	0.5359	0.5365	Ave		0.5471			0.1000	13.1		20.0			
Bromomethane	0.3252 0.2950	0.3034	0.3254	0.3099	0.3115	Ave		0.3117			0.0500	3.9		20.0			
Chloroethane	0.3895 0.3472	0.3348	0.3717	0.3664	0.3630	Ave		0.3621			0.0500	5.3		20.0			
Dichlorofluoromethane	0.8312 0.7939	0.8044	0.8398	0.8103	0.8205	Ave		0.8167				2.1		20.0			
Trichlorofluoromethane	0.4810 0.5638	0.5006	0.6031	0.5870	0.5552	Ave		0.5484			0.1000	8.8		20.0			
Ethyl ether	0.2851 0.3087	0.2671	0.3234	0.3153	0.3071	Ave		0.3011				7.0		20.0			
Acrolein	0.0568 0.0531	0.0586	0.0519	0.0540	0.0541	Ave		0.0547				4.5		20.0			
1,1-Dichloroethene	0.6408 0.6112	0.6169	0.6191	0.6239	0.6213	Ave		0.6222			0.1000	1.6		20.0			
Acetone	+++++ 0.1145	0.3086	0.1373	0.1216	0.1159	Lin1	0.4031	0.1115			0.0100	3.8			1.0000		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3480 0.3709	0.3891	0.3757	0.3832	0.3894	Ave		0.3761			0.0500	4.1		20.0			
Iodomethane	0.4651 0.4988	0.4505	0.4751	0.4621	0.4927	Ave		0.4741				3.9		20.0			
Carbon disulfide	+++++ 1.0817	1.2105	1.1211	1.1207	1.1296	Ave		1.1327			0.1000	4.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.8591 0.6187	0.6724	0.6492	0.6346	0.6272	Ave		0.6769				13.5		20.0			
Methyl acetate	+++++ 0.2832	0.4579	0.3055	0.2926	0.2850	Lin1	0.3659	0.2812			0.1000	1.9			1.0000		0.9900
Methylene Chloride	+++++ 0.5224	0.7170	0.5499	0.5348	0.5336	Ave		0.5715			0.1000	14.3		20.0			
2-Methyl-2-propanol	0.0279 0.0369	0.0376	0.0378	0.0369	0.0371	Ave		0.0357				10.8		20.0			
Acrylonitrile	0.1355 0.1427	0.1418	0.1432	0.1458	0.1421	Ave		0.1419				2.4		20.0			
trans-1,2-Dichloroethene	0.6951 0.5386	0.5069	0.5342	0.5407	0.5354	Ave		0.5585			0.1000	12.2		20.0			
Methyl tert-butyl ether	0.9860 1.1539	1.1001	1.1236	1.1624	1.1414	Ave		1.1112			0.1000	5.9		20.0			
Hexane	0.5011 0.4259	0.4554	0.4194	0.4395	0.4202	Ave		0.4436				7.1		20.0			
1,1-Dichloroethane	0.6724 0.6702	0.6763	0.6836	0.6778	0.6586	Ave		0.6732			0.2000	1.3		20.0			
Vinyl acetate	0.7699 0.6985	0.7019	0.6678	0.6941	0.6935	Ave		0.7043				4.9		20.0			
2,2-Dichloropropane	0.0772 0.0875	0.0672	0.0842	0.0850	0.0863	Ave		0.0812				9.6		20.0			
cis-1,2-Dichloroethene	0.4454 0.3993	0.3859	0.4062	0.3952	0.3975	Ave		0.4049			0.1000	5.2		20.0			
2-Butanone (MEK)	0.2874 0.1708	0.2655	0.1855	0.1750	0.1727	Lin1	0.1446	0.1710			0.0100	10.7			1.0000		0.9900
Chlorobromomethane	0.3286 0.3139	0.3312	0.3205	0.3142	0.3126	Ave		0.3202				2.5		20.0			
Tetrahydrofuran	0.1118 0.1066	0.1196	0.1101	0.1106	0.1043	Ave		0.1105				4.8		20.0			
Chloroform	0.6690 0.6096	0.6088	0.6371	0.6153	0.6079	Ave		0.6246			0.2000	3.9		20.0			
1,1,1-Trichloroethane	0.5171 0.5225	0.5070	0.5092	0.5179	0.5069	Ave		0.5134			0.1000	1.3		20.0			
Cyclohexane	0.5374 0.5280	0.5682	0.5572	0.5737	0.5633	Ave		0.5546			0.1000	3.3		20.0			
1,1-Dichloropropene	0.5437 0.5292	0.5404	0.5137	0.5304	0.5279	Ave		0.5309				2.0		20.0			
Carbon tetrachloride	0.3230 0.3955	0.3773	0.3611	0.3848	0.3850	Ave		0.3711			0.1000	7.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0096 0.0111	0.0098	0.0098	0.0107	0.0113	Ave		0.0104				7.3		20.0			
Benzene	1.5622 1.6040	1.4411	1.5912	1.5800	1.5791	Ave		1.5596			0.5000	3.8		20.0			
1,2-Dichloroethane	0.5148 0.5394	0.5038	0.5401	0.5395	0.5331	Ave		0.5285			0.1000	2.9		20.0			
n-Heptane	+++++ 0.2083	0.9318	0.2640	0.2331	0.2094	Lin1	0.7351	0.1941				1.8			1.0000		0.9900
Trichloroethene	0.3948 0.3699	0.3554	0.3634	0.3710	0.3694	Ave		0.3707			0.1500	3.6		20.0			
Methylcyclohexane	0.5170 0.5124	0.5218	0.5066	0.5303	0.5042	Ave		0.5154			0.1000	1.9		20.0			
1,2-Dichloropropane	0.4307 0.3838	0.3790	0.4038	0.3935	0.3812	Ave		0.3953			0.1000	5.0		20.0			
Dibromomethane	0.2159 0.2285	0.2356	0.2307	0.2290	0.2324	Ave		0.2287				3.0		20.0			
1,4-Dioxane	+++++ 0.0046	0.0031	0.0041	0.0043	0.0047	Ave		0.0042				15.6		20.0			
Dichlorobromomethane	0.5095 0.4691	0.4474	0.4552	0.4651	0.4586	Ave		0.4675			0.1500	4.7		20.0			
2-Chloroethyl vinyl ether	+++++ 0.1722	0.1282	0.1405	0.1612	0.1629	Ave		0.1530				11.8		20.0			
cis-1,3-Dichloropropene	0.6270 0.6273	0.5366	0.5953	0.5994	0.6126	Ave		0.5997			0.1500	5.6		20.0			
4-Methyl-2-pentanone (MIBK)	0.3301 0.3591	0.3423	0.3505	0.3653	0.3607	Ave		0.3513			0.0500	3.8		20.0			
Toluene	2.3483 2.0146	1.9243	1.9691	1.9755	1.9567	Ave		2.0314			0.4000	7.8		20.0			
trans-1,3-Dichloropropene	0.6467 0.6970	0.5220	0.6520	0.6584	0.6787	Ave		0.6425			0.1000	9.6		20.0			
Ethyl methacrylate	0.4692 0.6493	0.5922	0.6106	0.6277	0.6279	Ave		0.5961				10.9		20.0			
1,1,2-Trichloroethane	0.3802 0.3736	0.3409	0.3902	0.3734	0.3779	Ave		0.3727			0.1000	4.5		20.0			
Tetrachloroethene	0.4686 0.4342	0.4344	0.4312	0.4281	0.4199	Ave		0.4361			0.1500	3.9		20.0			
1,3-Dichloropropane	0.7855 0.7693	0.7219	0.7523	0.7497	0.7537	Ave		0.7554				2.8		20.0			
2-Hexanone	0.2545 0.3164	0.2914	0.3081	0.3096	0.3093	Ave		0.2982			0.0500	7.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2823 0.3684	0.2817	0.3228	0.3250	0.3405	Ave		0.3201				10.5		20.0			
Ethylene Dibromide	0.4080 0.3839	0.3627	0.3757	0.3772	0.3775	Ave		0.3808				3.9		20.0			
Chlorobenzene	1.4346 1.2640	1.2001	1.2526	1.2501	1.2463	Ave		1.2746			0.3000	6.4		20.0			
1,1,1,2-Tetrachloroethane	0.3263 0.3924	0.3313	0.3686	0.3599	0.3753	Ave		0.3589				7.2		20.0			
Ethylbenzene	0.6913 0.6876	0.6226	0.6651	0.6654	0.6656	Ave		0.6662				3.7		20.0			
m-Xylene & p-Xylene	0.8619 0.8537	0.7479	0.8271	0.8192	0.8334	Ave		0.8239				4.9		20.0			
o-Xylene	0.7905 0.8400	0.7974	0.8056	0.8129	0.8113	Ave		0.8096				2.1		20.0			
Styrene	1.2566 1.5037	1.2500	1.4233	1.4334	1.4537	Ave		1.3868			0.3000	7.7		20.0			
Bromoform	+++++ 0.2178	0.1163	0.1642	0.1810	0.1959	Lin1	-0.128	0.2055			0.1000	15.1			0.9940		0.9900
Isopropylbenzene	1.8612 1.9783	1.8088	1.8774	1.8961	1.9230	Ave		1.8908			0.1000	3.0		20.0			
1,1,2,2-Tetrachloroethane	0.8248 0.9392	0.8716	0.9500	0.9729	0.9263	Ave		0.9141			0.3000	6.1		20.0			
Bromobenzene	1.0580 0.9594	0.9224	0.9430	0.9427	0.9243	Ave		0.9583				5.3		20.0			
1,2,3-Trichloropropane	0.3095 0.3135	0.3418	0.3053	0.3178	0.3064	Ave		0.3157				4.3		20.0			
trans-1,4-Dichloro-2-butene	0.0923 0.2649	0.1099	0.1643	0.2127	0.2360	Ave		0.1800				38.7	*	20.0			
N-Propylbenzene	1.1215 0.9715	0.9570	0.9225	0.9668	0.9484	Ave		0.9813				7.2		20.0			
2-Chlorotoluene	0.8487 0.8640	0.8176	0.8455	0.8862	0.8509	Ave		0.8521				2.7		20.0			
1,3,5-Trimethylbenzene	2.9656 3.0792	2.8273	2.9310	2.9963	2.9661	Ave		2.9609				2.8		20.0			
4-Chlorotoluene	1.0280 0.9381	0.8764	0.8996	0.9269	0.9009	Ave		0.9283				5.8		20.0			
tert-Butylbenzene	2.6548 2.4815	2.2675	2.3976	2.4601	2.4723	Ave		2.4557				5.1		20.0			
1,2,4-Trimethylbenzene	3.1092 3.2259	2.9711	3.0868	3.1890	3.1372	Ave		3.1199				2.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.4343 3.4765	3.0806	3.3477	3.4360	3.3551	Ave		3.3550				4.3		20.0			
1,3-Dichlorobenzene	1.8494 1.7173	1.7425	1.7025	1.7420	1.6926	Ave		1.7411			0.6000	3.3		20.0			
4-Isopropyltoluene	3.1753 3.1118	2.8845	2.9229	3.0159	2.9975	Ave		3.0180				3.7		20.0			
1,4-Dichlorobenzene	2.0860 1.8090	1.7202	1.7334	1.8255	1.7656	Ave		1.8233			0.5000	7.4		20.0			
n-Butylbenzene	2.7824 2.5914	2.4548	2.4821	2.5837	2.5326	Ave		2.5711				4.5		20.0			
1,2-Dichlorobenzene	1.9071 1.6691	1.6179	1.6302	1.6970	1.6592	Ave		1.6967			0.4000	6.3		20.0			
1,2-Dibromo-3-Chloropropane	0.1348 0.1943	0.1634	0.1661	0.1813	0.1836	Ave		0.1706			0.0500	12.3		20.0			
1,2,4-Trichlorobenzene	1.1566 1.0602	1.0134	1.0481	1.0545	1.0386	Ave		1.0619			0.2000	4.6		20.0			
Hexachlorobutadiene	0.4959 0.4089	0.4365	0.4098	0.4257	0.4210	Ave		0.4330				7.5		20.0			
Naphthalene	3.0340 3.1242	2.5776	2.9812	3.1396	3.0839	Ave		2.9901				7.0		20.0			
1,2,3-Trichlorobenzene	1.0109 0.9935	0.9630	0.9572	0.9943	1.0079	Ave		0.9878				2.3		20.0			
Dibromofluoromethane (Surr)	+++++ 0.3072	0.3152	0.3060	0.3067	0.3062	Ave		0.3083				1.3		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.4410	0.4245	0.4521	0.4438	0.4400	Ave		0.4403				2.3		20.0			
Toluene-d8 (Surr)	+++++ 1.6617	1.5584	1.6259	1.5888	1.6232	Ave		1.6116				2.4		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.6340	0.6368	0.6065	0.6192	0.6233	Ave		0.6239				2.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-299859/8	U1260606.D
Level 2	STD8260 240-299859/9	U1260607.D
Level 3	STD8260 240-299859/10	U1260608.D
Level 4	ICIS 240-299859/11	U1260609.D
Level 5	STD8260 240-299859/12	U1260610.D
Level 6	STD8260 240-299859/13	U1260611.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	10078 1616210	20771	267421	531186	1022903	0.500 60.0	1.00	10.0	20.0	40.0
Chloromethane	FB	Ave	18275 1703828	29266	289833	578477	1139782	0.500 60.0	1.00	10.0	20.0	40.0
Butadiene	FB	Ave	19163 1845398	28082	332269	625183	1212948	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl chloride	FB	Ave	17518 1828143	23237	297136	575480	1178723	0.500 60.0	1.00	10.0	20.0	40.0
Bromomethane	FB	Ave	8477 1018109	15644	173256	332849	684351	0.500 60.0	1.00	10.0	20.0	40.0
Chloroethane	FB	Ave	10153 1198344	17259	197906	393445	797631	0.500 60.0	1.00	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	21666 2740286	41473	447083	870194	1802910	0.500 60.0	1.00	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	12537 1946235	25811	321060	630370	1219805	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl ether	FB	Ave	7432 1065569	13770	172164	338610	674672	0.500 60.0	1.00	10.0	20.0	40.0
Acrolein	FB	Ave	7398 916255	15105	138103	290037	593842	2.50 300	5.00	50.0	100	200
1,1-Dichloroethene	FB	Ave	16702 2109595	31807	329580	670015	1365054	0.500 60.0	1.00	10.0	20.0	40.0
Acetone	FB	Lin1	+++++ 790240	31817	146218	261110	509490	+++++ 120	2.00	20.0	40.0	80.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9072 1280247	20060	199994	411559	855692	0.500 60.0	1.00	10.0	20.0	40.0
Iodomethane	FB	Ave	12123 1721657	23229	252950	496306	1082663	0.500 60.0	1.00	10.0	20.0	40.0
Carbon disulfide	FB	Ave	+++++ 3733918	62411	596847	1203586	2482088	+++++ 60.0	1.00	10.0	20.0	40.0
3-Chloro-1-propene	FB	Ave	22393 2135770	34666	345595	681478	1378194	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Lin1	+++++ 1954827	47215	325249	628378	1252367	+++++ 120	2.00	20.0	40.0	80.0
Methylene Chloride	FB	Ave	+++++ 1803366	36966	292730	574349	1172545	+++++ 60.0	1.00	10.0	20.0	40.0
2-Methyl-2-propanol	FB	Ave	7267 1274091	19404	201110	396558	814306	5.00 600	10.0	100	200	400
Acrylonitrile	FB	Ave	35324 4927274	73103	762566	1565888	3123151	5.00 600	10.0	100	200	400
trans-1,2-Dichloroethene	FB	Ave	18118 1859089	26133	284415	580637	1176415	0.500 60.0	1.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	25700 3983103	56719	598157	1248301	2507966	0.500 60.0	1.00	10.0	20.0	40.0
Hexane	FB	Ave	13062 1470210	23479	223284	472024	923295	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	17526 2313408	34869	363928	727923	1447195	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl acetate	FB	Ave	20068 2411081	36187	355543	745376	1523816	0.500 60.0	1.00	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	2011 302076	3466	44846	91285	189580	0.500 60.0	1.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	11611 1378444	19897	216275	424438	873371	0.500 60.0	1.00	10.0	20.0	40.0
2-Butanone (MEK)	FB	Lin1	14982 1179169	27375	197490	375859	759106	1.00 120	2.00	20.0	40.0	80.0
Chlorobromomethane	FB	Ave	8565 1083610	17076	170606	337474	686924	0.500 60.0	1.00	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	5827 735722	12335	117175	237527	458544	1.00 120	2.00	20.0	40.0	80.0
Chloroform	FB	Ave	17439 2104324	31389	339158	660807	1335783	0.500 60.0	1.00	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	13478 1803674	26137	271079	556172	1113817	0.500 60.0	1.00	10.0	20.0	40.0
Cyclohexane	FB	Ave	14008 1822653	29295	296618	616144	1237628	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	14173 1826540	27864	273497	569578	1160019	0.500 60.0	1.00	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	8418 1365135	19454	192262	413240	845898	0.500 60.0	1.00	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	6257 961400	12644	130625	288597	622837	12.5 1500	25.0	250	500	1000
Benzene	FB	Ave	40721 5536710	74297	847087	1696806	3469672	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	13419 1861916	25977	287536	579437	1171456	0.500 60.0	1.00	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 718867	48042	140535	250346	460128	+++++ 60.0	1.00	10.0	20.0	40.0
Trichloroethene	FB	Ave	10291 1276836	18322	193474	398478	811744	0.500 60.0	1.00	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	13477 1768617	26904	269684	569531	1107917	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	11226 1324655	19540	214959	422612	837547	0.500 60.0	1.00	10.0	20.0	40.0
Dibromomethane	FB	Ave	5628 788611	12146	122801	245963	510716	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	+++++ 318519	3180	44085	92476	207147	+++++ 1200	20.0	200	400	800
Dichlorobromomethane	FB	Ave	13281 1619322	23067	242318	499445	1007758	0.500 60.0	1.00	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 1189082	13219	149645	346241	715738	+++++ 120	2.00	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	16343 2165194	27666	316942	643738	1346107	0.500 60.0	1.00	10.0	20.0	40.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	17208 2479022	35296	373165	784641	1584963	1.00 120	2.00	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	51153 5712774	81849	863881	1764177	3585085	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	14087 1976443	22201	286050	587953	1243509	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	10220 1841064	25189	267865	560569	1150363	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	8283 1059440	14498	171187	333424	692322	0.500 60.0	1.00	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	10208 1231210	18478	189197	382325	769407	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	17110 2181429	30705	330048	669516	1380868	0.500 60.0	1.00	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	11089 1794545	24789	270299	552921	1133422	1.00 120	2.00	20.0	40.0	80.0
Chlorodibromomethane	CBNZ d5	Ave	6149 1044602	11981	141618	290234	623910	0.500 60.0	1.00	10.0	20.0	40.0
Ethylene Dibromide	CBNZ d5	Ave	8888 1088495	15428	164828	336875	691693	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobenzene	CBNZ d5	Ave	31251 3584262	51045	549546	1116394	2283467	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	7108 1112576	14090	161695	321398	687569	0.500 60.0	1.00	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	15058 1949808	26482	291789	594200	1219415	0.500 60.0	1.00	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	18775 2420690	31813	362886	731564	1526875	0.500 60.0	1.00	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	17220 2381912	33918	353418	725914	1486470	0.500 60.0	1.00	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	27373 4263963	53166	624428	1280081	2663408	0.500 60.0	1.00	10.0	20.0	40.0
Bromoform	CBNZ d5	Lin1	+++++ 617595	4947	72026	161678	358872	+++++ 60.0	1.00	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	40543 5609659	76935	823642	1693265	3523224	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	9027 1439730	19233	223087	455236	921268	0.500 60.0	1.00	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	11580 1470576	20353	221450	441093	919250	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	3387 480583	7543	71684	148722	304763	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1010 406088	2426	38593	99511	234706	0.500 60.0	1.00	10.0	20.0	40.0
N-Propylbenzene	DCBd 4	Ave	12275 1489098	21118	216622	452391	943239	0.500 60.0	1.00	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	9289 1324406	18041	198546	414669	846275	0.500 60.0	1.00	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	32458 4719953	62389	688265	1402053	2949922	0.500 60.0	1.00	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	11251 1438046	19339	211257	433733	896043	0.500 60.0	1.00	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	29057 3803828	50035	563024	1151156	2458871	0.500 60.0	1.00	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	34030 4944828	65561	724860	1492215	3120164	0.500 60.0	1.00	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	37588 5328955	67977	786123	1607782	3336805	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	20242 2632366	38451	399803	815125	1683362	0.500 60.0	1.00	10.0	20.0	40.0
4-Isopropyltoluene	DCBd 4	Ave	34754 4769908	63650	686383	1411200	2981177	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dichlorobenzene	DCBd 4	Ave	22831 2773012	37959	407047	854214	1755970	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	30453 3972194	54168	582861	1208977	2518790	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	20873 2558511	35700	382809	794068	1650186	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1475 297793	3605	39010	84840	182557	0.500 60.0	1.00	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	12659 1625190	22362	246127	493441	1032959	0.500 60.0	1.00	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	5428 626825	9633	96224	199214	418714	0.500 60.0	1.00	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	33207 4788984	56877	700067	1469090	3067158	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	11064 1522901	21250	224766	465282	1002451	0.500 60.0	1.00	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 1060478	16253	162931	329414	672795	+++++ 60.0	1.00	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 1522224	21887	240698	476624	966714	+++++ 60.0	1.00	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 4711941	66287	713293	1418821	2973960	+++++ 60.0	1.00	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 1797703	27085	266082	552953	1141957	+++++ 60.0	1.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-299859/8	U1260606.D
Level 2	STD8260 240-299859/9	U1260607.D
Level 3	STD8260 240-299859/10	U1260608.D
Level 4	ICIS 240-299859/11	U1260609.D
Level 5	STD8260 240-299859/12	U1260610.D
Level 6	STD8260 240-299859/13	U1260611.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Acetone	+++++	-4.1						50				
Methyl acetate	+++++	-2.2						50				
2-Butanone (MEK)	-16.5						50					
n-Heptane	+++++	1.4						50				
Bromoform	+++++	18.8						50				

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-299859/14 Calibration Date: 10/19/2017 20:18

Instrument ID: A3UX12 Calib Start Date: 10/19/2017 18:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/19/2017 19:55

Lab File ID: U1260612.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4534	0.5352	0.1000	0.0236	0.0200	18.1	30.0
Chloromethane	Ave	0.5607	0.5555	0.1000	0.0198	0.0200	-0.9	30.0
Butadiene	Ave	0.5955	0.6209		0.0209	0.0200	4.3	30.0
Vinyl chloride	Ave	0.5471	0.5877	0.1000	0.0215	0.0200	7.4	30.0
Bromomethane	Ave	0.3117	0.3302	0.0500	0.0212	0.0200	5.9	30.0
Chloroethane	Ave	0.3621	0.3757	0.0500	0.0207	0.0200	3.7	30.0
Dichlorofluoromethane	Ave	0.8167	0.8396		0.0206	0.0200	2.8	30.0
Trichlorofluoromethane	Ave	0.5484	0.6379	0.1000	0.0233	0.0200	16.3	30.0
Ethyl ether	Ave	0.3011	0.3364		0.0223	0.0200	11.7	30.0
Acrolein	Ave	0.0547	0.0593		0.108	0.100	8.3	50.0
1,1-Dichloroethene	Ave	0.6222	0.6792	0.1000	0.0218	0.0200	9.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3761	0.4254	0.0500	0.0226	0.0200	13.1	30.0
Acetone	Lin1		0.1224	0.0100	0.0403	0.0400	0.7	50.0
Iodomethane	Ave	0.4741	0.5513		0.0233	0.0200	16.3	30.0
Carbon disulfide	Ave	1.133	1.187	0.1000	0.0209	0.0200	4.7	30.0
3-Chloro-1-propene	Ave	0.6769	0.6441		0.0190	0.0200	-4.8	30.0
Methyl acetate	Lin1		0.2930	0.1000	0.0404	0.0400	0.9	30.0
Methylene Chloride	Ave	0.5715	0.5547	0.1000	0.0194	0.0200	-3.0	50.0
2-Methyl-2-propanol	Ave	0.0357	0.0399		0.224	0.200	11.8	50.0
Acrylonitrile	Ave	0.1419	0.1478		0.208	0.200	4.2	30.0
trans-1,2-Dichloroethene	Ave	0.5585	0.5748	0.1000	0.0206	0.0200	2.9	30.0
Methyl tert-butyl ether	Ave	1.111	1.185	0.1000	0.0213	0.0200	6.7	30.0
Hexane	Ave	0.4436	0.4669		0.0210	0.0200	5.2	30.0
1,1-Dichloroethane	Ave	0.6732	0.6826	0.2000	0.0203	0.0200	1.4	30.0
Vinyl acetate	Ave	0.7043	0.7776		0.0221	0.0200	10.4	50.0
2,2-Dichloropropane	Ave	0.0812	0.0891		0.0219	0.0200	9.7	30.0
cis-1,2-Dichloroethene	Ave	0.4049	0.4215	0.1000	0.0208	0.0200	4.1	30.0
2-Butanone (MEK)	Lin1		0.1719	0.0100	0.0394	0.0400	-1.6	30.0
Chlorobromomethane	Ave	0.3202	0.3264		0.0204	0.0200	1.9	30.0
Tetrahydrofuran	Ave	0.1105	0.1126		0.0408	0.0400	1.9	30.0
Chloroform	Ave	0.6246	0.6287	0.2000	0.0201	0.0200	0.7	30.0
1,1,1-Trichloroethane	Ave	0.5134	0.5488	0.1000	0.0214	0.0200	6.9	30.0
Cyclohexane	Ave	0.5546	0.6165	0.1000	0.0222	0.0200	11.2	30.0
1,1-Dichloropropene	Ave	0.5309	0.5586		0.0210	0.0200	5.2	30.0
Carbon tetrachloride	Ave	0.3711	0.4082	0.1000	0.0220	0.0200	10.0	30.0
Isobutyl alcohol	Ave	0.0104	0.0113		0.542	0.500	8.4	30.0
Benzene	Ave	1.560	1.623	0.5000	0.0208	0.0200	4.1	30.0
1,2-Dichloroethane	Ave	0.5285	0.5429	0.1000	0.0205	0.0200	2.7	30.0
n-Heptane	Lin1		0.2405		0.0210	0.0200	4.9	30.0
Trichloroethene	Ave	0.3707	0.3836	0.1500	0.0207	0.0200	3.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-299859/14 Calibration Date: 10/19/2017 20:18

Instrument ID: A3UX12 Calib Start Date: 10/19/2017 18:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/19/2017 19:55

Lab File ID: U1260612.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5154	0.5353	0.1000	0.0208	0.0200	3.9	30.0
1,2-Dichloropropane	Ave	0.3953	0.4050	0.1000	0.0205	0.0200	2.4	30.0
Dibromomethane	Ave	0.2287	0.2274		0.0199	0.0200	-0.5	30.0
1,4-Dioxane	Ave	0.0042	0.0047		0.454	0.400	13.5	50.0
Dichlorobromomethane	Ave	0.4675	0.4656	0.1500	0.0199	0.0200	-0.4	30.0
2-Chloroethyl vinyl ether	Ave	0.1530	0.1545		0.0202	0.0200	1.0	30.0
cis-1,3-Dichloropropene	Ave	0.5997	0.6323	0.1500	0.0211	0.0200	5.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3513	0.3636	0.0500	0.0414	0.0400	3.5	30.0
Toluene	Ave	2.031	1.943	0.4000	0.0191	0.0200	-4.3	30.0
trans-1,3-Dichloropropene	Ave	0.6425	0.6507	0.1000	0.0203	0.0200	1.3	30.0
Ethyl methacrylate	Ave	0.5961	0.6130		0.0206	0.0200	2.8	30.0
1,1,2-Trichloroethane	Ave	0.3727	0.3806	0.1000	0.0204	0.0200	2.1	30.0
Tetrachloroethene	Ave	0.4361	0.4305	0.1500	0.0197	0.0200	-1.3	30.0
1,3-Dichloropropane	Ave	0.7554	0.7547		0.0200	0.0200	-0.1	30.0
2-Hexanone	Ave	0.2982	0.3036	0.0500	0.0407	0.0400	1.8	30.0
Chlorodibromomethane	Ave	0.3201	0.3441		0.0215	0.0200	7.5	30.0
Ethylene Dibromide	Ave	0.3808	0.3835		0.0201	0.0200	0.7	30.0
Chlorobenzene	Ave	1.275	1.243	0.3000	0.0195	0.0200	-2.5	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3589	0.3638		0.0203	0.0200	1.4	30.0
Ethylbenzene	Ave	0.6662	0.6757		0.0203	0.0200	1.4	30.0
m-Xylene & p-Xylene	Ave	0.8239	0.8247		0.0200	0.0200	0.0	30.0
o-Xylene	Ave	0.8096	0.8121		0.0201	0.0200	0.3	30.0
Styrene	Ave	1.387	1.421	0.3000	0.0205	0.0200	2.5	30.0
Bromoform	Lin1		0.1889	0.1000	0.0190	0.0200	-5.0	30.0
Isopropylbenzene	Ave	1.891	1.944	0.1000	0.0206	0.0200	2.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9141	0.9590	0.3000	0.0210	0.0200	4.9	30.0
Bromobenzene	Ave	0.9583	0.9678		0.0202	0.0200	1.0	30.0
1,2,3-Trichloropropane	Ave	0.3157	0.3232		0.0205	0.0200	2.4	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1800	0.2269		0.0252	0.0200	26.0	30.0
N-Propylbenzene	Ave	0.9813	0.9805		0.0200	0.0200	-0.0	30.0
2-Chlorotoluene	Ave	0.8521	0.8716		0.0205	0.0200	2.3	30.0
1,3,5-Trimethylbenzene	Ave	2.961	2.990		0.0202	0.0200	1.0	30.0
4-Chlorotoluene	Ave	0.9283	0.9174		0.0198	0.0200	-1.2	30.0
tert-Butylbenzene	Ave	2.456	2.502		0.0204	0.0200	1.9	30.0
1,2,4-Trimethylbenzene	Ave	3.120	3.134		0.0201	0.0200	0.4	30.0
sec-Butylbenzene	Ave	3.355	3.486		0.0208	0.0200	3.9	30.0
1,3-Dichlorobenzene	Ave	1.741	1.737	0.6000	0.0200	0.0200	-0.2	30.0
4-Isopropyltoluene	Ave	3.018	3.056		0.0202	0.0200	1.2	30.0
1,4-Dichlorobenzene	Ave	1.823	1.784	0.5000	0.0196	0.0200	-2.1	30.0
n-Butylbenzene	Ave	2.571	2.579		0.0201	0.0200	0.3	30.0
1,2-Dichlorobenzene	Ave	1.697	1.695	0.4000	0.0200	0.0200	-0.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-299859/14 Calibration Date: 10/19/2017 20:18

Instrument ID: A3UX12 Calib Start Date: 10/19/2017 18:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/19/2017 19:55

Lab File ID: U1260612.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1706	0.1929	0.0500	0.0226	0.0200	13.1	50.0
1,2,4-Trichlorobenzene	Ave	1.062	1.068	0.2000	0.0201	0.0200	0.6	50.0
Hexachlorobutadiene	Ave	0.4330	0.4567		0.0211	0.0200	5.5	30.0
Naphthalene	Ave	2.990	3.139		0.0210	0.0200	5.0	50.0
1,2,3-Trichlorobenzene	Ave	0.9878	1.013		0.0205	0.0200	2.5	30.0
Dibromofluoromethane (Surr)	Ave	0.3083	0.3123		0.0167	0.0165	1.3	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4403	0.3961		0.0149	0.0165	-10.0	30.0
Toluene-d8 (Surr)	Ave	1.612	1.595		0.0163	0.0165	-1.0	30.0
4-Bromofluorobenzene (Surr)	Ave	0.6239	0.6046		0.0160	0.0165	-3.1	30.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab File ID: BFB3687.D BFB Injection Date: 10/20/2017

Instrument ID: A3UX12 BFB Injection Time: 17:07

Analysis Batch No.: 300032

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.4	
75	30.0 - 60.0 % of mass 95	50.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	50.0 - 120.00 % of mass 95	78.3	
175	5.0 - 9.0 % of mass 174	5.6	(7.1) 1
176	95.0 - 101.0 % of mass 174	74.9	(95.7) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-300032/3	U1260624.D	10/20/2017	17:54
	LCS 240-300032/4	U1260625.D	10/20/2017	18:17
	CCV 240-300032/5	U1260626.D	10/20/2017	18:39
	MB 240-300032/7	U1260628.D	10/20/2017	19:25
MRC-MW120A-101117	240-86380-1	U1260629.D	10/20/2017	19:47
MRC-MW119A-101117	240-86380-2	U1260630.D	10/20/2017	20:10
MRC-MW118B-101117	240-86380-3	U1260631.D	10/20/2017	20:33
MRC-MW188A-101117	240-86380-4	U1260632.D	10/20/2017	20:57
TRIP BLANK	240-86380-5	U1260633.D	10/20/2017	21:19

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCVIS 240-300032/3 Calibration Date: 10/20/2017 17:54

Instrument ID: A3UX12 Calib Start Date: 10/19/2017 18:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/19/2017 19:55

Lab File ID: U1260624.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4534	0.5016	0.1000	0.0221	0.0200	10.6	20.0
Chloromethane	Ave	0.5607	0.5169	0.1000	0.0184	0.0200	-7.8	20.0
Butadiene	Ave	0.5955	0.5821		0.0195	0.0200	-2.3	20.0
Vinyl chloride	Ave	0.5471	0.5468	0.1000	0.0200	0.0200	-0.0	20.0
Bromomethane	Ave	0.3117	0.3082	0.0500	0.0198	0.0200	-1.1	20.0
Chloroethane	Ave	0.3621	0.3581	0.0500	0.0198	0.0200	-1.1	20.0
Dichlorofluoromethane	Ave	0.8167	0.8142		0.0199	0.0200	-0.3	20.0
Trichlorofluoromethane	Ave	0.5484	0.6238	0.1000	0.0227	0.0200	13.7	20.0
Ethyl ether	Ave	0.3011	0.2974		0.0198	0.0200	-1.2	20.0
Acrolein	Ave	0.0547	0.0452		0.0826	0.100	-17.4	50.0
1,1-Dichloroethene	Ave	0.6222	0.6105	0.1000	0.0196	0.0200	-1.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3761	0.4045	0.0500	0.0215	0.0200	7.6	20.0
Acetone	Lin1		0.0965	0.0100	0.0310	0.0400	-22.5	50.0
Iodomethane	Ave	0.4741	0.4297		0.0181	0.0200	-9.4	20.0
Carbon disulfide	Ave	1.133	1.170	0.1000	0.0207	0.0200	3.3	20.0
3-Chloro-1-propene	Ave	0.6769	0.6384		0.0189	0.0200	-5.7	20.0
Methyl acetate	Lin1		0.2457	0.1000	0.0336	0.0400	-15.9	20.0
Methylene Chloride	Ave	0.5715	0.5148	0.1000	0.0180	0.0200	-9.9	50.0
2-Methyl-2-propanol	Ave	0.0357	0.0254		0.142	0.200	-29.0	50.0
Acrylonitrile	Ave	0.1419	0.1198		0.169	0.200	-15.5	20.0
trans-1,2-Dichloroethene	Ave	0.5585	0.5388	0.1000	0.0193	0.0200	-3.5	20.0
Methyl tert-butyl ether	Ave	1.111	1.037	0.1000	0.0187	0.0200	-6.7	20.0
Hexane	Ave	0.4436	0.4533		0.0204	0.0200	2.2	20.0
1,1-Dichloroethane	Ave	0.6732	0.6785	0.2000	0.0202	0.0200	0.8	20.0
Vinyl acetate	Ave	0.7043	0.5611		0.0159	0.0200	-20.3	50.0
2,2-Dichloropropane	Ave	0.0812	0.0892		0.0220	0.0200	9.8	20.0
cis-1,2-Dichloroethene	Ave	0.4049	0.4105	0.1000	0.0203	0.0200	1.4	20.0
2-Butanone (MEK)	Lin1		0.1325	0.0100	0.0302	0.0400	-24.6*	20.0
Chlorobromomethane	Ave	0.3202	0.3072		0.0192	0.0200	-4.1	20.0
Tetrahydrofuran	Ave	0.1105	0.0830		0.0300	0.0400	-24.9*	20.0
Chloroform	Ave	0.6246	0.6255	0.2000	0.0200	0.0200	0.1	20.0
1,1,1-Trichloroethane	Ave	0.5134	0.5423	0.1000	0.0211	0.0200	5.6	20.0
Cyclohexane	Ave	0.5546	0.5546	0.1000	0.0200	0.0200	-0.0	20.0
1,1-Dichloropropene	Ave	0.5309	0.5368		0.0202	0.0200	1.1	20.0
Carbon tetrachloride	Ave	0.3711	0.4123	0.1000	0.0222	0.0200	11.1	20.0
Isobutyl alcohol	Ave	0.0104	0.0067		0.322	0.500	-35.7*	20.0
Benzene	Ave	1.560	1.610	0.5000	0.0207	0.0200	3.3	20.0
1,2-Dichloroethane	Ave	0.5285	0.5186	0.1000	0.0196	0.0200	-1.9	20.0
n-Heptane	Lin1		0.2454		0.0215	0.0200	7.5	20.0
Trichloroethene	Ave	0.3707	0.3850	0.1500	0.0208	0.0200	3.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCVIS 240-300032/3 Calibration Date: 10/20/2017 17:54

Instrument ID: A3UX12 Calib Start Date: 10/19/2017 18:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/19/2017 19:55

