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Engineering
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SOIL VAPOR INTRUSION INVESTIGATION REPORT; 690 Saint Paul Street – Off-Site NYSDEC SITE #C828159A

Location:

691 and 705 Saint Paul Street
Rochester, New York

Prepared for:

Bausch & Lomb
1400 North Goodman Street
Rochester, New York 14609

LaBella Project No. 2170820

August 20, 2019

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CERTIFICATIONS

"I _Daniel P. Noll_ certify that I am currently a NYS registered professional engineer and that this Soil Vapor Intrusion Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10)."

081996	8/20/19 ~~10/20/2019~~	
NYS Professional Engineer #	Date	Signature

1.0 INTRODUCTION

As required under the terms of the New State Department of Environmental Conservation (NYSDEC) Order of Consent and Administrative Settlement (Index No. R8-20161013-107) with Bausch & Lomb (B&L), this report details the findings of a Soil Vapor Intrusion (SVI) investigation that was performed by LaBella Associates, D.P.C. on behalf of B&L for the properties at 691 and 705 Saint Paul Street, City of Rochester, Monroe County, New York and identified by the NYSDEC as 690 Saint Paul Street – Off-Site, Site #C828159A. A site location map is included as Figures 1 and 2. The SVI investigation activities were conducted in accordance with a NYSDEC approved work plans entitled:

- *Soil Gas Sampling Work Plan, NYSDEC Site #828159A, 691 and 705 Saint Paul Street, Rochester, New York* dated January 30, 2017 prepared by LaBella Associates, D.P.C.
- Soil Vapor Intrusion Work Plan, *NYSDEC Site #828159A, 691 and 705 Saint Paul Street, Rochester, New York* dated March 24, 2017 prepared by LaBella Associates, D.P.C.

This SVI Report documents soil gas and SVI sampling at the site that is west of the 690 Saint Paul Street NYSDEC Brownfield Cleanup Program (BCP) Site #C828159. The SVI sampling was conducted to determine whether there is a SVI concern at the site with regard to the chlorinated solvent plumes associated with the 690 Saint Paul Street NYSDEC BCP Site #C828159. This report was also completed in accordance with the NYSDEC Division of Environmental Remediation (DER) BCP Guide dated May 2004 and the DER-10 (*Technical Guidance for Site Investigation and Remediation*) dated May 3, 2010 and the New York State Department of Health (NYSDOH) Final document "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2006.

1.1 Report Organization

The remainder of this SVI Report is organized into the sections listed below.

- Section 2 provides a general description of the site and surrounding properties and an environmental summary of the 690 Saint Paul Street BCP Site #C828159
- Section 3 provides a description of the subsurface geologic conditions in the area of the site
- Section 4 provides a description of the Standards, Criteria, and Guidance that are used to define the soil vapor cleanup guidelines for the site
- Section 5 provides a description of field activities, sampling, and analysis performed during the SVI investigation
- Section 6 provides a summary of the analytical results of samples collected and analyzed during the SVI investigation
- Section 7 provides a conclusions of the results of the SVI work completed to date
- Section 8 provides a recommendation with regard to potential mitigation measures at the site

2.0 SITE DESCRIPTION AND ENVIRONMENTAL SUMMARY

2.1 Site Description

The Site is located directly west of the NYSDEC BCP site #C828159 known as 690 Saint Paul Street. The 691 Saint Paul Street property is primarily used as commercial office space by: 1) Monroe County Social Services (primary tenant) that occupies the upper basement and the remaining upper floors (2) St. Michael's Woodshop occupies most of the lower basement space, and (3) Newport Gratings (photonics company) occupies the northern end of the upper and lower basement space. The 705 Saint Paul Street property is presently used as manufacturing by Richardson Gratings. Each property is improved with one building as outlined in Table 1.1 below.

TABLE 1.1 – Site Buildings Description

	691 Saint Paul Street	705 Saint Paul Street
Acreage of Site	2.94	0.82
Approximate Building Footprint (square feet)	30,630	10,627
Foundation Type	Basement	Unknown
Construction Date	1920	1930
Current Use	Commercial office space	Manufacturing

The basement of the 691 Saint Paul Street building is divided into two separate levels or elevations. The eastern half of the upper basement is approximately 8 to 10 ft higher in elevation than the lower basement that is located on the approximate western half of the site building as shown on Figures 4A and 4B.

The exterior of the 691 Saint Paul Street parcel primarily consists of an asphalt paved parking lot located south of the building and the exterior of the 705 Saint Paul Street parcel primarily consists of an asphalt paved parking lot located north of the building. Neighboring properties that border the site include:

TABLE 1.1B - Adjacent Properties

Location	Current Use
North	Asphalt paved parking lot
South	Smith Street, High Fall Brewery
East	690 Saint Paul Street, NYSDEC BCP Site# C828159
West	Suntru Street, RG&E Substation #34

2.2 Environmental Summary of NYSDEC 690 Saint Paul Street BCP Site #C828159

The 690 Saint Paul Street BCP site was developed prior to 1875 and was utilized primarily for residential purposes prior to approximately the 1920s. Based on the review of historical mapping and local street directories, the BCP site was primarily utilized for industrial purposes by Bausch & Lomb, Inc., formerly known as Bausch & Lomb Optical Company ("B&L") from sometime around 1920 until it was abandoned by the company in the late 1960s. The property was developed for industrial use by B&L to manufacture lenses and other products. From the early 1970s until 2000, the BCP site was used predominantly for light commercial and storage applications. Occupants and/or owners of the Site have included various individual residences, B&L, Thomas Edison Technical and Industrial High School, Geva Theater storage, and various manufacturing and industrial tenants.

Prior uses of the BCP site that appear to have led to site contamination include underground storage tanks (USTs) that may have leaked. These tanks appear to have contained chlorinated solvents including trichloroethene (TCE) and petroleum products including gasoline and fuel oil. In 2002, a 500-gallon UST was removed from the site and contaminated soil was encountered. In 2008, a Phase II Environmental Site Assessment (ESA) was performed to evaluate subsurface soil and groundwater. The Phase II ESA identified an area of petroleum contaminated soil. The investigation was followed by the excavation of approximately 1,650 cubic yards of petroleum impacted soil and a previously undocumented UST. TCE was identified in confirmation samples in soil and ground and thus the 690 Saint Paul Street site was entered into the BCP. A Remedial Investigation (RI) conducted through the BCP identified eight (8) Areas of Concern that related to elevated concentrations of metals, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons, petroleum products, and/or chlorinated solvents. Interim Remedial Measures (IRMs) were completed after these and the Remedial Investigation (RI) work it was determined three areas required further remedial actions. One of these areas was petroleum product (light non-aqueous phase liquid) which is limited to within the 690 Saint Paul Street parcel. The other two locations contain chlorinated VOCs which were document to have off-site migration.

The areas of concern related to this report are two groundwater chlorinated solvent plumes that were identified to have migrated off the BCP site to the west and toward the Site as shown on Figure 3. It should be noted that the 690 Saint Paul Street site is currently undergoing remediation, including the chlorinated VOC impacts.

3.0 SUMMARY OF LOCAL SUBSURFACE GEOLOGIC CONDITIONS

This section relies upon information obtained from the 690 Saint Paul Street NYSDEC BCP site environmental investigations. The overburden material ranges in depth up to approximately 12 feet (ft) below the ground surface (bgs) and consists primarily of glacial till. Fill material is anticipated to overly the till and may consist of sand, gravel, cinders, and ash.

The Decew Dolomite underlies the overburden material. The Decew Dolomite is the uppermost formation of the Clinton Group and consists of variably bedded, dark-gray to olive-gray, argillaceous to sandy, fine-grained dolomite that contains shaly partings and interbeds, as well as frequent pits and vugs. The thickness of this unit is generally 8 to 12 ft.

The Rochester Shale underlies the Decew Dolomite, and is a relatively uniform dark- to medium-gray, pale- and platy-weathering, highly calcareous to dolomitic mudstone. It contains abundant thin interbeds of medium gray, pale-buff weathering, laminated calcisiltites. Its thickness in Western New York is generally 58 to 65 ft.

The overburden groundwater table at the BCP site ranged from 4 to 9 ft bgs in the southern portion of the site and 8 to 10 ft bgs in the northern portion of the site. The overburden groundwater flows generally to the west-southwest.

The shallow bedrock water-bearing interval was identified as the uppermost bedrock down to depths of approximately 20 ft bgs. This interval is the uppermost water-bearing unit within the bedrock, and no low permeability horizon separates this zone from the overburden. Groundwater flow direction is generally to the west.

4.0 STANDARDS CRITERIA AND GUIDELINES

This section identifies the Standards, Criteria, and Guidance (SCGs) for the site. The SCGs identified are used in order to quantify the extent of contamination at the site that may require remedial work. The SCGs will be used to evaluate the effectiveness of any remedial measures and will be used to determine if remedial actions are warranted. The SCG's for soil vapor are provided below:

- Soil Gas SCGs: Currently there are no state regulatory (NYSDEC or NYSDOH) soil gas guidance values.
- Sub-Slab Soil Vapor and Indoor Air SCGs: The NYSDOH Final document "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2006 and updates for tetrachloroethene (September 2013), TCE (August 2015), and the soil vapor/indoor air decision matrices (May 2017). These updates are included on NYSDOH website: https://www.health.ny.gov/environmental/indoors/vapor_intrusion/update.htm.

5.0 SOIL VAPOR INTRUSION INVESTIGATION FIELD ACTIVITIES

This section provides a description of the methodologies used during the field investigations of the site. The SVI work was completed from March to April 2017 and was conducted in accordance with the NYSDEC approved work plans. Specific tasks performed during the SVI investigation included the following:

- Soil gas and sub-slab vapor point installation, sampling, and laboratory analysis
- Quality Assurance/Quality Control

5.1 Soil Gas Point Installation, Sampling, and Laboratory Analysis

The purpose of this activity was to determine if subsurface impacts from the 690 Saint Paul Street site have the potential to adversely affect indoor air quality via the vapor intrusion pathway at the site. The locations of the soil gas samples were located within the Saint Paul Street right-of-way and directly across from the chlorinated solvent plumes at the 690 Saint Paul Street site. Soil gas sample locations are shown on Figure 3, whereas soil gas sample locations SV-1 and SV-2 are located adjacent to the 705 Saint Paul Street site building and soil gas sample locations SV-3 and SV-4 are located adjacent to the southern end of the 691 Saint Paul Street site building. Sampling of soil gas was conducted on March 3, 2017.

Permanent soil gas sampling points were installed using direct push technology. A 1 foot screen section was installed to a depth of approximately 8 feet (ft) below the ground surface (bgs), which is approximately the top of bedrock and approximately just below the floor of the upper basement of the 691 Saint Paul Street site. A solid PVC riser was installed above the 1 ft screen to the ground surface. A porous inert backfill material (i.e. sand) was placed around the sampling screen to approximately 1 ft above the screened section to create a sampling zone of 2 ft in length. The soil gas sampling points were sealed above the sampling zone with approximately 7 ft of a bentonite slurry (to just below the ground surface) and finished with a protective casing that was grouted in place to minimize infiltration of water, and to prevent damage to the soil gas point. The soil gas installation log is included in Appendix 1.

Prior to sampling each soil gas point, a tracer gas (helium) was utilized at each sampling point to ensure that ambient air was not being pulled into the Summa® canister during sampling. This was accomplished by placing a clean, stainless steel enclosure over the soil vapor sampling points. Non emitting VOC modeling clay was placed on the ground surface around the edge of the enclosure where it contacted the ground to make an air-tight seal. Prior to purging and sampling activities, a helium tracer gas was released via a small diameter tube, placed through a port on the exterior side of the enclosure. The sub-slab vapor Teflon® tubing extended up through the air-tight seal to the exterior side of the enclosure and connected to a helium detector to determine the presence of helium gas and purge the sampling point. Helium was not detected on the helium detector at each sampling point indicating that each soil gas sampling point were sealed from ambient air. All sample points passed the trace gas test (i.e. less than 10% of helium was detected during each test).

Care was taken to avoid excessive purging of the samples points and the flow rate during purging did not exceed 0.2 liters per minute (L/min) to minimize outdoor air infiltration. Soil gas points were purged with a PID.

Four soil gas and one outdoor ambient air samples were collected utilizing individually certified-clean 1-liter Summa® canisters equipped with laboratory calibrated flow controllers. The samples were collected over an approximate eight (8) hour time period. The outdoor air sample was collected at a height of approximately 5 ft above the ground surface to simulate the breathing zone. Immediately after opening each Summa® canister, the initial vacuum (inches of mercury) and time was noted and recorded on the laboratory chain-of-custody. After approximately eight (8) hours, final vacuum readings (inches of mercury) were noted and the Summa® canisters were closed. A copy of the Air Sampling Field Report for each sample collected is included in Appendix 1.

The samples (including QA/QC samples) were submitted to Centek Laboratories, LLC in Syracuse, New York. Centek is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program certified laboratory for analysis of targeted volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15.

5.2 Sub-Slab Sample Point Installation, Soil Vapor Intrusion Sampling, and Laboratory Analysis

The purpose of this activity was to assess for potential SVI at the 691 Saint Paul Street building from subsurface impacts at the 690 Saint Paul Street site. LaBella conducted SVI sampling at the locations shown on Figure 4A (upper basement) and 4B (lower basement). SVI sampling was conducted on April 1, 2017. A copy of the Air Sampling Field Report for each sample collected and the NYSDOH Indoor Air Quality and Building Inventory Form are included in Appendix 1.

Sub slab vapor sample points were collected by coring a nominal 5/8 inch diameter hole through the slab to approximately 1 to 2 inches beneath the floor slab. A 5/8 inch diameter polyethylene tube and barbed fitting was inserted into the corehole. The tubing was connected to a Summa® canister with a pre-set regulator to the barbed fitting for sub-slab vapor collection.

Prior to sampling each sub-slab vapor point, a tracer gas (helium) was placed over each sampling point to ensure that ambient air was not being pulled into the Summa® canister (i.e. sampling vessel) during sampling. This was accomplished by placing a clean, stainless steel enclosure over each sub-slab sampling point. Non-emitting VOC modeling clay or equivalent was placed on the ground surface around the edge of the enclosure where it contacts the ground to make an air-tight seal. Prior to the purging and sampling activities, a helium tracer gas was released via a small diameter tube placed through a port on the exterior side of the enclosure. The sub-slab vapor Teflon tubing that extends up through the air tight seal to the exterior side of the enclosure was connected to a helium detector to determine the presence of helium gas and to purge the sampling point. All sampling points pass the trace gas test (i.e. less than 10% tracer gas in test).

Corresponding ambient air samples were collected within 5 ft and at a height of 3 to 5 ft above the ground surface at each sample locations

SVI samples were collected utilizing individually laboratory certified-clean 1-liter Summa® canisters equipped with laboratory calibrated flow controllers. The samples were collected over an approximate 8 hour time period. Immediately after opening each Summa® canister, the initial vacuum (inches of mercury) and time was noted and recorded on the laboratory chain-of-custody. After approximately 8 hours, final vacuum readings (inches of mercury) were noted and the Summa® canisters were closed.

Each sample (including QA/QC samples) was submitted to Centek Laboratories, LLC in Syracuse, New York for analysis of targeted VOCs by USEPA Method TO-15.

5.3 Quality Assurance/Quality Control (QA/QC)

QA/QC procedures were implemented during the investigation in order to ensure accuracy, precision, and completeness of the chemical data collected during the investigation. Samples for QA/QC were taken during the portions of the environmental work in order to evaluate the validity of sampling and analytical methods employed throughout the work.

There were two types of field duplicates taken during sampling activities: "blind" duplicates and matrix spike/matrix spike duplicate (MS/MSD) samples. Blind duplicates were labeled in such a manner that the laboratory would not know which samples they were duplicating, nor that they were actually duplicates in some cases. This process allowed LaBella to verify laboratory reproducibility of analytical data. MS/MSD samples were also submitted and were identified as such on the chain-of-custody so the laboratory could perform internal quality checks on instrument performance.

During sampling activities, QA/QC samples were submitted to Centek Laboratories, LLC in Syracuse, New York for analysis. The samples were analyzed for targeted VOCs using USEPA Method TO-15 per the NYSDEC approved work plan. Targeted VOCs and their associated laboratory detection limits included:

TABLE 5.3 – Targeted VOCs

Targeted VOCs	Laboratory Detection Limit ($\mu g/m^3$)
TCE	0.25
cis-1,2-dichloroethene (CIS-1,2-DCE)	1.0
trans-1,2-dichloroethene	1.0
vinyl chloride	0.25
1,1-Dichloroethene (1,1-DCE)	1.0
chloroethane	1.0

$\mu g/m^3$ denotes micrograms per cubic meter

The samples were collected prior to the NYSDOH update to the Soil Vapor/Indoor Air Decisions Matrices in May 2017.

Full data evaluation packages were submitted to LaBella for the sampling data in accordance with NYSDEC Electronic Data Deliverables (EDD) requirements. Data usability summary reports were conducted by Dataval, Inc. based on the following parameters:

- Sample Data Reporting Format
- Preservation and Holding Time Compliance
- GC/MS Instrument Performance Check
- Initial Calibration Verification (ICV)
- Continuing Calibration Verification (CCV)
- Blank Sample Analysis
- System Monitoring/Surrogate Compound Recoveries
- Laboratory Control Sample (LCS) Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
- Internal Standards
- Target Compound Identification
- Compound Quantitation

- Data Qualifiers
- Summary

Copies of the data usability summary reports (DUSRs) are included in Appendix 2 and the laboratory analytical reports that were provided by Centek are provided in Appendix 3 of this report. The laboratory reports are provided on a CD due to the size of the documents. Qualifiers are included in those reports as well as in the summary tables within this report.

The validation of the analytical results for samples collected from the project site indicate that the samples were processed in general compliance with applicable protocols, and the majority of results are usable as reported, or usable with minor edits or qualification as estimated or edits to non-detection. None of the results were rejected.

6.0 ANALYTICAL RESULTS

This section presents and describes the analytical results for the soil gas and SVI samples collected during the investigation. Analytical result tables for the samples collected are presented in the following subsections. The analytical results were compared to applicable NYSDOH guidance values and/or standards.

Samples submitted during the SVI investigation for laboratory analysis are summarized in the following tables:

- Soil Gas Samples - Table 6.1 (attached)
- Sub-Slab Vapor Samples – Table 6.2A (attached)

6.1 Soil Gas Results

VOCs were detected in two (2) of the four (4) soil gas samples above the laboratory method detection (MDL) limit as summarized in Table 6.1. Sample SV-1 and SV-2 were collected adjacent to the 705 Saint Paul Street building and in the downgradient location of the northern chlorinated VOC groundwater plume at the 690 Saint Paul Street site. Soil gas samples SV-1 and SV-2 did not detect any VOCs above the laboratory method detection limit, however, one VOC (chloroetheane) was identified as estimated below the detection limit. The samples with VOCs detected above the laboratory method detection limit were soil gas samples SV-3 and SV-4 that are located adjacent to the southern end of the 691 Saint Paul Street site building and are in the downgradient area of the southern chlorinated VOC plume from the 690 Saint Paul Street site. VOCs were not detected above the laboratory MDL in the outdoor ambient air/background air sample.

SCGs are not applicable to soil gas results, however, the results are used to assess the potential for a SVI concern in the buildings adjacent to these sample locations. Based on the soil gas samples results, the targeted VOCs present in soil gas samples SV-3 and SV-4 (adjacent to the 691 Saint Paul Street site building) warranted further evaluation (i.e. SVI testing of the 691 Saint Paul Street building).

6.2 Soil Vapor Intrusion Sample Results

The SVI (i.e. sub-slab and indoor air samples) sample results were compared to the guidance values listed in the NYSDOH SVI Guidance document. For compounds without specific indoor air guidance values, typical background levels are used for comparison purposes. The NYSDOH SVI Guidance Appendix C, includes a USEPA 2001 Building Assessment and Survey Evaluation (BASE) Database which provides background levels in indoor air of commercial and public buildings for comparison purposes. For the purposes of this evaluation, the 90th percentile values were utilized. It should be noted that this database is referenced to provide a relative benchmark for comparison to the indoor air sampling data, but does not represent regulatory standards or compliance values. The SVI sample results are summarized on Table 6.2A (attached).

Target VOCs were detected above the laboratory MDL in each of the sub-slab vapor samples and were also detected above the laboratory MDL in five (5) of the six (6) corresponding ambient air samples. The outdoor air/background ambient air sample did not detect targeted VOCs above the laboratory MDL.

A comparison of the SVI results to the NYSDOH Ambient Air Guidelines, NYSDOH Decision Matrices, and the USEPA BASE Database 90th Percentile values are summarized in Table 6.2B.

TABLE 6.2B - Summary of SVI Sample Results

Sample Location	Result above USEPA Database - 90th Percentile	Indoor Ambient Air Result above NYSDOH Ambient Air Guideline	NYSDOH Decision Matrix	
			Result Above Minimum NYSDOH Decision Matrix	NYSDOH Recommendation
Upper Basement				
691-NE	None	None	None	None
691-B15	TCE	TCE	TCE	Mitigate
691-B19	TCE	TCE	TCE	Mitigate
Lower Basement				
691-SB5B	TCE, CIS-1,2-DCE	TCE	TCE, CIS-1,2-DCE	Mitigate
691-SB5A	TCE, CIS-1,2-DCE	TCE	TCE, CIS-1,2-DCE	Mitigate
691-5A	TCE, CIS-1,2-DCE	None	CIS-1,2-DCE	Mitigate

Note: CIS-1,2-DCE denotes cis-1,2-Dichloroethene, TCE denotes Trichloroethene

As indicated in Table 6.2B, TCE was detected above the NYSDOH Ambient Air Guideline in samples 691-B15 and 691-B-19 from the upper basement and samples 691-SB5B and 691-SB5A in the lower basement. Comparison of the results to the NYSDOH Decision Matrices recommends mitigation at five (5) of the six (6) sample locations. The location that did not identify a recommended action (per NYSDOH Guidance) was location 691-NE which was in the upper basement and directly adjacent to the 705 Saint Paul Street building.

7.0 SUMMARY OF FINDINGS AND CONCLUSIONS

Based on the results of the SVI investigation, the following findings were made:

- The exterior soil gas sampling identified chlorinated VOCs above the laboratory detection limits in the southern two soil gas sample locations (i.e. SV-3 and SV-4). The northern soil gas locations (i.e. SV-1 and SV-2) did not identify VOCs above the laboratory detection limit.
- TCE was detected in four (4) of the six (6) ambient indoor air samples above the NYSDEC Ambient Air Guideline Value of 2.0 µg/m^3 at two (2) sample locations in the upper basement (i.e. 691-B15 and 691-B19) and two (2) sample locations in the lower basement (i.e. 691-SB5B and 691-SB5A). TCE was not detected in the indoor air in the sample from the northeast corner of the 691 Saint Paul Street building. (i.e. 691-NE) which is directly adjacent to the 705 Saint Paul Street building.
- Comparison of the SVI samples results to the NYSDOH Decision Matrices (updated May 2017), indicates NYSDOH recommends mitigation at five (5) of the six (6) sample locations based on the concentrations of TCE and/or CIS-1,2-DCE detected in the SVI samples. The sample location where mitigation is not recommended by the NYSDOH guidance is the location in the northeast corner adjacent to the 705 Saint Paul Street building.

Based on the above, the following conclusions are made:

- A completed SVI pathway appears present at the 691 Saint Paul Street building.
- A completed SVI pathway does not appear present for the 705 Saint Paul Street building.

8.0 RECOMMENDATIONS

Based on the above conclusions, it is recommended that a sub-slab depressurization system (SSDS) be assessed to mitigate SVI vapors from entering the 691 Saint Paul Street building for both the upper and lower basement areas.

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TABLES

REFERENCE PAGE FOR SAMPLE RESULTS FOR TABLES 6.1 AND 6.2A

Soil Gas and Vapor Intrusion Sampling Results
NYSDEC Site #C828159A
691 and 705 Saint Paul Street, Rochester, New York

Concentrations displayed in micrograms per cubic meter (ug/m^3)

Samples analyzed by USEPA Method TO-15

NL denotes Not Listed

(1) *New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York* , October 2006 and updates for tetrachloroethene (September 2013), TCE (August 2015), and the soil vapor/indoor air decision matrices (May 2017). These updates are included on NYSDOH website: https://www.health.ny.gov/environmental/indoors/vapor_intrusion/update.htm.. [Note: This Guidance uses a combination of indoor air and sub-slab soil vapor when comparing to the matrices. In addition, for compounds not listed in the matrices an overall site approach is employed which utilizes the USEPA BASE Database (see 2. below) as typical background for commercial buildings and also uses the outdoor air sample, refer to Guidance document for details.]

(2) USEPA 2001 Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (Refer to Footnote "1") this database is referenced for the indoor air sampling results. This database is also referenced to provide initial benchmarks for comparison to the air sampling data and does not represent regulatory standards or compliance values.

(3) No value was listed in NYSDOH Table C2 - USEPA Base Database. A value from Table C3 NYSDOH 1997: Control home database (90th Percentile) was used.

U indicates the value was detected below the reported laboratory method detection limit

UJ indicates the value was detected below the estimated reported laboratory method detection limit

J indicates an estimated value

BOLD type denotes that the compound was detected at a concentration that was found to exceed the NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level).

UNDERLINED type denotes that the compound was detected at a concentration that was found to exceed the NYSDOH Indoor Air Concentration (minimum action level).

RED values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of NY", October 2006 (and subsequent updates).