Lab File ID: U1260624.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5154	0.5578	0.1000	0.0216	0.0200	8.2	20.0
1,2-Dichloropropane	Ave	0.3953	0.3866	0.1000	0.0196	0.0200	-2.2	20.0
Dibromomethane	Ave	0.2287	0.2292		0.0200	0.0200	0.2	20.0
1,4-Dioxane	Ave	0.0042	0.0030		0.283	0.400	-29.2	50.0
Dichlorobromomethane	Ave	0.4675	0.4728	0.1500	0.0202	0.0200	1.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1530	0.1222		0.0319	0.0400	-20.1*	20.0
cis-1,3-Dichloropropene	Ave	0.5997	0.6133	0.1500	0.0205	0.0200	2.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3513	0.2871	0.0500	0.0327	0.0400	-18.3	20.0
Toluene	Ave	2.031	1.973	0.4000	0.0194	0.0200	-2.9	20.0
trans-1,3-Dichloropropene	Ave	0.6425	0.6395	0.1000	0.0199	0.0200	-0.5	20.0
Ethyl methacrylate	Ave	0.5961	0.5325		0.0179	0.0200	-10.7	20.0
1,1,2-Trichloroethane	Ave	0.3727	0.3474	0.1000	0.0186	0.0200	-6.8	20.0
Tetrachloroethene	Ave	0.4361	0.4458	0.1500	0.0204	0.0200	2.2	20.0
1,3-Dichloropropane	Ave	0.7554	0.7008		0.0186	0.0200	-7.2	20.0
2-Hexanone	Ave	0.2982	0.2258	0.0500	0.0303	0.0400	-24.3*	20.0
Chlorodibromomethane	Ave	0.3201	0.3347		0.0209	0.0200	4.5	20.0
Ethylene Dibromide	Ave	0.3808	0.3556		0.0187	0.0200	-6.6	20.0
Chlorobenzene	Ave	1.275	1.257	0.3000	0.0197	0.0200	-1.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3589	0.3782		0.0211	0.0200	5.4	20.0
Ethylbenzene	Ave	0.6662	0.6685		0.0201	0.0200	0.3	20.0
m-Xylene & p-Xylene	Ave	0.8239	0.8401		0.0204	0.0200	2.0	20.0
o-Xylene	Ave	0.8096	0.8229		0.0203	0.0200	1.6	20.0
Styrene	Ave	1.387	1.442	0.3000	0.0208	0.0200	4.0	20.0
Bromoform	Lin1		0.1850	0.1000	0.0186	0.0200	-6.9	20.0
Isopropylbenzene	Ave	1.891	1.948	0.1000	0.0206	0.0200	3.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9141	0.8030	0.3000	0.0176	0.0200	-12.2	20.0
Bromobenzene	Ave	0.9583	0.9399		0.0196	0.0200	-1.9	20.0
1,2,3-Trichloropropane	Ave	0.3157	0.2692		0.0170	0.0200	-14.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1800	0.2023		0.0225	0.0200	12.4	20.0
N-Propylbenzene	Ave	0.9813	0.9720		0.0198	0.0200	-0.9	20.0
2-Chlorotoluene	Ave	0.8521	0.8605		0.0202	0.0200	1.0	20.0
1,3,5-Trimethylbenzene	Ave	2.961	2.987		0.0202	0.0200	0.9	20.0
4-Chlorotoluene	Ave	0.9283	0.9132		0.0197	0.0200	-1.6	20.0
tert-Butylbenzene	Ave	2.456	2.534		0.0206	0.0200	3.2	20.0
1,2,4-Trimethylbenzene	Ave	3.120	3.177		0.0204	0.0200	1.8	20.0
sec-Butylbenzene	Ave	3.355	3.499		0.0209	0.0200	4.3	20.0
1,3-Dichlorobenzene	Ave	1.741	1.731	0.6000	0.0199	0.0200	-0.6	20.0
4-Isopropyltoluene	Ave	3.018	3.076		0.0204	0.0200	1.9	20.0
1,4-Dichlorobenzene	Ave	1.823	1.802	0.5000	0.0198	0.0200	-1.2	20.0
n-Butylbenzene	Ave	2.571	2.620		0.0204	0.0200	1.9	20.0
1,2-Dichlorobenzene	Ave	1.697	1.660	0.4000	0.0196	0.0200	-2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCVIS 240-300032/3 Calibration Date: 10/20/2017 17:54

Instrument ID: A3UX12 Calib Start Date: 10/19/2017 18:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/19/2017 19:55

Lab File ID: U1260624.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1706	0.1516	0.0500	0.0178	0.0200	-11.1	50.0
1,2,4-Trichlorobenzene	Ave	1.062	1.058	0.2000	0.0199	0.0200	-0.4	50.0
Hexachlorobutadiene	Ave	0.4330	0.4408		0.0204	0.0200	1.8	20.0
Naphthalene	Ave	2.990	2.613		0.0175	0.0200	-12.6	50.0
1,2,3-Trichlorobenzene	Ave	0.9878	0.9513		0.0193	0.0200	-3.7	20.0
Dibromofluoromethane (Surr)	Ave	0.3083	0.3109		0.0167	0.0165	0.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4403	0.4199		0.0158	0.0165	-4.6	20.0
Toluene-d8 (Surr)	Ave	1.612	1.616		0.0166	0.0165	0.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.6239	0.6017		0.0159	0.0165	-3.6	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab File ID: U1260628.D Lab Sample ID: MB 240-300032/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX12 Date Analyzed: 10/20/2017 19:25

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-300032/4	U1260625.D	10/20/2017 18:17
MRC-MW120A-101117	240-86380-1	U1260629.D	10/20/2017 19:47
MRC-MW119A-101117	240-86380-2	U1260630.D	10/20/2017 20:10
MRC-MW118B-101117	240-86380-3	U1260631.D	10/20/2017 20:33
MRC-MW188A-101117	240-86380-4	U1260632.D	10/20/2017 20:57
TRIP BLANK	240-86380-5	U1260633.D	10/20/2017 21:19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-300032/7

Matrix: Water | Lab File ID: U1260628.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 19:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.27	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	1.8	U	10	1.8
71-43-2	Benzene	0.28	U	1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	0.30	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	0.44	U	1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-300032/7

Matrix: Water | Lab File ID: U1260628.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 19:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	0.45	U	1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.23	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	0.33	U	1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	0.24	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		69-124
460-00-4	4-Bromofluorobenzene (Surr)	96		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		61-138

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1260625.D

Lab ID: LCS 240-300032/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	21.5	108	64-147	
1,1,2,2-Tetrachloroethane	20.0	18.3	92	58-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.3	112	65-144	
1,1,2-Trichloroethane	20.0	19.3	97	76-121	
1,1-Dichloroethane	20.0	20.2	101	74-120	
1,1-Dichloroethene	20.0	21.3	106	65-127	
1,2,4-Trichlorobenzene	20.0	20.0	100	34-141	
1,2-Dibromo-3-Chloropropane	20.0	18.1	91	50-130	
Ethylene Dibromide	20.0	18.7	93	80-120	
1,2-Dichlorobenzene	20.0	19.7	98	80-120	
1,2-Dichloroethane	20.0	19.9	100	68-133	
1,2-Dichloropropane	20.0	20.4	102	78-127	
1,3-Dichlorobenzene	20.0	19.7	98	80-120	
1,4-Dichlorobenzene	20.0	19.6	98	80-120	
2-Butanone (MEK)	40.0	32.1	80	43-149	
2-Hexanone	40.0	32.1	80	28-169	
4-Methyl-2-pentanone (MIBK)	40.0	33.3	83	53-144	
Acetone	40.0	31.9	80	35-131	
Benzene	20.0	20.8	104	79-120	
Dichlorobromomethane	20.0	19.9	100	79-125	
Bromoform	20.0	17.9	89	55-145	
Bromomethane	20.0	20.9	104	17-158	
Carbon disulfide	20.0	20.9	105	49-141	
Carbon tetrachloride	20.0	21.8	109	55-171	
Chlorobenzene	20.0	19.6	98	80-120	
Chloroethane	20.0	21.1	105	10-149	
Chloroform	20.0	20.6	103	80-120	
Chloromethane	20.0	19.9	99	59-124	
cis-1,2-Dichloroethene	20.0	20.8	104	77-120	
cis-1,3-Dichloropropene	20.0	20.8	104	75-120	
Cyclohexane	20.0	21.0	105	66-135	
Chlorodibromomethane	20.0	20.7	104	64-129	
Dichlorodifluoromethane	20.0	25.7	129	42-141	
Ethylbenzene	20.0	20.1	100	80-120	
Isopropylbenzene	20.0	20.3	101	80-128	
Methyl acetate	40.0	33.1	83	63-137	
Methyl tert-butyl ether	20.0	19.1	95	73-120	
Methylcyclohexane	20.0	20.5	102	63-141	
Methylene Chloride	20.0	18.8	94	64-140	
Styrene	20.0	20.3	102	80-121	
Tetrachloroethene	20.0	20.0	100	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1260625.D

Lab ID: LCS 240-300032/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	19.2	96	78-120	
trans-1,2-Dichloroethene	20.0	20.3	101	74-124	
trans-1,3-Dichloropropene	20.0	19.1	96	67-120	
Trichloroethene	20.0	21.4	107	76-124	
Trichlorofluoromethane	20.0	23.9	120	27-176	
Vinyl chloride	20.0	21.2	106	65-124	
Xylenes, Total	40.0	40.2	101	80-120	
m-Xylene & p-Xylene	20.0	20.2	101	80-120	
o-Xylene	20.0	20.0	100	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MRC-MW120A-101117	240-86380-1	103	93	99	94
MRC-MW119A-101117	240-86380-2	104	95	98	93
MRC-MW118B-101117	240-86380-3	102	95	98	93
MRC-MW188A-101117	240-86380-4	103	94	98	95
TRIP BLANK	240-86380-5	102	94	98	95
	MB 240-300032/7	102	93	98	96
	LCS 240-300032/4	99	88	99	95

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	69-124
DCA = 1,2-Dichloroethane-d4 (Surr)	61-138
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	69-120

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: ICIS 240-299859/11 Date Analyzed: 10/19/2017 19:10

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1260609.D Heated Purge: (Y/N) N

Calibration ID: 41955

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1073944	5.16	893039	7.82	467927	10.03
UPPER LIMIT		2147888	5.66	1786078	8.32	935854	10.53
LOWER LIMIT		536972	4.66	446520	7.32	233964	9.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-299859/14		1109887	5.16	937151	7.82	490581	10.03
CCVIS 240-300032/3		1077615	5.16	919607	7.82	500090	10.03

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: CCVIS 240-300032/3 Date Analyzed: 10/20/2017 17:54

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1260624.D Heated Purge: (Y/N) N

Calibration ID: 41958

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1077615	5.16	919607	7.82	500090	10.03
UPPER LIMIT		2155230	5.66	1839214	8.32	1000180	10.53
LOWER LIMIT		538808	4.66	459804	7.32	250045	9.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-300032/4		1072422	5.16	923337	7.82	497170	10.03
CCV 240-300032/5		1087444	5.16	931383	7.81	466722	10.03
MB 240-300032/7		1029352	5.16	887862	7.81	458020	10.03
240-86380-1	MRC-MW120A-101117	1028460	5.16	894275	7.82	448951	10.03
240-86380-2	MRC-MW119A-101117	1022780	5.16	877478	7.82	447178	10.03
240-86380-3	MRC-MW118B-101117	1012748	5.16	883944	7.82	457587	10.03
240-86380-4	MRC-MW188A-101117	984254	5.16	850742	7.82	450853	10.03
240-86380-5	TRIP BLANK	997375	5.16	868449	7.81	452170	10.03

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

SAMPLE IDENTIFICATION	MRC-MW120A-101117	
COMPOUND	Trichloroethene	
COMPOUND AREA	65032	
INTERNAL STANDARD AMOUNT (ug)	20	
DILUTION FACTOR	1	
INTERNAL STANDARD AREA	1028460	
AVERAGE RRF	0.3707	
65032 x 20 / 1028460 x 0.3707	3.4115	ug/L
3.41151366241399 x 1	3.41	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: U1260629.D

Analysis Method: 8260C | Date Collected: 10/11/2017 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 19:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.23	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	0.32	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.41	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	0.34	U	1.0	0.34
75-34-3	1,1-Dichloroethane	0.25	U	1.0	0.25
75-35-4	1,1-Dichloroethene	0.46	J	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	0.27	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	0.47	U	2.0	0.47
106-93-4	Ethylene Dibromide	0.23	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	0.26	U	1.0	0.26
107-06-2	1,2-Dichloroethane	0.30	U	1.0	0.30
78-87-5	1,2-Dichloropropane	0.30	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	0.32	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	0.23	U	1.0	0.23
78-93-3	2-Butanone (MEK)	1.0	U	10	1.0
591-78-6	2-Hexanone	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.71	U	10	0.71
67-64-1	Acetone	51		10	1.8
71-43-2	Benzene	9.6		1.0	0.28
75-27-4	Dichlorobromomethane	0.30	U	1.0	0.30
75-25-2	Bromoform	0.43	U	1.0	0.43
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.34	U	1.0	0.34
56-23-5	Carbon tetrachloride	0.35	U	1.0	0.35
108-90-7	Chlorobenzene	0.32	U	1.0	0.32
75-00-3	Chloroethane	0.41	U	1.0	0.41
67-66-3	Chloroform	0.31	U	1.0	0.31
74-87-3	Chloromethane	0.43	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	1.0		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	0.26	U	1.0	0.26
110-82-7	Cyclohexane	4.6		1.0	0.44
124-48-1	Chlorodibromomethane	0.25	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	0.50	U	1.0	0.50
100-41-4	Ethylbenzene	0.26	U	1.0	0.26
98-82-8	Isopropylbenzene	0.21	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: U1260629.D

Analysis Method: 8260C | Date Collected: 10/11/2017 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2017 19:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 300032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	1.4	U	10	1.4
1634-04-4	Methyl tert-butyl ether	0.27	U	1.0	0.27
108-87-2	Methylcyclohexane	1.8		1.0	0.45
75-09-2	Methylene Chloride	0.53	U	1.0	0.53
100-42-5	Styrene	0.23	U	1.0	0.23
127-18-4	Tetrachloroethene	0.30	U	1.0	0.30
108-88-3	Toluene	0.24	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	0.29	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	0.31	U	1.0	0.31
79-01-6	Trichloroethene	3.4		1.0	0.33
75-69-4	Trichlorofluoromethane	0.50	U	1.0	0.50
75-01-4	Vinyl chloride	0.45	U	1.0	0.45
1330-20-7	Xylenes, Total	2.1		2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		69-124
460-00-4	4-Bromofluorobenzene (Surr)	94		69-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		61-138

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX12\20171020-69895.b\U1260629.D
Lims ID: 240-86380-B-1
Client ID: MRC-MW120A-101117
Sample Type: Client
Inject. Date: 20-Oct-2017 19:47:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069895-008
Operator ID: 001904 Instrument ID: A3UX12

Method: \\ChromNA\Canton\ChromData\A3UX12\20171020-69895.b\8260_12.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Oct-2017 20:13:07 Calib Date: 19-Oct-2017 22:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX12\20171019-69858.b\U1260618.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: laveyt Date: 20-Oct-2017 20:13:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.157	0.000	99	1028460	20.0	
* 2 Chlorobenzene-d5	117	7.820	7.808	0.012	87	894275	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.032	10.032	0.000	96	448951	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.601	4.589	0.012	93	270436	17.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	92	347299	15.3	
$ 6 Toluene-d8 (Surr)	98	6.518	6.518	0.000	93	1178741	16.4	
$ 7 4-Bromofluorobenzene (Surr	95	8.908	8.908	0.000	89	433541	15.5	
9 Dichlorodifluoromethane	85		1.430				ND	
10 Chloromethane	50		1.584				ND	
11 Vinyl chloride	62		1.643				ND	
13 Bromomethane	94		1.962				ND	
14 Chloroethane	64		2.057				ND	
16 Trichlorofluoromethane	101		2.282				ND	
21 1,1-Dichloroethene	61	2.696	2.731	-0.035	54	14856	0.4643	
22 Acetone	43	2.743	2.743	0.000	99	310801	50.6	
20 1,1,2-Trichloro-1,2,2-trif	101		2.743				ND	
24 Carbon disulfide	76	2.909	2.909	0.000	65	12068	0.2072	
27 Methyl acetate	43		3.027				ND	
28 Methylene Chloride	49		3.110				ND	
32 trans-1,2-Dichloroethene	61		3.347				ND	
31 Methyl tert-butyl ether	73		3.358				ND	
34 1,1-Dichloroethane	63		3.713				ND	

Report Date: 20-Oct-2017 20:13:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

Data File: \\ChromNA\Canton\ChromData\A3UX12\20171020-69895.b\U1260629.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
40 cis-1,2-Dichloroethene	96	4.199	4.199	0.000	82	21219	1.02	
41 2-Butanone (MEK)	43	4.210	4.210	0.000	37	15082	0.8692	
47 Chloroform	83		4.459				ND	
48 1,1,1-Trichloroethane	97		4.625				ND	
49 Cyclohexane	84	4.672	4.672	0.000	89	130766	4.58	
51 Carbon tetrachloride	117		4.755				ND	
53 Benzene	78	4.932	4.932	0.000	95	769947	9.60	
54 1,2-Dichloroethane	62		4.944				ND	
58 Trichloroethene	130	5.477	5.465	0.012	96	65032	3.41	✓
60 Methylcyclohexane	83	5.642	5.642	0.000	90	48723	1.84	
61 1,2-Dichloropropane	63		5.654				ND	
65 Dichlorobromomethane	83		5.891				ND	
68 cis-1,3-Dichloropropene	75		6.281				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.411				ND	
70 Toluene	91	6.577	6.577	0.000	97	21832	0.2404	
71 trans-1,3-Dichloropropene	75		6.754				ND	
74 1,1,2-Trichloroethane	97		6.932				ND	
75 Tetrachloroethene	166		7.062				ND	
77 2-Hexanone	43		7.145				ND	
79 Chlorodibromomethane	129		7.287				ND	
80 Ethylene Dibromide	107		7.393				ND	
82 Chlorobenzene	112		7.843				ND	
84 Ethylbenzene	106		7.938				ND	
85 m-Xylene & p-Xylene	106	8.044	8.044	0.000	97	76310	2.07	
86 o-Xylene	106	8.423	8.423	0.000	95	7270	0.2008	
87 Styrene	104		8.435				ND	
88 Bromoform	173		8.612				ND	
89 Isopropylbenzene	105		8.766				ND	
91 1,1,2,2-Tetrachloroethane	83		9.050				ND	
103 1,3-Dichlorobenzene	146		9.973				ND	
105 1,4-Dichlorobenzene	146		10.056				ND	
109 1,2-Dichlorobenzene	146		10.423				ND	
110 1,2-Dibromo-3-Chloropropan	157		11.192				ND	
112 1,2,4-Trichlorobenzene	180		12.008				ND	
S 126 Xylenes, Total	106				0		2.27	

Reagents:

vm100ss_stk_00027	Amount Added:	0.83	Units: uL	Run Reagent
vmDist_H2o_00103	Amount Added:	0.00	Units:	Run Reagent
vm100is_stk_00036	Amount Added:	1.00	Units: uL	Run Reagent

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 299859

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2017 18:03 Calibration End Date: 10/19/2017 19:55 Calibration ID: 41955

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0096 0.0111	0.0098	0.0098	0.0107	0.0113	Ave		0.0104				7.3		20.0			
Benzene	1.5622 1.6040	1.4411	1.5912	1.5800	1.5791	Ave		1.5596			0.5000	3.8		20.0			
1,2-Dichloroethane	0.5148 0.5394	0.5038	0.5401	0.5395	0.5331	Ave		0.5285			0.1000	2.9		20.0			
n-Heptane	+++++ 0.2083	0.9318	0.2640	0.2331	0.2094	Lin1	0.7351	0.1941				1.8			1.0000		0.9900
Trichloroethene	0.3948 0.3699	0.3554	0.3634	0.3710	0.3694	Ave		0.3707			0.1500	3.6		20.0			
Methylcyclohexane	0.5170 0.5124	0.5218	0.5066	0.5303	0.5042	Ave		0.5154			0.1000	1.9		20.0			
1,2-Dichloropropane	0.4307 0.3838	0.3790	0.4038	0.3935	0.3812	Ave		0.3953			0.1000	5.0		20.0			
Dibromomethane	0.2159 0.2285	0.2356	0.2307	0.2290	0.2324	Ave		0.2287				3.0		20.0			
1,4-Dioxane	+++++ 0.0046	0.0031	0.0041	0.0043	0.0047	Ave		0.0042				15.6		20.0			
Dichlorobromomethane	0.5095 0.4691	0.4474	0.4552	0.4651	0.4586	Ave		0.4675			0.1500	4.7		20.0			
2-Chloroethyl vinyl ether	+++++ 0.1722	0.1282	0.1405	0.1612	0.1629	Ave		0.1530				11.8		20.0			
cis-1,3-Dichloropropene	0.6270 0.6273	0.5366	0.5953	0.5994	0.6126	Ave		0.5997			0.1500	5.6		20.0			
4-Methyl-2-pentanone (MIBK)	0.3301 0.3591	0.3423	0.3505	0.3653	0.3607	Ave		0.3513			0.0500	3.8		20.0			
Toluene	2.3483 2.0146	1.9243	1.9691	1.9755	1.9567	Ave		2.0314			0.4000	7.8		20.0			
trans-1,3-Dichloropropene	0.6467 0.6970	0.5220	0.6520	0.6584	0.6787	Ave		0.6425			0.1000	9.6		20.0			
Ethyl methacrylate	0.4692 0.6493	0.5922	0.6106	0.6277	0.6279	Ave		0.5961				10.9		20.0			
1,1,2-Trichloroethane	0.3802 0.3736	0.3409	0.3902	0.3734	0.3779	Ave		0.3727			0.1000	4.5		20.0			
Tetrachloroethene	0.4686 0.4342	0.4344	0.4312	0.4281	0.4199	Ave		0.4361			0.1500	3.9		20.0			
1,3-Dichloropropane	0.7855 0.7693	0.7219	0.7523	0.7497	0.7537	Ave		0.7554				2.8		20.0			
2-Hexanone	0.2545 0.3164	0.2914	0.3081	0.3096	0.3093	Ave		0.2982			0.0500	7.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab File ID: 71004001.D DFTPP Injection Date: 10/04/2017

Instrument ID: A4HP7 DFTPP Injection Time: 10:14

Analysis Batch No.: 297506

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.5	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	43.8	
70	Less than 2.0% of mass 69	0.2	(0.6) 1
127	25.0 - 75.0% of mass 198	48.1	
197	Less than 1.0% of mass 198	0.4	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	26.0	
365	Greater than 0.75% of mass 198	2.8	
441	Present, but less than mass 443	8.4	
442	40.0 - 110.0% of mass 198	56.6	
443	15.0 - 24.0% of mass 442	10.2	(18.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-297506/2	71004002.D	10/04/2017	10:36
	STD4 240-297506/3	71004003.D	10/04/2017	11:00
	STD3 240-297506/4	71004004.D	10/04/2017	11:24
	STD2 240-297506/5	71004005.D	10/04/2017	11:47
	STD1 240-297506/6	71004006.D	10/04/2017	12:11
	STD9 240-297506/7	71004007.D	10/04/2017	12:34
	STD8 240-297506/8	71004008.D	10/04/2017	12:58
	STD7 240-297506/9	71004009.D	10/04/2017	13:21
	STD6 240-297506/10	71004010.D	10/04/2017	13:45
	ICV 240-297506/11	71004011.D	10/04/2017	14:08

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4992	0.5748 0.5083	0.6324 0.5395	0.5206 0.5451	0.5493	Ave		0.5462				7.8		20.0			
N-Nitrosodimethylamine	0.6999	0.7110 0.7306	0.7923 0.7479	0.7515 0.7657	0.6620	Ave		0.7326				5.6		20.0			
Pyridine	1.4702 1.3973	1.3259 1.4312	1.3422 1.4341	1.3870 1.4747	1.3909	Ave		1.4060				3.7		20.0			
Benzaldehyde	1.3418 1.1061	1.1460 1.0608	1.1236 1.0627	1.1259 1.0187	1.0957	Ave		1.1202			0.0100	8.2		20.0			
Phenol	1.6347	1.5388 1.6263	1.7341 1.7260	1.6338 1.7079	1.7784	Ave		1.6725			0.8000	4.6		20.0			
Aniline	2.0192	1.8225 2.0278	1.8766 2.1134	2.0187 2.1299	2.0339	Ave		2.0053				5.3		20.0			
Bis(2-chloroethyl)ether	1.2201	1.2288 1.2200	1.2183 1.2823	1.2140 1.2640	1.2614	Ave		1.2386			0.7000	2.1		20.0			
2-Chlorophenol	1.3148	1.0751 1.3346	1.2274 1.3745	1.2755 1.3793	1.3058	Ave		1.2859			0.8000	7.7		20.0			
n-Decane	1.4332	1.3682 1.4265	1.4633 1.4812	1.4535 1.4890	1.5025	Ave		1.4522				3.0		20.0			
1,3-Dichlorobenzene	1.4916	1.3903 1.4926	1.4887 1.5383	1.5031 1.5742	1.5044	Ave		1.4979				3.5		20.0			
1,4-Dichlorobenzene	1.5003	1.5311 1.5506	1.5331 1.5763	1.5614 1.6091	1.5778	Ave		1.5549				2.2		20.0			
Benzyl alcohol	0.7755	0.6629 0.8150	0.6559 0.8372	0.6916 0.8598	0.7572	Ave		0.7569				10.5		20.0			
1,2-Dichlorobenzene	1.4185	1.4010 1.4457	1.3757 1.4899	1.4510 1.4871	1.4657	Ave		1.4418				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	1.2006	1.0371 1.1805	1.1384 1.2454	1.1469 1.2559	1.2020	Ave		1.1759			0.7000	5.9		20.0			
bis (2-chloroisopropyl) ether	1.6437	1.6919 1.6674	1.7801 1.7248	1.7770 1.7792	1.7037	Ave		1.7210				3.1		20.0			
Indene	2.4711	2.3348 2.5008	2.4441 2.6322	2.4516 2.7286	2.4764	Ave		2.5049				4.9		20.0			
N-Nitrosodi-n-propylamine	0.9398	0.7244 0.9449	0.7753 1.0203	0.8919 1.0096	0.9191	Ave		0.9032			0.5000	11.6		20.0			
3 & 4 Methylphenol	1.2471	0.9704 1.2756	1.0916 1.3374	1.1892 1.4067	1.2206	Ave		1.2173				11.3		20.0			
Acetophenone	1.8773	1.7032 1.8929	1.7944 2.0084	1.8985 2.0760	1.8798	Ave		1.8913			0.0100	6.1		20.0			
Hexachloroethane	0.6021	0.7115 0.6258	0.6762 0.6544	0.5949 0.6621	0.6475	Ave		0.6468			0.3000	6.0		20.0			
Nitrobenzene	0.4041	0.3733 0.4095	0.3643 0.4189	0.4046 0.4149	0.4305	Ave		0.4025			0.2000	5.6		20.0			
Isophorone	0.6775	0.5291 0.7053	0.6013 0.7228	0.6238 0.7268	0.6871	Ave		0.6592			0.4000	10.5		20.0			
2-Nitrophenol	0.1751	0.1288 0.1849	0.1572 0.1886	0.1648 0.1850	0.1728	Ave		0.1697			0.1000	11.6		20.0			
2,4-Dimethylphenol	0.3762	0.3043 0.3880	0.3382 0.3951	0.3594 0.4018	0.3691	Ave		0.3665			0.2000	8.8		20.0			
Benzoic acid	0.1610	+++++ 0.1931	0.0944 0.2002	0.1212 0.2030	0.1436	Lin1	-0.297	0.2010							0.9930		0.9900
Bis(2-chloroethoxy)methane	0.3950	0.3698 0.4175	0.3757 0.4248	0.4036 0.4254	0.4062	Ave		0.4023			0.3000	5.2		20.0			
2,4-Dichlorophenol	0.2981	0.2020 0.3081	0.2494 0.3130	0.2659 0.3161	0.2915	Ave		0.2805			0.2000	14.0		20.0			
1,2,4-Trichlorobenzene	0.3499	0.3369 0.3482	0.3161 0.3554	0.3497 0.3642	0.3445	Ave		0.3456				4.1		20.0			
Naphthalene	1.0610 1.0026	0.8885 1.0289	0.9995 1.0546	0.9545 1.0751	1.0123	Ave		1.0086			0.7000	5.8		20.0			
4-Chloroaniline	0.4286	0.3651 0.4384	0.3965 0.4451	0.4041 0.4579	0.4228	Ave		0.4198			0.0100	7.2		20.0			
2,6-Dichlorophenol	0.3001	0.2303 0.2991	0.2786 0.3057	0.2709 0.3144	0.2962	Ave		0.2869				9.4		20.0			
Hexachlorobutadiene	0.2357	0.1870 0.2405	0.2262 0.2392	0.2319 0.2457	0.2427	Ave		0.2311			0.0100	8.2		20.0			
Caprolactam	0.1291 0.0976	0.0756 0.1012	0.0802 0.1021	0.0900 +++++	0.0981	Ave		0.0967			0.0100	16.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3304	0.2500 0.3351	0.2470 0.3419	0.2797 0.3523	0.3211	Ave		0.3072			0.2000	13.7		20.0			
2-Methylnaphthalene	0.7439 0.7247	0.6309 0.7246	0.7004 0.7526	0.6788 0.7866	0.7135	Ave		0.7173			0.4000	6.3		20.0			
1-Methylnaphthalene	0.6090 0.6610	0.5776 0.6748	0.6087 0.6907	0.5915 0.7101	0.6667	Ave		0.6433				7.4		20.0			
Hexachlorocyclopentadiene	0.3717	0.2703 0.3982	0.2891 0.4195	0.3198 0.4282	0.3615	Ave		0.3573			0.0500	16.5		20.0			
1,2,4,5-Tetrachlorobenzene	0.6023	0.5540 0.5893	0.5828 0.6136	0.5743 0.6223	0.5633	Ave		0.5878			0.0100	4.1		20.0			
2,4,6-Trichlorophenol	0.3597	0.2941 0.3620	0.3135 0.3762	0.3015 0.3766	0.3503	Ave		0.3417			0.2000	9.8		20.0			
2,4,5-Trichlorophenol	0.3658	0.2427 0.3752	0.2975 0.3864	0.3138 0.3845	0.3615	Ave		0.3409			0.2000	15.1		20.0			
1,1'-Biphenyl	1.1640 1.3617	1.3244 1.3687	1.2761 1.4254	1.2643 1.4390	1.3414	Ave		1.3294			0.0100	6.4		20.0			
2-Chloronaphthalene	1.0003 1.0081	0.9524 1.0328	0.9140 1.0434	0.9900 1.0618	0.9893	Ave		0.9991			0.8000	4.6		20.0			
2-Nitroaniline	0.3716	0.2871 0.3769	0.2991 0.3988	0.3316 0.3935	0.3664	Ave		0.3531			0.0100	12.0		20.0			
Dimethyl phthalate	1.1910	1.1059 1.2241	1.1610 1.2571	1.1856 1.2681	1.1895	Ave		1.1978			0.0100	4.4		20.0			
1,3-Dinitrobenzene	0.2003	0.0898 0.2008	0.1551 0.2068	0.1854 0.2056	0.1730	Lin1	-0.059	0.2064							0.9990		0.9900
2,6-Dinitrotoluene	0.2846	0.2264 0.2902	0.2463 0.3010	0.2421 0.3078	0.2679	Ave		0.2708				11.0		20.0			
Acenaphthylene	1.2420 1.5918	1.4218 1.6531	1.4699 1.7132	1.4645 1.7032	1.5416	Ave		1.5335			0.9000	9.9		20.0			
3-Nitroaniline	0.2810	0.1739 0.2996	0.2514 0.3035	0.2490 0.2963	0.2727	Ave		0.2659			0.0100	16.0		20.0			
2,4-Dinitrophenol	0.1524	+++++ 0.1780	0.0667 0.1863	0.0856 0.1957	0.1274	Qua	-0.266	0.1520	0.0010012		0.0100				0.9990		0.9900
Acenaphthene	0.8054 1.1136	1.0422 1.1394	1.0544 1.1901	1.0471 1.2087	1.0741	Ave		1.0750			0.9000	11.0		20.0			
4-Nitrophenol	0.2345	0.1231 0.2379	0.1576 0.2429	0.1887 0.2404	0.2191	Lin1	-0.152	0.2431							1.0000		0.9900
2,4-Dinitrotoluene	0.3846	0.2848 0.3987	0.3103 0.4006	0.3370 0.4158	0.3705	Ave		0.3628			0.2000	13.0		20.0			
Dibenzofuran	1.4352 1.5627	1.4118 1.5741	1.5624 1.6157	1.4618 1.6453	1.5413	Ave		1.5344			0.8000	5.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.3392	0.2562 0.3511	0.2630 0.3585	0.2982 0.3653	0.3185	Ave		0.3187			0.0100	13.3		20.0			
Diethyl phthalate	1.2333	1.1698 1.2791	1.1857 1.3077	1.1582 1.3395	1.2207	Ave		1.2367			0.0100	5.4		20.0			
Hexadecane	0.7454	0.6359 0.7671	0.6779 0.7901	0.6996 0.8054	0.7478	Ave		0.7336				7.9		20.0			
4-Chlorophenyl phenyl ether	0.6474	0.6491 0.6694	0.6108 0.6861	0.6327 0.6976	0.6367	Ave		0.6537			0.4000	4.4		20.0			
4-Nitroaniline	0.3050	0.2237 0.3124	0.2445 0.3283	0.2621 0.3426	0.2765	Ave		0.2869			0.0100	14.6		20.0			
Fluorene	1.0130 1.2345	1.1508 1.3018	1.2158 1.3464	1.1602 1.4091	1.2372	Ave		1.2299			0.9000	9.5		20.0			
4,6-Dinitro-2-methylphenol	0.1161	0.0542 0.1298	0.0846 0.1360	0.0960 0.1361	0.1024	Lin1	-0.107	0.1334			0.0100				0.9950		0.9900
Diphenylamine	0.5489	0.4828 0.5795	0.5513 0.5838	0.5502 0.5741	0.5293	Ave		0.5500				6.0		20.0			
N-Nitrosodiphenylamine	0.4667	0.4105 0.4927	0.4687 0.4963	0.4678 0.4881	0.4500	Ave		0.4676			0.0100	6.0		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.6896	0.5619 0.7104	0.6721 0.7382	0.6920 0.7232	0.6779	Ave		0.6831				7.9		20.0			
Azobenzene	0.6895	0.5619 0.7104	0.6721 0.7382	0.6926 0.7232	0.6771	Ave		0.6831				7.9		20.0			
4-Bromophenyl phenyl ether	0.1914	0.1649 0.2015	0.1902 0.2058	0.2048 0.2124	0.1896	Ave		0.1951			0.1000	7.6		20.0			
Hexachlorobenzene	0.2305 0.1826	0.1724 0.1891	0.1988 0.1944	0.1833 0.1940	0.1744	Lin1	0.0006	0.1901			0.1000				0.9990		0.9900
Atrazine	0.1607 0.1955	0.1659 0.2124	0.1963 0.2121	0.1994 0.2062	0.1972	Ave		0.1940			0.0100	9.6		20.0			
n-Octadecane	0.3927	0.3232 0.4157	0.3680 0.4352	0.3900 0.4326	0.3850	Ave		0.3928				9.3		20.0			
Pentachlorophenol	0.1182	0.0587 0.1307	0.0817 0.1381	0.0942 0.1426	0.1088	Lin1	-0.113	0.1371			0.0500				0.9950		0.9900
Phenanthrene	0.8447 0.9928	0.9443 1.0203	1.0270 1.0532	0.9851 1.0493	0.9533	Ave		0.9855			0.7000	6.6		20.0			
Anthracene	0.7948 0.9869	0.8323 1.0309	0.9235 1.0726	0.9659 1.0638	0.9635	Ave		0.9593			0.7000	10.0		20.0			
Carbazole	0.8901	0.7829 0.9250	0.8846 0.9464	0.8588 0.9474	0.8751	Ave		0.8888			0.0100	6.1		20.0			
Di-n-butyl phthalate	1.0212	0.7239 1.0877	0.9584 1.1189	0.9895 1.1305	1.0083	Ave		1.0048			0.0100	12.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	0.9648 1.1342	0.9770 1.1924	1.1392 1.2288	1.0882 1.2265	1.1039	Ave		1.1172			0.6000	8.7		20.0			
Benzidine	 0.4657	0.2690 0.5008	0.3995 0.4842	0.4542 0.4720	0.4742	Ave		0.4399				17.1		20.0			
Pyrene	0.9536 1.0421	0.8498 1.1022	1.0440 1.1145	0.9836 1.1012	1.0597	Ave		1.0279			0.6000	8.4		20.0			
Butyl benzyl phthalate	 0.4235	0.2971 0.4510	0.3900 0.4571	0.3732 0.4453	0.4129	Ave		0.4063			0.0100	13.1		20.0			
Bis(2-ethylhexyl) phthalate	 0.5657	0.3779 0.6172	0.4640 0.6338	0.4572 0.6361	0.5550	Ave		0.5384			0.0100	17.7		20.0			
3,3'-Dichlorobenzidine	 0.3482	0.2501 0.3675	0.3083 0.3822	0.2987 0.3829	0.3405	Ave		0.3348			0.0100	13.8		20.0			
Benzo[a]anthracene	0.9781 1.0286	0.8689 1.0669	1.0099 1.0767	0.9787 1.0778	1.0440	Ave		1.0144			0.8000	6.6		20.0			
Chrysene	0.8537 0.9699	0.9048 1.0258	1.0248 1.0486	0.9569 1.0344	1.0068	Ave		0.9806			0.7000	6.7		20.0			
Di-n-octyl phthalate	 1.2032	0.7925 1.2596	0.9274 1.3357	0.8920 1.3639	1.0605	Ave		1.1044			0.0100	19.7		20.0			
Benzo[b]fluoranthene	0.9243 1.2447	1.0226 1.2408	1.0992 1.2531	1.0205 1.3125	1.1157	Ave		1.1370			0.7000	11.7		20.0			
Benzo[k]fluoranthene	0.6804 1.2493	0.9796 1.2820	1.2643 1.3272	1.1918 1.3089	1.1937	Ave		1.1641			0.7000	17.9		20.0			
Benzo[a]pyrene	0.5811 1.1675	0.8719 1.1705	1.0367 1.2223	0.9781 1.2547	1.0876	Lin1	-0.108	1.2079			0.7000				0.9980		0.9900
Indeno[1,2,3-cd]pyrene	1.0209 1.3011	1.0209 1.3245	1.1333 1.3766	1.1191 1.3942	1.2018	Ave		1.2103			0.5000	12.0		20.0			
Dibenz(a,h)anthracene	0.9523 1.0789	0.7934 1.1095	0.9300 1.1629	0.9223 1.2077	1.0150	Ave		1.0191			0.4000	13.0		20.0			
Benzo[g,h,i]perylene	1.1524 1.0906	0.8642 1.1089	1.0138 1.1442	0.9826 1.1512	1.0374	Ave		1.0606			0.5000	9.1		20.0			
2-Fluorophenol (Surr)	 1.1732	0.9158 1.1887	1.1098 1.2162	1.0871 1.2196	1.1908	Ave		1.1376				8.9		20.0			
Phenol-d5 (Surr)	 1.5057	1.3831 1.5399	1.4256 1.5661	1.5599 1.5979	1.5087	Ave		1.5109				4.8		20.0			
Nitrobenzene-d5 (Surr)	0.3712 0.4029	0.3420 0.4107	0.3917 0.4137	0.3838 0.4130	0.4092	Ave		0.3931				6.1		20.0			
2-Fluorobiphenyl (Surr)	1.1469 1.1691	1.1541 1.2122	1.1967 1.2360	1.1579 1.2370	1.1845	Ave		1.1883				2.9		20.0			
2,4,6-Tribromophenol (Surr)	 0.1485	+++++ 0.1524	0.1202 0.1572	0.1317 0.1646	0.1423	Ave		0.1453				10.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Terphenyl-d14 (Surr)	0.6445 0.6621	0.6337 0.7027	0.6724 0.7063	0.6388 0.6926	0.6771	Ave		0.6700				4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCBd 4	Ave	155799	8200 240867	18913 324762	30826 383406	78004	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCBd 4	Ave	218412	10142 346180	23695 450238	44497 538503	93996	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCBd 4	Ave	8769 872123	37827 1356254	80278 1726767	164250 2074390	394988	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzaldehyde	DCBd 4	Ave	8003 690373	32695 1005307	67205 1279497	133332 1432956	311173	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCBd 4	Ave	510175	21950 770613	51859 1039115	96734 1201187	252517	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCBd 4	Ave	630161	25997 960835	56122 1272339	119524 1497945	288806	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCBd 4	Ave	380773	17529 578086	36433 771962	71879 888990	179105	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCBd 4	Ave	410313	15336 632367	36707 827496	75524 970065	185413	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
n-Decane	DCBd 4	Ave	447275	19517 675912	43762 891715	86062 1047194	213350	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	465508	19832 707230	44519 926087	88997 1107152	213620	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	468209	21840 734706	45847 948946	92447 1131665	224033	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCBd 4	Ave	242034	9456 386154	19615 504031	40949 604673	107523	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	442691	19985 685006	41141 896946	85914 1045891	208123	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCBd 4	Ave	374691	14794 559369	34044 749760	67909 883277	170671	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
bis (2-chloroisopropyl) ether	DCBd 4	Ave	512964	24135 790063	53235 1038349	105214 1251352	241921	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indene	DCBd 4	Ave	1542378	66611 2369913	146186 3169265	290312 3838025	703263	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodi-n-propylamine	DCBd 4	Ave	293293	10334 447732	23187 614230	52809 710080	130512	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3 & 4 Methylphenol	DCBd 4	Ave	389197	13842 604425	32645 805155	70412 989329	173316	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCBd 4	Ave	585870	24296 896917	53663 1209126	112408 1460032	266913	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCBd 4	Ave	187908	10149 296509	20221 393960	35222 465674	91942	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	474833	20292 723338	41464 969068	93246 1139001	230870	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	796086	28761 1245869	68433 1671863	143757 1995297	368478	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	205753	7003 326576	17888 436229	37982 507971	92654	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	442002	16542 685474	38489 913855	82821 1102981	197901	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Lin1	378422	+++++ 682251	21486 926274	55876 1114336	154023	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	464094	20104 737590	42755 982600	93016 1167843	217835	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	350204	10980 544244	28380 724111	61277 867701	156317	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	411119	18312 615024	35980 822115	80595 999674	184743	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	11891 1178033	48301 1817569	113761 2439393	219950 2951300	542855	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	503613	19845 774445	45128 1029657	93123 1257063	226721	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	352649	12521 528316	31706 707148	62417 863040	158826	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	276977	10167 424857	25749 553388	53439 674479	130161	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	2894 229327	8214 357495	18254 472269	41497 +++++	105200	0.200 20.0	1.00 30.0	2.00 40.0	4.00 +++++	10.0
4-Chloro-3-methylphenol	NPT	Ave	388225	13591 592047	28112 790787	64455 967076	172168	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	8337 851459	34297 1280089	79715 1740926	156418 2159215	382629	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1-Methylnaphthalene	NPT	Ave	6825 776629	31400 1192045	69278 1597684	136314 1949329	357506	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorocyclopentadiene	ANT	Ave	 282994	9020 458664	21153 632443	46946 789181	127709	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	 458585	18490 678765	42646 925036	84317 1146948	198986	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	 273845	9814 416915	22937 567169	44267 694124	123726	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	 278470	8099 432150	21773 582571	46076 708653	127687	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	8249 1036769	44198 1576418	93377 2148826	185610 2652322	473819	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	7089 767557	31785 1189546	66885 1573070	145340 1957025	349438	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	 282947	9580 434071	21888 601147	48683 725240	129407	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	 906787	36906 1409826	84960 1895186	174065 2337250	420162	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Lin1	 152491	2997 231225	11349 311803	27223 378952	61105	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	 216644	7556 334242	18024 453802	35544 567368	94647	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	8802 1211952	47448 1903998	107563 2582814	215011 3139265	544529	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	 213917	5804 345061	18398 457604	36557 546181	96310	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Qua	 231985	+++++ 409936	9760 561686	25125 721239	90005	 20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	5708 847851	34782 1312346	77156 1794208	153721 2227743	379396	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Lin1	 357136	8213 547991	23065 732281	55409 886326	154807	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	 292802	9504 459215	22703 603999	49472 766309	130859	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	10171 1189751	47114 1812967	114327 2435800	214604 3032385	544426	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	 258276	8549 404328	19243 540456	43780 673347	112492	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	 938974	39039 1473225	86761 1971470	170040 2468842	431188	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexadecane	ANT	Ave	 567535	21221 883458	49607 1191120	102713 1484470	264139	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Chlorophenyl phenyl ether	ANT	Ave	492933	21661 771007	44695 1034382	92885 1285767	224917	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	232181	7467 359783	17894 494986	38479 631499	97657	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	7179 939867	38404 1499408	88963 2029776	170333 2597191	437031	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	344640	6881 574293	23046 784900	52197 989882	143104	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Diphenylamine	PHN	Ave	692455	26051 1090343	63866 1431991	127170 1775067	314331	8.50	0.425 12.8	0.850 17.0	1.70 21.3	4.25
N-Nitrosodiphenylamine	PHN	Ave	692455	26051 1090343	63866 1431991	127170 1775067	314331	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	1023229	35658 1572053	91588 2129932	188138 2630051	473580	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	1023139	35658 1572053	91588 2129932	188279 2630051	472988	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	284071	10464 446017	25921 593676	55684 772489	132442	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Lin1	3120 270983	10943 418527	27090 561003	49837 705449	121824	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	4350 580038	21055 940253	53513 1224099	108420 1500060	275449	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
n-Octadecane	PHN	Ave	582625	20510 919860	50141 1255710	106035 1573277	268940	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Lin1	350815	7454 578474	22266 797070	51213 1036945	151980	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	11435 1473126	59924 2257937	139948 3038587	267812 3815929	665926	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	10760 1464399	52817 2281330	125840 3094591	262584 3868950	673052	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	1320702	49685 2047120	120548 2730700	233473 3445490	611290	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	1515259	45943 2407022	130606 3228158	269004 4111487	704369	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	13061 1682964	62000 2638719	155233 3545476	295839 4460565	771159	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	1515439	37173 2420807	120088 3099062	277583 3869429	707596	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	13559 1695568	58728 2663764	156895 3566825	300574 4513702	790698	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	688994	20528 1089953	58605 1462968	114050 1825432	308067	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bis(2-ethylhexyl) phthalate	CRY	Ave	920454	26118 1491673	69727 2028413	139692 2607117	414141	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	1133177	34564 1776400	92667 2446125	182578 3139127	508101	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	13907 1673585	60044 2578454	151766 3445968	299058 4417897	778986	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	12138 1578035	62525 2479102	154019 3355820	292402 4239803	751251	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	1458692	41295 2344925	108845 3239603	208342 4149021	631644	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	9942 1509015	53286 2309976	129006 3039199	238341 3992487	664542	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	7319 1514553	51044 2386658	148389 3218942	278363 3981504	710991	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Lin1	6250 1415444	45432 2179089	121671 2964559	228438 3816637	647833	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	10981 1577390	53199 2465702	133015 3338910	261389 4241122	715827	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	10243 1307982	41344 2065476	109151 2820560	215405 3673614	604541	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	12395 1322192	45031 2064390	118986 2775151	229497 3501712	617903	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCBd 4	Ave	366140	13063 563228	33188 732200	64365 857722	169091	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCBd 4	Ave	469910	19729 729643	42632 942805	92359 1123847	214232	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	4160 473401	18589 725575	44580 956902	88438 1133704	219421	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	8128 890082	38516 1396167	87571 1863334	169988 2280003	418399	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	113088	+++++ 175568	8799 236981	19340 303462	50259	10.0	+++++ 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	9164 1077309	43789 1698368	101054 2260424	195205 2838933	505243	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.4853		8.88	10.0	-11.2	30.0
N-Nitrosodimethylamine	Ave	0.7326	0.6375		8.70	10.0	-13.0	30.0
Pyridine	Ave	1.406	1.300		18.5	20.0	-7.5	30.0
Benzaldehyde	Ave	1.120	1.075	0.0100	19.2	20.0	-4.0	30.0
Phenol	Ave	1.673	1.578	0.8000	9.43	10.0	-5.7	30.0
Aniline	Ave	2.005	1.816		9.06	10.0	-9.4	30.0
Bis(2-chloroethyl)ether	Ave	1.239	1.169	0.7000	9.44	10.0	-5.6	30.0
2-Chlorophenol	Ave	1.286	1.290	0.8000	10.0	10.0	0.3	30.0
n-Decane	Ave	1.452	1.364		9.39	10.0	-6.1	30.0
1,3-Dichlorobenzene	Ave	1.498	1.453		9.70	10.0	-3.0	30.0
1,4-Dichlorobenzene	Ave	1.555	1.491		9.59	10.0	-4.1	30.0
Benzyl alcohol	Ave	0.7569	0.7637		10.1	10.0	0.9	30.0
1,2-Dichlorobenzene	Ave	1.442	1.370		9.50	10.0	-5.0	30.0
2-Methylphenol	Ave	1.176	1.125	0.7000	9.56	10.0	-4.4	30.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.494		8.68	10.0	-13.2	30.0
Indene	Ave	2.505	2.263		18.1	20.0	-9.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.8606	0.5000	9.53	10.0	-4.7	30.0
3 & 4 Methylphenol	Ave	1.217	1.211		9.95	10.0	-0.5	30.0
Acetophenone	Ave	1.891	1.747	0.0100	9.24	10.0	-7.6	30.0
Hexachloroethane	Ave	0.6468	0.5917	0.3000	9.15	10.0	-8.5	30.0
Nitrobenzene	Ave	0.4025	0.3854	0.2000	9.57	10.0	-4.3	30.0
Isophorone	Ave	0.6592	0.6512	0.4000	9.88	10.0	-1.2	30.0
2-Nitrophenol	Ave	0.1697	0.1684	0.1000	9.92	10.0	-0.8	30.0
2,4-Dimethylphenol	Ave	0.3665	0.2941	0.2000	8.03	10.0	-19.7	30.0
Benzoic acid	Lin1		0.1686		18.2	20.0	-8.8	30.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3789	0.3000	9.42	10.0	-5.8	30.0
2,4-Dichlorophenol	Ave	0.2805	0.2833	0.2000	10.1	10.0	1.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3199		9.26	10.0	-7.4	30.0
Naphthalene	Ave	1.009	0.9504	0.7000	9.42	10.0	-5.8	30.0
4-Chloroaniline	Ave	0.4198	0.3833	0.0100	9.13	10.0	-8.7	30.0
2,6-Dichlorophenol	Ave	0.2869	0.2753		9.60	10.0	-4.0	30.0
Hexachlorobutadiene	Ave	0.2311	0.2244	0.0100	9.71	10.0	-2.9	30.0
Caprolactam	Ave	0.0967	0.0976	0.0100	20.2	20.0	0.9	30.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3079	0.2000	10.0	10.0	0.2	30.0
2-Methylnaphthalene	Ave	0.7173	0.6659	0.4000	9.28	10.0	-7.2	30.0
1-Methylnaphthalene	Ave	0.6433	0.6467		10.1	10.0	0.5	30.0
Hexachlorocyclopentadiene	Ave	0.3573	0.2954	0.0500	8.27	10.0	-17.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5413	0.0100	9.21	10.0	-7.9	30.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3348	0.2000	9.80	10.0	-2.0	30.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3521	0.2000	10.3	10.0	3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.280	0.0100	9.63	10.0	-3.7	30.0
2-Chloronaphthalene	Ave	0.999	0.9518	0.8000	9.53	10.0	-4.7	30.0
2-Nitroaniline	Ave	0.3531	0.3461	0.0100	9.80	10.0	-2.0	30.0
Dimethyl phthalate	Ave	1.198	1.143	0.0100	9.54	10.0	-4.6	30.0
1,3-Dinitrobenzene	Lin1		0.1864		9.32	10.0	-6.8	30.0
2,6-Dinitrotoluene	Ave	0.2708	0.2748		10.1	10.0	1.5	30.0
Acenaphthylene	Ave	1.533	1.536	0.9000	10.0	10.0	0.1	30.0
3-Nitroaniline	Ave	0.2659	0.2703	0.0100	10.2	10.0	1.6	30.0
2,4-Dinitrophenol	Qua		0.1562	0.0100	19.7	20.0	-1.3	30.0
Acenaphthene	Ave	1.075	1.032	0.9000	9.60	10.0	-4.0	30.0
4-Nitrophenol	Lin1		0.2219		18.9	20.0	-5.6	30.0
2,4-Dinitrotoluene	Ave	0.3628	0.3747	0.2000	10.3	10.0	3.3	30.0
Dibenzofuran	Ave	1.534	1.448	0.8000	9.44	10.0	-5.6	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.3082	0.0100	9.67	10.0	-3.3	30.0
Diethyl phthalate	Ave	1.237	1.179	0.0100	9.53	10.0	-4.7	30.0
Hexadecane	Ave	0.7336	0.7020		9.57	10.0	-4.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.6098	0.4000	9.33	10.0	-6.7	30.0
4-Nitroaniline	Ave	0.2869	0.2769	0.0100	9.65	10.0	-3.5	30.0
Fluorene	Ave	1.230	1.180	0.9000	9.60	10.0	-4.0	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1211	0.0100	18.9	20.0	-5.3	30.0
Diphenylamine	Ave	0.5500	0.5216		8.07	8.51	-5.2	30.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4439	0.0100	9.49	10.0	-5.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6700		9.81	10.0	-1.9	30.0
Azobenzene	Ave	0.6831	0.6696		9.80	10.0	-2.0	30.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.1814	0.1000	9.30	10.0	-7.0	30.0
Hexachlorobenzene	Lin1		0.1744	0.1000	9.17	10.0	-8.3	30.0
Atrazine	Ave	0.1940	0.2025	0.0100	20.9	20.0	4.4	30.0
n-Octadecane	Ave	0.3928	0.3838		9.77	10.0	-2.3	30.0
Pentachlorophenol	Lin1		0.1227	0.0500	18.7	20.0	-6.4	30.0
Phenanthrene	Ave	0.9855	0.9442	0.7000	9.58	10.0	-4.2	30.0
Anthracene	Ave	0.9593	0.9454	0.7000	9.85	10.0	-1.5	30.0
Carbazole	Ave	0.8888	0.8550	0.0100	9.62	10.0	-3.8	30.0
Di-n-butyl phthalate	Ave	1.005	1.023	0.0100	10.2	10.0	1.8	30.0
Fluoranthene	Ave	1.117	1.091	0.6000	9.77	10.0	-2.3	30.0
Benzidine	Ave	0.4399	0.4387		19.9	20.0	-0.3	30.0
Pyrene	Ave	1.028	1.002	0.6000	9.75	10.0	-2.5	30.0
Butyl benzyl phthalate	Ave	0.4063	0.3972	0.0100	9.78	10.0	-2.2	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.5435	0.0100	10.1	10.0	1.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3370	0.0100	20.1	20.0	0.7	30.0
Benzo[a]anthracene	Ave	1.014	0.9574	0.8000	9.44	10.0	-5.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-297506/11 | Calibration Date: 10/04/2017 14:08

Instrument ID: A4HP7 | Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) | Calib End Date: 10/04/2017 13:45

Lab File ID: 71004011.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9371	0.7000	9.56	10.0	-4.4	30.0
Di-n-octyl phthalate	Ave	1.104	1.106	0.0100	10.0	10.0	0.2	30.0
Benzo[b]fluoranthene	Ave	1.137	1.148	0.7000	10.1	10.0	1.0	30.0
Benzo[k]fluoranthene	Ave	1.164	1.169	0.7000	10.0	10.0	0.4	30.0
Benzo[a]pyrene	Lin1		1.048	0.7000	8.76	10.0	-12.4	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.167	0.5000	9.64	10.0	-3.6	30.0
Dibenz(a,h)anthracene	Ave	1.019	1.009	0.4000	9.90	10.0	-1.0	30.0
Benzo[g,h,i]perylene	Ave	1.061	0.9738	0.5000	9.18	10.0	-8.2	30.0
2-Fluorophenol (Surr)	Ave	1.138	1.290		11.3	10.0	13.4	30.0
Phenol-d5 (Surr)	Ave	1.511	1.672		11.1	10.0	10.7	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.4373		11.1	10.0	11.2	30.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.248		10.5	10.0	5.0	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1663		11.4	10.0	14.4	30.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.7194		10.7	10.0	7.4	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab File ID: 71020001.D DFTPP Injection Date: 10/20/2017

Instrument ID: A4HP7 DFTPP Injection Time: 09:25

Analysis Batch No.: 299931

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	46.8	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	43.9	
70	Less than 2.0% of mass 69	0.3	(0.7) 1
127	25.0 - 75.0% of mass 198	49.0	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	23.9	
365	Greater than 0.75% of mass 198	2.4	
441	Present, but less than mass 443	8.1	
442	40.0 - 110.0% of mass 198	52.4	
443	15.0 - 24.0% of mass 442	10.2	(19.5) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-299931/2	71020002.D	10/20/2017	09:45
	MB 240-299317/20-A	71020003.D	10/20/2017	10:09
	LCS 240-299317/21-A	71020004.D	10/20/2017	10:33
MRC-MW120A-101117	240-86380-1	71020011.D	10/20/2017	13:19
MRC-MW188A-101117	240-86380-4	71020012.D	10/20/2017	13:43
MRC-MW118B-101117	240-86380-3	71020013.D	10/20/2017	14:07

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID (1): CCV 240-299931/2 CCVIS Instrument ID (1): A4HP7

GC Column (1): RXI-5SILMS ID: 0.25(mm) Date Analyzed (1): 10/20/2017 09:45

ANALYTE	RT	RESOLUTION (%)
1,4-Dioxane	2.59	100.0
2-Fluorophenol (Surr)	4.86	100.0
Phenol-d5 (Surr)	5.74	100.0
Nitrobenzene-d5 (Surr)	6.57	100.0
2-Fluorobiphenyl (Surr)	8.10	100.0
2,4,6-Tribromophenol (Surr)	9.36	100.0
Terphenyl-d14 (Surr)	11.31	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299931/2 Calibration Date: 10/20/2017 09:45

Instrument ID: A4HP7 Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 10/04/2017 13:45

Lab File ID: 71020002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5462	0.4883		8.94	10.0	-10.6	20.0
N-Nitrosodimethylamine	Ave	0.7326	0.7188		9.81	10.0	-1.9	20.0
Pyridine	Ave	1.406	1.379		19.6	20.0	-1.9	20.0
Benzaldehyde	Ave	1.120	1.010	0.0100	18.0	20.0	-9.9	20.0
Phenol	Ave	1.673	1.823	0.8000	10.9	10.0	9.0	20.0
Aniline	Ave	2.005	2.009		10.0	10.0	0.2	20.0
Bis(2-chloroethyl)ether	Ave	1.239	1.229	0.7000	9.92	10.0	-0.8	20.0
2-Chlorophenol	Ave	1.286	1.316	0.8000	10.2	10.0	2.3	20.0
n-Decane	Ave	1.452	1.421		9.78	10.0	-2.2	20.0
1,3-Dichlorobenzene	Ave	1.498	1.483		9.90	10.0	-1.0	20.0
1,4-Dichlorobenzene	Ave	1.555	1.509		9.71	10.0	-2.9	20.0
Benzyl alcohol	Ave	0.7569	0.6933		9.16	10.0	-8.4	20.0
1,2-Dichlorobenzene	Ave	1.442	1.426		9.89	10.0	-1.1	20.0
2-Methylphenol	Ave	1.176	1.203	0.7000	10.2	10.0	2.3	20.0
bis (2-chloroisopropyl) ether	Ave	1.721	1.635		9.50	10.0	-5.0	20.0
Indene	Ave	2.505	2.483		19.8	20.0	-0.9	20.0
N-Nitrosodi-n-propylamine	Ave	0.9032	0.8908	0.5000	9.86	10.0	-1.4	20.0
3 & 4 Methylphenol	Ave	1.217	1.244		10.2	10.0	2.2	20.0
Acetophenone	Ave	1.891	1.837	0.0100	9.71	10.0	-2.9	20.0
Hexachloroethane	Ave	0.6468	0.5979	0.3000	9.24	10.0	-7.6	20.0
Nitrobenzene	Ave	0.4025	0.3727	0.2000	9.26	10.0	-7.4	20.0
Isophorone	Ave	0.6592	0.6672	0.4000	10.1	10.0	1.2	20.0
2-Nitrophenol	Ave	0.1697	0.1760	0.1000	10.4	10.0	3.7	20.0
2,4-Dimethylphenol	Ave	0.3665	0.3656	0.2000	9.97	10.0	-0.3	20.0
Bis(2-chloroethoxy)methane	Ave	0.4023	0.3820	0.3000	9.50	10.0	-5.0	20.0
Benzoic acid	Lin1		0.1734		18.7	20.0	-6.3	20.0
2,4-Dichlorophenol	Ave	0.2805	0.2925	0.2000	10.4	10.0	4.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3456	0.3382		9.78	10.0	-2.2	20.0
Naphthalene	Ave	1.009	1.010	0.7000	10.0	10.0	0.2	20.0
4-Chloroaniline	Ave	0.4198	0.4166	0.0100	9.92	10.0	-0.8	20.0
2,6-Dichlorophenol	Ave	0.2869	0.2910		10.1	10.0	1.4	20.0
Hexachlorobutadiene	Ave	0.2311	0.2161	0.0100	9.35	10.0	-6.5	20.0
Caprolactam	Ave	0.0967	0.0966	0.0100	20.0	20.0	-0.2	20.0
4-Chloro-3-methylphenol	Ave	0.3072	0.3115	0.2000	10.1	10.0	1.4	20.0
2-Methylnaphthalene	Ave	0.7173	0.7109	0.4000	9.91	10.0	-0.9	20.0
1-Methylnaphthalene	Ave	0.6433	0.6496		10.1	10.0	1.0	20.0
Hexachlorocyclopentadiene	Ave	0.3573	0.3470	0.0500	9.71	10.0	-2.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5878	0.5969	0.0100	10.2	10.0	1.5	20.0
2,4,6-Trichlorophenol	Ave	0.3417	0.3628	0.2000	10.6	10.0	6.2	20.0
2,4,5-Trichlorophenol	Ave	0.3409	0.3534	0.2000	10.4	10.0	3.7	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299931/2 | Calibration Date: 10/20/2017 09:45

Instrument ID: A4HP7 | Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) | Calib End Date: 10/04/2017 13:45

Lab File ID: 71020002.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.329	1.364	0.0100	10.3	10.0	2.6	20.0
2-Chloronaphthalene	Ave	0.999	1.024	0.8000	10.2	10.0	2.5	20.0
2-Nitroaniline	Ave	0.3531	0.3436	0.0100	9.73	10.0	-2.7	20.0
Dimethyl phthalate	Ave	1.198	1.205	0.0100	10.1	10.0	0.6	20.0
1,3-Dinitrobenzene	Lin1		0.2017		10.1	10.0	0.6	20.0
2,6-Dinitrotoluene	Ave	0.2708	0.2874		10.6	10.0	6.1	20.0
Acenaphthylene	Ave	1.533	1.655	0.9000	10.8	10.0	7.9	20.0
3-Nitroaniline	Ave	0.2659	0.2816	0.0100	10.6	10.0	5.9	20.0
Acenaphthene	Ave	1.075	1.129	0.9000	10.5	10.0	5.0	20.0
2,4-Dinitrophenol	Qua		0.2014	0.0100	24.3	20.0	21.7*	20.0
4-Nitrophenol	Lin1		0.2091		17.8	20.0	-10.9	20.0
2,4-Dinitrotoluene	Ave	0.3628	0.3888	0.2000	10.7	10.0	7.2	20.0
Dibenzofuran	Ave	1.534	1.505	0.8000	9.81	10.0	-1.9	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3187	0.3408	0.0100	10.7	10.0	6.9	20.0
Diethyl phthalate	Ave	1.237	1.263	0.0100	10.2	10.0	2.2	20.0
Hexadecane	Ave	0.7336	0.7318		9.98	10.0	-0.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.6537	0.6523	0.4000	9.98	10.0	-0.2	20.0
4-Nitroaniline	Ave	0.2869	0.2963	0.0100	10.3	10.0	3.3	20.0
Fluorene	Ave	1.230	1.275	0.9000	10.4	10.0	3.6	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1342	0.0100	20.9	20.0	4.6	20.0
Diphenylamine	Ave	0.5500	0.5693		8.80	8.50	3.5	20.0
N-Nitrosodiphenylamine	Ave	0.4676	0.4840	0.0100	10.4	10.0	3.5	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.6832	0.6604		9.67	10.0	-3.3	20.0
Azobenzene	Ave	0.6831	0.6606		9.67	10.0	-3.3	20.0
4-Bromophenyl phenyl ether	Ave	0.1951	0.2016	0.1000	10.3	10.0	3.3	20.0
Hexachlorobenzene	Lin1		0.1924	0.1000	10.1	10.0	1.2	20.0
Atrazine	Ave	0.1940	0.2011	0.0100	20.7	20.0	3.7	20.0
n-Octadecane	Ave	0.3928	0.3981		10.1	10.0	1.4	20.0
Pentachlorophenol	Lin1		0.1346	0.0500	20.4	20.0	2.2	20.0
Phenanthrene	Ave	0.9855	0.997	0.7000	10.1	10.0	1.2	20.0
Anthracene	Ave	0.9593	1.021	0.7000	10.6	10.0	6.4	20.0
Carbazole	Ave	0.8888	0.8934	0.0100	10.1	10.0	0.5	20.0
Di-n-butyl phthalate	Ave	1.005	1.063	0.0100	10.6	10.0	5.8	20.0
Fluoranthene	Ave	1.117	1.149	0.6000	10.3	10.0	2.8	20.0
Benzidine	Ave	0.4399	0.4752		21.6	20.0	8.0	20.0
Pyrene	Ave	1.028	1.035	0.6000	10.1	10.0	0.7	20.0
Butyl benzyl phthalate	Ave	0.4063	0.4277	0.0100	10.5	10.0	5.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5384	0.6125	0.0100	11.4	10.0	13.8	20.0
3,3'-Dichlorobenzidine	Ave	0.3348	0.3581	0.0100	21.4	20.0	6.9	20.0
Benzo[a]anthracene	Ave	1.014	1.057	0.8000	10.4	10.0	4.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299931/2 | Calibration Date: 10/20/2017 09:45

Instrument ID: A4HP7 | Calib Start Date: 10/04/2017 10:36

GC Column: RXI-5SILMS ID: 0.25(mm) | Calib End Date: 10/04/2017 13:45

Lab File ID: 71020002.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chrysene	Ave	0.9806	0.9735	0.7000	9.93	10.0	-0.7	20.0
Di-n-octyl phthalate	Ave	1.104	1.255	0.0100	11.4	10.0	13.7	20.0
Benzo[b]fluoranthene	Ave	1.137	1.159	0.7000	10.2	10.0	1.9	20.0
Benzo[k]fluoranthene	Ave	1.164	1.254	0.7000	10.8	10.0	7.7	20.0
Benzo[a]pyrene	Lin1		1.147	0.7000	9.58	10.0	-4.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.210	1.236	0.5000	10.2	10.0	2.1	20.0
Dibenz(a,h)anthracene	Ave	1.019	1.042	0.4000	10.2	10.0	2.2	20.0
Benzo[g,h,i]perylene	Ave	1.061	1.014	0.5000	9.56	10.0	-4.4	20.0
2-Fluorophenol (Surr)	Ave	1.138	1.149		10.1	10.0	1.0	20.0
Phenol-d5 (Surr)	Ave	1.511	1.532		10.1	10.0	1.4	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3931	0.3725		9.48	10.0	-5.2	20.0
2-Fluorobiphenyl (Surr)	Ave	1.188	1.192		10.0	10.0	0.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1453	0.1563		10.8	10.0	7.6	20.0
Terphenyl-d14 (Surr)	Ave	0.6700	0.6831		10.2	10.0	1.9	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab File ID: 71020003.D Lab Sample ID: MB 240-299317/20-A

Matrix: Water Date Extracted: 10/17/2017 07:35

Instrument ID: A4HP7 Date Analyzed: 10/20/2017 10:09

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-299317/21-A	71020004.D	10/20/2017 10:33
MRC-MW120A-101117	240-86380-1	71020011.D	10/20/2017 13:19
MRC-MW188A-101117	240-86380-4	71020012.D	10/20/2017 13:43
MRC-MW118B-101117	240-86380-3	71020013.D	10/20/2017 14:07

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299317/20-A

Matrix: Water | Lab File ID: 71020003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 10/17/2017 07:35

Sample wt/vol: 1000(mL) | Date Analyzed: 10/20/2017 10:09

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299931 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.49	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	92		23-127
4165-62-2	Phenol-d5 (Surr)	28		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	68		32-120
367-12-4	2-Fluorophenol (Surr)	47		10-120
321-60-8	2-Fluorobiphenyl (Surr)	84		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	79		28-120

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 71020004.D

Lab ID: LCS 240-299317/21-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	5.76	29	10-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
MRC-MW120A-101117	240-86380-1	38	23	58	71	82	56
MRC-MW118B-101117	240-86380-3	40	25	60	77	93	91
MRC-MW188A-101117	240-86380-4	40	23	62	78	90	100
	MB 240-299317/20-A	47	28	68	84	79	92
	LCS 240-299317/21-A	54	34	73	91	105	98

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-120
PHL = Phenol-d5 (Surr)	10-120
NBZ = Nitrobenzene-d5 (Surr)	32-120
FBP = 2-Fluorobiphenyl (Surr)	38-120
TBP = 2,4,6-Tribromophenol (Surr)	28-120
TPHL = Terphenyl-d14 (Surr)	23-127

Column to be used to flag recovery values

FORM II 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: STD6 240-297506/10 Date Analyzed: 10/04/2017 13:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71004010.D Heated Purge: (Y/N) N

Calibration ID: 41776

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124833	6.10	469993	7.22	304542	8.71
UPPER LIMIT		249666	6.60	939986	7.72	609084	9.21
LOWER LIMIT		62417	5.60	234997	6.72	152271	8.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297506/11		124508	6.10	479747	7.22	315567	8.71
CCV 240-299931/2 CCVIS		141707	6.08	545262	7.20	343905	8.69

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: STD6 240-297506/10 Date Analyzed: 10/04/2017 13:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71004010.D Heated Purge: (Y/N) N

Calibration ID: 41776

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		593523	9.96	650805	12.55	484933	14.67
UPPER LIMIT		1187046	10.46	1301610	13.05	969866	15.17
LOWER LIMIT		296762	9.46	325403	12.05	242467	14.17
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-297506/11		603100	9.96	675755	12.55	512426	14.67
CCV 240-299931/2 CCVIS		657628	9.95	736647	12.55	598976	14.67

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: CCV 240-299931/2 Date Analyzed: 10/20/2017 09:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71020002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		141707	6.08	545262	7.20	343905	8.69
UPPER LIMIT		283414	6.58	1090524	7.70	687810	9.19
LOWER LIMIT		70854	5.58	272631	6.70	171953	8.19
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-299317/20-A		143900	6.08	572325	7.20	300200	8.69
LCS 240-299317/21-A		124344	6.08	524157	7.20	278752	8.69
240-86380-1	MRC-MW120A-101117	134253	6.08	525977	7.20	284704	8.69
240-86380-4	MRC-MW188A-101117	127045	6.08	514883	7.20	282856	8.69
240-86380-3	MRC-MW118B-101117	134821	6.08	524466	7.20	275075	8.69

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: CCV 240-299931/2 Date Analyzed: 10/20/2017 09:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 71020002.D Heated Purge: (Y/N) N

Calibration ID: 41786

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		657628	9.95	736647	12.55	598976	14.67
UPPER LIMIT		1315256	10.45	1473294	13.05	1197952	15.17
LOWER LIMIT		328814	9.45	368324	12.05	299488	14.17
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-299317/20-A		606149	9.95	660162	12.55	583914	14.66
LCS 240-299317/21-A		574630	9.95	636150	12.55	549831	14.66
240-86380-1	MRC-MW120A-101117	579921	9.95	639210	12.54	586497	14.67
240-86380-4	MRC-MW188A-101117	554241	9.95	627867	12.55	559066	14.67
240-86380-3	MRC-MW118B-101117	562658	9.95	634953	12.55	548584	14.66

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

SAMPLE CALCULATION - 1,4-DIOXANE	WATER	
SAMPLE IDENTIFICATION	MRC-MW120A-101117	
COMPOUND	1,4-Dioxane	
COMPOUND AREA	24824	
INTERNAL STANDARD AMOUNT (ng)	4	
INTERNAL STANDARD AREA	134253	
AVERAGE RRF	0.5462	
24824 x 4 x 1 / 134253 x 0.5462	1.3541	ng/uL
DILUTION FACTOR	1	
SAMPLE VOLUME (uL)	0.99	
VOLUME EXTRACT (uL)	0.002	
uL in 1 mL	1000	
1.35411659012027 x 1 x 1000 x 0.002 / (0.99)	2.7	ug/L

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: 71020011.D

Analysis Method: 8270D | Date Collected: 10/11/2017 09:05

Extract. Method: 3510C | Date Extracted: 10/17/2017 07:35

Sample wt/vol: 990(mL) | Date Analyzed: 10/20/2017 13:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299931 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.7		1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	56		23-127
4165-62-2	Phenol-d5 (Surr)	23		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	58		32-120
367-12-4	2-Fluorophenol (Surr)	38		10-120
321-60-8	2-Fluorobiphenyl (Surr)	71		38-120
118-79-6	2,4,6-Tribromophenol (Surr)	82		28-120

Sample Calculation - Page 3

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A4HP7\20171020-69876.b\71020011.D
Lims ID: 240-86380-L-1-A
Client ID: MRC-MW120A-101117
Sample Type: Client
Inject. Date: 20-Oct-2017 13:19:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0069876-011
Misc. Info.: 240-86380-L-1-A
Operator ID: 001710 Instrument ID: A4HP7

Method: \\ChromNA\Canton\ChromData\A4HP7\20171020-69876.b\8270_hp7.m
Limit Group: MSS 8270D ICAL
Last Update: 21-Oct-2017 12:08:27 Calib Date: 09-Oct-2017 12:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A4HP7\20171009-69473.b\71009009.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: gruberj Date: 20-Oct-2017 13:40:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.081	6.081	0.000	98	134253	4.00	
* 2 Naphthalene-d8	136	7.199	7.199	0.000	100	525977	4.00	
* 3 Acenaphthene-d10	164	8.691	8.691	0.000	96	284704	4.00	
* 4 Phenanthrene-d10	188	9.948	9.953	-0.005	97	579921	4.00	
* 5 Chrysene-d12	240	12.542	12.548	-0.006	97	639210	4.00	
* 6 Perylene-d12	264	14.666	14.666	0.000	98	586497	4.00	
$ 7 2-Fluorophenol	112	4.856	4.856	0.000	94	143238	3.75	
$ 8 Phenol-d5	99	5.750	5.744	0.006	96	116014	2.29	
$ 9 Nitrobenzene-d5	82	6.568	6.568	0.000	93	301042	5.82	
$ 10 2-Fluorobiphenyl (Surr)	172	8.103	8.103	0.000	100	604580	7.15	
$ 11 2,4,6-Tribromophenol	330	9.360	9.360	0.000	88	84526	8.17	
$ 12 Terphenyl-d14	244	11.307	11.307	0.000	99	604926	5.65	
24 1,4-Dioxane	88	2.594	2.588	0.006	97	24824	1.35	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SMIS80PPMW_00016 Amount Added: 5.00 Units: uL Run Reagent

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 297506

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2017 10:36 Calibration End Date: 10/04/2017 13:45 Calibration ID: 41776