YELLOW HIGLIGHT indicates the compound was detected at a concentration that was found to exceed NYSDOH Guidance 90th Percentile Database Value

* NYSDOH Air Guideline Value included in Table 3.1 of NYSDOH Guidance Document

TABLE 6.1
SOIL GAS SAMPLE RESULTS
NYSDEC Site #C828159A
691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	SV-1		SV-2		SV-3		SV-4		DUPLICATE (SV-4)		AMBIENT AIR	
Sample Type		Soil Gas		Soil Gas		Soil Gas		Soil Gas		Soil Gas		Outdoor Air	
Sample Date		3/3/2017		3/3/2017		3/3/2017		3/3/2017		3/3/2017		3/3/2017	
1,1-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	0.59	U	0.59	U	0.59	U
Chloroethane	ug/m^3	0.34	J	0.40	U	0.29	J	0.40	U	0.40	U	0.40	U
cis-1,2-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.71		4.1		3.9		0.59	U
trans-1,2-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	0.59	U	0.59	U	0.59	U
Trichloroethene (TCE)	ug/m^3	0.81	U	0.81	U	40	J	48		47		0.21	U
Vinyl chloride	ug/m^3	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.10	U
Total Detected VOCs	ug/m^3	0		0		41.0		52.1		50.9		0	

TABLE 6.2A

SAMPLE LOCATION: 691-SB5B

Soil Vapor Intrusion Sampling Results

NYSDEC Site #C828159A

691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	691-SB5B-SVI		691-SB5B-IAQ		691-OUTDOOR-04012017		NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)[1]	NYSDOH Indoor Air Concentration (minimum action level)[1] / NYSDOH Air Guideline Value	NYSDOH Guidance Table C2 USEPA BASE Database - 90th Percentile[2]
Sample Type		Sub-Slab		Indoor Air		Outdoor Air				
Sample Date		4/1/2017		4/1/2017		4/1/2017				
1,1-Dichloroethene	ug/m^3	0.59	UJ	0.59	UJ	0.59	U	<6	<0.2	<1.4
Chloroethane	ug/m^3	0.40	UJ	0.40	UJ	0.40	U	NL	NL	<1.2
cis-1,2-Dichloroethene	ug/m^3	**23**	J	**12**	J	0.59	U	<6	<0.2	<1.8
trans-1,2-Dichloroethene	ug/m^3	0.71	J	0.59	UJ	0.59	U	NL	NL	<10[3]
Trichloroethene (TCE)	ug/m^3	**58**	J	**6.8**	J	0.21	U	<6	<0.2 / 2 *	1.3
Vinyl chloride	ug/m^3	0.28	J	0.15	J	0.10	U	<6	<0.2	<1.8

TABLE 6.2A

SAMPLE LOCATION: 691-SB5A

Soil Vapor Intrusion Sampling Results

NYSDEC Site #C828159A

691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	691-SB5A-SVI		691-SB5A-IAQ		691-OUTDOOR-04012017		NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)[1]	NYSDOH Indoor Air Concentration (minimum action level)[1] / NYSDOH Air Guideline Value	NYSDOH Guidance Table C2 USEPA BASE Database - 90th Percentile[2]
Sample Type		Sub-Slab		Indoor Air		Outdoor Air				
Sample Date		4/1/2017		4/1/2017		4/1/2017				
1,1-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	<6	<0.2	<1.4
Chloroethane	ug/m^3	0.40	U	0.40	U	0.40	U	NL	NL	<1.2
cis-1,2-Dichloroethene	ug/m^3	**170**		**13**		0.59	U	<6	<0.2	<1.8
trans-1,2-Dichloroethene	ug/m^3	1.6		0.59	U	0.59	U	NL	NL	<10[3]
Trichloroethene (TCE)	ug/m^3	**20**	J	6.5		0.21	U	<6	<0.2 / 2 *	1.3
Vinyl chloride	ug/m^3	0.49		0.10	U	0.10	U	<6	<0.2	<1.8

TABLE 6.2A

SAMPLE LOCATION: 691-SB1

Soil Vapor Intrusion Sampling Results

NYSDEC Site #C828159A

691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	691-SB1-SVI		691-SB1-IAQ		691-OUTDOOR-04012017		NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)[1]	NYSDOH Indoor Air Concentration (minimum action level)[1] / NYSDOH Air Guideline Value	NYSDOH Guidance Table C2 USEPA BASE Database - 90th Percentile[2]
Sample Type		Sub-Slab		Indoor Air		Outdoor Air				
Sample Date		4/1/2017		4/1/2017		4/1/2017				
1,1-Dichloroethene	ug/m^3	0.59	U	0.59	UJ	0.59	U	<6	<0.2	<1.4
Chloroethane	ug/m^3	0.40	U	0.40	UJ	0.40	U	NL	NL	<1.2
cis-1,2-Dichloroethene	ug/m^3	**52**		**2.6**	J	0.59	U	<6	<0.2	<1.8
trans-1,2-Dichloroethene	ug/m^3	0.59	U	0.59	UJ	0.59	U	NL	NL	<10[3]
Trichloroethene (TCE)	ug/m^3	4.0		**1.3**	J	0.21	U	<6	<0.2 / 2 *	1.3
Vinyl chloride	ug/m^3	0.38		0.10	UJ	0.10	U	<6	<0.2	<1.8

TABLE 6.2A

SAMPLE LOCATION: 691-NE

Soil Vapor Intrusion Sampling Results

NYSDEC Site #C828159A

691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	691-NE-SVI		691-NE-IAQ		691-OUTDOOR-04012017		NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)[1]	NYSDOH Indoor Air Concentration (minimum action level)[1] / NYSDOH Air Guideline Value	NYSDOH Guidance Table C2 USEPA BASE Database - 90th Percentile[2]
Sample Type		Sub-Slab		Indoor Air		Outdoor Air				
Sample Date		4/1/2017		4/1/2017		4/1/2017				
1,1-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	<6	<0.2	<1.4
Chloroethane	ug/m^3	0.40	U	0.40	U	0.40	U	NL	NL	<1.2
cis-1,2-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	<6	<0.2	<1.8
trans-1,2-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	NL	NL	<10[3]
Trichloroethene (TCE)	ug/m^3	3.9		0.21	U	0.21	U	<6	<0.2 / 2 *	1.3
Vinyl chloride	ug/m^3	0.10	U	0.10	U	0.10	U	<6	<0.2	<1.8

TABLE 6.2A

SAMPLE LOCATION: 691-B15

Soil Vapor Intrusion Sampling Results

NYSDEC Site #C828159A

691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	691-B15-SVI		691-B15-IAQ		691-OUTDOOR-04012017		NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)[1]	NYSDOH Indoor Air Concentration (minimum action level)[1] / NYSDOH Air Guideline Value	NYSDOH Guidance Table C2 USEPA BASE Database - 90th Percentile[2]
Sample Type		Sub-Slab		Indoor Air		Outdoor Air				
Sample Date		4/1/2017		4/1/2017		4/1/2017				
1,1-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	<6	<0.2	<1.4
Chloroethane	ug/m^3	0.37	J	0.40	U	0.40	U	NL	NL	<1.2
cis-1,2-Dichloroethene	ug/m^3	0.59	U	**1.6**		0.59	U	<6	<0.2	<1.8
trans-1,2-Dichloroethene	ug/m^3	0.59	U	0.59	U	0.59	U	NL	NL	<10[3]
Trichloroethene (TCE)	ug/m^3	**220**		**2.2**		0.21	U	<6	<0.2 / 2 *	1.3
Vinyl chloride	ug/m^3	0.28		0.10	U	0.10	U	<6	<0.2	<1.8

TABLE 6.2A

SAMPLE LOCATION: 691-B19

Soil Vapor Intrusion Sampling Results

NYSDEC Site #C828159A

691 and 705 Saint Paul Street, Rochester, New York

Sample ID	Units	691-B19-SVI		691-B19-IAQ-1		691-B19-IAQ-2		691-OUTDOOR-04012017		NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)[1]	NYSDOH Indoor Air Concentration (minimum action level)[1] / NYSDOH Air Guideline Value	NYSDOH Guidance Table C2 USEPA BASE Database - 90th Percentile[2]
Sample Type		**Sub-Slab**		**Indoor Air**		**Indoor Air**		**Outdoor Air**				
Sample Date		**4/1/2017**		**4/1/2017**		**4/1/2017**		**4/1/2017**				
1,1-Dichloroethene	ug/m^3	0.59	UJ	0.59	UJ	0.59	U	0.59	U	<6	<0.2	<1.4
Chloroethane	ug/m^3	0.40	UJ	0.40	UJ	0.40	U	0.40	U	NL	NL	<1.2
cis-1,2-Dichloroethene	ug/m^3	0.59	UJ	1.3	J	1.1		0.59	U	<6	<0.2	<1.8
trans-1,2-Dichloroethene	ug/m^3	0.59	UJ	0.59	UJ	0.59	U	0.59	U	NL	NL	<10[3]
Trichloroethene (TCE)	ug/m^3	**26**	J	2.1	J	2.1		0.21	U	<6	<0.2 / 2 *	1.3
Vinyl chloride	ug/m^3	0.20	J	0.10	UJ	0.10	U	0.10	U	<6	<0.2	<1.8

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FIGURES

I:\Barzotti Woodworking, Inc\213211 - 1445 Jefferson Rd, Phase II, ESA\Drawings\Figure2.mxd

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SITE LOCATION MAP

SOIL VAPOR INTRUSION INVESTIGATION REPORT

690 ST. PAUL ST OFF-SITE NYSDEC SITE #C828159A

691 AND 705 SAINT PAUL ST ROCHESTER, NEW YORK

CLIENT:
BAUSCH & LOMB

N
W E
S

250 0 1,000

1 inch = 1,000 feet

DATE: 8/17/2017

INTENDED TO PRINT 11"X17"

2170820

FIGURE 1

Path: I:\Bausch & Lomb\2170820 - 691 St Paul St SVIA BCP Site\Drawings\SVI Report\Figure 2 Site Layout Map.mxd

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TITLE
SITE LAYOUT MAP

PROJECT
SOIL VAPOR INTRUSION INVESTIGATION REPORT

690 ST. PAUL ST OFF-SITE NYSDEC SITE #C828159A

691 AND 705 SAINT PAUL ST ROCHESTER, NEW YORK

CLIENT:
BAUSCH AND LOMB

STATE OF NEW YORK
DANIEL P. NOLL
No. 091996
LICENSED PROFESSIONAL ENGINEER

N E W S

0 25 50 100 Feet

1 inch = 100 feet

DATE: 8/17/2017

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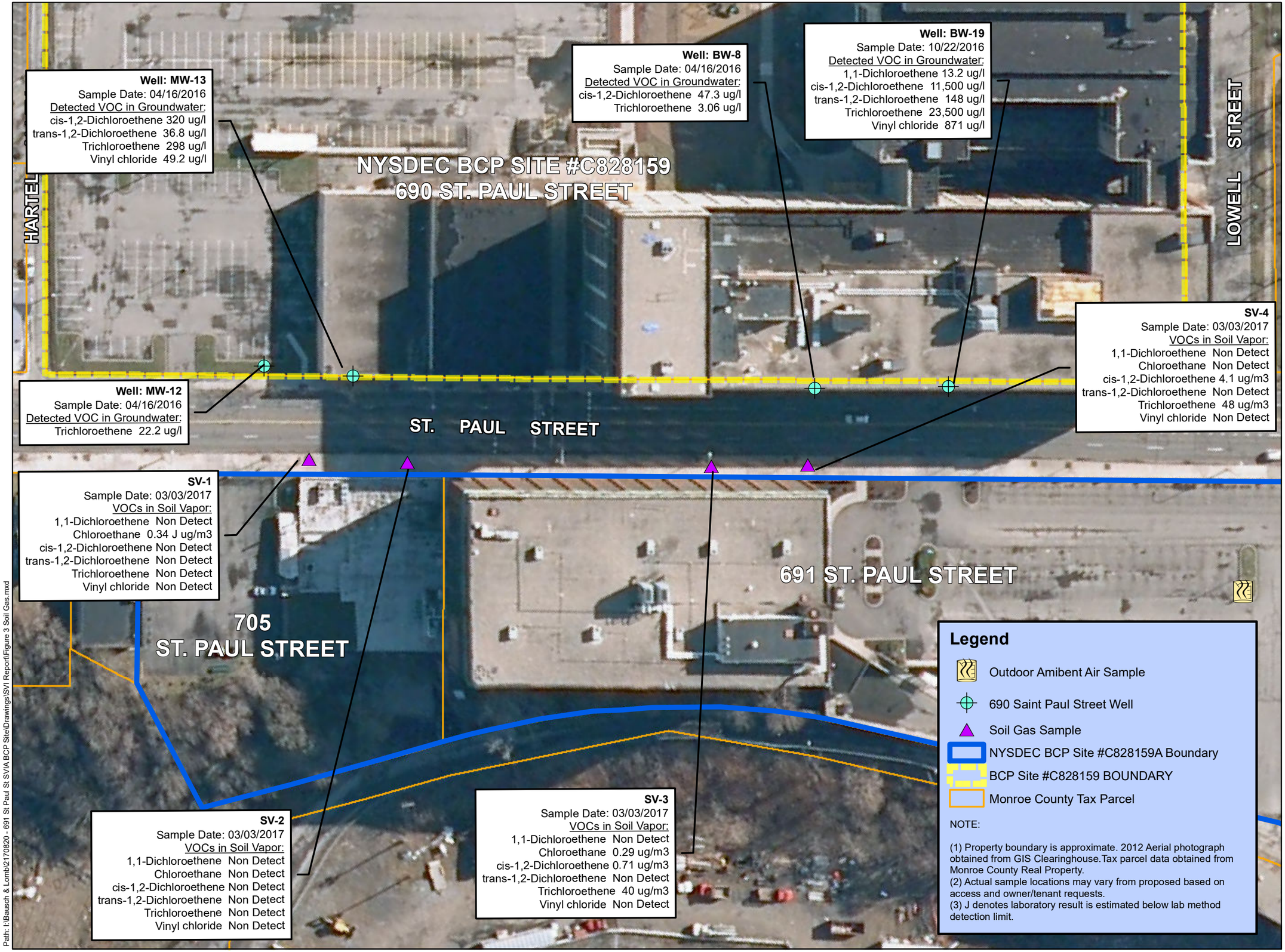
FIGURE 2