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-297506/6	71004006.D
Level 2	STD2 240-297506/5	71004005.D
Level 3	STD3 240-297506/4	71004004.D
Level 4	STD4 240-297506/3	71004003.D
Level 5	STD5 240-297506/2	71004002.D
Level 6	STD6 240-297506/10	71004010.D
Level 7	STD7 240-297506/9	71004009.D
Level 8	STD8 240-297506/8	71004008.D
Level 9	STD9 240-297506/7	71004007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4992	0.5748 0.5083	0.6324 0.5395	0.5206 0.5451	0.5493	Ave		0.5462				7.8		20.0			
N-Nitrosodimethylamine	0.6999	0.7110 0.7306	0.7923 0.7479	0.7515 0.7657	0.6620	Ave		0.7326				5.6		20.0			
Pyridine	1.4702 1.3973	1.3259 1.4312	1.3422 1.4341	1.3870 1.4747	1.3909	Ave		1.4060				3.7		20.0			
Benzaldehyde	1.3418 1.1061	1.1460 1.0608	1.1236 1.0627	1.1259 1.0187	1.0957	Ave		1.1202			0.0100	8.2		20.0			
Phenol	1.6347	1.5388 1.6263	1.7341 1.7260	1.6338 1.7079	1.7784	Ave		1.6725			0.8000	4.6		20.0			
Aniline	2.0192	1.8225 2.0278	1.8766 2.1134	2.0187 2.1299	2.0339	Ave		2.0053				5.3		20.0			
Bis(2-chloroethyl)ether	1.2201	1.2288 1.2200	1.2183 1.2823	1.2140 1.2640	1.2614	Ave		1.2386			0.7000	2.1		20.0			
2-Chlorophenol	1.3148	1.0751 1.3346	1.2274 1.3745	1.2755 1.3793	1.3058	Ave		1.2859			0.8000	7.7		20.0			
n-Decane	1.4332	1.3682 1.4265	1.4633 1.4812	1.4535 1.4890	1.5025	Ave		1.4522				3.0		20.0			
1,3-Dichlorobenzene	1.4916	1.3903 1.4926	1.4887 1.5383	1.5031 1.5742	1.5044	Ave		1.4979				3.5		20.0			
1,4-Dichlorobenzene	1.5003	1.5311 1.5506	1.5331 1.5763	1.5614 1.6091	1.5778	Ave		1.5549				2.2		20.0			
Benzyl alcohol	0.7755	0.6629 0.8150	0.6559 0.8372	0.6916 0.8598	0.7572	Ave		0.7569				10.5		20.0			
1,2-Dichlorobenzene	1.4185	1.4010 1.4457	1.3757 1.4899	1.4510 1.4871	1.4657	Ave		1.4418				2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

Method 680

Polychlorinated Biphenyls (PCBs) (GC/MS) by Method 680

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Lab File ID: xG1317.D DFTPP Injection Date: 07/13/2017

Instrument ID: CMSX DFTPP Injection Time: 21:27

Analysis Batch No.: 487683

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	55.2
197	Less than 1 % of mass 198	1.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	5.9
275	10 - 30% of mass 198	24.5
365	Greater than 1% of mass 198	3.5
441	Present but less than mass 443	9.5 (99.6) 2
442	Greater than 40% of mass 198	55.7
443	17 - 23% of mass 442	9.6 (17.2) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICISAV 680-487683/3	xG1319.D	07/13/2017	22:31
	IC 680-487683/4	xG1320.D	07/13/2017	23:00
	IC 680-487683/5	xG1321.D	07/13/2017	23:28
	IC 680-487683/6	xG1322.D	07/13/2017	23:57
	IC 680-487683/7	xG1323.D	07/14/2017	00:26
	ICV 680-487683/8	xG1324.D	07/14/2017	00:55

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 240-86380-1 Analy Batch No.: 487683

SDG No.:

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/13/2017 22:31 Calibration End Date: 07/14/2017 00:26 Calibration ID: 53004

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-487683/7	xG1323.D
Level 2	IC 680-487683/6	xG1322.D
Level 3	ICISAV 680-487683/3	xG1319.D
Level 4	IC 680-487683/5	xG1321.D
Level 5	IC 680-487683/4	xG1320.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Monochlorobiphenyl	0.6383	0.5922	0.6105	0.7179	0.5678	Ave		0.6253				9.2		20.0			
Dichlorobiphenyl	0.5120	0.4834	0.4971	0.5815	0.4625	Ave		0.5073				8.9		20.0			
Trichlorobiphenyl	0.3459	0.3378	0.3417	0.4008	0.3427	Ave		0.3538				7.5		20.0			
PCB-104			0.3009			Ave		0.3009						30.0			
Tetrachlorobiphenyl	0.2481	0.2303	0.2447	0.2794	0.2260	Ave		0.2457				8.6		20.0			
Pentachlorobiphenyl	0.2088	0.1975	0.2148	0.2409	0.2021	Ave		0.2128				8.0		20.0			
PCB-77			0.3717			Ave		0.3717						30.0			
Hexachlorobiphenyl	0.2057	0.1931	0.2108	0.2326	0.1918	Ave		0.2068				8.0		20.0			
Heptachlorobiphenyl	0.1742	0.1706	0.1866	0.2033	0.1713	Ave		0.1812				7.7		20.0			
Octachlorobiphenyl	0.1692	0.1568	0.1705	0.1889	0.1683	Ave		0.1707				6.8		20.0			
PCB-208			0.0606			Ave		0.0606						30.0			
Nonachlorobiphenyl			0.0485			Ave		0.0347				7.2		20.0			
DCB Decachlorobiphenyl	0.0323	0.0325	0.0362	0.0382	0.0342	Ave		0.0347				7.2		20.0			
Decachlorobiphenyl-13C12	0.0384	0.0375	0.0424	0.0430	0.0384	Ave		0.0399				6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 240-86380-1 Analy Batch No.: 487683

SDG No.:

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/13/2017 22:31 Calibration End Date: 07/14/2017 00:26 Calibration ID: 53004

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-487683/7	xG1323.D
Level 2	IC 680-487683/6	xG1322.D
Level 3	ICISAV 680-487683/3	xG1319.D
Level 4	IC 680-487683/5	xG1321.D
Level 5	IC 680-487683/4	xG1320.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Monochlorobiphenyl	CRY	Ave	5953	33261	54288	123580	355219	0.100	0.500	1.00	2.00	5.00
Dichlorobiphenyl	CRY	Ave	4775	27148	44207	100107	289315	0.100	0.500	1.00	2.00	5.00
Trichlorobiphenyl	CRY	Ave	3226	18973	30385	68995	214412	0.100	0.500	1.00	2.00	5.00
PCB-104	CRY	Ave			53519					2.00		
Tetrachlorobiphenyl	CRY	Ave	4628	25875	43516	96195	282720	0.200	1.00	2.00	4.00	10.0
Pentachlorobiphenyl	CRY	Ave	3894	22188	38201	82935	252835	0.200	1.00	2.00	4.00	10.0
PCB-77	CRY	Ave			66099					2.00		
Hexachlorobiphenyl	CRY	Ave	3837	21690	37491	80096	240032	0.200	1.00	2.00	4.00	10.0
Heptachlorobiphenyl	CRY	Ave	4875	28752	49769	104994	321447	0.300	1.50	3.00	6.00	15.0
Octachlorobiphenyl	CRY	Ave	4734	26417	45478	97547	315841	0.300	1.50	3.00	6.00	15.0
PCB-208	CRY	Ave			21552					4.00		
Nonachlorobiphenyl	CRY	Ave			21552					5.00		
DCB Decachlorobiphenyl	CRY	Ave	1507	9117	16083	32857	106822	0.500	2.50	5.00	10.0	25.0
Decachlorobiphenyl-13C12	CRY	Ave	1792	10523	18871	36978	96182	0.500	2.50	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD

FORM VII
PCBS CONTINUING CALIBRATION DATA

Does not affect samples in this SDG

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 680-487683/8 Calibration Date: 07/14/2017 00:55

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xG1324.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.6032		0.965	1.00	-3.5	20.0
Dichlorobiphenyl	Ave	0.5073	0.4501		0.887	1.00	-11.3	20.0
Trichlorobiphenyl	Ave	0.3538	0.3464		0.979	1.00	-2.1	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2404		1.96	2.00	-2.2	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2082		1.96	2.00	-2.2	20.0
Hexachlorobiphenyl	Ave	0.2068	0.1933		1.87	2.00	-6.5	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1748		2.89	3.00	-3.5	20.0
Octachlorobiphenyl	Ave	0.1707	0.1673		2.94	3.00	-2.0	20.0
Nonachlorobiphenyl	Ave	0.0485	0.0604		6.97	4.00	24.5*	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0330		4.77	5.00	-4.7	20.0

FORM V
PCBS INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Lab File ID: xj1904.D DFTPP Injection Date: 10/19/2017

Instrument ID: CMSX DFTPP Injection Time: 16:19

Analysis Batch No.: 499172

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	48.8
197	Less than 1 % of mass 198	0.5
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.8
365	Greater than 1% of mass 198	7.2
441	Present but less than mass 443	17.9 (91.9) 2
442	Greater than 40% of mass 198	109.9
443	17 - 23% of mass 442	19.5 (17.7) 1

1-Value is % mass 442 2-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	WDM 680-499172/2	xj1905.D	10/19/2017	16:50
	CCVIS 680-499172/3	xj1906.D	10/19/2017	17:20
	MB 680-498935/4-A	xj1909.D	10/19/2017	18:47
	LCS 680-498935/5-A	xj1910.D	10/19/2017	19:15
	LCSD 680-498935/6-A	xj1911.D	10/19/2017	19:44
MRC-MW120A-101117	240-86380-1	xj1912.D	10/19/2017	20:12
MRC-MW118B-101117	240-86380-3	xj1913.D	10/19/2017	20:41
MRC-MW188A-101117	240-86380-4	xj1914.D	10/19/2017	21:10
	CCV 680-499172/12	xj1915.D	10/19/2017	21:39

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCVIS 680-499172/3 Calibration Date: 10/19/2017 17:20

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1906.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5839		0.934	1.00	-6.6	20.0
Dichlorobiphenyl	Ave	0.5073	0.4790		0.944	1.00	-5.6	20.0
Trichlorobiphenyl	Ave	0.3538	0.3631		1.03	1.00	2.6	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2694		2.19	2.00	9.6	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2287		2.15	2.00	7.5	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2225		2.15	2.00	7.6	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1965		3.25	3.00	8.4	20.0
Octachlorobiphenyl	Ave	0.1707	0.1855		3.26	3.00	8.7	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0332		4.79	5.00	-4.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0414		5.19	5.00	3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 680-499172/12 Calibration Date: 10/19/2017 21:39

Instrument ID: CMSX Calib Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/14/2017 00:26

Lab File ID: xj1915.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.6253	0.5339		0.854	1.00	-14.6	20.0
Dichlorobiphenyl	Ave	0.5073	0.4357		0.859	1.00	-14.1	20.0
Trichlorobiphenyl	Ave	0.3538	0.3267		0.923	1.00	-7.7	20.0
Tetrachlorobiphenyl	Ave	0.2457	0.2238		1.82	2.00	-8.9	20.0
Pentachlorobiphenyl	Ave	0.2128	0.2097		1.97	2.00	-1.5	20.0
Hexachlorobiphenyl	Ave	0.2068	0.2008		1.94	2.00	-2.9	20.0
Heptachlorobiphenyl	Ave	0.1812	0.1805		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1707	0.1607		2.82	3.00	-5.9	20.0
DCB Decachlorobiphenyl	Ave	0.0347	0.0307		4.43	5.00	-11.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0399	0.0384		4.81	5.00	-3.8	20.0

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Lab File ID: xj1909.D Lab Sample ID: MB 680-498935/4-A

Matrix: Water Date Extracted: 10/18/2017 12:35

Instrument ID: CMSX Date Analyzed: 10/19/2017 18:47

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-498935/5-A	xj1910.D	10/19/2017 19:15
	LCSD 680-498935/6-A	xj1911.D	10/19/2017 19:44
MRC-MW120A-101117	240-86380-1	xj1912.D	10/19/2017 20:12
MRC-MW118B-101117	240-86380-3	xj1913.D	10/19/2017 20:41
MRC-MW188A-101117	240-86380-4	xj1914.D	10/19/2017 21:10

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 240-86380-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-498935/4-A

Matrix: Water | Lab File ID: xj1909.D

Analysis Method: 680 | Date Collected:

Extract. Method: 680 | Date Extracted: 10/18/2017 12:35

Sample wt/vol: 1000(mL) | Date Analyzed: 10/19/2017 18:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 499172 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
28655-71-2	Heptachlorobiphenyl	0.030	U	0.30	0.030
26601-64-9	Hexachlorobiphenyl	0.015	U	0.20	0.015
53742-07-7	Nonachlorobiphenyl	0.049	U	0.50	0.049
55722-26-4	Octachlorobiphenyl	0.038	U	0.30	0.038
27323-18-8	Monochlorobiphenyl	0.0056	U	0.10	0.0056
2051-24-3	DCB Decachlorobiphenyl	0.070	U	0.50	0.070
25512-42-9	Dichlorobiphenyl	0.0054	U	0.10	0.0054
25429-29-2	Pentachlorobiphenyl	0.014	U	0.20	0.014
26914-33-0	Tetrachlorobiphenyl	0.013	U	0.20	0.013
25323-68-6	Trichlorobiphenyl	0.0065	U	0.10	0.0065

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	88		25-113

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: xj1910.D

Lab ID: LCS 680-498935/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Heptachlorobiphenyl	6.00	5.20	87	62-130	
Hexachlorobiphenyl	4.00	3.38	85	62-130	
Nonachlorobiphenyl	10.0	16.2	162	70-195	
Octachlorobiphenyl	6.00	5.26	88	64-130	
Monochlorobiphenyl	2.00	1.22	61	42-130	
DCB Decachlorobiphenyl	10.0	8.09	81	59-130	
Dichlorobiphenyl	2.00	1.37	68	49-130	
Pentachlorobiphenyl	4.00	3.37	84	63-130	
Tetrachlorobiphenyl	4.00	3.10	77	54-130	
Trichlorobiphenyl	2.00	1.53	76	51-130	

Column to be used to flag recovery and RPD values

FORM III 680

FORM III
PCBS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: xj1911.D

Lab ID: LCSD 680-498935/6-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Heptachlorobiphenyl	6.00	5.05	84	3	40	62-130	
Hexachlorobiphenyl	4.00	3.31	83	2	40	62-130	
Nonachlorobiphenyl	10.0	16.0	160	1	40	70-195	
Octachlorobiphenyl	6.00	5.08	85	4	40	64-130	
Monochlorobiphenyl	2.00	1.22	61	0	40	42-130	
DCB Decachlorobiphenyl	10.0	7.62	76	6	40	59-130	
Dichlorobiphenyl	2.00	1.39	70	2	40	49-130	
Pentachlorobiphenyl	4.00	3.31	83	2	40	63-130	
Tetrachlorobiphenyl	4.00	3.13	78	1	40	54-130	
Trichlorobiphenyl	2.00	1.50	75	2	40	51-130	

Column to be used to flag recovery and RPD values

FORM III 680

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): HP-5MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	13CDCB #
MRC-MW120A-101117	240-86380-1	68
MRC-MW118B-101117	240-86380-3	70
MRC-MW188A-101117	240-86380-4	78
	MB 680-498935/4-A	88
	LCS 680-498935/5-A	84
	LCSD 680-498935/6-A	77

	QC LIMITS
13CDCB = Decachlorobiphenyl-13C12	25-113

Column to be used to flag recovery values

FORM II 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Instrument ID: CMSX Calibration Start Date: 07/13/2017 22:31

GC Column: HP-5MS ID: 0.25(mm) Calibration End Date: 07/14/2017 00:26

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		61690	9.78	75856	15.84		
UPPER LIMIT		92535	10.28	113784	16.34		
LOWER LIMIT		30845	9.28	37928	15.34		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-487683/8		66010	9.77	83301	15.84		
CCVIS 680-499172/3		47919	9.50	64864	15.54		
MB 680-498935/4-A		47839	9.50	67354	15.52		
LCS 680-498935/5-A		50000	9.49	70691	15.52		
LCSD 680-498935/6-A		50385	9.49	73131	15.52		
240-86380-1	MRC-MW120A-101117	53185	9.47	84240	15.50		
240-86380-3	MRC-MW118B-101117	57187	9.47	88349*	15.50		
240-86380-4	MRC-MW188A-101117	61321	9.49	86464*	15.50		
CCV 680-499172/12		51968	9.50	75368	15.52		

Areas are within limits

PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 240-86380-1

SDG No.:

Sample No.: CCVIS 680-499172/3 Date Analyzed: 10/19/2017 17:20

Instrument ID: CMSX GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): xj1906.D Heated Purge: (Y/N) N

Calibration ID: 53004

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		47919	9.50	64864	15.54		
UPPER LIMIT		62295	10.00	84323	16.04		
LOWER LIMIT		33543	9.00	45405	15.04		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-498935/4-A		47839	9.50	67354	15.52		
LCS 680-498935/5-A		50000	9.49	70691	15.52		
LCSD 680-498935/6-A		50385	9.49	73131	15.52		
240-86380-1	MRC-MW120A-101117	53185	9.47	84240	15.50		
240-86380-3	MRC-MW118B-101117	57187	9.47	88349*	15.50		
240-86380-4	MRC-MW188A-101117	61321	9.49	86464*	15.50		
CCV 680-499172/12		51968	9.50	75368	15.52		

PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 680

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: A2HP14R Start Date: 09/14/2017 15:50

Analysis Batch Number: 294860 End Date: 09/15/2017 01:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-294860/6		09/14/2017 15:50	1		Rxi-5HT 0.53(mm)
STD1 240-294860/7 IC		09/14/2017 17:00	1	P14R091407.D	Rxi-5HT 0.53(mm)
STD2 240-294860/8 IC		09/14/2017 17:28	1	P14R091408.D	Rxi-5HT 0.53(mm)
STD3 240-294860/9 ICRT		09/14/2017 17:55	1	P14R091409.D	Rxi-5HT 0.53(mm)
STD4 240-294860/10 IC		09/14/2017 18:22	1	P14R091410.D	Rxi-5HT 0.53(mm)
STD5 240-294860/11 IC		09/14/2017 18:49	1	P14R091411.D	Rxi-5HT 0.53(mm)
ICV 240-294860/12		09/14/2017 19:16	1	P14R091412.D	Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 19:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 20:11	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 20:38	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:05	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:32	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 21:59	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 22:27	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 22:54	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 23:21	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/14/2017 23:48	1		Rxi-5HT 0.53(mm)
CCV 240-294860/23		09/15/2017 00:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/15/2017 00:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		09/15/2017 01:10	1		Rxi-5HT 0.53(mm)
CCV 240-294860/26		09/15/2017 01:37	1		Rxi-5HT 0.53(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: A2HP14R Start Date: 10/18/2017 13:39

Analysis Batch Number: 299612 End Date: 10/19/2017 02:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 240-299612/2		10/18/2017 13:39	1	P14R101802.D	Rxi-5HT 0.53(mm)
CCV 240-299612/3 CCVRT		10/18/2017 14:06	1	P14R101803.D	Rxi-5HT 0.53(mm)
CCV 240-299612/8		10/18/2017 16:22	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 16:49	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 17:16	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 17:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 18:10	1		Rxi-5HT 0.53(mm)
CCV 240-299612/13		10/18/2017 18:38	1	P14R101813.D	Rxi-5HT 0.53(mm)
MB 240-299363/15-A		10/18/2017 19:05	1	P14R101814.D	Rxi-5HT 0.53(mm)
LCS 240-299363/16-A		10/18/2017 19:32	1	P14R101815.D	Rxi-5HT 0.53(mm)
240-86380-1		10/18/2017 19:59	1	P14R101816.D	Rxi-5HT 0.53(mm)
240-86380-3		10/18/2017 20:27	1	P14R101817.D	Rxi-5HT 0.53(mm)
240-86380-4		10/18/2017 20:54	1	P14R101818.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 21:21	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 21:48	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 22:15	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 22:43	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/18/2017 23:10	1		Rxi-5HT 0.53(mm)
CCV 240-299612/24		10/18/2017 23:37	1	P14R101824.D	Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:04	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:31	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 00:58	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 01:26	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 01:53	1		Rxi-5HT 0.53(mm)
ZZZZZ		10/19/2017 02:20	1		Rxi-5HT 0.53(mm)
CCV 240-299612/31		10/19/2017 02:47	1		Rxi-5HT 0.53(mm)

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: STD3 240-294860/9 Date Analyzed: 09/14/2017 17:55

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R091409.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
INITIAL CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-294860/9 ICRT		09/14/2017 17:55	P14R091409.D	8.49		

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: CCV 240-299612/3 Date Analyzed: 10/18/2017 14:06

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID (Standard): P14R101803.D Heated Purge: (Y/N) N

Calibration ID: 41409

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH		
				RT #		
CONTINUING CALIBRATION SURROGATE				8.49		
UPPER LIMIT				8.59		
LOWER LIMIT				8.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-299612/3 CCVRT		10/18/2017 14:06	P14R101803.D	8.49		
CCV 240-299612/13		10/18/2017 18:38	P14R101813.D	8.49		
MB 240-299363/15-A		10/18/2017 19:05	P14R101814.D	8.49		
LCS 240-299363/16-A		10/18/2017 19:32	P14R101815.D	8.49		
240-86380-1	MRC-MW120A-101117	10/18/2017 19:59	P14R101816.D	8.49		
240-86380-3	MRC-MW118B-101117	10/18/2017 20:27	P14R101817.D	8.49		
240-86380-4	MRC-MW188A-101117	10/18/2017 20:54	P14R101818.D	8.49		
CCV 240-299612/24		10/18/2017 23:37	P14R101824.D	8.49		

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	7.683	7.683	7.683	7.683	7.683						3.479 - 11.888	7.683
o-Terphenyl (Surr)	8.489	8.490	8.491	8.493	8.497						8.389 - 8.589	8.492

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	903481 808073	804607	814100	861600	Ave		838372.398				5.1		20.0			
o-Terphenyl (Surr)	890646 905743	900616	924945	970715	Ave		918532.994				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]	Ave	18069625	32184297	81409987	172320075	323229227	20.0	40.0	100	200	400
o-Terphenyl (Surr)	Ave	1425034	2881972	7399560	15531436	28983767	1.60	3.20	8.00	16.0	32.0

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-294860/12 Calibration Date: 09/14/2017 19:16

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R091412.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	818178		97900	100000	-2.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-294860/12 Calibration Date: 09/14/2017 19:16

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R091412.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.48	11.89

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299612/3 Calibration Date: 10/18/2017 14:06

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101803.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	795286		94900	100000	-5.1	20.0
o-Terphenyl (Surr)	Ave	918533	897155		7810	8000	-2.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299612/3 Calibration Date: 10/18/2017 14:06

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101803.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299612/13 Calibration Date: 10/18/2017 18:38

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101813.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	787362		93900	100000	-6.1	20.0
o-Terphenyl (Surr)	Ave	918533	912207		7940	8000	-0.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299612/13 Calibration Date: 10/18/2017 18:38

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101813.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299612/24 Calibration Date: 10/18/2017 23:37

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101824.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	838372	800691		95500	100000	-4.5	20.0
o-Terphenyl (Surr)	Ave	918533	922381		8030	8000	0.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299612/24 Calibration Date: 10/18/2017 23:37

Instrument ID: A2HP14R Calib Start Date: 09/14/2017 17:00

GC Column: Rxi-5HT ID: 0.53(mm) Calib End Date: 09/14/2017 18:49

Lab File ID: P14R101824.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88
o-Terphenyl (Surr)	8.49	8.39	8.59

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: RTC 240-299612/2 Date Analyzed: 10/18/2017 13:39

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm)

Lab File ID: P14R101802.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	7.68	3.47	11.88

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: MB 240-299363/15-A

Matrix: Water Date Extracted: 10/17/2017 10:02

Lab File ID:(1) P14R101814.D Lab File ID:(2)

Date Analyzed:(1) 10/18/2017 19:05 Date Analyzed:(2)

Instrument ID:(1) A2HP14R Instrument ID:(2)

GC Column:(1) Rxi-5HT ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-299363/16-A	10/18/2017 19:32	
MRC-MW120A-101117	240-86380-1	10/18/2017 19:59	
MRC-MW118B-101117	240-86380-3	10/18/2017 20:27	
MRC-MW188A-101117	240-86380-4	10/18/2017 20:54	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299363/15-A

Matrix: Water | Lab File ID: P14R101814.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3520C | Date Extracted: 10/17/2017 10:02

Sample wt/vol: 250(mL) | Date Analyzed: 10/18/2017 19:05

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	230	U	500	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	82		37-130

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P14R101815.D

Lab ID: LCS 240-299363/16-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2000	1440	72	56-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5HT ID: 0.53(mm)

Client Sample ID	Lab Sample ID	OTPH1 #
MRC-MW120A-101117	240-86380-1	95
MRC-MW118B-101117	240-86380-3	83
MRC-MW188A-101117	240-86380-4	90
	MB 240-299363/15-A	82
	LCS 240-299363/16-A	83

	QC LIMITS
OTPH = o-Terphenyl (Surr)	37-130

Column to be used to flag recovery values

FORM II 8015C

SAMPLE IDENTIFICATION	MRC-MW120A-101117	
COMPOUND	DRO	
COMPOUND AREA	51122726	
AVERAGE RRF	838372.398	
51122726 / 838372.398	61.0	ng/ul
SAMPLE VOLUME (ml)	260	
VOLUME EXTRACT (µl)	5	
VOLUME INJECTED (µl)	1	
DILUTION FACTOR	1	
CONVERSION FACTOR	1000	
60.9785414237838 x 1 x 5 x 1000/ (260 x 1)	1173	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 | Lab Sample ID: 240-86380-1

Matrix: Water | Lab File ID: P14R101816.D

Analysis Method: 8015C | Date Collected: 10/11/2017 09:05

Extraction Method: 3520C | Date Extracted: 10/17/2017 09:58

Sample wt/vol: 260(mL) | Date Analyzed: 10/18/2017 19:59

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Rxi-5HT ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 299612 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1200		480	220

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	95		37-130

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A2HP14R\20171018-69803.b\P14R101816.D
Lims ID: 240-86380-J-1-A
Client ID: MRC-MW120A-101117
Sample Type: Client
Inject. Date: 18-Oct-2017 19:59:47 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: A2HP14R

Method: \\ChromNA\Canton\ChromData\A2HP14R\20171018-69803.b\TPH14RLVI.m
Limit Group: GC 8015C-D TPH LVI ICAL
Last Update: 19-Oct-2017 11:34:37 Calib Date: 14-Sep-2017 18:49:43
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A2HP14R\20170914-68708.b\P14R091411.D

Column 1 : Det: GC FID1A
Process Host: XAWRK024

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
A	32 Diesel					
	7.675	(3.468-11.883)		42814311	51.1	
A	36 C10-C32					
	8.331	(3.468-13.195)		51122726	61.0	
$	37 o-Terphenyl					
	8.485	8.487	-0.002	7004487	7.63	

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 294860

SDG No.:

Instrument ID: A2HP14R GC Column: Rxi-5HT ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 17:00 Calibration End Date: 09/14/2017 18:49 Calibration ID: 41409

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-294860/7	P14R091407.D
Level 2	STD2 240-294860/8	P14R091408.D
Level 3	STD3 240-294860/9	P14R091409.D
Level 4	STD4 240-294860/10	P14R091410.D
Level 5	STD5 240-294860/11	P14R091411.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	903481 808073	804607	814100	861600	Ave		838372.398				5.1		20.0			
o-Terphenyl (Surr)	890646 905743	900616	924945	970715	Ave		918532.994				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

Method 8015C - GRO

Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: AFID Start Date: 09/21/2017 13:19

Analysis Batch Number: 295712 End Date: 09/21/2017 18:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-295712/4 IC		09/21/2017 13:19	1	A0092104.D	RTX-VRX 0.45(mm)
STD2 240-295712/5 IC		09/21/2017 13:57	1	A0092105.D	RTX-VRX 0.45(mm)
STD3 240-295712/6 IC		09/21/2017 14:35	1	A0092106.D	RTX-VRX 0.45(mm)
STD4 240-295712/7 IC		09/21/2017 15:14	1	A0092107.D	RTX-VRX 0.45(mm)
STD5 240-295712/8 IC		09/21/2017 15:53	1	A0092108.D	RTX-VRX 0.45(mm)
STD6 240-295712/9 IC		09/21/2017 16:32	1	A0092109.D	RTX-VRX 0.45(mm)
STD7 240-295712/10 IC		09/21/2017 17:10	1	A0092110.D	RTX-VRX 0.45(mm)
STD8 240-295712/11 IC		09/21/2017 17:48	1	A0092111.D	RTX-VRX 0.45(mm)
ICV 240-295712/12		09/21/2017 18:25	1	A0092112.D	RTX-VRX 0.45(mm)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: AFID Start Date: 10/19/2017 07:55

Analysis Batch Number: 299683 End Date: 10/20/2017 04:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-299683/4		10/19/2017 07:55	1	A0101904.D	RTX-VRX 0.45(mm)
MB 240-299683/5		10/19/2017 08:31	1	A0101905.D	RTX-VRX 0.45(mm)
LCS 240-299683/6		10/19/2017 09:08	1	A0101906.D	RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 09:44	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 10:22	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 10:59	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 11:36	1		RTX-VRX 0.45(mm)
240-86380-1		10/19/2017 12:13	1	A0101911.D	RTX-VRX 0.45(mm)
240-86380-2		10/19/2017 12:49	1	A0101912.D	RTX-VRX 0.45(mm)
240-86380-3		10/19/2017 13:26	1	A0101913.D	RTX-VRX 0.45(mm)
240-86380-4		10/19/2017 14:03	1	A0101914.D	RTX-VRX 0.45(mm)
CCV 240-299683/15		10/19/2017 14:40	1	A0101915.D	RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 15:17	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 15:53	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 16:30	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 17:44	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 18:20	1		RTX-VRX 0.45(mm)
240-86610-A-1 MS		10/19/2017 18:58	1	A0101922.D	RTX-VRX 0.45(mm)
240-86610-A-1 MSD		10/19/2017 19:35	1	A0101923.D	RTX-VRX 0.45(mm)
CCV 240-299683/25		10/19/2017 20:48	1	A0101925.D	RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 21:25	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 22:02	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 22:39	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 23:15	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2017 23:52	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 00:29	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 01:06	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 01:42	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 02:19	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 02:55	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 03:31	1		RTX-VRX 0.45(mm)
ZZZZZ		10/20/2017 04:07	1		RTX-VRX 0.45(mm)
CCV 240-299683/38		10/20/2017 04:44	1		RTX-VRX 0.45(mm)

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Sample No.: CCVRT 240-299683/4 Date Analyzed: 10/19/2017 07:55

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): A0101904.D Heated Purge: (Y/N) N

Calibration ID: 41480

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT		
				RT #		
CONTINUING CALIBRATION SURROGATE				10.49		
UPPER LIMIT				10.59		
LOWER LIMIT				10.39		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-299683/4		10/19/2017 07:55	A0101904.D	10.49		
MB 240-299683/5		10/19/2017 08:31	A0101905.D	10.49		
LCS 240-299683/6		10/19/2017 09:08	A0101906.D	10.49		
240-86380-1	MRC-MW120A-101117	10/19/2017 12:13	A0101911.D	10.49		
240-86380-2	MRC-MW119A-101117	10/19/2017 12:49	A0101912.D	10.49		
240-86380-3	MRC-MW118B-101117	10/19/2017 13:26	A0101913.D	10.49		
240-86380-4	MRC-MW188A-101117	10/19/2017 14:03	A0101914.D	10.49		
CCV 240-299683/15		10/19/2017 14:40	A0101915.D	10.49		
240-86610-A-1 MS		10/19/2017 18:58	A0101922.D	10.49		
240-86610-A-1 MSD		10/19/2017 19:35	A0101923.D	10.49		
CCV 240-299683/25		10/19/2017 20:48	A0101925.D	10.49		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Gasoline Range Organics [C6 - C10]	11.715	11.715	11.715	11.715	11.715	11.715	11.715	11.715			6.295 - 17.134	11.715
C6-C12	12.973	12.973	12.973	12.973	12.973	12.973	12.973	12.973			6.295 - 19.651	12.973
Trifluorotoluene (Surr)	10.493	10.488	10.487	10.489	10.489	10.489	10.489	10.491			10.439 - 10.539	10.489

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Gasoline Range Organics [C6 - C10]	467028 327734	404314 334335	358289 313395	333580 313854	Lin	21092163.3	309478.633							1.0000		0.9900
C6-C12	566060 358191	461616 365844	400114 341675	367288 341189	Lin	27740274.7	335538.951							1.0000		0.9900
Trifluorotoluene (Surr)	433595 352666	377792 367389	352227 323612	340107 337329	Ave		360589.558				9.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Gasoline Range Organics [C6 - C10]	Lin	46702752 534936239	80862842 1002863362	143315431 1506499199	266864076	393280590	100 1600	200 3200	400 4800	800	1200
C6-C12	Lin	56606036 585350085	92323209 1093361306	160045434 1637705499	293830549	429829177	100 1600	200 3200	400 4800	800	1200
Trifluorotoluene (Surr)	Ave	1734381 73477715	3022335 142389161	7044548 215890352	13604270	28213297	4.00 200	8.00 440	20.0 640	40.0	80.0

Curve Type Legend:

Ave = Average
Lin = Linear

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-295712/12 Calibration Date: 09/21/2017 18:25

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0092112.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		343843		821	800	2.6	20.0
C6-C12	Lin		379123		821	800	2.7	20.0
Trifluorotoluene (Surr)	Ave	360590	363207		40.3	40.0	0.7	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICV 240-295712/12 Calibration Date: 09/21/2017 18:25

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0092112.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.72	6.30	17.13
C6-C12	12.97	6.30	19.65
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCVRT 240-299683/4 Calibration Date: 10/19/2017 07:55

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101904.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		305522		722	800	-9.8	20.0
C6-C12	Lin		333852		713	800	-10.8	20.0
Trifluorotoluene (Surr)	Ave	360590	378055		33.5	32.0	4.8	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCVRT 240-299683/4 Calibration Date: 10/19/2017 07:55

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101904.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.73	6.33	17.15
C6-C12	12.98	6.33	19.64
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299683/15 Calibration Date: 10/19/2017 14:40

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101915.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		305072		720	800	-9.9	20.0
C6-C12	Lin		332019		709	800	-11.4	20.0
Trifluorotoluene (Surr)	Ave	360590	381573		33.9	32.0	5.8	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299683/15 Calibration Date: 10/19/2017 14:40

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101915.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.73	6.33	17.15
C6-C12	12.98	6.33	19.64
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299683/25 Calibration Date: 10/19/2017 20:48

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101925.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Gasoline Range Organics [C6 - C10]	Lin		314100		744	800	-7.0	20.0
C6-C12	Lin		342763		735	800	-8.2	20.0
Trifluorotoluene (Surr)	Ave	360590	395456		35.1	32.0	9.7	20.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: CCV 240-299683/25 Calibration Date: 10/19/2017 20:48

Instrument ID: AFID Calib Start Date: 09/21/2017 13:19

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 09/21/2017 17:48

Lab File ID: A0101925.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.74	6.33	17.15
C6-C12	12.99	6.33	19.64
Trifluorotoluene (Surr)	10.49	10.44	10.54

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: MB 240-299683/5

Matrix: Water Date Extracted: 10/19/2017 08:31

Lab File ID:(1) A0101905.D Lab File ID:(2)

Date Analyzed:(1) 10/19/2017 08:31 Date Analyzed:(2)

Instrument ID:(1) AFID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-299683/6	10/19/2017 09:08	
MRC-MW120A-101117	240-86380-1	10/19/2017 12:13	
MRC-MW119A-101117	240-86380-2	10/19/2017 12:49	
MRC-MW118B-101117	240-86380-3	10/19/2017 13:26	
MRC-MW188A-101117	240-86380-4	10/19/2017 14:03	
	240-86610-A-1 MS	10/19/2017 18:58	
	240-86610-A-1 MSD	10/19/2017 19:35	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-86380-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-299683/5

Matrix: Water | Lab File ID: A0101905.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2017 08:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 299683 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	49	U	100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	96		56-120

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101906.D

Lab ID: LCS 240-299683/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	786	98	73-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101922.D

Lab ID: 240-86610-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	49 U	843	105	61-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A0101923.D

Lab ID: 240-86610-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Gasoline Range Organics [C6 - C10]	800	849	106	1	23	61-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45(mm)

Client Sample ID	Lab Sample ID	TFT1 #
MRC-MW120A-101117	240-86380-1	106
MRC-MW119A-101117	240-86380-2	101
MRC-MW118B-101117	240-86380-3	104
MRC-MW188A-101117	240-86380-4	103
	MB 240-299683/5	96
	LCS 240-299683/6	109
	240-86610-A-1 MS	109
	240-86610-A-1 MSD	114

	QC LIMITS
TFT = Trifluorotoluene (Surr)	56-120

Column to be used to flag recovery values

FORM II 8015C

SAMPLE CALCULATION - GRO	WATER	
SAMPLE IDENTIFICATION	MRC-MW120A-101117	
COMPOUND	GRO	
COMPOUND AREA	90360519	
INTERNAL STANDARD AREA	1	
INTERNAL STANDARD AMOUND (ng)	1	
AVERAGE RRF	309478.633	
Y-INTERCEPT	21092163.3	
90360519 / 309478.633	223.82	ng/ul

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Client Sample ID: MRC-MW120A-101117 Lab Sample ID: 240-86380-1

Matrix: Water Lab File ID: A0101911.D

Analysis Method: 8015C Date Collected: 10/11/2017 09:05

Sample wt/vol: 5(mL) Date Analyzed: 10/19/2017 12:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 299683 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics [C6 - C10]	220		100	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	106		56-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\AFID\20171019-69821.b\A0101911.D
Lims ID: 240-86380-A-1
Client ID: MRC-MW120A-101117
Sample Type: Client
Inject. Date: 19-Oct-2017 12:13:22 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0069821-011
Operator ID: Instrument ID: AFID

Method: \\ChromNA\Canton\ChromData\AFID\20171019-69821.b\A80218015.m
Limit Group: GCV 8015C GRO ICAL
Last Update: 20-Oct-2017 06:54:10 Calib Date: 21-Sep-2017 17:48:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\AFID\20170921-68899.b\A0092111.D

Column 1 : Det: GC FID1A
Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	10.492	10.487	0.005	12197360	33.8	
A 5 C6-C10	11.734	(6.333-17.147)		90360519	223.8	

Reagents:

VGGASURROGATE_00044 Amount Added: 0.80 Units: uL Run Reagent

FORM VI
GASOLINE RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-86380-1 Analy Batch No.: 295712

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2017 13:19 Calibration End Date: 09/21/2017 17:48 Calibration ID: 41480

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-295712/4	A0092104.D
Level 2	STD2 240-295712/5	A0092105.D
Level 3	STD3 240-295712/6	A0092106.D
Level 4	STD4 240-295712/7	A0092107.D
Level 5	STD5 240-295712/8	A0092108.D
Level 6	STD6 240-295712/9	A0092109.D
Level 7	STD7 240-295712/10	A0092110.D
Level 8	STD8 240-295712/11	A0092111.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Gasoline Range Organics	467028	404314	358289	333580	Lin	21092163.3	309478.633							1.0000		0.9900
[C6 - C10]	327734	334335	313395	313854												
C6-C12	566060	461616	400114	367288	Lin	27740274.7	335538.951							1.0000		0.9900
	358191	365844	341675	341189												
Trifluorotoluene (Surr)	433595	377792	352227	340107	Ave		360589.558				9.5		20.0			
	352666	367389	323612	337329												

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG No.:

Project: LMC Groundwater Sampling

Client Sample ID	Lab Sample ID
MRC-MW120A-101117	240-86380-1
MRC-MW118B-101117	240-86380-3
MRC-MW188A-101117	240-86380-4

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	ICV 240-299723/7 10/18/2017 16:39				CCV 240-299723/67 10/18/2017 21:10				CCV 240-299723/79 10/18/2017 22:04			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	40.2		40.0	100	49.1		50.0	98	50.2		50.0	100
Arsenic	41.2		40.0	103	52.2		50.0	104	52.2		50.0	104
Barium	40.3		40.0	101	50.1		50.0	100	49.3		50.0	99
Beryllium	39.8		40.0	99	46.8		50.0	94	47.5		50.0	95
Cadmium	41.2		40.0	103	50.8		50.0	102	51.5		50.0	103
Chromium	40.7		40.0	102	50.7		50.0	101	49.6		50.0	99
Cobalt	40.7		40.0	102	50.9		50.0	102	51.0		50.0	102
Copper	41.8		40.0	104	51.1		50.0	102	50.7		50.0	101
Iron	10100		10000	101	12800		12500	102	12700		12500	101
Lead	40.8		40.0	102	51.0		50.0	102	50.8		50.0	102
Manganese	203		200	101	255		250	102	254		250	102
Molybdenum	40.3		40.0	101	51.2		50.0	102	51.3		50.0	103
Nickel	40.5		40.0	101	47.6		50.0	95	46.8		50.0	94
Selenium	38.5		40.0	96	50.2		50.0	100	50.6		50.0	101
Silver	39.8		40.0	100	49.2		50.0	98	49.6		50.0	99
Thallium	40.5		40.0	101	50.8		50.0	102	51.2		50.0	102
Vanadium	40.5		40.0	101	50.8		50.0	102	50.6		50.0	101
Zinc	41.1		40.0	103	49.8		50.0	100	51.9		50.0	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICV Source: MTMSICVW_00081 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00201

Analyte	CCV 240-299723/88 10/18/2017 22:45											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	50.9		50.0	102								
Arsenic	51.8		50.0	104								
Barium	50.3		50.0	101								
Beryllium	46.6		50.0	93								
Cadmium	50.5		50.0	101								
Chromium	50.7		50.0	101								
Cobalt	51.5		50.0	103								
Copper	51.3		50.0	103								
Iron	12700		12500	102								
Lead	51.2		50.0	102								
Manganese	257		250	103								
Molybdenum	50.7		50.0	101								
Nickel	46.8		50.0	94								
Selenium	48.9		50.0	98								
Silver	49.8		50.0	100								
Thallium	51.0		50.0	102								
Vanadium	50.1		50.0	100								
Zinc	51.2		50.0	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICV Source: MTMSCRI6020AW_00062 Concentration Units: ug/L

CCV Source: MTMSCRI6020AW_00062

Analyte	ICVL 240-299723/9 10/18/2017 16:48				CCVL 240-299723/90 10/18/2017 22:54							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	2.19		2.00	109	2.02		2.00	101				
Arsenic	5.28		5.00	106	5.43		5.00	109				
Barium	5.33		5.00	107	5.29		5.00	106				
Beryllium	1.02		1.00	102	0.932	J	1.00	93				
Cadmium	1.14		1.00	114	1.10		1.00	110				
Chromium	2.11		2.00	106	2.18		2.00	109				
Cobalt	1.08		1.00	108	1.10		1.00	110				
Copper	2.17		2.00	109	2.23		2.00	111				
Iron	116		100	116	117		100	117				
Lead	1.07		1.00	107	1.15		1.00	115				
Manganese	5.05		5.00	101	5.38		5.00	108				
Molybdenum	5.19	J	5.00	104	4.93	J	5.00	99				
Nickel	2.18		2.00	109	1.94	J	2.00	97				
Selenium	5.04		5.00	101	5.52		5.00	110				
Silver	0.963	J	1.00	96	0.960	J	1.00	96				
Thallium	1.07		1.00	107	1.04		1.00	104				
Vanadium	5.01		5.00	100	5.10		5.00	102				
Zinc	22.2		20.0	111	23.3		20.0	116				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICV Source: MTHgICV_00001_00241 Concentration Units: ug/L

CCV Source: MTHGCALW_01642

Analyte	ICV 240-299251/7-A 10/16/2017 12:01				CCV 240-299251/10-A 10/16/2017 14:08				CCV 240-299251/10-A 10/16/2017 14:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.21		5.00	104	4.82		5.00	96	4.98		5.00	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICV Source: MTHgICV_00001_00241 Concentration Units: ug/L

CCV Source: MTHGCALW_01642

Analyte	CCV 240-299251/10-A 10/16/2017 14:56											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.96		5.00	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Method: 7470A Instrument ID: H3

Lab Sample ID: CRA 240-299251/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01642

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.212		106	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299723/8 10/18/2017 16:43		CCB 240-299723/68 10/18/2017 21:15		CCB 240-299723/80 10/18/2017 22:09		CCB 240-299723/89 10/18/2017 22:50	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.57	U	0.57	U	0.57	U	0.57	U
Arsenic	5.0	0.75	U	0.75	U	0.75	U	0.75	U
Barium	5.0	2.2	U	2.2	U	2.2	U	2.2	U
Beryllium	1.0	0.31	U	0.31	U	0.31	U	0.31	U
Cadmium	1.0	0.21	U	0.21	U	0.21	U	0.21	U
Chromium	2.0	0.98	U	0.98	U	0.98	U	0.98	U
Cobalt	1.0	0.19	U	0.19	U	0.19	U	0.19	U
Copper	2.0	1.7	U	1.7	U	1.7	U	1.7	U
Iron	100	47	U	47	U	47	U	47	U
Lead	1.0	0.45	U	0.45	U	0.45	U	0.45	U
Manganese	5.0	2.1	U	2.1	U	2.1	U	2.1	U
Molybdenum	10	1.1	U	1.1	U	1.1	U	1.1	U
Nickel	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Selenium	5.0	0.89	U	0.89	U	0.89	U	0.89	U
Silver	1.0	0.053	U	0.053	U	0.053	U	0.053	U
Thallium	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Vanadium	5.0	0.82	U	0.82	U	0.82	U	0.82	U
Zinc	20	15	U	15	U	15	U	15	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-299251/8-A 10/16/2017 12:03		CCB 240-299251/11-A 10/16/2017 14:10		CCB 240-299251/11-A 10/16/2017 14:33		CCB 240-299251/11-A 10/16/2017 14:57	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.13	U	0.13	U	0.13	U	0.13	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-298920/1-A

Instrument Code: I10 Batch No.: 299723

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.75	U		6020A
7440-39-3	Barium	2.2	U		6020A
7440-41-7	Beryllium	0.31	U		6020A
7440-43-9	Cadmium	0.21	U		6020A
7440-48-4	Cobalt	0.19	U		6020A
7440-47-3	Chromium	0.98	U		6020A
7440-50-8	Copper	1.7	U		6020A
7439-89-6	Iron	47	U		6020A
7439-96-5	Manganese	2.1	U		6020A
7439-98-7	Molybdenum	1.1	U		6020A
7440-02-0	Nickel	1.5	U		6020A
7439-92-1	Lead	0.45	U		6020A
7440-36-0	Antimony	0.57	U		6020A
7782-49-2	Selenium	0.89	U		6020A
7440-62-2	Vanadium	0.82	U		6020A
7440-66-6	Zinc	15	U		6020A
7440-22-4	Silver	0.053	U		6020A
7440-28-0	Thallium	0.20	U		6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-298922/1-A

Instrument Code: H3 Batch No.: 299250

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.13	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICSA 240-299723/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00082

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.110**	
Arsenic		**0.0560**	
Barium		**-0.0250**	
Beryllium		**0.0040**	
Cadmium		**-0.0430**	
Chromium		**0.577**	
Cobalt		**0.0000**	
Copper		**0.112**	
Iron	**50000**	**50513**	**101**
Lead		**0.0240**	
Manganese		**-0.107**	
Molybdenum	**1000**	**994**	**99**
Nickel		**0.0590**	
Selenium		**0.178**	
Silver		**0.0100**	
Thallium		**0.0030**	
Vanadium		**-0.0170**	
Zinc		**1.69**	
Aluminum	*50000*	*49599*	*99*
Boron		*0.880*	
Calcium	*50000*	*49476*	*99*
Lithium		*0.315*	
Magnesium	*50000*	*50945*	*102*
Potassium	*50000*	*50449*	*101*
Sodium	*50000*	*50563*	*101*
Strontium		*0.410*	
Tin		*0.215*	
Titanium	*1000*	*998*	*100*
Tungsten		*0.185*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Lab Sample ID: ICSAB 240-299723/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00079

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**99.7**	**100**
Arsenic	**100**	**104**	**104**
Barium	**100**	**104**	**104**
Beryllium	**100**	**100.0**	**100**
Cadmium	**100**	**104**	**104**
Chromium	**100**	**103**	**103**
Cobalt	**100**	**103**	**103**
Copper	**100**	**104**	**104**
Iron	**50000**	**49788**	**100**
Lead	**100**	**104**	**104**
Manganese	**100**	**104**	**104**
Molybdenum	**1100**	**1085**	**99**
Nickel	**100**	**101**	**101**
Selenium	**100**	**99.6**	**100**
Silver	**100**	**99.2**	**99**
Thallium	**100**	**103**	**103**
Vanadium	**100**	**101**	**101**
Zinc	**100**	**102**	**102**
Aluminum	*50000*	*49397*	*99*
Boron	*100*	*96.5*	*97*
Calcium	*50000*	*49918*	*100*
Lithium	*100*	*101*	*101*
Magnesium	*50000*	*50519*	*101*
Potassium	*50000*	*49986*	*100*
Sodium	*50000*	*50371*	*101*
Strontium	*100*	*100*	*100*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1088*	*99*
Tungsten	*100*	*102*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-86407-Q-3-B MS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	1040		0.75	J	1000	104	75-125		6020A
Barium	1110		23		1000	108	75-125		6020A
Beryllium	864		0.31	U	1000	86	75-125		6020A
Cadmium	1070		0.27	J	1000	107	75-125		6020A
Cobalt	1000		0.25	J	1000	100	75-125		6020A
Chromium	1010		4.0		1000	100	75-125		6020A
Copper	991		1.7	U	1000	99	75-125		6020A
Iron	11100		1300		10000	98	75-125		6020A
Manganese	1090		89		1000	100	75-125		6020A
Nickel	962		36		1000	93	75-125		6020A
Lead	1000		0.45	U	1000	100	75-125		6020A
Antimony	106		0.57	U	100	106	75-125		6020A
Selenium	918		0.89	U	1000	92	75-125		6020A
Vanadium	991		0.82	U	1000	99	75-125		6020A
Zinc	957		15	U	1000	96	75-125		6020A
Silver	101		0.053	U	100	101	75-125		6020A
Thallium	251		0.20	U	250	100	75-125		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-86407-Q-3-C MSD

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	1030		1000	103	75-125	1	20		6020A
Barium	1080		1000	106	75-125	2	20		6020A
Beryllium	837		1000	84	75-125	3	20		6020A
Cadmium	1050		1000	105	75-125	2	20		6020A
Cobalt	988		1000	99	75-125	1	20		6020A
Chromium	986		1000	98	75-125	2	20		6020A
Copper	983		1000	98	75-125	1	20		6020A
Iron	11100		10000	99	75-125	1	20		6020A
Manganese	1080		1000	99	75-125	1	20		6020A
Nickel	935		1000	90	75-125	3	20		6020A
Lead	988		1000	99	75-125	2	20		6020A
Antimony	104		100	104	75-125	2	20		6020A
Selenium	897		1000	90	75-125	2	20		6020A
Vanadium	977		1000	98	75-125	1	20		6020A
Zinc	953		1000	95	75-125	0	20		6020A
Silver	99.8		100	100	75-125	1	20		6020A
Thallium	245		250	98	75-125	2	20		6020A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-298920/2-A

Lab Name: TestAmerica Canton Job No.: 240-86380-1

Sample Matrix: Water LCS Source: MTICPMSA_00032

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	1000	1020		102	80	120		6020A
Barium	1000	1010		101	80	120		6020A
Beryllium	1000	901		90	80	120		6020A
Cadmium	1000	1060		106	80	120		6020A
Cobalt	1000	1020		102	80	120		6020A
Chromium	1000	985		99	80	120		6020A
Copper	1000	1030		103	80	120		6020A
Iron	10000	10100		101	80	120		6020A
Manganese	1000	1010		101	80	120		6020A
Molybdenum	100	95.5		96	80	120		6020A
Nickel	1000	930		93	80	120		6020A
Lead	1000	1030		103	80	120		6020A
Antimony	100	99.9		100	80	120		6020A
Selenium	1000	917		92	80	120		6020A
Vanadium	1000	960		96	80	120		6020A
Zinc	1000	1020		102	80	120		6020A
Silver	100	99.8		100	80	120		6020A
Thallium	250	254		102	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-298922/2-A

Lab Name: TestAmerica Canton Job No.: 240-86380-1

Sample Matrix: Water LCS Source: MTHGCALW_01641

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.62		92	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-86407-Q-3-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-86380-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	0.75	J	3.8	U	NC		6020A
Barium	23		21.1	J	NC		6020A
Beryllium	0.31	U	1.5	U	NC		6020A
Cadmium	0.27	J	1.1	U	NC		6020A
Cobalt	0.25	J	0.95	U	NC		6020A
Chromium	4.0		4.9	U	NC		6020A
Copper	1.7	U	8.5	U	NC		6020A
Iron	1300		1400		NC		6020A
Manganese	89		115		NC		6020A
Nickel	36		36.6		NC		6020A
Lead	0.45	U	2.3	U	NC		6020A
Antimony	0.57	U	2.9	U	NC		6020A
Selenium	0.89	U	4.5	U	NC		6020A
Vanadium	0.82	U	4.1	U	NC		6020A
Zinc	15	U	75	U	NC		6020A
Silver	0.053	U	0.27	U	NC		6020A
Thallium	0.20	U	1.0	U	NC		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020A XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	10	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-86380-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-86380-1

SDG No.:

Instrument ID: I10 Date: 09/29/2017 10:30

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Arsenic		10000	6020A
Barium		10000	6020A
Beryllium		2000	6020A
Cadmium		4000	6020A
Cobalt		5000	6020A
Chromium		10000	6020A
Copper		10000	6020A
Molybdenum		2000	6020A
Nickel		10000	6020A
Lead		4000	6020A
Antimony		200	6020A
Selenium		10000	6020A
Vanadium		10000	6020A
Zinc		10000	6020A
Silver		300	6020A
Thallium		2000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-298920/1-A	10/13/2017 14:00	298920		50	50
LCS 240-298920/2-A	10/13/2017 14:00	298920		50	50
240-86380-1	10/13/2017 14:00	298920		50	50
240-86380-1	10/13/2017 14:00	298920		50	50
240-86380-3	10/13/2017 14:00	298920		50	50
240-86380-3	10/13/2017 14:00	298920		50	50
240-86380-4	10/13/2017 14:00	298920		50	50
240-86380-4	10/13/2017 14:00	298920		50	50
240-86407-Q-3-B MS	10/13/2017 14:00	298920		50	50
240-86407-Q-3-C MSD	10/13/2017 14:00	298920		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-298922/1-A	10/13/2017 14:00	298922		50	50
LCS 240-298922/2-A	10/13/2017 14:00	298922		50	50
240-86380-1	10/13/2017 14:00	298922		50	50
240-86380-1	10/13/2017 14:00	298922		50	50
240-86380-3	10/13/2017 14:00	298922		50	50
240-86380-3	10/13/2017 14:00	298922		50	50
240-86380-4	10/13/2017 14:00	298922		50	50
240-86380-4	10/13/2017 14:00	298922		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/18/2017 16:12 End Date: 10/19/2017 02:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			16:12																									
ICIS 240-299723/2			16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD1 240-299723/3 IC	1		16:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 240-299723/4 IC	1		16:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 240-299723/5 IC	1		16:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD4 240-299723/6 IC	1		16:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 240-299723/7	1		16:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 240-299723/8	1		16:43	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X								
ICVL 240-299723/9	1		16:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 240-299723/10	1		16:52	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X								
ICSAB 240-299723/11	1		16:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 240-299723/12			17:01																									
CCB 240-299723/13			17:06																									
CCV 240-299723/14			17:11																									
CCB 240-299723/15			17:16																									
ZZZZZZ			17:20																									
ZZZZZZ			17:25																									
ZZZZZZ			17:30																									
ZZZZZZ			17:34																									
ZZZZZZ			17:39																									
ZZZZZZ			17:43																									
ZZZZZZ			17:47																									
ZZZZZZ			17:52																									
ZZZZZZ			17:56																									
ZZZZZZ			18:01																									
CCV 240-299723/26			18:05																									
CCB 240-299723/27			18:10																									
ZZZZZZ			18:14																									
ZZZZZZ			18:19																									
ZZZZZZ			18:23																									
ZZZZZZ			18:28																									
ZZZZZZ			18:32																									
ZZZZZZ			18:37																									
ZZZZZZ			18:41																									
ZZZZZZ			18:46																									
ZZZZZZ			18:50																									
CCV 240-299723/37			18:55																									
CCB 240-299723/38			18:59																									
ZZZZZZ			19:04																									
ZZZZZZ			19:09																									
ZZZZZZ			19:13																									
ZZZZZZ			19:18																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/18/2017 16:12 End Date: 10/19/2017 02:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			19:22																									
ZZZZZZ			19:27																									
ZZZZZZ			19:31																									
CCV 240-299723/46			19:36																									
CCB 240-299723/47			19:40																									
CCVL 240-299723/48			19:45																									
ZZZZZZ			19:49																									
ZZZZZZ			19:54																									
ZZZZZZ			19:58																									
ZZZZZZ			20:03																									
ZZZZZZ			20:07																									
ZZZZZZ			20:12																									
ZZZZZZ			20:16																									
ZZZZZZ			20:21																									
ZZZZZZ			20:25																									
CCV 240-299723/58			20:30																									
CCB 240-299723/59			20:34																									
ZZZZZZ			20:39																									
ZZZZZZ			20:43																									
ZZZZZZ			20:48																									
ZZZZZZ			20:52																									
ZZZZZZ			20:57																									
ZZZZZZ			21:01																									
ZZZZZZ			21:06																									
CCV 240-299723/67	1		21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB 240-299723/68	1		21:15	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
CCVL 240-299723/69			21:19																									
MB 240-298920/1-A	1	R	21:24	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
LCS 240-298920/2-A	1	R	21:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			21:33																									
240-86407-Q-3-A SD ^5	5	D	21:37	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X					
ZZZZZZ			21:42																									
240-86407-Q-3-B MS	1	D	21:46	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
240-86407-Q-3-C MSD	1	D	21:51	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
240-86380-1	1	R	21:55	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			22:00																									
CCV 240-299723/79	1		22:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB 240-299723/80	1		22:09	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
240-86380-1	1	D	22:13	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			22:18																									
240-86380-3	1	R	22:22	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
240-86380-3	1	D	22:27	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X					

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/18/2017 16:12 End Date: 10/19/2017 02:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
240-86380-4	1	R	22:31	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X								
240-86380-4	1	D	22:36	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X								
ZZZZZZ			22:40																									
CCV 240-299723/88	1		22:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-299723/89	1		22:50	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X								
CCVL 240-299723/90	1		22:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			22:59																									
ZZZZZZ			23:03																									
ZZZZZZ			23:08																									
ZZZZZZ			23:12																									
ZZZZZZ			23:17																									
ZZZZZZ			23:21																									
ZZZZZZ			23:26																									
ZZZZZZ			23:30																									
ZZZZZZ			23:35																									
CCV 240-299723/100			23:39																									
CCB 240-299723/101			23:44																									
ZZZZZZ			23:48																									
ZZZZZZ			23:53																									
ZZZZZZ			23:57																									
ZZZZZZ			00:02																									
ZZZZZZ			00:06																									
ZZZZZZ			00:11																									
ZZZZZZ			00:15																									
ZZZZZZ			00:20																									
ZZZZZZ			00:24																									
ZZZZZZ			00:29																									
CCV 240-299723/112			00:33																									
CCB 240-299723/113			00:38																									
ZZZZZZ			00:42																									
ZZZZZZ			00:47																									
ZZZZZZ			00:51																									
ZZZZZZ			00:56																									
ZZZZZZ			01:00																									
ZZZZZZ			01:05																									
ZZZZZZ			01:09																									
ZZZZZZ			01:14																									
ZZZZZZ			01:18																									
ZZZZZZ			01:23																									
CCV 240-299723/124			01:27																									
CCB 240-299723/125			01:32																									
ZZZZZZ			01:36																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020A

Start Date: 10/18/2017 16:12 End Date: 10/19/2017 02:49

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Fe	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn									
ZZZZZZ			01:41																											
ZZZZZZ			01:45																											
ZZZZZZ			01:50																											
ZZZZZZ			01:54																											
ZZZZZZ			01:59																											
ZZZZZZ			02:03																											
ZZZZZZ			02:08																											
ZZZZZZ			02:12																											
ZZZZZZ			02:17																											
CCV 240-299723/136			02:22																											
CCB 240-299723/137			02:26																											
ZZZZZZ			02:31																											
ZZZZZZ			02:35																											
ZZZZZZ			02:40																											
CCV 240-299723/141			02:44																											
CCB 240-299723/142			02:49																											

Prep Types:
D = Dissolved
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/16/2017 11:48 End Date: 10/16/2017 14:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-299251/1-A			11:48	X																								
IC 240-299251/2-A			11:50	X																								
IC 240-299251/3-A			11:52	X																								
IC 240-299251/4-A			11:54	X																								
IC 240-299251/5-A			11:56	X																								
IC 240-299251/6-A			11:58	X																								
ICV 240-299251/7-A	1		12:01	X																								
ICB 240-299251/8-A	1		12:03	X																								
CRA 240-299251/9-A	1		12:06	X																								
CCV 240-299251/10-A			12:07																									
CCB 240-299251/11-A			12:09																									
CCV 240-299251/10-A			12:12																									
CCV 240-299251/10-A			13:43																									
CCB 240-299251/11-A			13:45																									
ZZZZZZ			13:47																									
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									
ZZZZZZ			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ZZZZZZ			14:00																									
ZZZZZZ			14:02																									
ZZZZZZ			14:04																									
ZZZZZZ			14:06																									
CCV 240-299251/10-A	1		14:08	X																								
CCB 240-299251/11-A	1		14:10	X																								
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
ZZZZZZ			14:18																									
ZZZZZZ			14:20																									
ZZZZZZ			14:22																									
ZZZZZZ			14:24																									
ZZZZZZ			14:26																									
CRA 240-299251/9-A			14:28																									
MB 240-298922/1-A	1	T	14:30	X																								
CCV 240-299251/10-A	1		14:31	X																								
CCB 240-299251/11-A	1		14:33	X																								
LCS 240-298922/2-A	1	T	14:36	X																								
240-86380-1	1	T	14:38	X																								
240-86380-1	1	D	14:40	X																								
240-86380-3	1	T	14:42	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 10/16/2017 11:48 End Date: 10/16/2017 14:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
240-86380-3	1	D	14:44	X																								
240-86380-4	1	T	14:46	X																								
240-86380-4	1	D	14:48	X																								
ZZZZZZ			14:50																									
ZZZZZZ			14:52																									
ZZZZZZ			14:54																									
CCV 240-299251/10-A	1		14:56	X																								
CCB 240-299251/11-A	1		14:57	X																								

Prep Types:
D = Dissolved
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/18/2017 End Date: 10/18/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-299723/3 I	16:21	99		98		96		97		99	
STD2 240-299723/4 I	16:25	99		99		98		95		99	
STD3 240-299723/5 I	16:30	103		101		102		94		98	
STD4 240-299723/6 I	16:34	100		102		100		102		103	
ICV 240-299723/7	16:39	102		103		105		98		97	
ICB 240-299723/8	16:43	104		106		105		101		91	
ICVL 240-299723/9	16:48	104		105		104		99		88	
ICSA 240-299723/10	16:52	87		90		89		83		78	
ICSAB 240-299723/11	16:57	80		86		85		83		82	
CCV 240-299723/67	21:10	83		84		87		85		86	
CCB 240-299723/68	21:15	83		84		83		87		90	
MB 240-298920/1-A	21:24	79		81		85		85		81	
LCS 240-298920/2-A	21:28	73		77		82		80		75	
240-86407-Q-3-A SD	21:37	85		87		93		90		92	
240-86407-Q-3-B MS	21:46	67		73		78		73		69	
240-86407-Q-3-C MSD	21:51	66		71		77		72		68	
240-86380-1	21:55	65		69		76		70		70	
240-86380-1	22:00	73		76		79		79		83	
CCV 240-299723/79	22:04	73		76		77		77		77	
CCB 240-299723/80	22:09	73		74		76		77		76	
240-86380-1	22:13	65		68		72		66		68	
240-86380-1	22:18	71		73		77		75		78	
240-86380-3	22:22	67		69		73		74		76	
240-86380-3	22:27	67		71		75		74		74	
240-86380-4	22:31	68		72		77		72		72	
240-86380-4	22:36	69		73		78		73		75	
CCV 240-299723/88	22:45	75		77		78		78		80	
CCB 240-299723/89	22:50	74		75		75		78		77	
CCVL 240-299723/90	22:54	74		74		75		78		80	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/18/2017 End Date: 10/18/2017

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-299723/3 I	16:21	98		98		100					
STD2 240-299723/4 I	16:25	101		100		95					
STD3 240-299723/5 I	16:30	99		98		92					
STD4 240-299723/6 I	16:34	101		101		100					
ICV 240-299723/7	16:39	100		99		96					
ICB 240-299723/8	16:43	98		98		99					
ICVL 240-299723/9	16:48	96		95		97					
ICSA 240-299723/10	16:52	87		86		84					
ICSAB 240-299723/11	16:57	86		86		84					
CCV 240-299723/67	21:10	88		88		85					
CCB 240-299723/68	21:15	88		88		85					
MB 240-298920/1-A	21:24	87		86		89					
LCS 240-298920/2-A	21:28	84		84		83					
240-86407-Q-3-A SD	21:37	95		94		91					
240-86407-Q-3-B MS	21:46	82		83		77					
240-86407-Q-3-C MSD	21:51	81		82		76					
240-86380-1	21:55	79		78		71					
240-86380-1	22:00	86		86		83					
CCV 240-299723/79	22:04	83		83		79					
CCB 240-299723/80	22:09	80		80		80					
240-86380-1	22:13	75		76		70					
240-86380-1	22:18	81		82		79					
240-86380-3	22:22	82		81		81					
240-86380-3	22:27	82		82		83					
240-86380-4	22:31	80		81		74					
240-86380-4	22:36	83		83		76					
CCV 240-299723/88	22:45	83		84		80					
CCB 240-299723/89	22:50	81		81		80					
CCVL 240-299723/90	22:54	81		79		80					

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Batch Number: 298920 Batch Start Date: 10/13/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 10/13/17 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00031	MTICPMSA 00032	MTICPMSB 00032	MTTMHCL 00173
MB 240-298920/1		3005A, 6020A		50 mL	50 mL				2.5 mL
LCS 240-298920/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86380-H-1	MRC-MW120A-101117	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86380-G-1	MRC-MW120A-101117	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86380-H-3	MRC-MW118B-101117	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86380-G-3	MRC-MW118B-101117	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86380-H-4	MRC-MW188A-101117	3005A, 6020A	R	50 mL	50 mL				2.5 mL
240-86380-G-4	MRC-MW188A-101117	3005A, 6020A	D	50 mL	50 mL				2.5 mL
240-86407-Q-3 MS		3005A, 6020A	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-86407-Q-3 MSD		3005A, 6020A	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
MB 240-298920/1		3005A, 6020A		1 mL					
LCS 240-298920/2		3005A, 6020A		1 mL					
240-86380-H-1	MRC-MW120A-101117	3005A, 6020A	R	1 mL					
240-86380-G-1	MRC-MW120A-101117	3005A, 6020A	D	1 mL					
240-86380-H-3	MRC-MW118B-101117	3005A, 6020A	R	1 mL					
240-86380-G-3	MRC-MW118B-101117	3005A, 6020A	D	1 mL					
240-86380-H-4	MRC-MW188A-101117	3005A, 6020A	R	1 mL					
240-86380-G-4	MRC-MW188A-101117	3005A, 6020A	D	1 mL					
240-86407-Q-3 MS		3005A, 6020A	D	1 mL					
240-86407-Q-3 MSD		3005A, 6020A	D	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Batch Number: 298920 Batch Start Date: 10/13/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 10/13/17 22:00

Batch Notes	
Filter Paper ID	60412103
Hot Block ID	HB1
Pipette/Syringe/Dispenser ID	mp3
Digestion Tube/Cup ID	1705110

Basis	Basis Description
R	Total Recoverable
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Batch Number: 298922 Batch Start Date: 10/13/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/13/17 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01641	MTKMN04W 00144
MB 240-298922/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-298922/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-86380-H-1	MRC-MW120A-101117	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86380-G-1	MRC-MW120A-101117	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86380-H-3	MRC-MW118B-101117	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86380-G-3	MRC-MW118B-101117	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86380-H-4	MRC-MW188A-101117	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-86380-G-4	MRC-MW188A-101117	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00132					
MB 240-298922/1		7470A, 7470A		1.25 mL					
LCS 240-298922/2		7470A, 7470A		1.25 mL					
240-86380-H-1	MRC-MW120A-101117	7470A, 7470A	T	1.25 mL					
240-86380-G-1	MRC-MW120A-101117	7470A, 7470A	D	1.25 mL					
240-86380-H-3	MRC-MW118B-101117	7470A, 7470A	T	1.25 mL					
240-86380-G-3	MRC-MW118B-101117	7470A, 7470A	D	1.25 mL					
240-86380-H-4	MRC-MW188A-101117	7470A, 7470A	T	1.25 mL					
240-86380-G-4	MRC-MW188A-101117	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	take out temps within range
Hot Block ID	C2
Pipette/Syringe/Dispenser ID	mp2/3
Digestion Tube/Cup ID	1705110

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Batch Number: 298922 Batch Start Date: 10/13/17 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 10/13/17 16:00

Basis	Basis Description
T	Total/NA
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG No.:

Batch Number: 299251 Batch Start Date: 10/16/17 08:15 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 10/16/17 10:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00074	MTH2S04 00049	MTHGCALW 01642	MTHgICV_00001 00241
ICV 240-299251/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-299251/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-299251/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-299251/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-299251/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00144	MTTMHNO3 00132				
ICV 240-299251/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-299251/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-299251/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-299251/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-299251/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	takeout temp in range (90-95* Celsius)
Hot Block ID	C1
Pipette/Syringe/Dispenser ID	MP1, MP2, A8, A5, MP5
Digestion Tube/Cup ID	1703076

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Sample Calculation - Page 1

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW120A-101117 Lab Sample ID: 240-86380-1

Lab Name: TestAmerica Canton Job No.: 240-86380-1

SDG ID.:

Matrix: Water Date Sampled: 10/11/2017 09:05

Reporting Basis: WET Date Received: 10/12/2017 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.57	2.0	0.57	ug/L	U		1	6020A
7440-38-2	Arsenic	3.5	5.0	0.75	ug/L	J		1	6020A
7440-39-3	Barium	710	5.0	2.2	ug/L			1	6020A
7440-41-7	Beryllium	0.38	1.0	0.31	ug/L	J		1	6020A
7440-43-9	Cadmium	0.37	1.0	0.21	ug/L	J		1	6020A
7440-48-4	Cobalt	160	1.0	0.19	ug/L			1	6020A
7440-47-3	Chromium	3.9	2.0	0.98	ug/L			1	6020A
7440-50-8	Copper	2.0	2.0	1.7	ug/L			1	6020A
7439-98-7	Molybdenum	20	10	1.1	ug/L			1	6020A
7440-02-0	Nickel	25	2.0	1.5	ug/L			1	6020A
7439-92-1	Lead	0.96	1.0	0.45	ug/L	J		1	6020A
7782-49-2	Selenium	1.1	5.0	0.89	ug/L	J		1	6020A
7440-28-0	Thallium	0.24	1.0	0.20	ug/L	J		1	6020A
7440-62-2	Vanadium	2.7	5.0	0.82	ug/L	J		1	6020A
7440-66-6	Zinc	20	20	15	ug/L			1	6020A
7440-22-4	Silver	0.053	1.0	0.053	ug/L	U		1	6020A

Sample Report

Sample Table

Sample Name	240-86380-h-1-a
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10101817D.b
Acq Date Time	2017-10-18T21:55:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

Sample MRC-MW120A-101117

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	6	2	NoGas	5.880	5.880	2.68	45979	0.01	10000	
Be	9	45	2	NoGas	0.378	0.378	12.97	576	0.07	2000	
B	11	45	2	NoGas	61.172	61.172	2.30	60087	0.10	300	
Na	23	45	1	He	452976.285	452976.285	1.22	59283651	0.76	500000	
Mg	24	45	1	He	41325.586	41325.586	2.15	3235896	1.28	500000	
Al	27	45	1	He	605.718	605.718	2.87	27843	2.18	200000	
K	39	45	1	He	5881.451	5881.451	0.84	363959	1.62	500000	
Ca	44	45	1	He	37762.027	37762.027	1.40	137573	27.45	500000	
Ti	47	45	1	He	10.829	10.829	4.04	240	4.51	2500	
V	51	45	1	He	2.664	2.664	9.33	1725	0.15	10000	
Cr	52	45	1	He	3.860	3.860	3.61	2972	0.13	10000	
Mn	55	45	1	He	22823.288	22823.288	1.52	12021070	0.19	10000	>LDR
Fe	56	45	1	He	150524.734	150524.734	1.11	93808790	0.16	200000	
Co	59	45	1	He	157.673	157.673	1.52	188183	0.08	5000	
Ni	60	103	1	He	25.451	25.451	0.84	8402	0.30	10000	
Cu	63	45	1	He	2.027	2.027	8.55	1755	0.12	10000	
Zn	66	45	1	He	19.568	19.568	4.82	3290	0.59	10000	
As	75	45	1	He	3.549	3.549	6.81	423	0.84	10000	
Se	78	103	1	He	1.075	1.075	17.68	18	6.03	10000	
Sr	88	103	1	He	468.845	468.845	1.18	342136	0.14	10000	
Mo	95	103	1	He	19.558	19.558	31.32	9604	0.20	2000	
Ag	107	103	1	He	0.015	0.015	23.88	32	0.05	100	
Cd	111	115	1	He	0.367	0.367	12.99	91	0.40	4000	
Sn	118	115	1	He	2.865	2.865	27.07	1380	0.21	2000	
Sb	123	115	1	He	0.512	0.512	5.94	204	0.25	200	
Ba	137	115	1	He	713.338	713.338	2.10	89562	0.80	10000	
W	182	159	1	He	1.399	1.399	23.00	1859	0.08	2500	
Tl	205	165	1	He	0.242	0.242	3.70	642	0.04	2000	
Pb	208	165	1	He	0.959	0.959	5.31	3844	0.02	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	399458	0.40	615541	64.90	60	120	
Sc	45	1	He	104599	1.56	151745	68.93	60	120	
Sc	45	2	NoGas	2587201	2.69	3394112	76.23	60	120	
Rh	103	1	He	471455	1.89	675485	69.79	60	120	
In	115	1	He	147458	1.42	211117	69.85	60	120	
Tb	159	1	He	447600	1.34	568347	78.75	60	120	
Ho	165	1	He	477470	1.05	609589	78.33	60	120	
Bi	209	1	He	351835	0.69	497346	70.74	60	120	

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **FEBRUARY 13, 2018**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION –HEXAVALENT CHROMIUM**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER CENTER (MRC)
SDGS TMM-093, TMM-094, AND TMM-095

SAMPLES:

SDG TMM-093: 2/Aqueous/

MRC-MW131B-100917 MRC-MW121B-100917

SDG TMM-094: 4/Aqueous/

MRC-MW117B-101017 MRC-MW119B-101017 MRC-MW120B-101017
MRC-MW121A-101017

SDG TMM-095: 3/Aqueous/

MRC-MW118A-101117 MRC-MW118B-101117 MRC-MW120A-101117

Overview

The sample set for LMC MRC, SDGs TMM-093, TMM-094, and TMM-095 consisted of nine (9) aqueous environmental samples. The samples were analyzed for hexavalent chromium. No field duplicate sample pair was included in these SDGs.