Path: I:\Bausch & Lomb\2170820 - 691 St Paul St SVIA BCP Site\Drawings\SVI Report\Figure 3 Soil Gas.mxd

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TITLE
SOIL GAS SAMPLE RESULTS AND SUMMARY OF 690 SAINT PAUL ST GROUNDWATER IMPACTS

PROJECT
SOIL VAPOR INTRUSION INVESTIGATION REPORT

690 ST. PAUL ST OFF-SITE
NYSDEC SITE #C828159A

691 AND 705 SAINT PAUL ST
ROCHESTER, NEW YORK

CLIENT:
BAUSCH AND LOMB

STATE OF NEW YORK
DANIEL P. NOLL
No. 081998
LICENSED PROFESSIONAL ENGINEER

N E W S

0 15 30 60 Feet
1 inch = 60 feet

DATE: 8/17/2017

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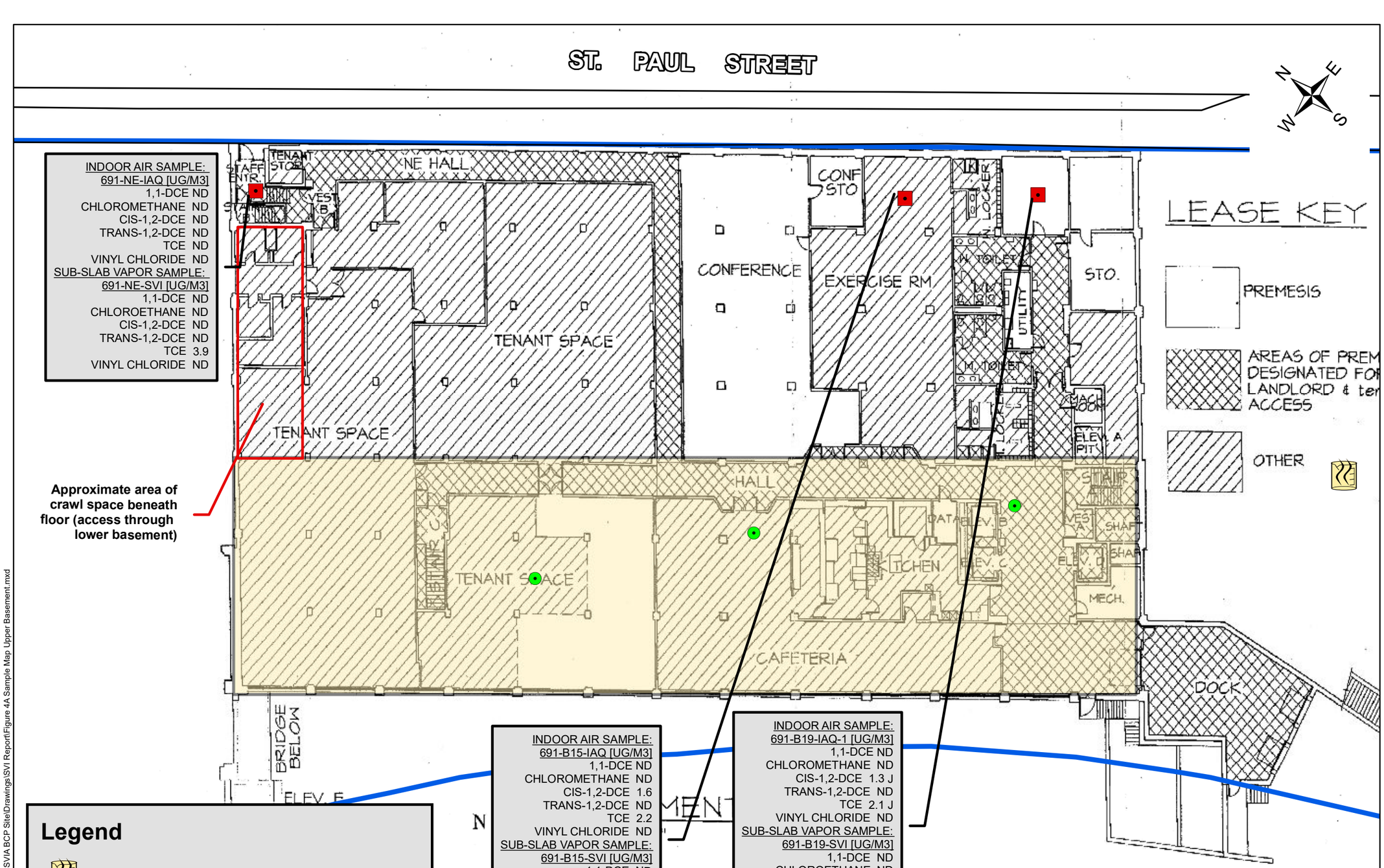
FIGURE 3

ST. PAUL STREET



INDOOR AIR SAMPLE:
691-NE-IAQ [UG/M3]
1,1-DCE ND
CHLOROMETHANE ND
CIS-1,2-DCE ND
TRANS-1,2-DCE ND
TCE ND
VINYL CHLORIDE ND
SUB-SLAB VAPOR SAMPLE:
691-NE-SVI [UG/M3]
1,1-DCE ND
CHLOROETHANE ND
CIS-1,2-DCE ND
TRANS-1,2-DCE ND
TCE 3.9
VINYL CHLORIDE ND

Approximate area of crawl space beneath floor (access through lower basement)

INDOOR AIR SAMPLE:
691-B15-IAQ [UG/M3]
1,1-DCE ND
CHLOROMETHANE ND
CIS-1,2-DCE 1.6
TRANS-1,2-DCE ND
TCE 2.2
VINYL CHLORIDE ND
SUB-SLAB VAPOR SAMPLE:
691-B15-SVI [UG/M3]
1,1-DCE ND
CHLOROETHANE 0.37 J
CIS-1,2-DCE ND
TRANS-1,2-DCE ND
TCE 220
VINYL CHLORIDE 0.28

INDOOR AIR SAMPLE:
691-B19-IAQ-1 [UG/M3]
1,1-DCE ND
CHLOROMETHANE ND
CIS-1,2-DCE 1.3 J
TRANS-1,2-DCE ND
TCE 2.1 J
VINYL CHLORIDE ND
SUB-SLAB VAPOR SAMPLE:
691-B19-SVI [UG/M3]
1,1-DCE ND
CHLOROETHANE ND
CIS-1,2-DCE ND
TRANS-1,2-DCE ND
TCE 26 J
VINYL CHLORIDE 0.20 J

LEASE KEY

PREMESIS

AREAS OF PREM
DESIGNATED FO
LANDLORD & ter
ACCESS

OTHER

Legend

- Outdoor Ambient Air Sample
- Sub Slab Vapor Sample - Lower Basement
- Sub Slab Vapor Sample - Upper Basement
- NYSDEC BCP Site #C828159A Boundary
- Approximate Area of Lower Basement

NOTE:
(1) Property boundary is approximate. Tax parcel data obtained from Monroe County Real Property.
(2) Building plan referenced from Bero Architecture dated 07/01/03.
(3) Actual basement plan may differ.
(4) ND denotes Non Detect
(5) UG/M3 denotes micrograms per cubic meter
(6) J denotes estimated result

Path: I:\Bausch & Lomb\2170820 - 691 St Paul St SVIA BCP Site\Drawings\SVI Report\Figure 4A Sample Map Upper Basement.mxd

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TITLE
SOIL VAPOR INTRUSION SAMPLING -UPPER BASEMENT

PROJECT
SOIL VAPOR INTRUSION INVESTIGATION REPORT

690 ST. PAUL ST OFF-SITE
NYSDEC SITE #C828159A

691 AND 705 SAINT PAUL ST
ROCHESTER, NEW YORK

CLIENT
BAUSCH AND LOMB

STATE OF NEW YORK
DANIEL P. NOLL
No. 081696
LICENSED PROFESSIONAL ENGINEER

0 12.5 25 Feet

1 inch = 25 feet

DATE: 10/05/2017

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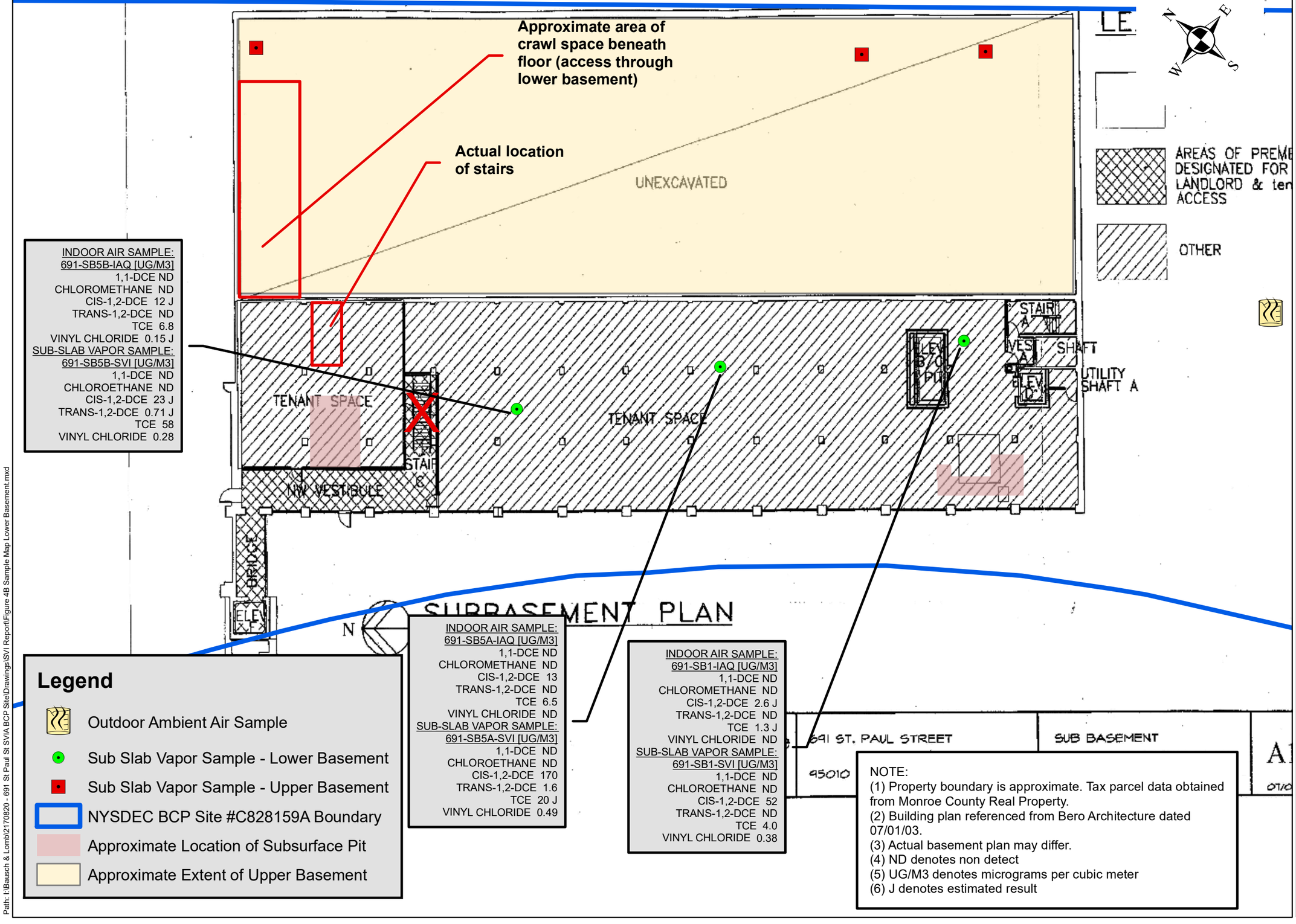
FIGURE 4A



INDOOR AIR SAMPLE:
691-SB5B-IAQ [UG/M3]
1,1-DCE ND
CHLOROMETHANE ND
CIS-1,2-DCE 12 J
TRANS-1,2-DCE ND
TCE 6.8
VINYL CHLORIDE 0.15 J
SUB-SLAB VAPOR SAMPLE:
691-SB5B-SVI [UG/M3]
1,1-DCE ND
CHLOROETHANE ND
CIS-1,2-DCE 23 J
TRANS-1,2-DCE 0.71 J
TCE 58
VINYL CHLORIDE 0.28