The samples were collected by Tetra Tech on October 9 to 11, 2017 and analyzed by ALS Environmental. All analyses were conducted in accordance with EPA Method 218.6 for hexavalent chromium analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, initial/continuing calibrations, laboratory method/preparation blanks, laboratory control sample results, surrogate spike recovery, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major – None.

Minor

All samples were collected on 10/09/17 through 10/11/17 and were analyzed 1 to 3 days past the 24 hour sample collection to analysis hold time for hexavalent chromium on 10/13/17. Detected results were qualified estimated with a low bias (J-) and nondetected were qualified as estimated (UJ).

Notes

All samples were properly preserved to a pH of 9.0 – 9.5 and were filtered at the laboratory.

Several of the field sample IDs were recorded as “MRL” on the sample result forms but the actual sample IDs should begin with “MRC”. The data reviewer corrected the results forms that were incorrectly identified and the database was also corrected. No further action was required.

Samples MRC-MW119A-101117 and MRC-MW119B-101117 were named incorrectly on the chain of custody record. The project manager discovered the error and instructed the lab to rename the samples as MRC-MW118A-101117 and MRC-MW118B-101117, respectively. The lab forms and the database was updated to include the change in sample ID names.

Sample MRC-MW117A-100917 was officially changed to MRC-MW131B-100917 at the request of the client. The chain of custody record was modified by the data reviewer. The sample ID was also changed in the database.

Non-detected results were reported to the method detection limit.

Executive Summary

Laboratory Performance: Hexavalent chromium results were qualified as estimated for sample collection to analysis hold time exceedances.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review" (January 2017). The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech
Leanne M. Ganser
Environmental Scientist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

MRC-MW131B

PROJ_NO: 08109	NSAMPLE	MRC-MW117A			MRC-MW121B		
SDG: TMM-093	LAB_ID	2267969002			2267969001		
FRACTION: MISC	SAMP_DATE	10/9/2017			10/9/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.25	UJ	H	1.9	J-	H

JAS 2/13/18

PROJ_NO: 08109	NSAMPLE	MRC-MW117B-101017			MRC-MW119B-101017			MRC-MW120B-101017			MRC-MW121A-101017		
SDG: TMM-094	LAB_ID	2268199001			2268199004			2268199003			2268199002		
FRACTION: MISC	SAMP_DATE	10/10/2017			10/10/2017			10/10/2017			10/10/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.047	UJ	H	0.047	UJ	H	0.047	UJ	H	0.047	UJ	H

MW118A MW118B

PROJ_NO: 08109	NSAMPLE	MRC-M~~W119A~~-101117			MRC-~~MW119B~~-101117			MRC-MW120A-101117		
SDG: TMM-095	LAB_ID	2268735002			2268735003			2268735001		
FRACTION: MISC	SAMP_DATE	10/11/2017			10/11/2017			10/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		54.9	J-	H	0.17	J-	HP	0.047	UJ	H

JAS 12/15/17

Appendix B

Results as Reported by the Laboratory

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2267969 TMM093|Hexavalent Chromium

Lab ID: **2267969001**
Sample ID: ~~MRL~~ MRC **MW121B-100917**

JAS 2/13/18

Date Collected: 10/9/2017 13:14
Date Received: 10/9/2017 20:15

Matrix: Water

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	1.9		ug/L	0.25	0.047	EPA 218.6		10/13/17 02:02	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2267969 TMM093|Hexavalent Chromium

Lab ID: **2267969002**
Sample ID: ~~**MRL**~~ MRC **MW131B-100917**

JAS 2/13/18

Date Collected: 10/9/2017 14:35
Date Received: 10/9/2017 20:15

Matrix: Water

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		10/13/17 02:11	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268199 TMM094|Hexavalent Chromium

Lab ID: **2268199001** Date Collected: 10/10/2017 13:15 Matrix: Water

Sample ID: MRC ~~**MRL-MW117B-101017**~~ Date Received: 10/10/2017 22:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		10/13/17 02:52	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

LG 11-9-17

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268199 TMM094|Hexavalent Chromium

Lab ID: **2268199002** Date Collected: 10/10/2017 09:34 Matrix: Water

Sample ID: MRC ~~MRL~~-**MW121A-101017** Date Received: 10/10/2017 22:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY											
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6			10/13/17 03:00	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

LG 11-9-17

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268199 TMM094|Hexavalent Chromium

Lab ID: **2268199003** Date Collected: 10/10/2017 12:00 Matrix: Water

Sample ID: MRC ~~MRL-MW120B-101017~~ Date Received: 10/10/2017 22:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		10/13/17 03:08	MBW	A

Vanessa N. Badman

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Project Coordinator

LG 11-9-17

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268199 TMM094|Hexavalent Chromium

Lab ID: **2268199004** Date Collected: 10/10/2017 14:40 Matrix: Water
Sample ID: MRC ~~MRL~~-**MW119B-101017** Date Received: 10/10/2017 22:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY											
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6			10/13/17 03:16	MBW	A

Vanessa N. Badman
Mrs. Vanessa N Badman
Project Coordinator

LG 11-9-17

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268735 TMM095|Hexavalent Chromium

Lab ID: **2268735001** Date Collected: 10/11/2017 09:05 Matrix: Water

Sample ID: **MRC-MW 120A-101117** Date Received: 10/11/2017 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		10/13/17 05:11	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268735 TMM095|Hexavalent Chromium

Lab ID: **2268735002** Date Collected: 10/11/2017 14:00 Matrix: Water

Sample ID: **MRC-MW 118A-101117** Date Received: 10/11/2017 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	54.9		ug/L	1.3	0.23	EPA 218.6		10/13/17 07:55	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2268735 TMM095|Hexavalent Chromium

Lab ID: **2268735003** Date Collected: 10/11/2017 12:05 Matrix: Water

Sample ID: **MRC-MW 118B-101117** Date Received: 10/11/2017 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	0.17J	J	ug/L	0.25	0.047	EPA 218.6		10/13/17 05:27	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

Appendix C

Support Documentation

Tetra Tech, Inc.

ALS-Middletown
Case Narrative
TMM-093

Sample Management

This report contains the results of the analysis of two (2) water samples collected on October 9, 2017. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The samples arrived at ALS via courier on October 9, 2017. Upon receipt, the samples were inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. Samples were received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Hexavalent Chromium by EPA Method 218.6

Sample handling. Two (2) aqueous samples were analyzed for hexavalent chromium by EPA Method 218.6. The samples were analyzed within the 28-day holding period established for the method.

Calibration. A calibration was properly established. Continuing calibration verification standards were analyzed to verify the calibration. The standards were within the QC limits.

Blanks. Method blanks were analyzed with the samples. Hexavalent chromium was not detected above the reporting limit in the blanks.

Laboratory Control Samples. Laboratory control samples, identified as MRL and 2624787, were analyzed initially and every 20 samples. The recoveries were within the QC limits.

I Jennifer M. Lamoreux, as the designated Quality Assurance Officer, hereby attest that all electronic deliverables have been thoroughly reviewed and are in agreement with the associated hardcopy data. The enclosed electronic files have been reviewed for accuracy (including significant figures), completeness and format. The laboratory will be responsible for any labor time necessary to correct enclosed electronic deliverables that have been found to be in error. I can be reached at (717) 944-5541 if there are any questions or problems with the enclosed electronic deliverables.

Signature:  Title: Reporting Manager Date: 11/6/2017

Tetra Tech, Inc.

ALS-Middletown
Case Narrative
TMM-094

Sample Management

This report contains the results of the analysis of four (4) water samples collected on October 10, 2017. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The samples arrived at ALS via courier on October 10, 2017. Upon receipt, the samples were inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. Samples were received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Hexavalent Chromium by EPA Method 218.6

Sample handling. Four (04) aqueous samples were analyzed for hexavalent chromium by EPA Method 218.6. The samples were analyzed within the 28 day holding period established for the method.

Calibration. A calibration was properly established. Continuing calibration verification standards were analyzed to verify the calibration. The standards were within the QC limits.

Blanks. Method blanks were analyzed with the samples. Hexavalent chromium was not detected above the reporting limit in the blanks.

Laboratory Control Samples. Laboratory control samples identified as 2624787 and 2624785 were analyzed initially and every 20 samples. The recoveries were within the QC limits.

I Jennifer M. Lamoreux, as the designated Quality Assurance Officer, hereby attest that all electronic deliverables have been thoroughly reviewed and are in agreement with the associated hardcopy data. The enclosed electronic files have been reviewed for accuracy (including significant figures), completeness and format. The laboratory will be responsible for any labor time necessary to correct enclosed electronic deliverables that have been found to be in error. I can be reached at (717) 944-5541 if there are any questions or problems with the enclosed electronic deliverables.

Signature:  Title: Reporting Manager Date: 11/6/2017

Tetra Tech, Inc.

ALS-Middletown
Case Narrative
TMM-095

Sample Management

This report contains the results of the analysis of three (3) water samples collected on October 11, 2017. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The samples arrived at ALS via courier on October 11, 2017. Upon receipt, the samples were inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. Samples were received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Hexavalent Chromium by EPA Method 218.6

Sample handling. Three (03) aqueous samples were analyzed for hexavalent chromium by EPA Method 218.6. The samples were analyzed within the 28-day holding period established for the method.

Calibration. A calibration was properly established. Continuing calibration verification standards were analyzed to verify the calibration. The standards were within the QC limits.

Blanks. Method blanks were analyzed with the samples. Hexavalent chromium was not detected above the reporting limit in the blanks.

Laboratory Control Samples. Laboratory control samples, identified as LCS and MRL, were analyzed initially and every 20 samples. The recoveries were within the QC limits.

I Jennifer M. Lamoreux, as the designated Quality Assurance Officer, hereby attest that all electronic deliverables have been thoroughly reviewed and are in agreement with the associated hardcopy data. The enclosed electronic files have been reviewed for accuracy (including significant figures), completeness and format. The laboratory will be responsible for any labor time necessary to correct enclosed electronic deliverables that have been found to be in error. I can be reached at (717) 944-5541 if there are any questions or problems with the enclosed electronic deliverables.

Signature:  Title: Reporting Manager Date: 11/6/2017

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page ___ of ___
Courier:
Tracking #:

* 2 2 6 7 9 6 9 *

Co. Name: Tetra Tech
Contact (Report to): Tony Apanavage
Address: 20251 Century Blvd. #200
Phone: 301-528-5552

Bill to (if different than Report to):
PO#: 112IC08109

Project Name/#:
ALS Quote #:

TAT: ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? ☐ -Y
Fax? ☐ -Y No.:

***Container Type	P														
***Container Size	250														
***Preservative	NaOH														

ANALYSES/METHOD REQUESTED

Hex Chrome

Enter Number of Containers Per Analysis

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Hex Chrome									
1	MRL-MW121B		10/9	1314		W	✓									
2	MRL-MW117A		10/9	1435		W	✓									
3																
4																
5																
6																
7																
8																

Receipt Information (completed by Sample Receiving)
Performed by: OBS
Cooler Temp: 3°C
Therm. ID: 309
No. of Coolers:
Notes:

Sample	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
1	Y	Y	Y	Y	N
2	Y	Y	Y	Y	N
3					
4					
5					
6					
7					
8					

Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
Y	Y	Y	Y	Y
N	N	N	N	N

SAMPLED BY (Please Print): J. Michael Wilks

Project Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	J. M. Wilks	10/9	1600	2	[signature]	10/9	1600
3	[signature]	10/9		4			1500
5	[signature]		2015	6	[signature]	10/9	2015
7				8			
9				10			

Data Deliverables: ☐ Standard ☐ CLP-like ☐ NJ-Reduced ☐ NJ-Full ☐ other
EDDs Required? ☐ If yes, format type:
SOWA Forms? yes ☐ yes ☐ yes ☐ yes ☐
State Samples Collected In? MD ☐ NJ ☐ NY ☐ PA ☐ Other
Enter PWSID No.
DOD Criteria Required?

ALS FIELD SERVICES: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment ☐ Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 01-2013

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page ___ of ___
Courier:
Tracking #:

2268199

Co. Name: Tetra Tech
Contact (Report to): Tony Apanarage
Phone: 301-233-8230
Address: 20251 century BLVD, #200 Germantown, MD

Bill to (if different than Report to):
PO#:

Project Name/#: 117-0512139.11
ALS Quote #:

TAT: ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? ☐ -Y
Fax? ☐ -Y No.:

***Container Type
***Container Size
***Preservative

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Hex Chrome									
1	~~MRC-122-101017~~		10/10				✓									
2	MRC-MW117B-101017	-MW117B-		1315			✓									
3	MRC-MW121A-101017	-MW121A-		0934			✓									
4	MRC-MW120B-101017			1200			✓									
5	MRC-MW119B-101017			1440			✓									
6																
7																
8																

Enter Number of Containers Per Analysis

(completed by Sample Receivers)
Performed by: [illegible]
Cooler Temp: 2°C
Therm. ID: 309
No. of Coolers:
Notes:

Sample	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
1	N	N	N	N	
2	Y	Y	Y	Y	
3	Y	Y	Y	Y	
4	Y	Y	Y	Y	
5	Y	Y	Y	Y	
6					
7					
8					

Custody seals Present? (if present) Seals intact? Received on ice? COC/Labels complete/accurate? Container in good condition?

SAMPLED BY (Please Print):
Project Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 J. Michael Wilcox Tetra Tech	10/10	1220	2 [signature]	10/10	1533
3 [signature]	10/10		4 [signature]		1941
5 [signature]		2240	6 [signature] ALS	10/10	2240
7			8		
9			10		

Data Deliverables: ☐ Standard ☐ CLP-like ☐ NJ-Reduced ☐ NJ-Full ☐ other
EDDs Required? ☐ If yes, format type:
SDWA Forms? yes ☐ yes ☐ yes ☐ yes ☐
State Samples Collected In? MD ☐ NJ ☐ NY ☐ PA ☐ Other
⇨ Enter PWSID No.
DOD Criteria Required?

ALS FIELD SERVICES: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment ☐ Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY
Rev 01-2013

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page ___ of ___
Courier:
Tracking #:

* 2 2 6 8 7 3 5 *

Co. Name: Tony Apahavage
Contact (Report to): Tetra Tech
Phone: 301-528-5552
Address: 20251 Century BLVD #200

Bill to (if different than Report to):
PO#:

Project Name/#: 117-0512139
ALS Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [ ] -Y
Fax? [ ] -Y No.:

***Container Type	DL															
***Container Size	250ml															
*** Preservative																

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Hex Chrome
1	MRC-MW120A-101117	Profile 492693	10-11	0905	G	W	✓
2	MRC-MW119A-101117	↓	↓	1400	↓	↓	✓
3	MRC-MW119B-101117			1205			✓
4							
5							
6							
7							
8							

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receiving)
Performed by: [illegible]
Cooler Temp: 3°C
Therm. ID: 309
No. of Coolers:
Notes:

Custody seals Present?	(if present) Seals Intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
Y N	Y N	Y N	Y N	Y N
Y N	Y N	Y N	Y N	Y N
Y N	Y N	Y N	Y N	Y N

Correct containers? Y N
Correct sample volume? Y N
Correct preservation? Y N
Headspace/Volatiles? Y N
Circle appropriate Y or N.

SAMPLED BY (Please Print):

Project Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 J Michael Wilks/Tetra Tech	10/11	1615	2 [signature]	10/11	1615
3 [signature]	10/11		4 [signature]		
5 [signature]	10/11	2100	6 [signature]	10/11	2100
7			8		
9			10		

Data Deliverables: [X] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ]
Other
⇨ Enter PWSID No.
DOD Criteria Required?

ALS FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 01-2013

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2267969 TMM093|Hexavalent Chromium

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

Hexavalent Chromium by Method 218.6 Raw Data

ALS Environmental

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SAMPLE SUMMARY

Workorder: 2267969 TMM093|Hexavalent Chromium

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2267969001	MRL-MW121B	Water	10/9/2017 13:14	10/9/2017 20:15	Collected by Client
2267969002	MRL-MW117A	Water	10/9/2017 14:35	10/9/2017 20:15	Collected by Client

Form 6B
Inorganic Initial and Continuing Calibration Verification Summary

Analysis Method: EPA 218.6 SDG No. TMM093

Instrument ID: IC-4 Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2624786	Hexavalent Chromium	CCVL	10/13/2017 01:46	5	4.9	97.7		90 - 110
2624790	Hexavalent Chromium	CCVH	10/13/2017 03:49	20	19.9	99.3		90 - 110

(1) The following qualifiers are used:
* : Values outside of acceptable limits

Comments:

Form 4B
Inorganic Blank Summary

Analysis Method: EPA 218.6
Instrument: IC-4

SDG No.: TMM093

Sample ID	Analyte	Type	Matrix	Analyzed	Result	Q (1)	Units
2624784	Hexavalent Chromium	MB	QC-Water	10/13/2017 01:30	0.25	U	ug/L
2624791	Hexavalent Chromium	MB	QC-Water	10/13/2017 03:57	0.25	U	ug/L

(1) The following qualifiers are used:

U: The analyte concentration is less than the reporting limit listed
J: The analyte concentration is less than the reporting limit but greater than the method detection limit

Comments:

Form 8B
Laboratory Control Sample (LCS) Recovery Summary

Analysis Method: EPA 218.6 SDG No.: TMM093

Matrix (soil/water): QC-Water Instrument ID: IC-4

Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2624785	Hexavalent Chromium	MRL	10/13/2017 01:38	0.25	0.27	110		50 - 150
2624787	Hexavalent Chromium	LCS	10/13/2017 01:54	10	10.1	101		90 - 110

(1) The following qualifiers are used:

* : Values outside of acceptable limits

Comments:

Hexavalent Chromium by Method 218.6 Summary Forms

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2268199 TMM094|Hexavalent Chromium

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2268199001	MRL-MW117B-101017	Water	10/10/2017 13:15	10/10/2017 22:40	Collected by Client
2268199002	MRL-MW121A-101017	Water	10/10/2017 09:34	10/10/2017 22:40	Collected by Client
2268199003	MRL-MW120B-101017	Water	10/10/2017 12:00	10/10/2017 22:40	Collected by Client
2268199004	MRL-MW119B-101017	Water	10/10/2017 14:40	10/10/2017 22:40	Collected by Client

Form 6B
Inorganic Initial and Continuing Calibration Verification Summary

Analysis Method: EPA 218.6 SDG No. TMM094

Instrument ID: IC-4 Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2624786	Hexavalent Chromium	CCVL	10/13/2017 01:46	5	4.9	97.7		90 - 110
2624790	Hexavalent Chromium	CCVH	10/13/2017 03:49	20	19.9	99.3		90 - 110

(1) The following qualifiers are used:
* : Values outside of acceptable limits

Comments:

Form 4B
Inorganic Blank Summary

Analysis Method: EPA 218.6
Instrument: IC-4

SDG No.: TMM094

Sample ID	Analyte	Type	Matrix	Analyzed	Result	Q (1)	Units
2624784	Hexavalent Chromium	MB	QC-Water	10/13/2017 01:30	0.25	U	ug/L
2624791	Hexavalent Chromium	MB	QC-Water	10/13/2017 03:57	0.25	U	ug/L

(1) The following qualifiers are used:

U: The analyte concentration is less than the reporting limit listed
J: The analyte concentration is less than the reporting limit but greater than the method detection limit

Comments:

Form 8B
Laboratory Control Sample (LCS) Recovery Summary

Analysis Method: EPA 218.6 SDG No.: TMM094

Matrix (soil/water): QC-Water Instrument ID: IC-4

Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2624785	Hexavalent Chromium	MRL	10/13/2017 01:38	0.25	0.27	110		50 - 150
2624787	Hexavalent Chromium	LCS	10/13/2017 01:54	10	10.1	101		90 - 110

(1) The following qualifiers are used:

* : Values outside of acceptable limits

Comments:

Hexavalent Chromium by Method 218.6 Summary Forms

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2268735 TMM095|Hexavalent Chromium

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2268735001	MRC-MW 120A-101117	Water	10/11/2017 09:05	10/11/2017 21:00	Collected by Client
2268735002	MRC-MW 119A-101117	Water	10/11/2017 14:00	10/11/2017 21:00	Collected by Client
2268735003	MRC-MW 119B-101117	Water	10/11/2017 12:05	10/11/2017 21:00	Collected by Client

Form 6B
Inorganic Initial and Continuing Calibration Verification Summary

Analysis Method: EPA 218.6 SDG No. TMM095

Instrument ID: IC-4 Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2624786	Hexavalent Chromium	CCVL	10/13/2017 01:46	5	4.9	97.7		90 - 110
2624790	Hexavalent Chromium	CCVH	10/13/2017 03:49	20	19.9	99.3		90 - 110
2624808	Hexavalent Chromium	CCVL	10/13/2017 06:08	5	4.8	95.9		90 - 110

(1) The following qualifiers are used:
* : Values outside of acceptable limits

Comments:

Form 4B
Inorganic Blank Summary

Analysis Method: EPA 218.6
Instrument: IC-4

SDG No.: TMM095

Sample ID	Analyte	Type	Matrix	Analyzed	Result	Q (1)	Units
2624784	Hexavalent Chromium	MB	QC-Water	10/13/2017 01:30	0.25	U	ug/L
2624791	Hexavalent Chromium	MB	QC-Water	10/13/2017 03:57	0.25	U	ug/L
2624806	Hexavalent Chromium	MB	QC-Water	10/13/2017 05:52	0.25	U	ug/L

(1) The following qualifiers are used:

U: The analyte concentration is less than the reporting limit listed
J: The analyte concentration is less than the reporting limit but greater than the method detection limit

Comments:

Form 8B
Laboratory Control Sample (LCS) Recovery Summary

Analysis Method: EPA 218.6 SDG No.: TMM095

Matrix (soil/water): QC-Water Instrument ID: IC-4

Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2624785	Hexavalent Chromium	MRL	10/13/2017 01:38	0.25	0.27	110		50 - 150
2624787	Hexavalent Chromium	LCS	10/13/2017 01:54	10	10.1	101		90 - 110
2624807	Hexavalent Chromium	MRL	10/13/2017 06:00	0.25	0.28	110		50 - 150
2624809	Hexavalent Chromium	LCS	10/13/2017 06:17	10	9.9	98.7		90 - 110

(1) The following qualifiers are used:
* : Values outside of acceptable limits

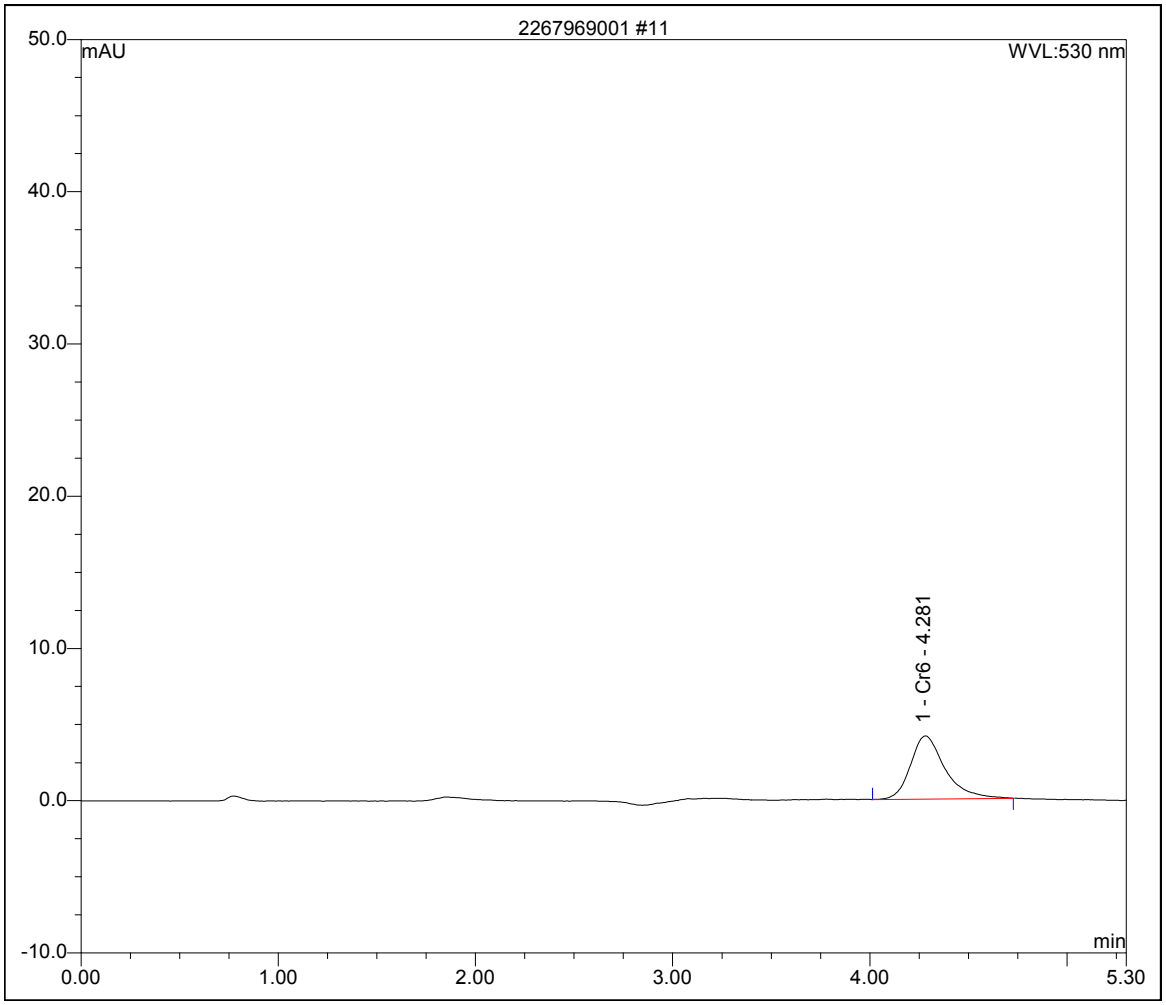
Comments:

Sample Calc.
TMM-093
Sample MRC-MW121B
Hex. chromium result: 1.9 ug/L

Peak Integration Report

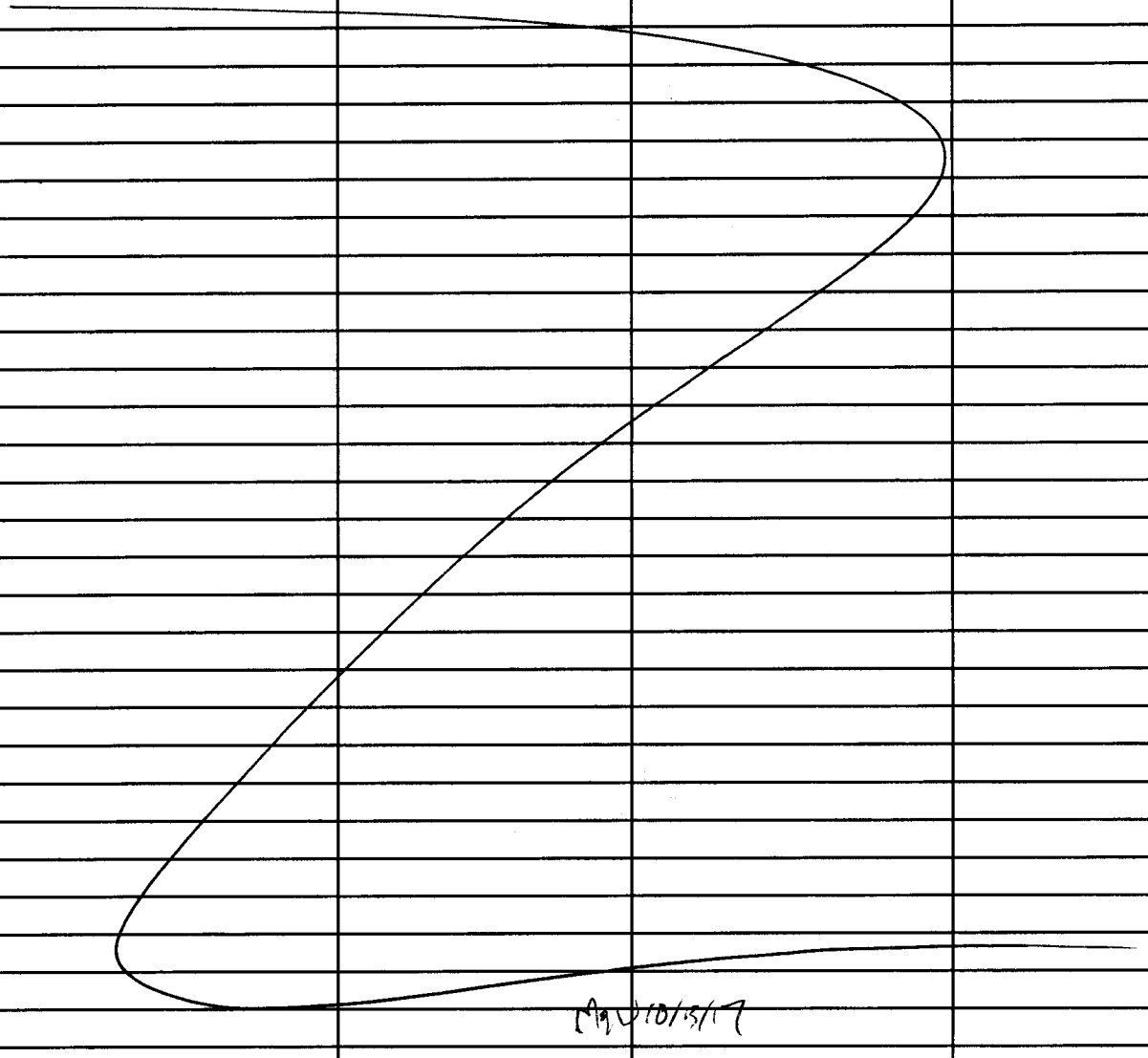
Sample Name:	**2267969001**	*Dilution:*	**1**
Sample Type:	**SAMPLE**	*Analyst:*	**MBW**
Program:	**cr+6**	*Queue:*	**WETC**
Inj. Date/Time:	**10/13/17 02:02**	*Batch:*	**194557**
Instrument:	**IC-4**	*Comment:*	
Sequence1:	**101317**	*InitialCal:*	**101317**
Sequence2:		*Method:*	**218_6_101317**

No.	Time min	Peak Name	Area mAU*min	Height mAU	Amount
1	4.28	Cr6	0.839	4.145	1.95
		TOTAL:	0.84	4.15	1.95



Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Final pH 9-9.5, SI units	0.4 µm Filtered
2267969001	Ammonium Hydroxide	X	Yes
2267969002	Ammonium Hydroxide	X	Yes



Date:	10.10.17 00:20
Tech:	MBW

Queue:	WETC
Batch:	194557, 194559

Reagent:	
Cr+6 Buffer:	N/A

Reviewed by:	CHD 10/11/17
Reviewed date:	10/11/17

Comments:
An "X" in the Final pH column indicates that the sample pH is within this range.
Ammonium Hydroxide - 161014002

_Q:WETC|_B:194557, 194559|_D:10.10.17 00:20

Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Final pH 9-9.5, SI units	0.4 µm Filtered
2268199001	Ammonium Hydroxide	X	Yes
2268199002	Ammonium Hydroxide	X	Yes
2268199003	Ammonium Hydroxide	X	Yes
2268199004	Ammonium Hydroxide	X	Yes

MBW 10/13/17

Date:	10.11.17 00:45
Tech:	MBW

Queue:	WETC
Batch:	194557, 194559

Reagent:	
Cr+6 Buffer:	N/A

Reviewed by:	CHW
Reviewed date:	10/14/17

Comments:
An "X" in the Final pH column indicates that the sample pH is within this range.
Ammonium Hydroxide - 161014002

_Q:WETC|_B:194557, 194559|_D:10.11.17 00:45

Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Final pH 9-9.5, SI units	0.4 µm Filtered
2268735001	Ammonium Hydroxide	X	Yes
2268735002	Ammonium Hydroxide	X	Yes
2268735003	Ammonium Hydroxide	X	Yes

Table G-1

Subsurface Soil Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	SB-131B	SB-117B	SB-118A	SB-118B	SB-119A	SB-119B	SB-120B		SB-121A	SB-121B
SAMPLE ID	SB-131-B33-35'	SB-117B-47-50'	SB-118A-10-13'	SB-118B-53-55'	SB-119A-10-12.5'	SB-119B-56-58'	SB-120B-43-45'	SB-120B-48-50'	SB-121A-26.5-28.5'	SB-121B-30.5-32.5'
SAMPLE DATE	20170910	20170910	20170907	20170907	20170909	20170909	20170908	20170908	20170906	20170906
TOP DEPTH	33	47	10	53	10	56	43	48	26.5	30.5
BOTTOM DEPTH	35	50	13	55	12.5	58	45	50	28.5	32.5
VOLATILES (UG/KG)										
1,1,1,2-TETRACHLOROETHANE	0.4 U	0.41 U	0.38 U	0.37 U	0.4 U	0.4 U	0.45 U	0.42 U	0.41 U	0.45 U
1,1,1-TRICHLOROETHANE	0.26 U	0.26 U	0.24 U	0.24 U	0.26 U	0.26 U	0.29 U	0.27 U	0.26 U	0.29 U
1,1,2,2-TETRACHLOROETHANE	0.29 U	0.3 U	0.28 U	0.27 U	0.29 U	0.29 U	0.33 U	0.31 U	0.3 U	0.33 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.55 U	0.56 U	0.52 U	0.5 U	0.55 U	0.55 U	0.62 U	0.58 U	0.56 U	0.62 U
1,1-DICHLOROETHANE	0.37 U	0.38 U	0.35 U	0.34 U	0.37 U	0.37 U	0.42 U	0.39 U	0.38 U	0.41 U
1,1-DICHLOROETHENE	1.4 J	0.61 U	0.57 U	0.56 U	0.6 U	0.61 U	9.3	1.4 J	0.62 U	0.68 U
1,1-DICHLOROPROPENE	0.21 U	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U	0.24 U	0.22 U	0.22 U	0.24 U
1,2,3-TRICHLOROBENZENE	0.39 U	0.4 U	0.37 U	0.36 U	0.39 U	0.39 U	0.44 U	0.41 U	0.4 U	0.44 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.44 U	0.41 U	0.4 U	0.43 U	0.44 U	0.49 U	0.46 U	0.45 U	0.49 U
1,2,3-TRIMETHYLBENZENE	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.13 U	0.12 U	0.12 U	0.13 U
1,2,4-TRICHLOROBENZENE	0.27 U	0.27 U	0.26 U	0.25 U	0.27 U	0.27 U	0.3 U	0.28 U	0.28 U	0.3 U
1,2,4-TRIMETHYLBENZENE	0.28 U	0.28 U	0.27 UJ	0.26 UJ	0.28 U	0.28 U	0.32 UJ	0.29 UJ	0.29 UJ	0.31 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.76 U	0.77 U	0.72 U	0.7 U	0.76 U	0.76 U	0.86 U	0.8 U	0.78 U	0.85 U
1,2-DIBROMOETHANE	0.39 U	0.4 U	0.37 U	0.36 U	0.39 U	0.39 U	0.44 U	0.41 U	0.4 U	0.44 U
1,2-DICHLOROBENZENE	0.24 U	0.25 U	0.23 U	0.23 U	0.25 U	0.25 U	0.28 U	0.26 U	0.25 U	0.28 U
1,2-DICHLOROETHANE	0.32 U	0.33 U	0.31 U	0.3 U	0.32 U	0.33 U	0.37 U	0.34 U	0.33 U	0.36 U
1,2-DICHLOROPROPANE	0.34 U	0.35 U	0.33 U	0.32 U	0.35 U	0.35 U	0.39 U	0.37 U	0.36 U	0.39 U
1,3-DICHLOROBENZENE	0.32 U	0.33 U	0.31 U	0.3 U	0.32 U	0.33 U	0.37 U	0.34 U	0.33 U	0.36 U
1,3-DICHLOROPROPANE	0.26 U	0.26 U	0.24 U	0.24 U	0.26 U	0.26 U	0.29 U	0.27 U	0.26 U	0.29 U
1,4-DICHLOROBENZENE	0.39 U	0.4 U	0.37 U	0.36 U	0.39 U	0.39 U	0.44 U	0.41 U	0.4 U	0.44 U
2,2-DICHLOROPROPANE	0.33 U	0.34 U	0.32 U	0.31 U	0.33 U	0.34 U	0.38 U	0.35 U	0.35 U	0.38 U
2-BUTANONE	1.4 U	1.4 U	3.3 J	1.3 U	1.8 J	1.4 U	1.6 U	1.5 U	1.5 U	1.6 U
2-CHLOROETHYL VINYL ETHER	3.1 U	3.2 U	3 U	2.9 U	3.1 U	3.2 U	3.5 U	3.3 U	3.2 U	3.5 U
2-CHLOROTOLUENE	0.41 U	0.42 U	0.39 U	0.38 U	0.41 U	0.42 U	0.47 U	0.44 U	0.43 U	0.46 U
2-HEXANONE	0.65 U	0.66 U	0.62 U	0.6 U	0.65 U	0.65 U	0.73 U	0.68 U	0.67 U	0.73 U
4-CHLOROTOLUENE	0.27 U	0.27 U	0.26 U	0.25 U	0.27 U	0.27 U	0.3 U	0.28 U	0.28 U	0.3 U
4-ISOPROPYLTOLUENE	0.2 U	0.2 U	0.19 U	0.19 U	0.37 J	0.2 U	0.23 U	0.21 U	0.21 U	0.23 U
4-METHYL-2-PENTANONE	0.99 U	1 U	0.95 U	0.92 U	0.99 U	1 U	1.1 U	1 U	1 U	1.1 U
ACETONE	3.4 U	3.5 U	17 J	9.9 J	19 U	3.4 U	3.9 U	3.6 U	3.5 U	3.8 U
BENZENE	0.36 U	0.36 U	0.34 U	0.33 U	0.36 U	14	0.4 U	0.38 U	0.37 U	0.4 U
BROMOBENZENE	0.3 U	0.31 U	0.29 U	0.28 U	0.3 U	0.3 U	0.34 U	0.32 U	0.31 U	0.34 U
BROMOCHLOROMETHANE	0.4 U	0.41 U	0.38 U	0.37 U	0.4 U	0.4 U	0.45 U	0.42 U	0.41 U	0.45 U
BROMODICHLOROMETHANE	0.37 U	0.38 U	0.35 U	0.34 U	0.37 U	0.37 U	0.42 U	0.39 U	0.38 U	0.41 U
BROMOFORM	0.45 U	0.45 U	0.43 U	0.41 U	0.45 U	0.45 U	0.5 U	0.47 U	0.46 U	0.5 U
BROMOMETHANE	0.66 U	0.67 U	0.63 UJ	0.61 UJ	0.66 U	0.66 U	0.74 UJ	0.69 UJ	0.68 UJ	0.74 UJ
CARBON DISULFIDE	0.23 U	0.24 U	0.42 J	0.22 U	0.23 U	0.24 U	0.27 U	0.25 U	0.24 U	0.26 U
CARBON TETRACHLORIDE	0.28 U	0.28 U	0.27 U	0.26 U	0.28 U	0.28 U	0.32 U	0.29 U	0.29 U	0.31 U
CHLOROBENZENE	0.37 U	0.38 U	0.35 U	0.46 J	0.37 U	0.37 U	0.42 U	0.39 U	0.38 U	0.41 U
CHLORODIBROMOMETHANE	0.33 U	0.34 U	0.32 U	0.31 U	0.33 U	0.34 U	0.38 U	0.35 U	0.35 U	0.38 U
CHLOROETHANE	0.42 U	0.43 U	0.4 UJ	0.39 UJ	0.42 U	0.43 U	0.48 UJ	0.45 UJ	0.44 UJ	0.48 UJ
CHLOROFORM	0.26 U	0.26 U	0.24 U	0.24 U	0.26 U	0.26 U	0.37 J	0.27 U	0.26 U	0.29 U
CHLOROMETHANE	0.42 U	0.43 U	0.4 U	0.39 U	0.42 U	0.43 U	0.48 U	0.45 U	0.44 U	0.48 U
CIS-1,2-DICHLOROETHENE	47	0.32 U	0.3 U	0.29 U	0.31 U	18	4.4 J	2.8 J	0.32 U	0.35 U
CIS-1,3-DICHLOROPROPENE	0.29 U	0.3 U	0.28 U	0.27 U	0.29 U	0.29 U	0.33 U	0.31 U	0.3 U	0.33 U
DIBROMOMETHANE	0.42 U	0.43 U	0.4 U	0.39 U	0.42 U	0.43 U	0.48 U	0.45 U	0.44 U	0.48 U
DICHLORODIFLUOROMETHANE	0.39 U	0.4 U	0.37 U	0.36 U	0.39 U	0.39 U	0.44 U	0.41 U	0.4 U	0.44 U
DIISOPROPYL ETHER	0.27 U	0.27 U	0.26 U	0.25 U	0.27 U	0.27 U	0.3 U	0.28 U	0.28 U	0.3 U
ETHYL TERT-BUTYL ETHER	0.14 U	0.15 U	0.14 U	0.13 U	0.14 U	0.15 U	0.16 U	0.15 U	0.15 U	0.16 U
ETHYLBENZENE	0.3 U	0.31 U	0.29 U	0.28 U	0.3 U	0.3 U	0.34 U	0.32 U	0.31 U	0.34 U
HEXACHLOROBUTADIENE	0.49 U	0.5 U	0.47 U	0.45 U	0.49 U	0.49 U	0.56 U	0.52 U	0.51 U	0.55 U
ISOPROPYLBENZENE	0.22 U	0.23 U	0.21 U	0.21 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.25 U
M+P-XYLENES	0.45 U	0.45 U	0.43 U	0.41 U	0.45 U	0.45 U	0.5 U	0.47 U	0.46 U	0.5 U
METHYL TERT-BUTYL ETHER	0.3 U	0.31 U	0.29 U	0.28 U	0.3 U	1.7 J	0.34 U	0.32 U	0.31 U	0.34 U
METHYLENE CHLORIDE	0.27 UJ	0.27 UJ	0.26 U	0.25 U	0.27 UJ	0.27 UJ	0.3 U	0.28 U	0.28 U	0.3 U
NAPHTHALENE	0.37 U	0.38 U	0.35 U	0.34 U	0.37 U	0.37 U	0.42 U	0.39 U	0.38 U	0.41 U
N-BUTYLBENZENE	0.28 U	0.28 U	0.27 UJ	0.26 UJ	0.28 U	0.28 U	0.32 UJ	0.29 UJ	0.29 UJ	0.31 UJ
N-PROPYLBENZENE	0.31 U	0.32 U	0.3 U	0.29 U	0.31 U	0.31 U	0.35 U	0.33 U	0.32 U	0.35 U

Table G-1

Subsurface Soil Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	SB-131B	SB-117B	SB-118A	SB-118B	SB-119A	SB-119B	SB-120B		SB-121A	SB-121B
SAMPLE ID	SB-131-B33-35[1]	SB-117B-47-50[1]	SB-118A-10-13[1]	SB-118B-53-55[1]	SB-119A-10-12.5[1]	SB-119B-56-58[1]	SB-120B-43-45[1]	SB-120B-48-50[1]	SB-121A-26.5-28.5[1]	SB-121B-30.5-32.5[1]
SAMPLE DATE	20170910	20170910	20170907	20170907	20170909	20170909	20170908	20170908	20170906	20170906
TOP DEPTH	33	47	10	53	10	56	43	48	26.5	30.5
BOTTOM DEPTH	35	50	13	55	12.5	58	45	50	28.5	32.5
O-XYLENE	0.24 U	0.25 U	0.23 U	0.23 U	0.25 U	0.53 J	0.28 U	0.26 U	0.25 U	0.28 U
SEC-BUTYLBENZENE	0.21 U	0.22 U	0.2 UJ	0.2 UJ	0.21 U	0.21 U	0.24 UJ	0.22 UJ	0.22 UJ	0.24 UJ
STYRENE	0.3 U	0.31 U	0.29 U	0.28 U	0.3 U	0.3 U	0.34 U	0.32 U	0.31 U	0.34 U
TERT-AMYL METHYL ETHER	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.24 U	0.27 U	0.25 U	0.24 U	0.26 U
TERT-BUTYLBENZENE	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.24 U	0.27 U	0.25 U	0.24 U	0.26 U
TERTIARY-BUTYL ALCOHOL	2.6 U	2.7 U	2.5 U	6.5 J	2.7 U	2.7 U	3 U	2.8 U	2.7 U	3 U
TETRACHLOROETHENE	0.41 U	0.42 U	0.39 U	0.38 U	0.41 U	0.42 U	0.47 U	0.44 U	0.43 U	0.46 U
TOLUENE	0.38 U	0.39 U	0.36 U	0.35 U	0.38 U	0.38 U	0.43 U	0.4 U	0.39 U	0.43 U
TOTAL XYLENES	0.45 U	0.45 U	0.43 U	0.41 U	0.45 U	0.53 J	0.5 U	0.47 U	0.46 U	0.5 U
TRANS-1,2-DICHLOROETHENE	1.9 J	0.43 U	0.4 U	0.39 U	0.42 U	1.3 J	0.48 U	0.45 U	0.44 U	0.48 U
TRANS-1,3-DICHLOROPROPENE	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.24 U	0.27 U	0.25 U	0.24 U	0.26 U
TRICHLOROETHENE	8.9	0.47 U	0.62 J	0.42 U	0.46 U	13	77	22	0.47 U	1 J
TRICHLOROFLUOROMETHANE	0.27 U	0.27 U	0.26 U	0.25 U	0.27 U	0.27 U	0.3 U	0.28 U	0.28 U	0.3 U
VINYL ACETATE	0.97 U	0.99 U	0.93 U	0.9 U	0.97 U	0.98 U	1.1 U	1 U	1 U	1.1 U
VINYL CHLORIDE	2.1 J	0.32 U	0.3 U	0.29 U	0.31 U	0.72 J	0.35 U	0.33 U	0.32 U	0.35 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)										
1-METHYL-4-(1-METHYLETHYL)-CYCLOHEXANE	NA	NA	NA	NA	55 NJ	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTANE, 2,2,3-TRIMETHYL-	NA	NA	NA	NA	12 NJ	NA	NA	NA	NA	NA
BUTANE, 2-METHYL-	NA	NA	NA	NA	NA	9.5 NJ	NA	NA	NA	NA

Table G-1

Subsurface Soil Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	SB-131B	SB-117B	SB-118A	SB-118B	SB-119A	SB-119B	SB-120B		SB-121A	SB-121B
SAMPLE ID	SB-131-B33-35'	SB-117B-47-50'	SB-118A-10-13'	SB-118B-53-55'	SB-119A-10-12.5'	SB-119B-56-58'	SB-120B-43-45'	SB-120B-48-50'	SB-121A-26.5-28.5'	SB-121B-30.5-32.5'
SAMPLE DATE	20170910	20170910	20170907	20170907	20170909	20170909	20170908	20170908	20170906	20170906
TOP DEPTH	33	47	10	53	10	56	43	48	26.5	30.5
BOTTOM DEPTH	35	50	13	55	12.5	58	45	50	28.5	32.5
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	4.1 U	4.1 U	4.1 U	3.9 U	4.2 U	4.4 U	4.5 U	4.3 U	4.1 U	4.6 U
1,4-DIOXANE	26 U	26 U	25 U	25 U	26 U	27 U	28 U	27 U	26 U	29 U
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	11 U	11 U	11 U	11 U	12 U	12 U	12 U	11 U	12 U
2,4,5-TRICHLOROPHENOL	29 U	29 U	29 U	28 U	30 U	31 U	32 U	31 U	29 U	33 U
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U	12 U
2,4-DICHLOROPHENOL	23 U	23 U	23 U	23 U	24 U	25 U	26 U	25 U	23 U	26 U
2,4-DIMETHYLPHENOL	23 U	23 U	23 U	23 U	24 U	25 U	26 U	25 U	23 U	26 U
2,4-DINITROPHENOL	25 U	25 U	24 U	24 U	25 U	26 U	27 U	26 U	25 U	27 U
2,4-DINITROTOLUENE	20 U	20 U	20 U	19 U	20 U	21 U	22 U	21 U	20 U	22 U
2,6-DINITROTOLUENE	25 U	25 U	24 U	24 U	25 U	26 U	27 U	26 U	25 U	27 U
2-CHLORONAPHTHALENE	0.53 U	0.53 U	0.52 U	0.51 U	0.54 U	0.56 U	0.57 U	0.56 U	0.53 U	0.59 U
2-CHLOROPHENOL	9.6 U	9.6 U	9.5 U	9.2 U	9.9 U	10 U	10 U	10 U	9.6 U	11 U
2-METHYLNAPHTHALENE	0.59 U	0.59 U	0.58 U	0.56 U	0.6 U	0.62 U	0.64 U	0.62 U	0.59 U	0.65 U
2-METHYLPHENOL	13 U	13 U	13 U	12 U	13 U	14 U	14 U	14 U	13 U	14 U
2-NITROANILINE	11 U	11 U	11 U	10 U	11 U	11 U	12 U	11 U	11 U	12 U
2-NITROPHENOL	9.7 U	9.7 U	9.6 U	9.3 U	10 U	10 U	11 U	10 U	9.7 U	11 U
3&4-METHYLPHENOL	23 U	23 U	23 U	23 U	24 U	25 U	26 U	25 U	23 U	26 U
3,3'-DICHLOROBENZIDINE	21 U	21 U	21 U	20 U	22 U	22 U	23 U	22 U	21 U	23 U
3-NITROANILINE	19 U	19 U	19 U	18 U	19 U	20 U	20 U	20 U	19 U	21 U
4,6-DINITRO-2-METHYLPHENOL	11 U	11 U	11 U	10 U	11 U	11 U	12 U	11 U	11 U	12 U
4-BROMOPHENYL PHENYL ETHER	15 U	15 U	15 U	15 U	16 U	16 U	17 U	16 U	15 U	17 U
4-CHLORO-3-METHYLPHENOL	25 U	25 U	24 U	24 U	25 U	26 U	27 U	26 U	25 U	27 U
4-CHLOROANILINE	20 U	20 U	20 U	19 U	20 U	21 U	22 U	21 U	20 U	22 U
4-CHLOROPHENYL PHENYL ETHER	15 U	15 U	15 U	15 U	16 U	16 U	17 U	16 U	15 U	17 U
4-NITROANILINE	31 U	31 U	30 U	29 U	31 U	32 U	33 U	32 U	31 U	34 U
4-NITROPHENOL	20 U	20 U	20 U	19 U	20 U	21 U	22 U	21 U	20 U	22 U
ACENAPHTHENE	0.89 U	0.89 U	0.88 U	0.86 U	0.91 U	0.95 U	0.97 U	0.94 U	0.89 U	0.99 U
ACENAPHTHYLENE	0.41 U	0.41 U	0.41 U	0.39 U	0.42 U	0.44 U	0.45 U	0.43 U	0.41 U	0.46 U
ACETOPHENONE	11 U	11 U	11 U	10 U	11 U	11 U	12 U	11 U	11 U	12 U
ANTHRACENE	0.92 U	0.92 U	0.9 U	0.88 U	0.94 U	0.97 U	1 U	0.97 U	0.92 U	1 U
ATRAZINE	11 U	11 U	11 U	10 U	11 U	11 U	12 U	11 U	11 U	12 U
BENZALDEHYDE	14 U	14 U	14 U	14 U	14 U	15 U	15 U	15 U	14 U	16 U
BENZO(A)ANTHRACENE	0.74 U	0.74 U	0.73 U	0.71 U	0.76 U	0.78 U	0.8 U	0.78 U	0.74 U	0.82 U
BENZO(A)PYRENE	0.75 U	0.75 U	0.74 U	0.72 U	0.77 U	0.8 U	0.82 U	0.79 U	0.75 U	0.83 U
BENZO(B)FLUORANTHENE	0.69 U	0.69 U	0.68 U	0.66 U	0.71 U	0.73 U	0.75 U	0.73 U	0.69 U	0.77 U
BENZO(G,H,I)PERYLENE	0.41 U	0.41 U	0.41 U	0.39 U	0.42 U	0.44 U	0.45 U	0.43 U	0.41 U	0.46 U
BENZO(K)FLUORANTHENE	0.8 U	0.8 U	0.79 U	0.77 U	0.82 U	0.85 U	0.87 U	0.84 U	0.8 U	0.89 U
BIS(2-CHLOROETHOXY)METHANE	26 U	26 U	25 U	25 U	26 U	27 U	28 U	27 U	26 U	29 U
BIS(2-CHLOROETHYL)ETHER	2.3 U	2.3 U	2.3 U	2.3 U	2.4 U	2.5 U	2.6 U	2.5 U	2.3 U	2.6 U
BIS(2-ETHYLHEXYL)PHTHALATE	22 U	22 U	22 U	21 U	23 U	24 U	24 U	24 U	22 U	25 U
BUTYL BENZYL PHTHALATE	12 U	12 U	12 U	11 U	12 U	12 U	13 U	12 U	12 U	13 U
CAPROLACTAM	43 U	43 U	43 U	42 U	44 U	46 U	47 U	46 U	43 U	57 J
CARBAZOLE	32 U	32 U	31 U	30 U	32 U	34 U	34 U	33 U	32 U	35 U
CHRYSENE	1.3 U	1.3 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U	1.4 U	1.3 U	1.4 U
DIBENZO(A,H)ANTHRACENE	0.77 U	0.78 U	0.76 U	0.74 U	0.79 U	0.82 U	0.84 U	0.82 U	0.77 U	0.86 U
DIBENZOFURAN	0.77 U	0.78 U	0.76 U	0.74 U	0.79 U	0.82 U	0.84 U	0.82 U	0.77 U	0.86 U
DIETHYL PHTHALATE	19 U	19 U	19 U	18 U	19 U	20 U	20 U	20 U	19 U	21 U
DIMETHYL PHTHALATE	20 U	20 U	20 U	19 U	20 U	21 U	22 U	21 U	20 U	22 U
DI-N-BUTYL PHTHALATE	18 U	18 U	17 U	17 U	18 U	19 U	19 U	19 U	18 U	20 U
DI-N-OCTYL PHTHALATE	9.3 U	9.3 U	9.2 U	8.9 U	9.5 U	9.8 U	10 U	9.8 U	9.3 U	10 U
FLUORANTHENE	0.65 U	0.65 U	0.64 U	0.62 U	0.66 U	0.69 U	0.7 U	0.68 U	0.65 U	0.72 U
FLUORENE	0.62 U	0.62 U	0.61 U	0.6 U	0.64 U	0.66 U	0.68 U	0.66 U	0.62 U	0.69 U
HEXACHLOROBENZENE	2.5 U	2.5 U	2.4 U	2.4 U	2.5 U	2.6 U	2.7 U	2.6 U	2.5 U	2.7 U
HEXACHLOROBUTADIENE	6.6 U	6.6 U	6.5 U	6.3 U	6.7 U	7 U	7.2 U	6.9 U	6.6 U	7.3 U
HEXACHLOROCYCLOPENTADIENE	9.5 U	9.5 U	9.4 U	9.1 U	9.7 U	10 U	10 U	10 U	9.5 U	11 U
HEXACHLOROETHANE	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	11 U	12 U
INDENO(1,2,3-CD)PYRENE	0.41 U	0.41 U	0.41 U	0.39 U	0.42 U	0.44 U	0.45 U	0.43 U	0.41 U	0.46 U

Table G-1

Subsurface Soil Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland
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LOCATION	SB-131B	SB-117B	SB-118A	SB-118B	SB-119A	SB-119B	SB-120B		SB-121A	SB-121B
SAMPLE ID	SB-131-B33-35'	SB-117B-47-50'	SB-118A-10-13'	SB-118B-53-55'	SB-119A-10-12.5'	SB-119B-56-58'	SB-120B-43-45'	SB-120B-48-50'	SB-121A-26.5-28.5'	SB-121B-30.5-32.5'
SAMPLE DATE	20170910	20170910	20170907	20170907	20170909	20170909	20170908	20170908	20170906	20170906
TOP DEPTH	33	47	10	53	10	56	43	48	26.5	30.5
BOTTOM DEPTH	35	50	13	55	12.5	58	45	50	28.5	32.5
ISOPHORONE	15 U	15 U	15 U	15 U	16 U	16 U	17 U	16 U	15 U	17 U
NAPHTHALENE	0.96 U	0.96 U	0.95 U	0.92 U	0.99 U	1 U	1 U	1 U	0.96 U	1.1 U
NITROBENZENE	2.6 U	2.6 U	2.5 U	2.5 U	2.6 U	2.7 U	2.8 U	2.7 U	2.6 U	2.9 U
N-NITROSODIMETHYLAMINE	19 U	19 U	19 U	18 U	19 U	20 U	20 U	20 U	19 U	21 U
N-NITROSO-DI-N-PROPYLAMINE	7.4 U	7.4 U	7.3 U	7.1 U	7.6 U	7.8 U	8 U	7.8 U	7.4 U	8.2 U
N-NITROSODIPHENYLAMINE	25 U	25 U	24 U	24 U	25 U	26 U	27 U	26 U	25 U	27 U
PENTACHLOROPHENOL	11 U	11 U	11 UJ	10 UJ	11 U	11 U	12 UJ	11 UJ	11 UJ	12 UJ
PHENANTHRENE	0.86 U	0.86 U	0.85 U	0.82 U	0.88 U	0.91 U	0.93 U	0.9 U	0.86 U	0.95 U
PHENOL	8.6 U	8.6 U	8.5 U	8.2 U	8.8 U	9.1 U	9.3 U	9 U	8.6 U	9.5 U
PYRENE	0.52 U	0.52 U	0.51 U	0.5 U	0.53 U	0.55 U	0.56 U	0.55 U	0.52 U	0.57 U
PETROLEUM HYDROCARBONS (UG/KG)										
TPH (C06-C10)	31 J	14 U	14 U	30 U	140	67 J	57 U	15 U	30 U	15 U
PETROLEUM HYDROCARBONS (MG/KG)										
TPH (C10-C32)	18 U	18 U	7.4 U	8.6 J	25 J	29 J	8.2 U	7.8 U	7.5 U	8.2 U

Notes:

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

J = estimated value

µg/kg = micrograms per kilogram

NA = not analyzed

U = nondetect

UJ = the analyte was not detected, however, the quantitation or detection limit may be inaccurate or imprecise.

Table G-2

Groundwater Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	DPT-1A	DPT-2D	MRC-MW131B	MRC-MW117B	MRC-MW118A	MRC-MW118B	MRC-MW119A
SAMPLE ID	DPT-1A-40-45'	DPT-2D-45-50'	MRC-MW131B-100917	MRC-MW117B-100917A	MRC-MW118A-101117	MRC-MW118B-101117	MRC-MW119A-101117
SAMPLE DATE	20170919	20170920	20171009	20171009	20171011	20171011	20171011
TOP DEPTH	40	45	-9999	-9999	-9999	-9999	-9999
BOTTOM DEPTH	45	50	-9999	-9999	-9999	-9999	-9999
VOLATILES (UG/L)							
1,1,1-TRICHLOROETHANE	0.23 U	0.23 U	2.3 U	0.23 U	1.6	0.23 U	0.23 U
1,1,2,2-TETRACHLOROETHANE	0.32 U	0.32 U	3.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,1,2-TRICHLOROETHANE	0.34 U	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U
1,1-DICHLOROETHANE	0.25 U	0.25 U	2.5 U	0.25 U	0.48 J	0.25 U	0.25 U
1,1-DICHLOROETHENE	0.27 U	0.27 U	6.8 J	0.27 U	0.27 U	0.27 U	0.33 J
1,2,4-TRICHLOROBENZENE	0.27 U	0.27 U	2.7 U	0.27 U	0.27 U	0.27 U	0.27 U
1,2-DIBROMO-3-CHLOROPROPANE	0.47 U	0.47 U	4.7 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2-DIBROMOETHANE	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROBENZENE	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U
1,2-DICHLOROETHANE	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-DICHLOROPROPANE	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,3-DICHLOROBENZENE	0.32 U	0.32 U	3.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,4-DICHLOROBENZENE	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U
2-BUTANONE	1 U	3.5 J	10 U	1 U	1 UJ	1 UJ	4.3 J
2-HEXANONE	1.2 U	1.2 U	12 U	1.2 U	1.2 UJ	1.2 UJ	1.2 UJ
4-METHYL-2-PENTANONE	0.71 U	0.71 U	7.1 U	0.71 U	0.71 U	0.71 U	0.71 U
ACETONE	2.2 J	1.8 U	18 U	16	5.6 J	13 J	43 J
BENZENE	1.9	0.28 U	2.8 U	0.28 U	0.28 U	0.28 U	0.53 J
BROMODICHLOROMETHANE	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
BROMOFORM	0.43 U	0.43 U	4.3 U	0.43 U	0.43 U	0.43 U	0.43 U
BROMOMETHANE	0.42 U	0.42 U	4.2 U	0.42 U	0.42 U	0.42 U	0.42 U
CARBON DISULFIDE	0.34 U	0.34 J	3.4 U	5.1	0.37 J	8.1	12
CARBON TETRACHLORIDE	0.35 U	0.35 U	3.5 U	0.35 U	0.35 U	0.35 U	0.35 U
CHLOROBENZENE	0.32 U	0.32 U	3.2 U	0.32 U	0.32 U	0.32 U	0.32 U
CHLORODIBROMOMETHANE	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROETHANE	0.41 U	0.41 U	4.1 UJ	0.41 U	0.41 U	0.41 U	0.41 U
CHLOROFORM	1.6	0.31 U	3.1 U	1.1	1.8	0.34 J	0.61 J
CHLOROMETHANE	0.43 U	0.43 U	4.3 UJ	0.43 U	0.43 U	0.43 U	0.43 U
CIS-1,2-DICHLOROETHENE	3.1	0.3 U	320	2.4	0.3 U	0.3 U	4.6
CIS-1,3-DICHLOROPROPENE	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U
CYCLOHEXANE	0.44 UJ	0.44 UJ	4.4 U	0.44 U	0.44 U	0.44 U	0.44 U
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYLBENZENE	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U
ISOPROPYLBENZENE	0.21 U	0.21 U	2.1 U	0.21 U	0.21 U	0.21 U	0.21 U
METHYL ACETATE	1.4 U	1.4 U	14 U	1.4 U	1.4 U	1.4 U	1.4 U
METHYL CYCLOHEXANE	0.45 U	0.45 U	4.5 U	0.45 U	0.45 U	0.45 U	0.45 U
METHYL TERT-BUTYL ETHER	0.27 U	0.27 U	2.7 U	0.27 U	0.27 U	0.27 U	0.27 J
METHYLENE CHLORIDE	0.53 U	0.53 U	7.1 U	0.53 U	0.53 U	0.53 U	0.72 J
STYRENE	0.23 U	0.23 U	2.3 U	0.23 U	0.23 U	0.23 U	0.23 U
TETRACHLOROETHENE	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
TOLUENE	2.5	2.1	2.3 U	0.27 J	0.23 U	1.2	2.7
TOTAL XYLENES	1 J	0.72 J	2.4 U	0.24 U	0.24 U	0.24 U	0.24 U
TRANS-1,2-DICHLOROETHENE	0.29 U	0.29 U	17	0.29 U	0.29 U	0.29 U	0.29 U
TRANS-1,3-DICHLOROPROPENE	0.31 U	0.31 U	3.1 U	0.31 U	0.31 U	0.31 U	0.31 U
TRICHLOROETHENE	31	0.33 U	71	7.6	4.3	0.33 U	8.4
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U	5 U	0.5 U	4.9	0.5 U	0.5 U
VINYL CHLORIDE	0.45 U	0.45 U	17	0.45 U	0.45 U	0.45 U	0.45 U

Table G-2

Groundwater Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	DPT-1A	DPT-2D	MRC-MW131B	MRC-MW117B	MRC-MW118A	MRC-MW118B	MRC-MW119A
SAMPLE ID	DPT-1A-40-45'	DPT-2D-45-50'	MRC-MW131B-100917	MRC-MW117B-100917A	MRC-MW118A-101117	MRC-MW118B-101117	MRC-MW119A-101117
SAMPLE DATE	20170919	20170920	20171009	20171009	20171011	20171011	20171011
TOP DEPTH	40	45	-9999	-9999	-9999	-9999	-9999
BOTTOM DEPTH	45	50	-9999	-9999	-9999	-9999	-9999
SEMIVOLATILES (UG/L)							
1,4-DIOXANE	NA	NA	6.4	0.47 U	0.5 U	0.49 U	NA
PCBS (UG/L)							
DECACHLOROBIPHENYL	NA	NA	0.068 U	0.067 U	0.069 U	0.071 U	NA
DICHLOROBIPHENYLS	NA	NA	0.0053 U	0.0052 U	0.0053 U	0.0055 U	NA
HEPTACHLOROBIPHENYLS	NA	NA	0.029 U	0.029 U	0.029 U	0.03 U	NA
HEXACHLOROBIPHENYLS	NA	NA	0.015 U	0.014 U	0.015 U	0.015 U	NA
MONOCHLOROBIPHENYLS	NA	NA	0.0055 U	0.0054 U	0.0055 U	0.0057 U	NA
NONACHLOROBIPHENYLS	NA	NA	0.048 U	0.047 U	0.048 U	0.049 U	NA
OCTACHLOROBIPHENYLS	NA	NA	0.037 U	0.036 U	0.037 U	0.038 U	NA
PENTACHLOROBIPHENYLS	NA	NA	0.014 U	0.013 U	0.014 U	0.014 U	NA
TETRACHLOROBIPHENYLS	NA	NA	0.013 U	0.012 U	0.013 U	0.013 U	NA
TRICHLOROBIPHENYLS	NA	NA	0.0063 U	0.0062 U	0.0064 U	0.0066 U	NA
METALS (UG/L)							
ANTIMONY	NA	NA	0.92 J	0.57 U	0.57 U	0.57 U	NA
ARSENIC	NA	NA	1.4 J	0.75 U	0.82 J	1.4 J	NA
BARIUM	NA	NA	170	50	170	34	NA
BERYLLIUM	NA	NA	1.6	0.31 U	0.31 U	0.75 J	NA
CADMIUM	NA	NA	0.43 J	0.21 U	2	0.21 U	NA
CHROMIUM	NA	NA	1.4 J	5.4	57	5.5	NA
COBALT	NA	NA	290	16	14	12	NA
COPPER	NA	NA	2.6	1.7 U	1.7 J	140	NA
LEAD	NA	NA	0.73 J	0.45 U	0.45 U	2.1	NA
MERCURY	NA	NA	0.13 U	0.13 U	0.13 U	0.13 U	NA
MOLYBDENUM	NA	NA	1.1 J	1.1 U	1.5 J	4.7 J	NA
NICKEL	NA	NA	350	17	15	13	NA
SELENIUM	NA	NA	1.4 J	0.89 U	3.3 J	0.89 U	NA
SILVER	NA	NA	0.053 U	0.053 U	0.053 U	0.053 U	NA
THALLIUM	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	NA
VANADIUM	NA	NA	1.9 J	0.93 J	1.5 J	6.3	NA
ZINC	NA	NA	140	20	15 U	97	NA
DISSOLVED METALS (UG/L)							
ANTIMONY	NA	NA	0.57 U	0.57 U	0.57 U	0.57 U	NA
ARSENIC	NA	NA	1 J	0.75 U	0.75 U	0.75 U	NA
BARIUM	NA	NA	160	45	170	28	NA
BERYLLIUM	NA	NA	1.6	0.31 U	0.31 U	0.46 J	NA
CADMIUM	NA	NA	0.21 U	0.21 U	2.1	0.21 U	NA
CHROMIUM	NA	NA	0.98 U	0.98 U	57	1.5 J	NA
COBALT	NA	NA	290	13	13	9.3	NA
COPPER	NA	NA	1.7 U	1.7 U	2.7	26	NA
LEAD	NA	NA	0.45 U	0.45 U	0.45 U	0.46 J	NA
MERCURY	NA	NA	0.13 U	0.13 U	0.13 U	0.13 U	NA
MOLYBDENUM	NA	NA	1.1 U	1.1 U	1.2 J	2.5 J	NA
NICKEL	NA	NA	360	13	15	9.8	NA
SELENIUM	NA	NA	1.2 J	0.89 U	3.4 J	0.89 U	NA
SILVER	NA	NA	0.053 U	0.053 U	0.053 U	0.053 U	NA
THALLIUM	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	NA
VANADIUM	NA	NA	0.82 U	0.82 U	1.5 J	0.97 J	NA
ZINC	NA	NA	160	15 U	15 U	26	NA

Table G-2

Groundwater Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	DPT-1A	DPT-2D	MRC-MW131B	MRC-MW117B	MRC-MW118A	MRC-MW118B	MRC-MW119A
SAMPLE ID	DPT-1A-40-45'	DPT-2D-45-50'	MRC-MW131B-100917	MRC-MW117B-100917A	MRC-MW118A-101117	MRC-MW118B-101117	MRC-MW119A-101117
SAMPLE DATE	20170919	20170920	20171009	20171009	20171011	20171011	20171011
TOP DEPTH	40	45	-9999	-9999	-9999	-9999	-9999
BOTTOM DEPTH	45	50	-9999	-9999	-9999	-9999	-9999
MISCELLANEOUS PARAMETERS (UG/L)							
HEXAVALENT CHROMIUM	NA	NA	0.25 UJ	0.047 UJ	54.9 J-	0.17 J-	NA
PETROLEUM HYDROCARBONS (UG/L)							
TPH (C06-C10)	NA	NA	120	49 U	49 U	49 U	49 U
TPH (C10-C32)	NA	NA	240 J	210 U	280 J	220 U	NA

Notes:

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

J = estimated value

µg/L = micrograms per liter

NA = not analyzed

U = nondetect

UJ = the analyte was not detected, however, the quantitation or detection limit may be inaccurate or imprecise.

Table G-2

Groundwater Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	MRC-MW119B	MRC-MW120A	MRC-MW120B	MRC-MW121A	MRC-MW121B	MRC-MW122A
SAMPLE ID	MRC-MW119B-101017	MRC-MW120A-101117	MRC-MW120B-101017	MRC-MW121A-101017	MRC-MW121B-100917	MRC-MW122A-101017
SAMPLE DATE	20171010	20171011	20171010	20171010	20171009	20171010
TOP DEPTH	-9999	-9999	-9999	-9999	-9999	-9999
BOTTOM DEPTH	-9999	-9999	-9999	-9999	-9999	-9999
VOLATILES (UG/L)						
1,1,1-TRICHLOROETHANE	4.6 U	0.23 U	12 U	0.23 U	0.23 U	0.23 U
1,1,2,2-TETRACHLOROETHANE	6.4 U	0.32 U	16 U	0.32 U	0.32 U	0.32 U
1,1,2-TRICHLOROETHANE	6.8 U	0.34 U	17 U	0.34 U	0.34 U	0.34 U
1,1,2-TRICHLOROTRIFLUOROETHANE	8.2 U	0.41 U	21 U	0.41 U	0.41 U	0.41 U
1,1-DICHLOROETHANE	5 U	0.25 U	13 U	0.25 U	0.25 U	0.25 U
1,1-DICHLOROETHENE	44	0.46 J	200	0.27 U	0.27 U	0.27 U
1,2,4-TRICHLOROBENZENE	5.4 U	0.27 U	14 U	0.27 U	0.45 J	0.27 U
1,2-DIBROMO-3-CHLOROPROPANE	9.4 U	0.47 U	24 U	0.47 U	0.47 U	0.47 U
1,2-DIBROMOETHANE	4.6 U	0.23 U	12 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROBENZENE	5.2 U	0.26 U	13 U	0.26 U	0.26 U	0.26 U
1,2-DICHLOROETHANE	6 U	0.3 U	15 U	0.3 U	0.3 U	0.3 U
1,2-DICHLOROPROPANE	6 U	0.3 U	15 U	0.3 U	0.3 U	0.3 U
1,3-DICHLOROBENZENE	6.4 U	0.32 U	16 U	0.32 U	0.32 U	0.32 U
1,4-DICHLOROBENZENE	4.6 U	0.23 U	12 U	0.23 U	0.23 U	0.23 U
2-BUTANONE	20 U	1 UJ	51 U	1 U	1.4 J	1 U
2-HEXANONE	25 U	1.2 UJ	62 U	1.2 U	1.2 U	1.2 U
4-METHYL-2-PENTANONE	14 U	0.71 U	36 U	0.71 U	0.71 U	0.71 U
ACETONE	35 U	51 J	88 U	23	8.1 J	13
BENZENE	53	9.6	14 U	0.28 U	0.28 U	0.28 U
BROMODICHLOROMETHANE	6 U	0.3 U	15 U	0.3 U	0.3 U	0.3 U
BROMOFORM	8.6 UJ	0.43 U	22 U	0.43 U	0.43 U	0.43 UJ
BROMOMETHANE	8.4 U	0.42 U	21 U	0.42 U	0.42 U	0.42 U
CARBON DISULFIDE	6.8 U	0.34 U	17 U	0.34 U	0.34 U	5.4
CARBON TETRACHLORIDE	7 UJ	0.35 U	18 U	0.35 U	0.35 U	0.35 UJ
CHLOROBENZENE	6.4 U	0.32 U	16 U	0.32 U	0.32 U	0.32 U
CHLORODIBROMOMETHANE	5 U	0.25 U	13 U	0.25 U	0.25 U	0.25 U
CHLOROETHANE	8.2 U	0.41 U	21 U	0.41 U	0.41 UJ	0.41 U
CHLOROFORM	6.2 U	0.31 U	16 U	0.31 U	0.31 U	1.4
CHLOROMETHANE	8.6 U	0.43 U	22 U	0.43 U	0.43 UJ	0.43 U
CIS-1,2-DICHLOROETHENE	170	1	120	0.66 J	0.3 U	0.8 J
CIS-1,3-DICHLOROPROPENE	5.2 UJ	0.26 U	13 U	0.26 U	0.26 U	0.26 UJ
CYCLOHEXANE	8.8 U	4.6	22 U	0.44 U	0.44 U	0.44 U
DICHLORODIFLUOROMETHANE	10 U	0.5 U	25 U	0.5 U	0.5 U	0.5 U
ETHYLBENZENE	5.2 U	0.26 U	13 U	0.26 U	0.26 U	0.26 U
ISOPROPYLBENZENE	4.2 U	0.21 U	11 U	0.21 U	0.21 U	0.21 U
METHYL ACETATE	29 U	1.4 U	72 U	1.4 U	1.4 U	1.4 U
METHYL CYCLOHEXANE	9 U	1.8	23 U	0.45 U	0.45 U	0.45 U
METHYL TERT-BUTYL ETHER	5.4 U	0.27 U	14 U	0.27 U	0.27 U	0.27 U
METHYLENE CHLORIDE	11 U	0.53 U	27 U	0.53 U	0.53 U	0.9 U
STYRENE	4.6 U	0.23 U	12 U	0.23 U	0.23 U	0.23 U
TETRACHLOROETHENE	6 U	0.3 U	15 U	0.3 U	0.3 U	0.3 U
TOLUENE	4.6 U	0.24 J	12 U	0.23 J	0.23 U	0.23 U
TOTAL XYLENES	4.8 U	2.1	12 U	0.24 U	0.24 U	0.24 U
TRANS-1,2-DICHLOROETHENE	12 J	0.29 U	15 U	0.29 U	0.29 U	0.37 J
TRANS-1,3-DICHLOROPROPENE	6.2 U	0.31 U	16 U	0.31 U	0.31 U	0.31 U
TRICHLOROETHENE	550	3.4	1400	8.2	12	1.2
TRICHLOROFLUOROMETHANE	10 U	0.5 U	25 U	0.5 U	0.5 U	0.5 U
VINYL CHLORIDE	9 U	0.45 U	23 U	0.45 U	0.45 UJ	0.45 U

Table G-2

Groundwater Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	MRC-MW119B	MRC-MW120A	MRC-MW120B	MRC-MW121A	MRC-MW121B	MRC-MW122A
SAMPLE ID	MRC-MW119B-101017	MRC-MW120A-101117	MRC-MW120B-101017	MRC-MW121A-101017	MRC-MW121B-100917	MRC-MW122A-101017
SAMPLE DATE	20171010	20171011	20171010	20171010	20171009	20171010
TOP DEPTH	-9999	-9999	-9999	-9999	-9999	-9999
BOTTOM DEPTH	-9999	-9999	-9999	-9999	-9999	-9999
SEMIVOLATILES (UG/L)						
1,4-DIOXANE	2.8	2.7	10	0.48 U	0.48 U	NA
PCBS (UG/L)						
DECACHLOROBIPHENYI	0.072 U	0.073 U	0.072 U	0.071 U	0.071 U	NA
DICHLOROBIPHENYLS	0.0055 U	0.0056 U	0.0055 U	0.0055 U	0.0055 U	NA
HEPTACHLOROBIPHENYLS	0.031 U	0.031 U	0.031 U	0.03 U	0.03 U	NA
HEXACHLOROBIPHENYLS	0.015 U	0.016 U	0.015 U	0.015 U	0.015 U	NA
MONOCHLOROBIPHENYLS	0.0058 U	0.0058 U	0.0058 U	0.0057 U	0.0057 U	NA
NONACHLOROBIPHENYLS	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	NA
OCTACHLOROBIPHENYLS	0.039 U	0.04 U	0.039 U	0.038 U	0.039 U	NA
PENTACHLOROBIPHENYLS	0.014 U	0.015 U	0.014 U	0.014 U	0.014 U	NA
TETRACHLOROBIPHENYLS	0.013 U	0.014 U	0.013 U	0.013 U	0.013 U	NA
TRICHLOROBIPHENYLS	0.0067 U	0.0068 U	0.0067 U	0.0066 U	0.0066 U	NA
METALS (UG/L)						
ANTIMONY	0.57 U	0.57 U	0.57 U	0.57 U	2.4	NA
ARSENIC	3 J	3.5 J	0.75 U	0.85 J	3.8 J	NA
BARIUM	440	710	100	92	20	NA
BERYLLIUM	12	0.38 J	1.7	0.31 U	0.44 J	NA
CADMIUM	3.4	0.37 J	0.53 J	0.59 J	0.21 J	NA
CHROMIUM	2.4	3.9	4.5	0.98 U	6.9	NA
COBALT	1100	160	190	77	2.2	NA
COPPER	230	2	15	1.9 J	10	NA
LEAD	7.7	0.96 J	1.3	0.45 U	4.4	NA
MERCURY	1.3	0.13 U	0.13 U	0.13 U	0.13 U	NA
MOLYBDENUM	1.1 U	20	1.1 U	1.1 U	13	NA
NICKEL	1700	25	200	120	5.5	NA
SELENIUM	1.7 J	1.1 J	0.89 U	0.89 U	1.9 J	NA
SILVER	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	NA
THALLIUM	0.3 J	0.24 J	0.22 J	0.2 U	0.2 U	NA
VANADIUM	2 J	2.7 J	3.6 J	0.82 U	23	NA
ZINC	1500	20	300	170	51	NA
DISSOLVED METALS (UG/L)						
ANTIMONY	0.57 U	0.57 U	0.57 U	0.57 U	1.9 J	NA
ARSENIC	1.6 J	2 J	0.75 U	0.81 J	3.4 J	NA
BARIUM	540	480	95	100	15	NA
BERYLLIUM	15	0.31 U	1.7	0.35 J	0.31 U	NA
CADMIUM	4.3	0.21 U	0.45 J	0.56 J	0.21 U	NA
CHROMIUM	1.3 J	5.5	1.2 J	0.98 U	3.3	NA
COBALT	1400	90	180	84	0.59 J	NA
COPPER	310	1.7 U	4.5	4.8	8.7	NA
LEAD	9	0.45 U	0.45 U	0.45 U	1.2	NA
MERCURY	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	NA
MOLYBDENUM	1.1 U	3.5 J	1.1 U	1.1 U	13	NA
NICKEL	2100	38	190	130	1.5 U	NA
SELENIUM	2.1 J	0.89 U	0.89 U	0.89 U	1.6 J	NA
SILVER	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	NA
THALLIUM	0.31 J	0.2 U	0.2 J	0.2 U	0.2 U	NA
VANADIUM	0.82 U	0.82 U	0.82 U	0.82 U	19	NA
ZINC	2000	15 U	280	190	15 U	NA

Table G-2

Groundwater Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	MRC-MW119B	MRC-MW120A	MRC-MW120B	MRC-MW121A	MRC-MW121B	MRC-MW122A
SAMPLE ID	MRC-MW119B-101017	MRC-MW120A-101117	MRC-MW120B-101017	MRC-MW121A-101017	MRC-MW121B-100917	MRC-MW122A-101017
SAMPLE DATE	20171010	20171011	20171010	20171010	20171009	20171010
TOP DEPTH	-9999	-9999	-9999	-9999	-9999	-9999
BOTTOM DEPTH	-9999	-9999	-9999	-9999	-9999	-9999
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	1.9 J-	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	360	220	440	49 U	49 U	49 U
TPH (C10-C32)	230 J	1200	220 U	770	810	NA

Notes:

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

J = estimated value
µg/L = micrograms per liter
NA = not analyzed
U = nondetect

UJ = the analyte was not detected, however, the quantitation or detection limit may be inaccurate or imprecise.