INDOOR AIR SAMPLE:
691-SB5A-IAQ [UG/M3]
1,1-DCE ND
CHLOROMETHANE ND
CIS-1,2-DCE 13
TRANS-1,2-DCE ND
TCE 6.5
VINYL CHLORIDE ND
SUB-SLAB VAPOR SAMPLE:
691-SB5A-SVI [UG/M3]
1,1-DCE ND
CHLOROETHANE ND
CIS-1,2-DCE 170
TRANS-1,2-DCE 1.6
TCE 20 J
VINYL CHLORIDE 0.49

INDOOR AIR SAMPLE:
691-SB1-IAQ [UG/M3]
1,1-DCE ND
CHLOROMETHANE ND
CIS-1,2-DCE 2.6 J
TRANS-1,2-DCE ND
TCE 1.3 J
VINYL CHLORIDE ND
SUB-SLAB VAPOR SAMPLE:
691-SB1-SVI [UG/M3]
1,1-DCE ND
CHLOROETHANE ND
CIS-1,2-DCE 52
TRANS-1,2-DCE ND
TCE 4.0
VINYL CHLORIDE 0.38

Legend

- Outdoor Ambient Air Sample
- Sub Slab Vapor Sample - Lower Basement
- Sub Slab Vapor Sample - Upper Basement
- NYSDEC BCP Site #C828159A Boundary
- Approximate Location of Subsurface Pit
- Approximate Extent of Upper Basement

NOTE:
(1) Property boundary is approximate. Tax parcel data obtained from Monroe County Real Property.
(2) Building plan referenced from Bero Architecture dated 07/01/03.
(3) Actual basement plan may differ.
(4) ND denotes non detect
(5) UG/M3 denotes micrograms per cubic meter
(6) J denotes estimated result

Path: I:\Bausch & Lomb\2170820 - 691 St Paul St SVIA BCP Site\Drawings\SVI Report\Figure 4B Sample Map Lower Basement.mxd

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TITLE
SOIL VAPOR INTRUSION SAMPLING AT UPPER BASEMENT

PROJECT
SOIL VAPOR INTRUSION INVESTIGATION REPORT

690 ST. PAUL ST OFF-SITE
NYSDEC SITE #C828159A

691 AND 705 SAINT PAUL ST
ROCHESTER, NEW YORK

CLIENT
BAUSCH AND LOMB

STATE OF NEW YORK
DANIEL P. NOLL
No. 091936
LICENSED PROFESSIONAL ENGINEER

0 12.5 25 Feet
1 inch = 25 feet

DATE: 10/05/2017

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FIGURE 4B

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APPENDIX 1

Field Logs and NYSDOH Building Inventory Form

SOIL GAS POINT INSTALLATION LOG

LABELLA Associates, P.C.
300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

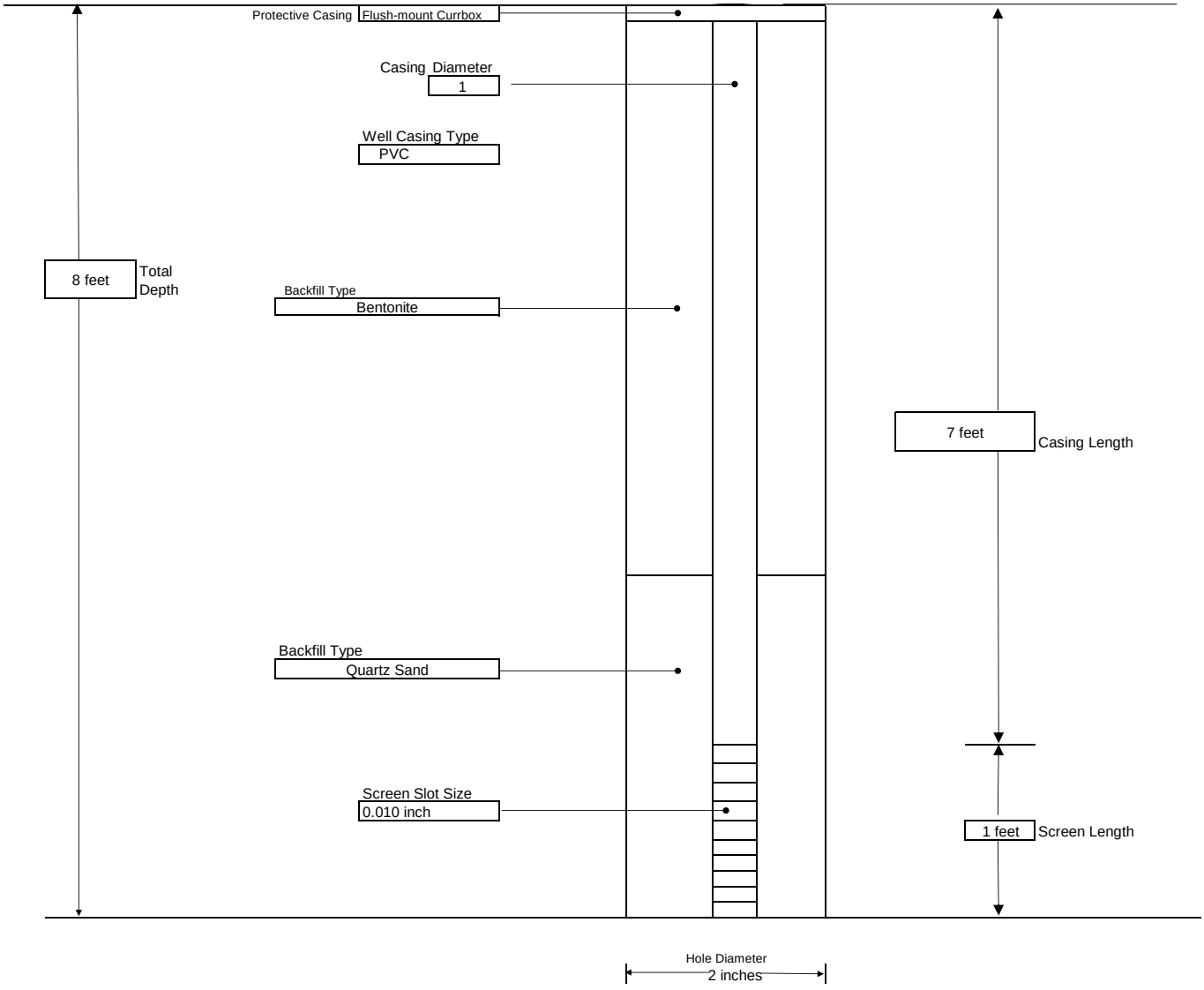
PROJECT
691 and 705 Saint Paul Street
Rochester, New York
Phase II Environmental Site Assessment

Soil Gas Sampling Point: SV-1
SHEET 1 OF 1
Project # 2170436
Client Bausch & Lomb

CONTRACTOR: LaBella Env. LLC
DRILLER: M Pepe and M. Winderl
LABELLA REPRESENTATIVE: Alex Brett

BORING LOCATION: SV-1
GROUND SURFACE ELEVATION: NA DATUM: NA
START DATE: 03/01/2017 END DATE: 03/01/2017

TYPE OF DRILL RIG: Geoprobe 6620 DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: NA
ROCK DRILLING METHOD: NA



NOTE: NOT TO SCALE

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300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

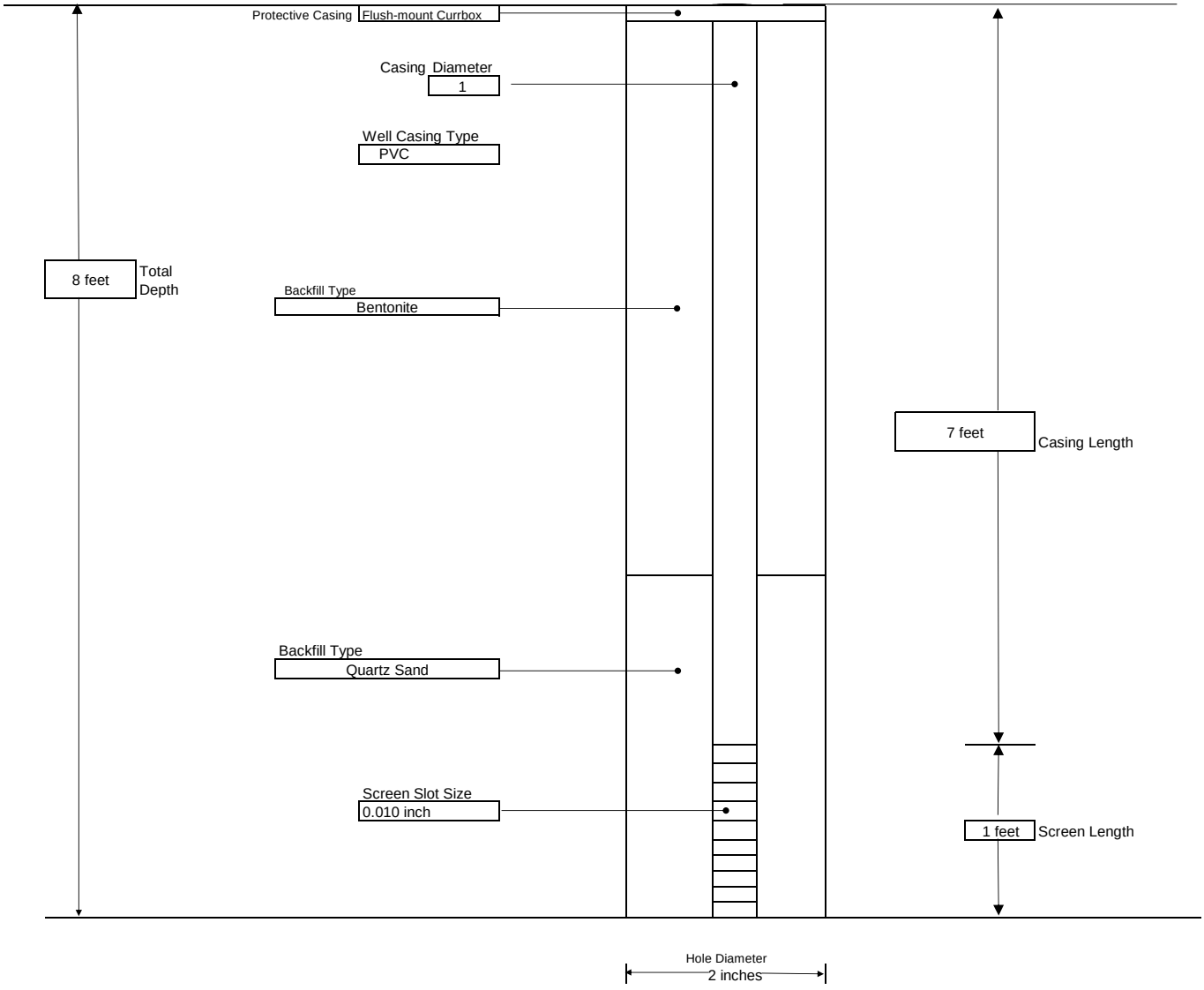
PROJECT
691 and 705 Saint Paul Street
Rochester, New York
Phase II Environmental Site Assessment

Soil Gas Sampling Point: SV-2
SHEET 1 OF 1
Project # 2170436
Client Bausch & Lomb

CONTRACTOR: LaBella Env. LLC
DRILLER: M Pepe and M. Winderl
LABELLA REPRESENTATIVE: Alex Brett

BORING LOCATION: SV-1
GROUND SURFACE ELEVATION: NA DATUM: NA
START DATE: 03/01/2017 END DATE: 03/01/2017

TYPE OF DRILL RIG: Geoprobe 6620 DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: NA
ROCK DRILLING METHOD: NA



NOTE: NOT TO SCALE

LABELLA Associates, P.C.
300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