Table G-3

Sub-Slab Soil Vapor Sample Results - 2017, Block I Maintenance Building and Surrounding Area
Lockheed Martin Middle River Complex. Middle River, Maryland

LOCATION	SV-178	SV-179	SV-180	SV-181	SV-182	SV-183	SV-184	SV-185	SV-186	SV-187
SAMPLE ID	SV-178-MB-1	SV-179-MB-1	SV-180-MB-1	SV-181-MB-1	SV-182-MB-1	SV-183-MB-1	SV-184-MB-1	SV-185-MB-1	SV-186-MB-1	SV-187-MB-1
SAMPLE DATE	20171012	20171012	20171012	20171012	20171012	20171012	20171012	20171012	20171012	20171012
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
VOLATILE ORGANICS (UG/M3)										
1,1,1-TRICHLOROETHANE	2 U	0.33 U	0.44 U	0.98 U	4	190	0.43 U	0.8 U	0.39 U	1.1 U
1,1,2-TRICHLOROETHANE	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	1.1 U	0.57 U	0.57 U	0.57 U	0.57 U
1,1-DICHLOROETHANE	7.9	39	1.4 J	500	280	1700	0.52 J	0.89 J	5.1	2.9
1,1-DICHLOROETHENE	0.28 U	1.6	0.28 U	18	9.4	270	0.28 U	0.28 U	0.28 U	0.28 U
1,2,3-TRIMETHYLBENZENE	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	1.7 U	0.84 U	0.84 U	0.84 U	0.84 U
1,2,4-TRICHLOROBENZENE	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U
1,2,4-TRIMETHYLBENZENE	1.8 J	1 J	1.1 J	1.3 J	1.2 J	1.2 U	1.5 J	1.3 J	1.3 J	1.5 J
1,2-DICHLOROETHANE	0.38 U	0.59 J	0.38 U	0.38 U	0.38 U	0.77 U	0.38 U	0.38 U	0.38 U	0.38 U
1,3,5-TRIMETHYLBENZENE	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	1.3 U	0.64 U	0.64 U	0.64 U	0.64 U
BENZENE	0.76 J	0.66 J	0.4 J	0.62 J	0.8 J	1 J	0.59 J	0.93 J	1.3	0.63 J
CARBON TETRACHLORIDE	0.47 U	0.55 J	0.47 U	0.47 U	0.47 U	0.94 U	0.48 J	0.47 U	0.47 U	0.47 U
CHLORODIFLUOROMETHANE	1.3 J	1.1 J	1.2 J	1.3 J	1.1 J	0.53 U	0.96 J	0.93 J	0.27 U	1.1 J
CHLOROFORM	2.8	1.1 J	0.37 U	0.56 J	0.37 U	0.93 J	0.37 U	0.37 U	0.37 U	0.37 U
CIS-1,2-DICHLOROETHENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.48 U	0.48 U	0.48 U
DICHLORODIFLUOROMETHANE	2.5	2.7	2.4	2.9	2.8	2.6 J	2.5	2.3	2.4	2.6
ETHYLBENZENE	1 J	0.95 J	0.71 J	0.93 J	0.68 J	1.2 U	0.79 J	1 J	1.1 J	1.1 J
METHYL TERT-BUTYL ETHER	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	1.2 U	1.2 U	1.2 U	1.2 U
METHYLENE CHLORIDE	6.6	5.9	6.7	6.6	7.2	7.8	5.4	7	8	6.2
NAPHTHALENE	1 U	1 U	1 U	1 U	1 U	2.1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	1.1 U	0.54 U	0.61 J	0.94 J	0.54 U
TOLUENE	7.3	6.7	4.2	6.8	4.3	4.5 U	5.4	6.5	6.9	6.9
TOTAL XYLENES	6	5.1	3.9	5.3	4	1 U	4.5	5.6	5.5	5.8
TRANS-1,2-DICHLOROETHENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.79 U	0.4 U	0.4 U	0.4 U	0.4 U
TRICHLOROETHENE	0.38 U	0.38 U	0.38 U	0.38 U	0.39 J	2 J	0.38 U	0.38 U	0.38 U	0.38 U
VINYL CHLORIDE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 J	0.37 U	0.37 U	0.37 U	0.37 U

Notes:

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

J = estimated value

µg/m^3 = micrograms per cubic meter

U = nondetect

Appendix H—Investigation-Derived Waste (IDW) Documentation

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) 04 17057 106 SC PPW 10/10/2017 65600 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
MDR000524413	1	(800) 483-3718	011582430 FLE

GENERATOR

5. Generator's Name and Mailing Address
Middle River Complex
195 Chesapeake Park Plaza Rd
Middle River, MD 21220
Generator's Phone (301) 526-3021

Generator's Site Address (if different than mailing address)
195 Chesapeake Park Plaza Rd
Baltimore, MD 21220

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Environmental Services, Inc.
2800 Rockefeller Avenue
Cleveland, OH 44115
Facility's Phone: (216) 429-2402
U.S. EPA ID Number
OHD000724153

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON D.O.T. REGULATED, (WATER)	015	DM	6,000	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. CB1447029

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Christopher Keller
Signature:
Month 11 Day 16 Year 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Catherine J. Gehr
Signature: Catherine J. Gehr
Month 11 Day 16 Year 17

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H070			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name:
Signature:
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

6560

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) D4 170575 106 SC PPW 10/10/2017 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
MDR000524413	1	(800) 483-3718	011582429 FLE

GENERATOR

5. Generator's Name and Mailing Address
Middle River Complex
195 Chesapeake Park Plaza Rd
Middle River, MD 21220
(301) 528-3021

Generator's Site Address (if different than mailing address)
195 Chesapeake Park Plaza Rd
Baltimore, MD 21220

Generator's Phone:

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number: MAD093322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: Clean Harbors Chattanooga LLC
3300 Cummings Road
Chattanooga, TN 37419
(423) 821-6926
U.S. EPA ID Number: TND982141392

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON HAZARDOUS, NON D.O.T. REGULATED (CONCRETE REBAR)	004	DM	2,400	P	
	2. NON D.O.T. REGULATED, (SOIL)	025	DM	13,750	P	
	3.					
	4.					

14. Special Handling Instructions and Additional Information
2.CR673563

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Christopher Keller
Signature:
Month: 11 Day: 16 Year: 17

INT'L

16. International Shipments ☐ Import to U.S ☐ Export from U.S
Port of entry/exit:
Transporter signature (for exports only):
Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Lawrence J. Geho
Signature:
Month: 11 Day: 16 Year: 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

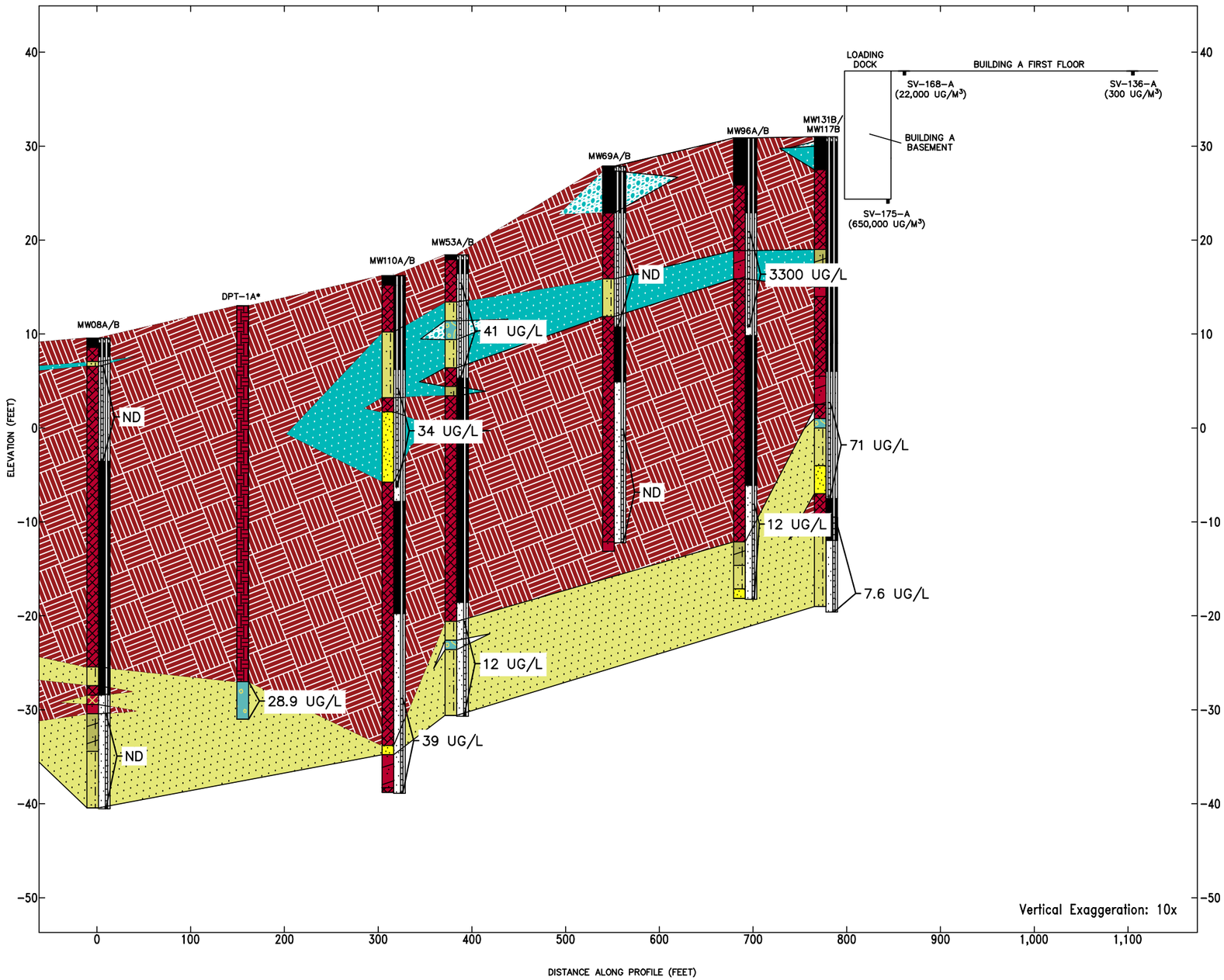
Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

GENERATOR'S INITIAL COPY

Appendix I—Cross-Sections



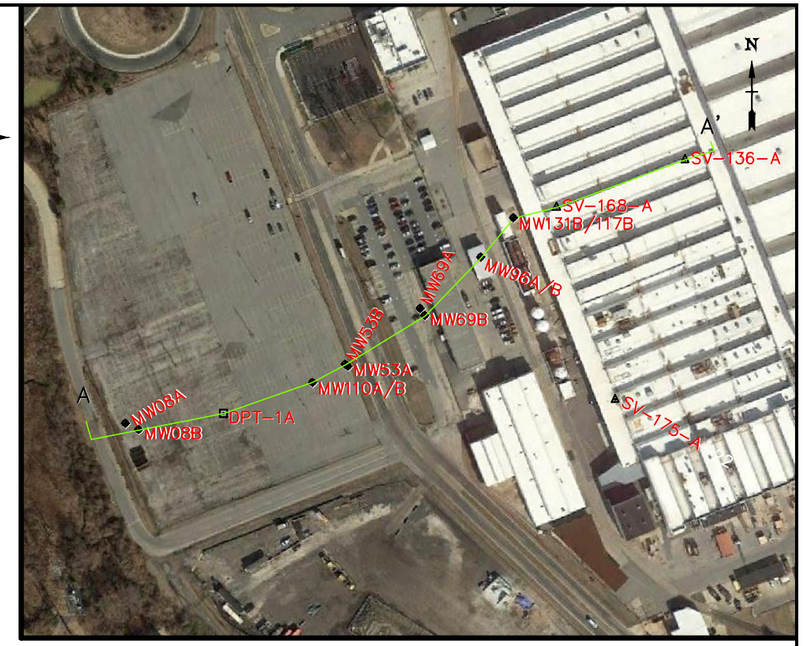
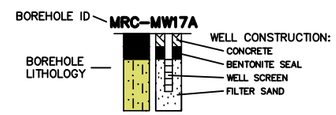


FIGURE 2–2

BUILDING A
GEOLOGIC CROSS–SECTION A–A'
WITH TCE CONCENTRATIONS
IN GROUNDWATER

LEGEND

BOREHOLE GRAPHICS:



BOREHOLE LITHOLOGY:

- SURFACE MATERIAL (CONCRETE, ASPHALT, ETC.)
- CLAY AND SILTY CLAY
- CLAY WITH SAND
- MOIST TO WET CLAY
- CLAYEY SAND
- SILTY SAND OR SANDY SILT
- PEA GRAVEL
- SAND
- MEDIUM TO COARSE SAND AND GRAVEL

CROSS SECTION LITHOLOGY:

- LOW PERMEABILITY
- UPPER HIGH PERMEABILITY
- DEEP HIGH PERMEABILITY
- GRAVEL

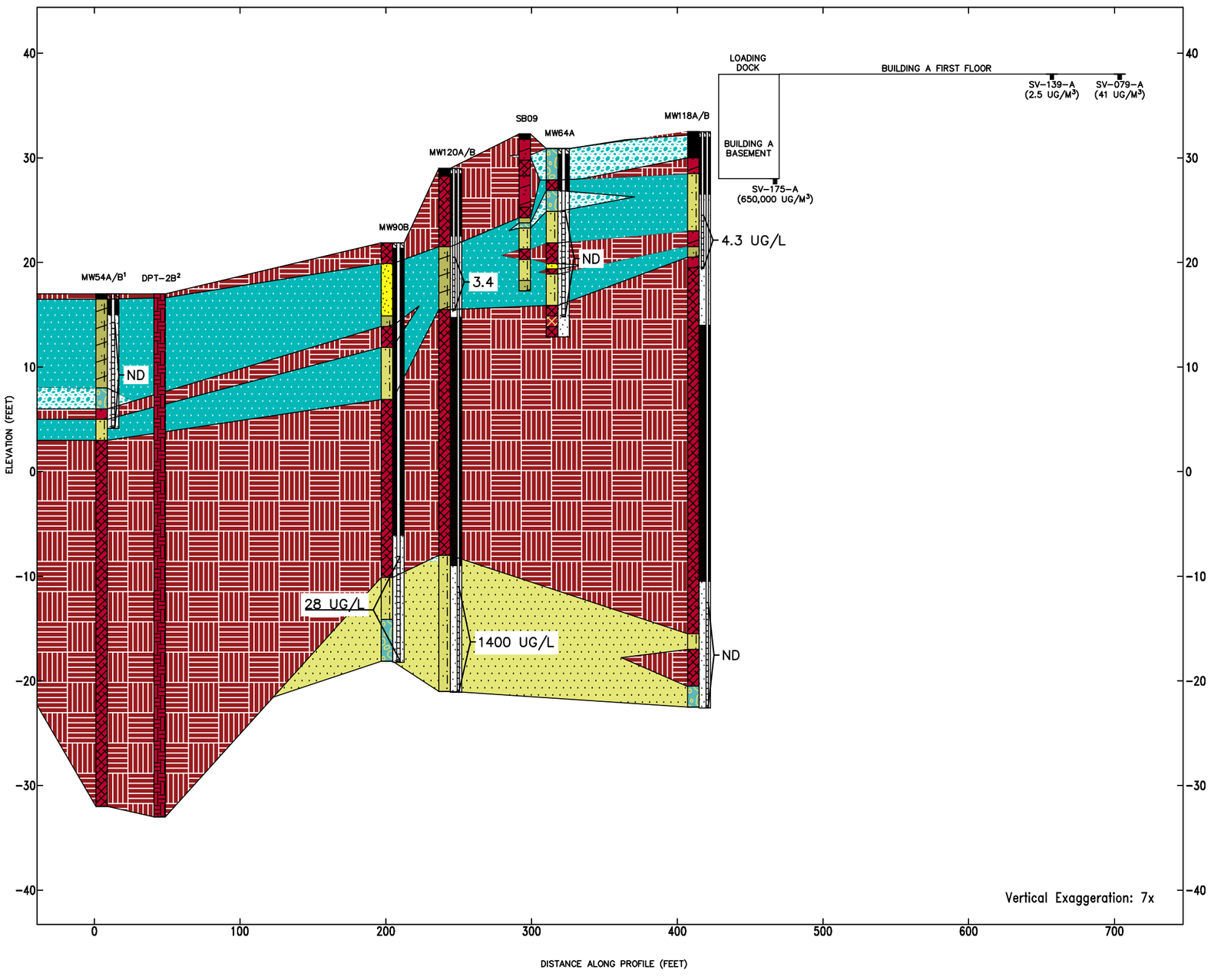
- CROSS SECTION LINE
- MW – MONITORING WELL
- NAVD 88 – NORTH AMERICAN VERTICAL DATUM 1988
- ND – NON–DETECT
- SB – SOIL BORING
- SV – SOIL VAPOR
- TCE – TRICHLOROETHENE
- UG/KG – MICROGRAMS PER KILOGRAM
- UG/L – MICROGRAMS PER LITER
- UG/M3 – MICROGRAMS PER CUBIC METER

*SPECIFIED BOREHOLE LITHOLOGY WAS ASSUMED BASED ON THE AVAILABILITY OF WATER; SOIL BORING WAS ADVANCED SOLELY FOR GROUNDWATER COLLECTION PURPOSES.

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

DATE MODIFIED:	CREATED BY:
12/1/2017	SBC

TETRA TECH



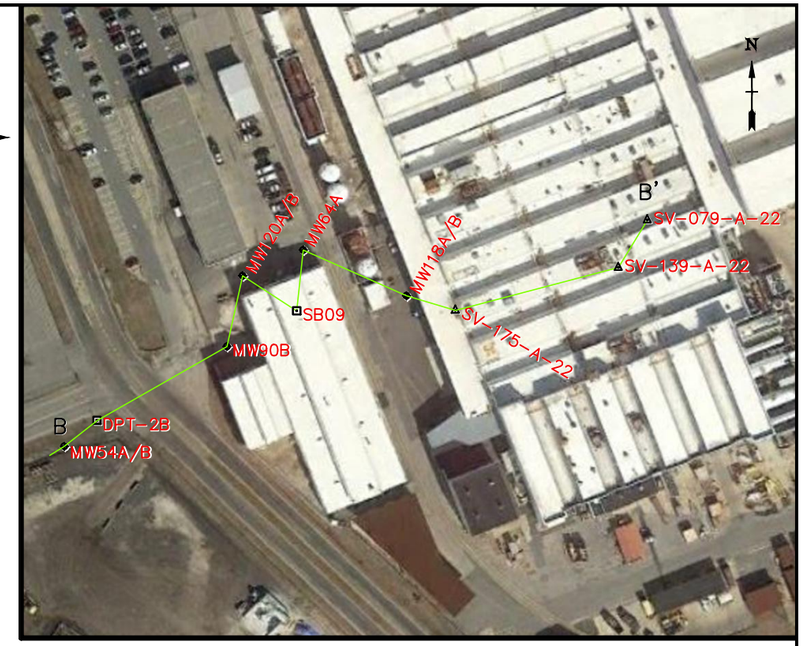
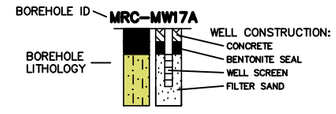


FIGURE 2–3

BUILDING A
GEOLOGIC CROSS–SECTION B–B'
WITH TCE CONCENTRATIONS
IN GROUNDWATER

LEGEND

BOREHOLE GRAPHICS:



BOREHOLE LITHOLOGY:

- SURFACE MATERIAL (CONCRETE, ASPHALT, ETC.)
- CLAY AND SILTY CLAY
- CLAY WITH SAND
- MOIST TO WET CLAY
- CLAYEY SAND
- SILTY SAND OR SANDY SILT
- PEA GRAVEL
- SAND
- MEDIUM TO COARSE SAND AND GRAVEL

CROSS SECTION LITHOLOGY:

- LOW PERMEABILITY
- UPPER HIGH PERMEABILITY
- DEEP HIGH PERMEABILITY
- GRAVEL

- CROSS SECTION LINE
- MW – MONITORING WELL
- NAVD 88 – NORTH AMERICAN VERTICAL DATUM 1988
- ND – NON–DETECT
- SB – SOIL BORING
- SV – SOIL VAPOR
- TCE – TRICHLOROETHENE
- UG/KG – MICROGRAMS PER KILOGRAM
- UG/L – MICROGRAMS PER LITER
- UG/M3 – MICROGRAMS PER CUBIC METER

1–MONITORING WELL MRC–MW54B WAS NOT INSTALLED IN THE INTENDED BOREHOLE DUE TO LACK OF PERMEABLE LITHOLOGY.

2–SPECIFIED BOREHOLE LITHOLOGY WAS ASSUMED BASED ON THE AVAILABILITY OF WATER; SOIL BORING WAS ADVANCED SOLELY FOR GROUNDWATER COLLECTION PURPOSES.

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

DATE MODIFIED: 12/4/2017

CREATED BY: SBC

TETRA TECH

C

C'

NORTHWEST
Elevation–Feet
NAVD–88

SOUTHEAST
Elevation–Feet
NAVD–88

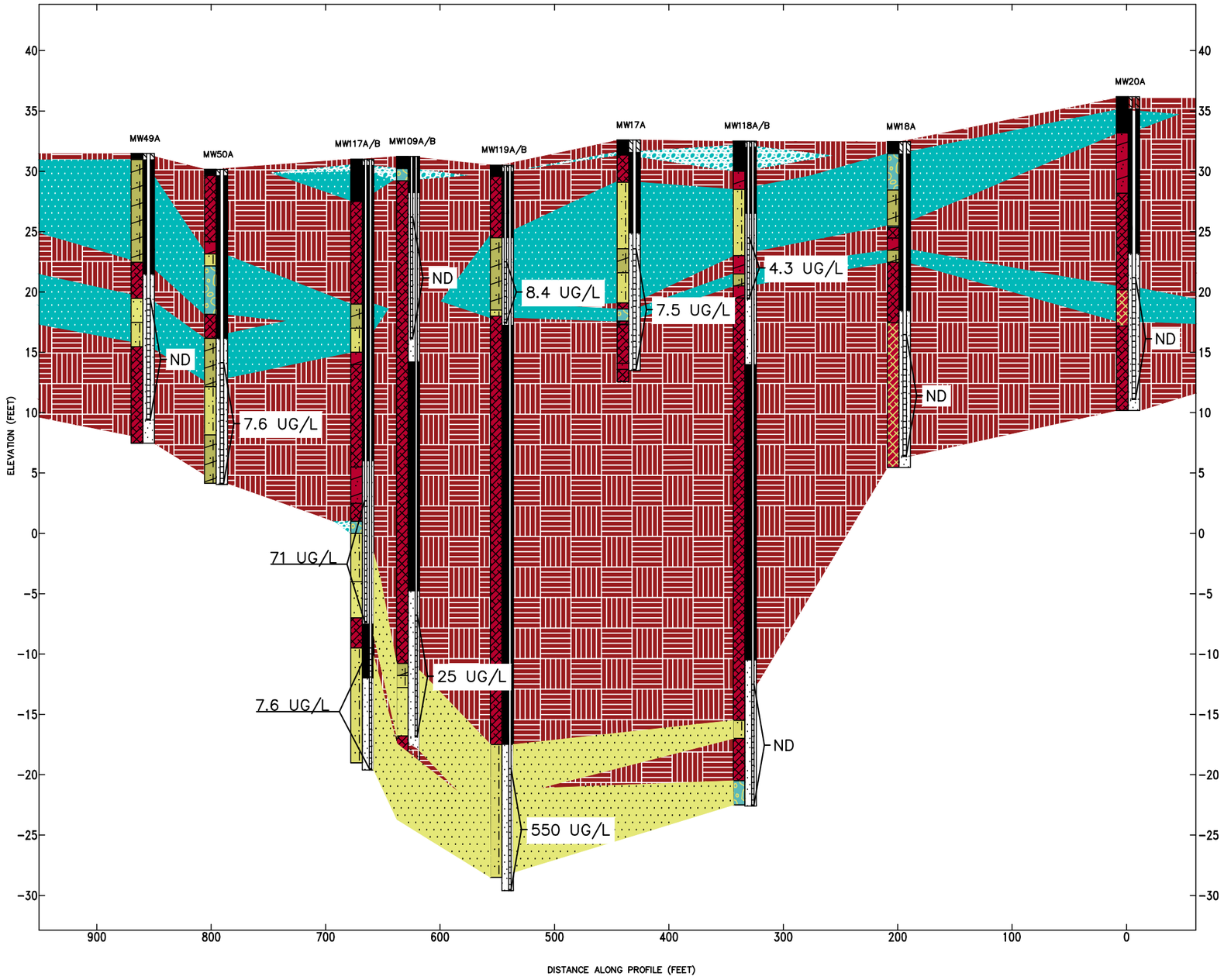




FIGURE 4

BUILDING A
GEOLOGIC CROSS–SECTION C–C'
WITH TCE CONCENTRATIONS
IN GROUNDWATER

LEGEND

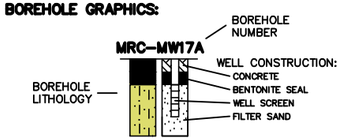
CROSS SECTION LITHOLOGY:

- LOW PERMEABILITY
- UPPER HIGH PERMEABILITY
- DEEP HIGH PERMEABILITY
- GRAVEL

BOREHOLE LITHOLOGY:

- SURFACE MATERIAL (CONCRETE, ASPHALT, ETC.)
- CLAY AND SILTY CLAY
- CLAY WITH SAND
- MOIST TO WET CLAY
- CLAYEY SAND
- SILTY SAND OR SANDY SILT
- PEA GRAVEL
- SAND
- MEDIUM TO COARSE SAND AND GRAVEL

BOREHOLE GRAPHICS:



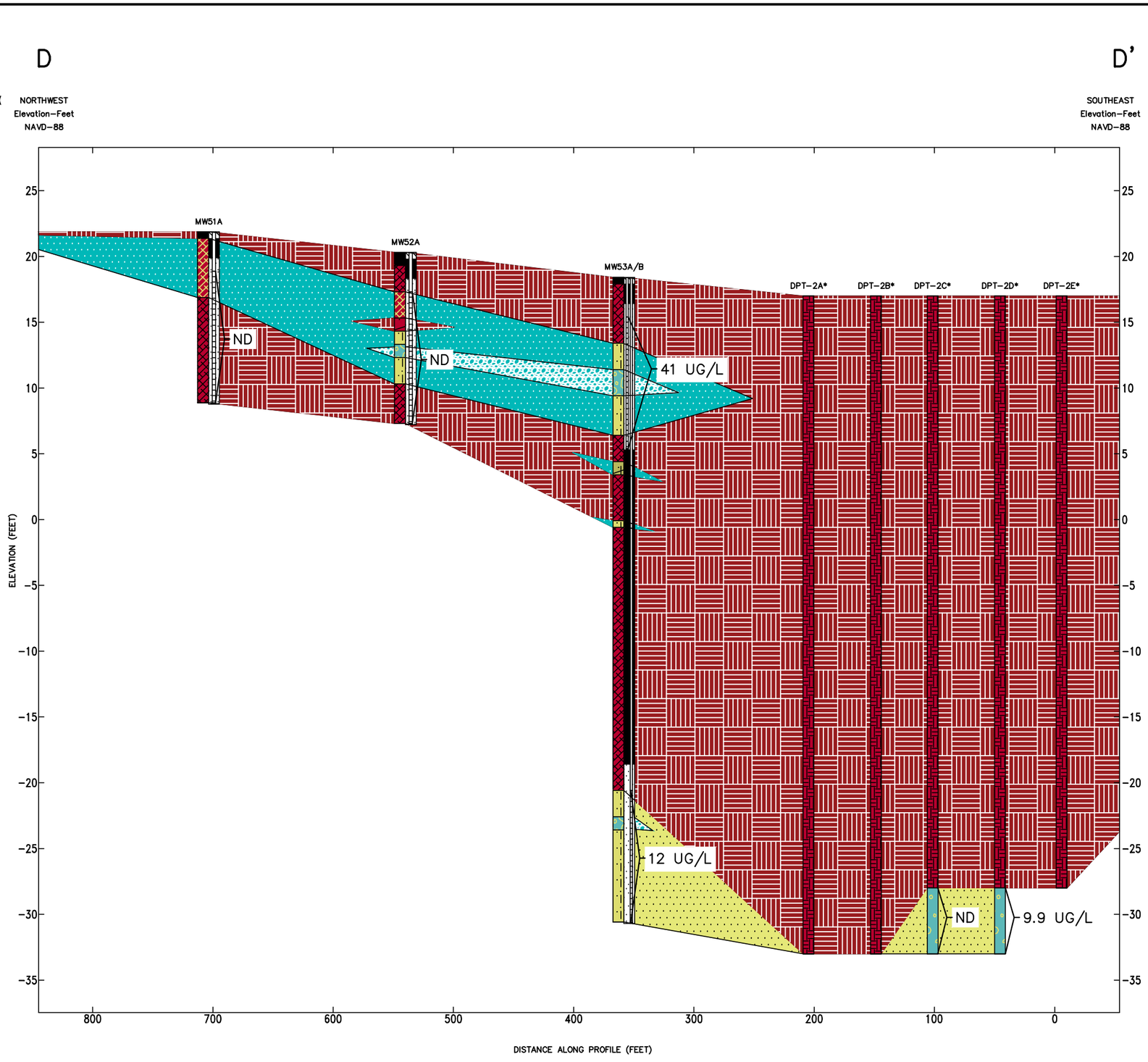
TCE – TRICHLOROETHENE
UG/L – MICROGRAMS PER LITER
ND – NON–DETECT
MW – MONITORING WELL
SB – SOIL BORING

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

DATE MODIFIED: 11/28/2017

CREATED BY: SBC

TETRA TECH



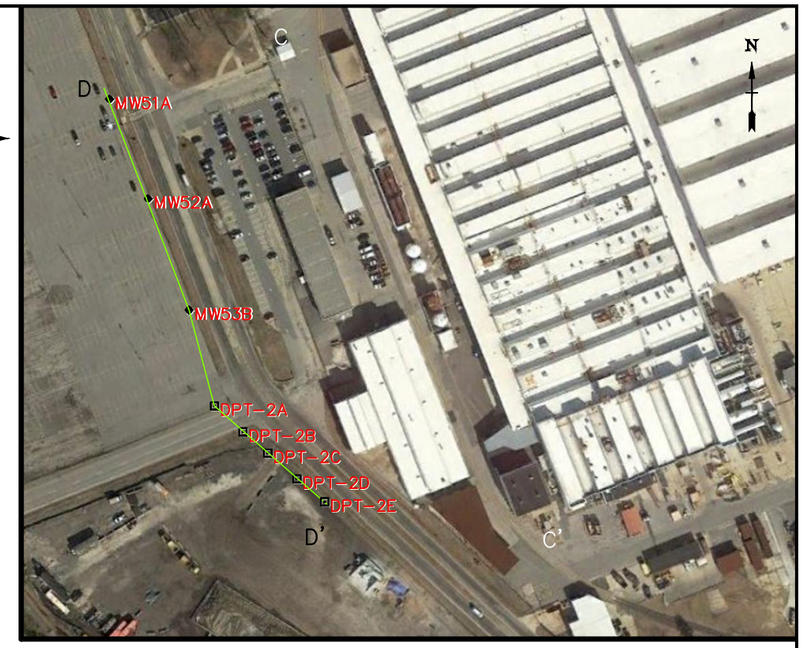


FIGURE 5

BUILDING A
GEOLOGIC CROSS–SECTION D–D'
WITH TCE CONCENTRATIONS
IN GROUNDWATER

LEGEND

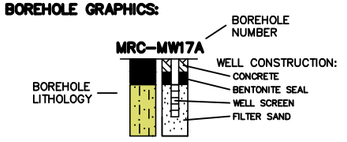
CROSS SECTION LITHOLOGY:

- LOW PERMEABILITY
- UPPER HIGH PERMEABILITY
- DEEP HIGH PERMEABILITY
- GRAVEL

BOREHOLE LITHOLOGY:

- SURFACE MATERIAL (CONCRETE, ASPHALT, ETC.)
- CLAY AND SILTY CLAY
- CLAY WITH SAND
- MOIST TO WET CLAY
- CLAYEY SAND
- SILTY SAND OR SANDY SILT
- PEA GRAVEL
- SAND
- MEDIUM TO COARSE SAND AND GRAVEL

BOREHOLE GRAPHICS:



TCE – TRICHLOROETHENE
UG/L – MICROGRAMS PER LITER
ND – NON–DETECT
MW – MONITORING WELL
SB – SOIL BORING

*SPECIFIED BOREHOLE LITHOLOGY WAS ASSUMED BASED ON THE AVAILABILITY OF WATER; SOIL BORING WAS ADVANCED SOLELY FOR GROUNDWATER COLLECTION PURPOSES.

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

DATE MODIFIED:	CREATED BY:
12/7/2017	SBC

TETRA TECH