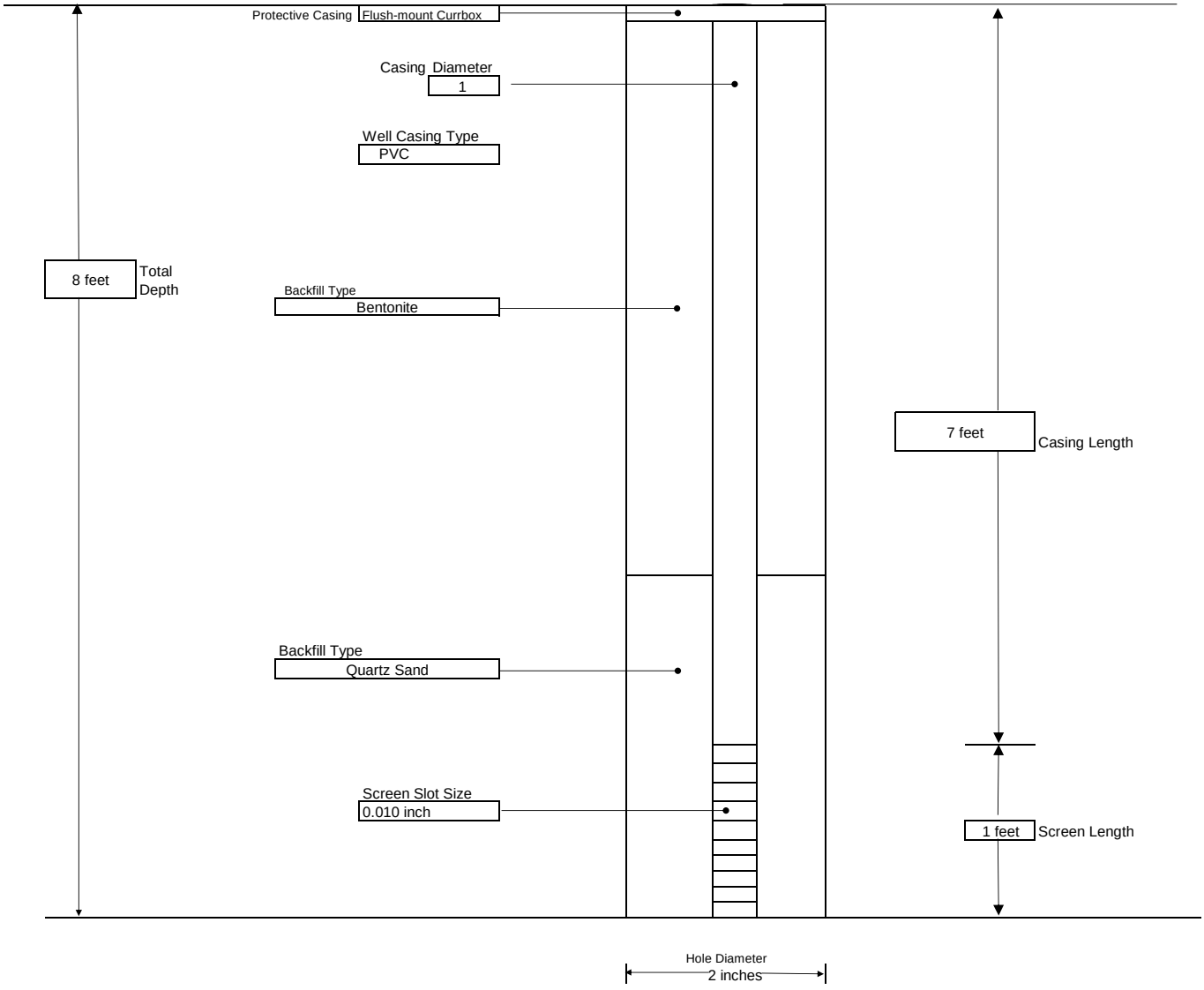
PROJECT
691 and 705 Saint Paul Street
Rochester, New York
Phase II Environmental Site Assessment

Soil Gas Sampling Point: SV-3
SHEET 1 OF 1
Project # 2170436
Client Bausch & Lomb

CONTRACTOR: LaBella Env. LLC
DRILLER: M Pepe and M. Winderl
LABELLA REPRESENTATIVE: Alex Brett

BORING LOCATION: SV-1
GROUND SURFACE ELEVATION: NA DATUM: NA
START DATE: 03/01/2017 END DATE: 03/01/2017

TYPE OF DRILL RIG: Geoprobe 6620 DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: NA
ROCK DRILLING METHOD: NA



NOTE: NOT TO SCALE

LABELLA Associates, P.C.
300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

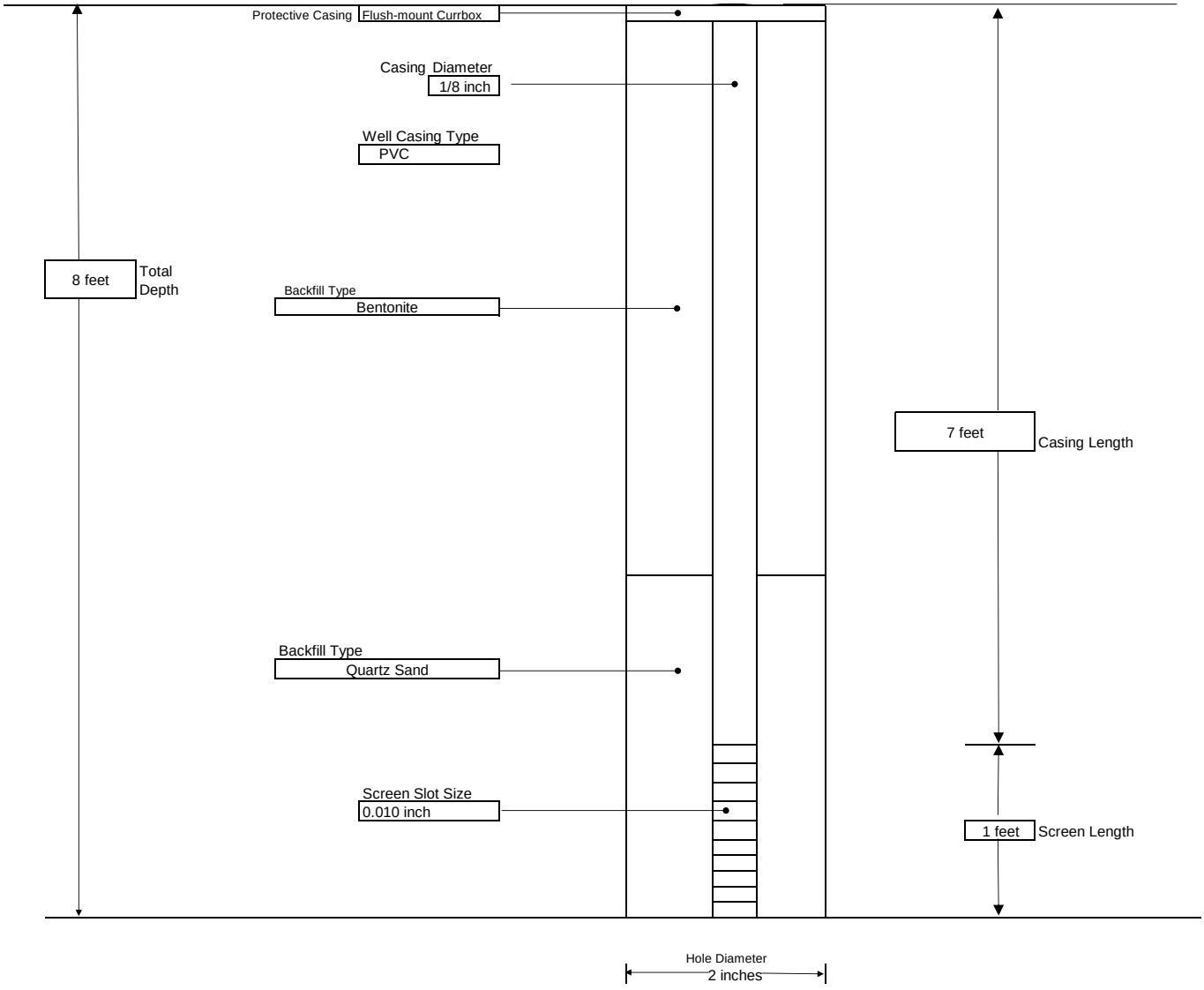
PROJECT
691 and 705 Saint Paul Street
Rochester, New York
Phase II Environmental Site Assessment

Soil Gas Sampling Point: SV-4
SHEET 1 OF 1
Project # 2170436
Client Bausch & Lomb

CONTRACTOR: LaBella Env. LLC
DRILLER: M Pepe and M. Winderl
LABELLA REPRESENTATIVE: Alex Brett

BORING LOCATION: SV-1
GROUND SURFACE ELEVATION: NA DATUM: NA
START DATE: 03/01/2017 END DATE: 03/01/2017

TYPE OF DRILL RIG: Geoprobe 6620 DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: NA
ROCK DRILLING METHOD: NA



NOTE: NOT TO SCALE

SOIL GAS SAMPLE LOG

LABELLA Associates, P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
SV-1

Project:	Soil Gas Samplilng	LaBella Project No.:	2170436
Site Location:	691 and 705 Saint Paul Street	LaBella Representative:	AGB
Client:	Bausch & Lomb	Weather:	Cloudy, moderate winds out of NW, temp in 20's

General Information

Sample Canister Location: Sidewalk near northeast corner of 705 St Paul Street building along St Paul Street

Sample Source: ___ Indoor Air ___ Sub-Slab ___ Interior Ambient Air ___ Exterior Ambient Air

X Exterior Soil Gas ___ Other

Shipping Date: ___ Laboratory: Centek

Canister Type: X 1.0 L Summa Canister ___ 6.0 L Summa Canister Other (specify): ___

Canister Serial No.: 542 Flow Controller Serial No.: 256

Purge Information

Leak Detection Test Date: 03/03/2017 Leak Detection: X Pass ___ Fail

Purging Method: Photoionization Detector

PID Reading Start: 0 ppm PID Reading End: 0.5 ppm

Volume of Gas Extracted: ~10 Liters

Sampling Information

Sample Date: 03/03/2017 Sampler: AGB

Sample Depth: 7-8 ft

	Start	Stop
Canister Pressure Gauge Reading:	-30	-5
Sample Time:	1145	1925

Comments:

Time and pressure Readings.	1145	- 30
	1310	- 25
Pressures shown are	1410	- 22
negative to show vacuum	1510	- 19
	1610	- 15
	1710	- 12
	1810	- 8.5
	1925	- 5

LABELLA Associates, P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT

SV-2

Project:	Soil Gas Samplilng	LaBella Project No.:	2170436
Site Location:	691 and 705 Saint Paul Street	LaBella Representative:	AGB
Client:	Bausch & Lomb	Weather:	Cloudy, moderate winds out of NW, temp in 20's

General Information

Sample Canister Location: Sidewalk near southeast corner of 705 St Paul Street building along St Paul Street

Sample Source: ____ Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

X Exterior Soil Gas ____ Other

Shipping Date: ____ Laboratory: Centek

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 237 Flow Controller Serial No.: 402

Purge Information

Leak Detection Test Date: 03/03/2017 Leak Detection: X Pass ____ Fail

Purging Method: Photoionization Detector

PID Reading Start: 0 ppm PID Reading End: 0.7 ppm

Volume of Gas Extracted: ~10 Liters

Sampling Information

Sample Date: 03/03/2017 Sampler: AGB

Sample Depth: 7-8 ft

	Start	Stop
Canister Pressure Gauge Reading:	-30	-5
Sample Time:	1155	1930

Comments:

Time and pressure Readings.	1155	- 30
	1310	- 24
Pressures shown are	1410	- 22
negative to show vacuum	1510	- 19
	1610	- 15
	1710	- 12
	1810	- 9
	1930	- 5

LABELLA Associates, P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
SV-3

Project:	Soil Gas Samplilng	LaBella Project No.:	2170436
Site Location:	691 and 705 Saint Paul Street	LaBella Representative:	AGB
Client:	Bausch & Lomb	Weather:	Cloudy, moderate winds out of NW, temp in 20's

General Information

Sample Canister Location: Sidewalk near southeast corner of 691 St Paul Street building along St Paul Street

Sample Source: ___ Indoor Air ___ Sub-Slab ___ Interior Ambient Air ___ Exterior Ambient Air

X Exterior Soil Gas ___ Other

Shipping Date: ___ Laboratory: Centek

Canister Type: X 1.0 L Summa Canister ___ 6.0 L Summa Canister Other (specify): ___

Canister Serial No.: 1206 Flow Controller Serial No.: 249

Purge Information

Leak Detection Test Date: 03/03/2017 Leak Detection: X Pass ___ Fail

Purging Method: Photoionization Detector

PID Reading Start: 0 ppm PID Reading End: 0.5 ppm

Volume of Gas Extracted: ~10 Liters

Sampling Information

Sample Date: 03/03/2017 Sampler: AGB

Sample Depth: 7-8 ft

	Start	Stop
Canister Pressure Gauge Reading:	-30+	-5
Sample Time:	1205	2000

Comments:

Time and pressure Readings.	1205	- 30+	"Plus" symbol after pressure to show vacuum is greater than -30 upon start
	1310	- 27	
Pressures shown are	1410	- 24	
negative to show vacuum	1510	- 21	
	1610	- 18	
MS/MSD Collected	1710	- 14	
with Sample	1810	- 11	
	2000	- 5	

LABELLA Associates, P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
SV-4

Project:	Soil Gas Samplilng	LaBella Project No.:	2170436
Site Location:	691 and 705 Saint Paul Street	LaBella Representative:	AGB
Client:	Bausch & Lomb	Weather:	Cloudy, moderate winds out of NW, temp in 20's

General Information

Sample Canister Location: Sidewalk near southeast corner of 691 St Paul Street building along St Paul Street

Sample Source: ___ Indoor Air ___ Sub-Slab ___ Interior Ambient Air ___ Exterior Ambient Air

X Exterior Soil Gas ___ Other

Shipping Date: ___ Laboratory: Centek

Canister Type: X 1.0 L Summa Canister ___ 6.0 L Summa Canister Other (specify): ___

Canister Serial No.: 290 Flow Controller Serial No.: 249

Duplicate Canister Serial No: 1184

Purge Information

Leak Detection Test Date: 03/03/2017 Leak Detection: X Pass ___ Fail

Purging Method: Photoionization Detector

PID Reading Start: 0 ppm PID Reading End: 0.6 ppm

Volume of Gas Extracted: ~10 Liters

Sampling Information

Sample Date: 03/03/2017 Sampler: AGB

Sample Depth: 6.8-7.8 ft

	Start	Stop
Canister Pressure Gauge Reading:	-27	-5
Sample Time:	1212	2040

Comments:

Time and pressure Readings.	1212	- 27	"Plus" symbol after pressure to show vacuum is greater than -30 upon start
	1310	- 25	
Pressures shown are	1410	- 22	
negative to show vacuum	1510	- 20	
	1610	- 17	
Duplicate collected	1710	- 15	
with sample.	1810	- 12	
	2040	- 5	

SOIL VAPOR INSTRUSION SAMPLE LOG

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT

691-OUTDOOR

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB5, WOODWORKING SHOP

Sample Source: ____ Indoor Air ____ Sub-Slab ____ Interior Ambient Air X Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 240 Flow Controller Serial No.: 340

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	28	8
Sample Time:	1030	1839

Comments:

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT: 691-SB5B-SVI

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB5, WOODWORKING SHOP

Sample Source: ____ Indoor Air X Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 467 Flow Controller Serial No.: 1167

Purge Information

Leak Detection Test Date: 4/1/2017 Leak Detection: X Pass ____ Fail

Purging Method: MGD 2002 HELIUM LEAK DETECTOR

Volume of Gas Extracted: 3 PROBE VOLUMES (~0.02 L)

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	29.5	0.5
Sample Time:	1129	1540

Comments:

CONCRETE FLOOR 5-6" THICK'

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT: 691-SB5B-IAQ

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB5, WOODWORKING SHOP

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 285 Flow Controller Serial No.: 344

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	3
Sample Time:	1121	1541

Comments:

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
691-SB5A-SVI

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB5, WOODWORKING SHOP

Sample Source: ____ Indoor Air X Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 475 Flow Controller Serial No.: 1170

Purge Information

Leak Detection Test Date: 4/1/2017 Leak Detection: X Pass ____ Fail

Purging Method: MGD 2002 HELIUM LEAK DETECTOR

Volume of Gas Extracted: 3 PROBE VOLUMES (~0.02 L)

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	28	2
Sample Time:	1115	NA

Comments:

CONCRETE FLOOR 5-6" THICK'

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
691-SB5A-IAQ

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB5, WOODWORKING SHOP

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 367 Flow Controller Serial No.: 251

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	2
Sample Time:	1112	1740

Comments:

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT

691-SB1-SVI

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB1

Sample Source: ____ Indoor Air X Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 203 Flow Controller Serial No.: 372

Purge Information

Leak Detection Test Date: 4/1/2017 Leak Detection: X Pass ____ Fail

Purging Method: MGD 2002 HELIUM LEAK DETECTOR

Volume of Gas Extracted: 3 PROBE VOLUMES (~0.02 L)

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	6
Sample Time:	1059	1911

Comments:

CONCRETE FLOOR 4-5" THICK'

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
691-SB1-IAQ

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: LOWER BASEMENT, ROOM SB1

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 170 Flow Controller Serial No.: 387

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	NA	5
Sample Time:	1101	1911

Comments:

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
691-NE-SVI

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: STAIRWELL, NORTHEAST CORNER OF BLDG [ROOM B12]

Sample Source: ____ Indoor Air X Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air ____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 1186 Flow Controller Serial No.: 145

Purge Information

Leak Detection Test Date: 4/1/2017 Leak Detection: X Pass ____ Fail

Purging Method: MGD 2002 HELIUM LEAK DETECTOR

Volume of Gas Extracted: 3 PROBE VOLUMES (~0.02 L)

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	3
Sample Time:	1045	1855

Comments:

CONCRETE FLOOR 4-5" THICK'

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
691-NE-IAQ

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: STAIRWELL, NORTHEAST CORNER OF BLDG [ROOM B12]

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 94 Flow Controller Serial No.: 379

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	28	1
Sample Time:	1042	1705

Comments:

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT

691-B15-SVI

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: UPPER BASEMENT UTILITY ROOM B19

Sample Source: ____ Indoor Air X Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 550 Flow Controller Serial No.: 266

Purge Information

Leak Detection Test Date: 4/1/2017 Leak Detection: X Pass ____ Fail

Purging Method: MGD 2002 HELIUM LEAK DETECTOR

Volume of Gas Extracted: 3 PROBE VOLUMES (~0.02 L)

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	2
Sample Time:	1034	1900

Comments:

CONCRETE FLOOR 4-5" THICK'

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT

691-B15-IAQ

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: ROOM B15 CUSTODIAN STORAGE OFFICE

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 101 Flow Controller Serial No.: 299

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	27.5	3
Sample Time:	1024	1825

Comments:

DUPLICATE SAMPLE ALSO COLLECTED (CAN #87) USING T CONNECTION

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT

691-B19-SVI

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: UPPER BASEMENT UTILITY ROOM B19

Sample Source: ____ Indoor Air X Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 362 Flow Controller Serial No.: 446

Purge Information

Leak Detection Test Date: 4/1/2017 Leak Detection: X Pass ____ Fail

Purging Method: MGD 2002 HELIUM LEAK DETECTOR

Volume of Gas Extracted: 3 PROBE VOLUMES (~0.02 L)

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	9
Sample Time:	1010	1935

Comments:

CONCRETE FLOOR 4-5" THICK'

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT
691-B19-IAQ-2

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: UPPER BASEMENT UTILITY ROOM B19

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: X 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): ____

Canister Serial No.: 1188 Flow Controller Serial No.: 306

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	9
Sample Time:	1135	1940

Comments:

LABELLA Associates, D.P.C.

AIR SAMPLING FIELD REPORT

AIR SAMPLING POINT: 691-B19-IAQ-1

Project:	NYSDEC BCP SITE #C828159A	LaBella Project No.:	2170820
Site Location:	691 SAINT PAUL ST, ROCHESTER, NY	LaBella Representative:	K. MILLER
Client:	BAUSCH & LOMB	Weather:	OVERCAST, RAIN, 40s F

General Information

Sample Canister Location: UPPER BASEMENT UTILITY ROOM B19

Sample Source: X Indoor Air ____ Sub-Slab ____ Interior Ambient Air ____ Exterior Ambient Air

____ Exterior Soil Gas ____ Other

Shipping Date: 4/1/2017 Laboratory: CENTEK LABORATORIES

Canister Type: ____ 1.0 L Summa Canister ____ 6.0 L Summa Canister Other (specify): X 1.6 LITER MS/MSD

Canister Serial No.: 1321 Flow Controller Serial No.: 1163

NOT APPLICABLE AMBIENT AIR SAMPLE

Purge Information

Leak Detection Test Date: ____ Leak Detection: ____ Pass ____ Fail

Purging Method: ____

PID Reading Start: ____ ppm PID Reading End: ____ ppm

Volume of Gas Extracted: ____

Sampling Information

Sample Date: 4/1/2017 Sampler: K. MILLER

Sample Depth: NOT APPLICABLE

	Start	Stop
Canister Pressure Gauge Reading [IN. HG]:	30	4
Sample Time:	1008	1834

Comments:

FLOW REGULATOR APPEARS TO HAVE MALFUNCTIONED AFTER CONNECTION TO CANISETER, PRESSURE DROP FROM 30" TO 7" AT 1130. THEN HOLDS STEADY AT 4" FROM 1140. DEPLOYED 1 L REPLACEMENT SAMPLE 691-B19-IAQ-2

NYSDOH BUILDING INVENTORY FORM

OSR – 3

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Kyle R. Miller Date/Time Prepared 4/1/17 p.m.

Preparer's Affiliation LaBella Assoc. Phone No. _____

Purpose of Investigation DPC SVI Assessment #828159A

1. OCCUPANT:

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial/Multi-use)
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response) N/A

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Office Space, Woodworking Shop

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors Multiple Building age ?

Is the building insulated? Y / N unknown How air tight? Tight / Average / Not Tight unknown

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N unknown			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene	
Electric	Propane	Solar	
Wood	Coal		

Domestic hot water tank fueled by: _____ (Nat. gas? and) electric?

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? (Y / N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

_____

7. OCCUPANCY

Is basement/lowest level occupied? Full-time (Occasionally) Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	_____
1st Floor	_____
2nd Floor	_____
3rd Floor	_____
4th Floor	_____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage havc a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? (Y) N woodworking shop
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service
No
Unknown

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: See Work Plan

First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See work plan

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
(1) Sub-basement woodworking shop (SB5)		various sizes	good	latex and oil based paints and stains; mineral spirits; paint thinners; spray paints; various wood working putties and supplies and sealants		Y
(2) custodians storage area and office area (B15)			good	several spray bottles and 1-gal. containers of ~~cleaners~~ cleaning solutions stored on janitors carts		Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

(3) Loading dock on SW corner of bldg. connected to upper basement area by man door and O/H door has yellow fireproof cabinet containing gasoline, oil/gas mix and spray lube. Y

Chemical storage in wood shop

Chemical storage in wood shop

Chemical storage in wood shop

Chemical storage in wood shop

Typical chemicals in upper basement space

Typical chemicals in upper basement space

LABELLA Associates, D.P.C. | Engineering Architecture Environmental Planning

APPENDIX 2

Data Usability Summary Reports

DATA USABILITY SUMMARY REPORT

for

LaBella Associates, P.C.

300 State Street

Rochester, NY 14614

691 ST PAUL SITE
Project 2170820
SDG: C1704014
Sampled 4/4/2017

TO-15 AIR SAMPLES

691-B19-IAQ-01	(C1704014-01)	691-B19-IAQ-02	(C1704014-02)
691-B19-SVI	(C1704014-03)	691-B15-IAQ	(C1704014-04)
691-B15-SVI	(C1704014-05)	691-OUTDOOR-0401217	(C1704014-06)
691-DUPLICATE	(C1704014-07)	691-NE-IAQ	(C1704014-08)
691-NE-SVI	(C1704014-09)	691-SBI-IAQ	(C1704014-10)
691-SBI-SVI	(C1704014-11)	691-SB5A-IAQ	(C1704014-12)
691-SB5B-IAQ	(C1704014-13)	691-SB5A-SVI	(C1704014-14)
691-SB5B-SVI	(C1704014-15)		

DATA ASSESSMENT

A TO-15 data package containing analytical results for fifteen air samples was received from LaBella Associates, P.C. on 08May17. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the 691 St. Paul Site, were identified by Chain of Custody documents and traceable through the work of Centek Laboratories, LLC, the laboratory contracted for analysis. The analyses were performed using US EPA Method TO-15 and addressed measurements of sixty-three volatile organic compounds. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-31, Rev. #4, October 2006, Volatile Organic Analysis of Ambient Air in Canisters by Method TO-15) was used as a technical reference.

The results from 691-B19-IAQ-01, 691-B19SVI, 691-SB5B-IAQ and 691-SB5B-SVI have been qualified as estimations because the samples were not collected properly.

The results reported from 691-SBI-IAQ have been qualified as estimations because the sample collection was not properly documented.

The trichloroethene results from 691-SB5A-SVI, 691-SB5B-SVI and 691-B19-SVI have been qualified as estimations due to poor internal standard performance.

CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results presenting a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B Baldwin Date: 19 MAY 17

James B. Baldwin
DATAVAL, Inc.

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the date of sampling. TO-15 samples must be analyzed within 14 days of collection.

This sample delivery group contained fifteen air samples that were collected in 1-liter SUMMA canisters. Sampling was completed on 01Apr17. The canisters were shipped back to the laboratory, via FedEx, on 04Apr17 and were received the following morning. Although the sample canisters were received intact, custody seals were not present on the packaging. It is noted that 691-B19-IAQ-1 was collected in a 1.4-liter canister to facilitate the preparation of MS/MSD samples.

Although the SUMMA canisters were set in the laboratory to collect 8-hour samples, most of the samples were terminated after 6.5-9.5 hours, based on the canister vacuum readings. The collection of 691-SB5B-IAQ and 691-SB5B-SVI, however, was terminated after just four hours. The results from this pair of samples have been qualified as estimations because the samples were not collected properly.

Numerous samples failed to satisfy the ASP gauge reading requirement of 5±1"Hg at the completion of sampling. Due to the accuracy of the canister gauges, only results falling outside of the limits of -2"Hg to -8"Hg have been qualified as estimations. 691-B19-IAQ-1, 691-B19-SVI and 691-SB5B-SVI were affected.

SAMPLE	PRIOR TO SHIPMENT ("Hg)	PRIOR TO SAMPLING ("Hg)	POST SAMPLING ("Hg)	LAB ANALYSIS ("Hg)
691-B19-IAQ-1	-30	-30	-4	-4
691-B19-IAQ-2	-30	-30	-9	-9
691-B19-SVI	-30	-30	-9	-9
691-B15-IAQ	-30	-27.5	-3	-3
691-B15-SVI	-30	-30	-2	-3
691-OUTDOOR	-30	-28	-8	-8
691-DUPLICATE	-30	-27.5	-3	-3
691-NE-IAQ	-30	-28	-1	-2
691-NE-SVI	-30	-30	-3	-3
691-SB1-IAQ	-30		-5	-5
691-SB1-SVI	-30	-30	-6	-6
691-SB5A-IAQ	-30	-30	-2	-2
691-SB5B-IAQ	-30	-30	-3	-3
691-SB5A-SVI	-30	-28	-2	-2
691-SB5B-SVI	-30	-29.5	-0.5	-1

An examination of the vacuum readings following sampling and at the time of analysis indicates that the integrity of each sample was maintained during this period.

It is noted that a vacuum reading was not recorded prior to the sampling of 691-SB1-IAQ. The results reported from this sample have been qualified as estimations due to this omission. Although these results are assumed to be usable, based on the laboratory's measurement, they would not withstand a legal challenge.

The analysis of this group of samples was completed between 06Apr17 and 08Apr17, satisfying the ASP holding time limitation.

CANISTER CERTIFICATION

The canisters used for this project were pressure tested at 30 psig for 24 hours. Each canister demonstrated a change ≤0.5 psig over this period.

The canisters for this project were cleaned in four batches. A blank analysis of a clean canister from each of these batches was free of targeted analyte contamination.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Trip Blanks monitor sampling activities, sample transport, and storage. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Two method blanks were analyzed with this group of samples. Both of these blanks demonstrated acceptable chromatography and were free of targeted analyte contamination.

MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

BFB ion abundance criteria was reported from standards run before the initial instrument calibration and prior to the analysis of program samples on 06Apr17 and 07Apr17. Each of these checks satisfied the ASP acceptance criteria.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration check standards verify instrument stability.

The initial instrument calibration was performed on 31Mar17. Standards of 0.04, 0.10, 0.15, 0.30, 0.50, 0.75, 1.0, 1.25, 1.50 and 2.0 ppbV were included. Each targeted analyte produced the required levels of instrument response and demonstrated an acceptable degree of linearity during this calibration.

Continuing calibration check standards were analyzed on 06Apr17 and 07Apr17, prior to the 24-hour periods of instrument operation that included samples from this program. When compared to the initial calibration, each targeted analyte produced the required levels of instrument response and demonstrated an acceptable degree of linearity during these checks.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Although surrogate summary sheets were properly prepared, an incorrect acceptance criteria was applied. However, when compared to the ASP requirements, acceptable surrogate recoveries were reported for each addition to this group of samples.

INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than 40%. When compared to the preceding calibration check, retention times may not vary by more than 10 seconds.

The laboratory recorded the response of each internal standard addition to this group of samples and the response obtained from the preceding CCV standard. Although the control limits based on the response of the CCV were not reported, they were calculated by this reviewer. When compared to these limits, unacceptable performance was reported for the 1,4-difluorobenzene and chlorobenzene-d5 additions to 691-SB5A-SVI, 691-SB5B-SVI and the 1:10 dilution of 691-B19-SVI. The trichloroethene (TCE) results from 691-SB5A-SVI, 691-SB5B-SVI and the 1:10 dilution of 691-B19-SVI have been qualified as estimations based on this performance. The remaining analytes reported from these samples were associated with the response of bromochloromethane and remain unqualified.

Internal standard retention times were not addressed. The ASP retention time acceptance criteria was calculated by this reviewer. The retention times produced by each program sample satisfied these requirements.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS

Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

691-B19-IAQ-1 was selected for matrix spiking. The six targeted analytes were added to two volumes of this sample. The recoveries reported for these additions demonstrated acceptable levels of measurement precision and accuracy.

Two pairs of spiked blanks (LCS/LCSD) were also analyzed with this delivery group. Each of these spiked blanks produced acceptable recoveries of the six targeted analytes.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

The blind duplicate sample that was included in this delivery group was not identified.

REPORTED ANALYTES

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Reference mass spectra were provided to confirm the identification of each analyte that was detected in this group of samples.

SUMMARY OF QUALIFIED DATA

691 ST PAUL SITE

SAMPLED APRIL 2017

		SAMPLING	VACUUM	SAMPLING RECORD	INT STD TCE
691-B19-IAQ-01	(C1704014-01)		ALL J/UJ		
691-B19-IAQ-02	(C1704014-02)				
691-B19-SVI	(C1704014-03)		ALL J/UJ		26J
691-B15-IAQ	(C1704014-04)				
691-B15-SVI	(C1704014-05)				
691-OUTDOOR-0401217	(C1704014-06)				
691-DUPLICATE	(C1704014-07)				
691-NE-IAQ	(C1704014-08)				
691-NE-SVI	(C1704014-09)				
691-SBI-IAQ	(C1704014-10)			ALL J/UJ	
691-SBI-SVI	(C1704014-11)				
691-SB5A-IAQ	(C1704014-12)				
691-SB5B-IAQ	(C1704014-13)	ALL J/UJ			
691-SB5A-SVI	(C1704014-14)				20J
691-SB5B-SVI	(C1704014-15)	ALL J/UJ	ALL J/UJ		57J

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-1
Lab Order:	C1704014	**Tag Number:**	1321.1163
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59 UJ	0.59		ug/m3	1	4/6/2017 9:55:00 PM
Chloroethane	< 0.40 UJ	0.40		ug/m3	1	4/6/2017 9:55:00 PM
cis-1,2-Dichloroethene –	1.3 J	0.59		ug/m3	1	4/6/2017 9:55:00 PM
trans-1,2-Dichloroethene	< 0.59 UJ	0.59		ug/m3	1	4/6/2017 9:55:00 PM
Trichloroethene –	2.1 J	0.21		ug/m3	1	4/6/2017 9:55:00 PM
Vinyl chloride	< 0.10 UJ	0.10		ug/m3	1	4/6/2017 9:55:00 PM

JHS

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-2
Lab Order:	C1704014	**Tag Number:**	1188.306
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:09:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 12:09:00 AM
cis-1,2-Dichloroethene	1.1	0.59		ug/m3	1	4/7/2017 12:09:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:09:00 AM
Trichloroethene	2.1	0.21		ug/m3	1	4/7/2017 12:09:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 12:09:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-SV1
Lab Order:	C1704014	**Tag Number:**	362446
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 3:23:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
Trichloroethene	26	2.1	J	ug/m3	10	4/7/2017 8:07:00 PM
Vinyl chloride	0.20	0.10	J	ug/m3	1	4/7/2017 3:23:00 PM

ND

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-IAQ
Lab Order:	C1704014	**Tag Number:**	87.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:50:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 12:50:00 AM
cis-1,2-Dichloroethene	1.6	0.59		ug/m3	1	4/7/2017 12:50:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:50:00 AM
Trichloroethene	2.2	0.21		ug/m3	1	4/7/2017 12:50:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 12:50:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	Client Sample ID:	691-B15-SVI
Lab Order:	C1704014	Tag Number:	550.266
Project:	691 St Paul Street	Collection Date:	4/1/2017
Lab ID:	C1704014-005A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
Chloroethane	0.37	0.40	J	ug/m3	1	4/7/2017 4:03:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
Trichloroethene	220	19		ug/m3	90	4/7/2017 9:20:00 PM
Vinyl chloride	0.28	0.10		ug/m3	1	4/7/2017 4:03:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: 04-May-17

CLIENT:	LaBella Associates, P.C.	Client Sample ID:	691-Outdoor-04012017
Lab Order:	C1704014	Tag Number:	240.340
Project:	691 St Paul Street	Collection Date:	4/1/2017
Lab ID:	C1704014-006A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 1:31:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
Trichloroethene	< 0.21	0.21		ug/m3	1	4/7/2017 1:31:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 1:31:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Duplicate
Lab Order:	C1704014	**Tag Number:**	101.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:12:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 2:12:00 AM
cis-1,2-Dichloroethene	1.7	0.59		ug/m3	1	4/7/2017 2:12:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:12:00 AM
Trichloroethene	2.2	0.21		ug/m3	1	4/7/2017 2:12:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 2:12:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-IAQ
Lab Order:	C1704014	**Tag Number:**	94.379
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 2:52:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
Trichloroethene	< 0.21	0.21		ug/m3	1	4/7/2017 2:52:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 2:52:00 AM

RJP

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	Client Sample ID:	691-NE-SVI
Lab Order:	C1704014	Tag Number:	1186.145
Project:	691 St Paul Street	Collection Date:	4/1/2017
Lab ID:	C1704014-009A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 5:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
Trichloroethene	3.9	0.21		ug/m3	1	4/7/2017 5:28:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 5:28:00 PM

JRS

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	Client Sample ID:	691-SB1-IAQ
Lab Order:	C1704014	Tag Number:	170.387
Project:	691 St Paul Street	Collection Date:	4/1/2017
Lab ID:	C1704014-010A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59 UJ	0.59		ug/m3	1	4/7/2017 3:33:00 AM
Chloroethane	< 0.40 UJ	0.40		ug/m3	1	4/7/2017 3:33:00 AM
cis-1,2-Dichloroethene	2.6 J	0.59		ug/m3	1	4/7/2017 3:33:00 AM
trans-1,2-Dichloroethene	< 0.59 UJ	0.59		ug/m3	1	4/7/2017 3:33:00 AM
Trichloroethene	1.3 J	0.21		ug/m3	1	4/7/2017 3:33:00 AM
Vinyl chloride	< 0.10 UJ	0.10		ug/m3	1	4/7/2017 3:33:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-SVI
Lab Order:	C1704014	**Tag Number:**	203.372
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 6:09:00 PM
cis-1,2-Dichloroethene —	52	5.9		ug/m3	10	4/7/2017 11:10:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:09:00 PM
Trichloroethene —	4.0	0.21		ug/m3	1	4/7/2017 6:09:00 PM
Vinyl chloride —	0.38	0.10		ug/m3	1	4/7/2017 6:09:00 PM

TCE

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-IAQ
Lab Order:	C1704014	**Tag Number:**	367.251
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:13:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 4:13:00 AM
cis-1,2-Dichloroethene	13	5.9		ug/m3	10	4/7/2017 1:50:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:13:00 AM
Trichloroethene	6.5	0.21		ug/m3	1	4/7/2017 4:13:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 4:13:00 AM

147

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-IAQ
Lab Order:	C1704014	**Tag Number:**	285.344
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59 UJ	0.59		ug/m3	1	4/7/2017 4:53:00 AM
Chloroethane	< 0.40 UJ	0.40		ug/m3	1	4/7/2017 4:53:00 AM
cis-1,2-Dichloroethene	12 J	5.9		ug/m3	10	4/7/2017 2:27:00 PM
trans-1,2-Dichloroethene	< 0.59 UJ	0.59		ug/m3	1	4/7/2017 4:53:00 AM
Trichloroethene	6.8 J	0.21		ug/m3	1	4/7/2017 4:53:00 AM
Vinyl chloride	0.15 J	0.10		ug/m3	1	4/7/2017 4:53:00 AM

JHS

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-SVI
Lab Order:	C1704014	**Tag Number:**	475.1170
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:50:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 6:50:00 PM
cis-1,2-Dichloroethene —	170	55		ug/m3	90	4/8/2017 1:00:00 AM
trans-1,2-Dichloroethene —	1.6	0.59		ug/m3	1	4/7/2017 6:50:00 PM
Trichloroethene —	20	1.9	J	ug/m3	9	4/8/2017 12:23:00 AM
Vinyl chloride —	0.49	0.10		ug/m3	1	4/7/2017 6:50:00 PM

1115

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	Client Sample ID:	691-SB5B-SVI
Lab Order:	C1704014	Tag Number:	467.1167
Project:	691 St Paul Street	Collection Date:	4/1/2017
Lab ID:	C1704014-015A	Matrix:	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 7:30:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 7:30:00 PM
cis-1,2-Dichloroethene	23	5.9		ug/m3	10	4/8/2017 1:37:00 AM
trans-1,2-Dichloroethene	0.71	0.59		ug/m3	1	4/7/2017 7:30:00 PM
Trichloroethene	57	2.1		ug/m3	10	4/8/2017 1:37:00 AM
Vinyl chloride	0.28	0.10		ug/m3	1	4/7/2017 7:30:00 PM

Qualifiers:

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

Date: 04-May-17

CENTEK LABORATORIES, LLC

QC SUMMARY REPORT
SURROGATE RECOVERIES

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street
Test No: TO-15 **Matrix:** A

Sample ID	BR4FBZ
ALCS1UG-040617	95.0
ALCS1UG-040717	97.0
ALCS1UGD-040617	98.0
ALCS1UGD-040717	97.0
AMB1UG-040617	90.0
AMB1UG-040717	86.0
C1704014-001A	96.0
C1704014-001A MS	97.0
C1704014-001A MSD	99.0
C1704014-002A	89.0
C1704014-003A	109
C1704014-004A	92.0
C1704014-005A	118
C1704014-006A	88.0
C1704014-007A	91.0
C1704014-008A	93.0
C1704014-009A	113
C1704014-010A	92.0
C1704014-011A	109
C1704014-012A	103
C1704014-013A	102
C1704014-014A	107
C1704014-015A	116

Acronym	Surrogate	QC Limits
BR4FBZ	= Bromofluorobenzene	70-130

* Surrogate recovery outside acceptance limits

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AO040602.D
Tune Time : 6 Apr 2017 9:31 am

Daily Calibration File : C:\HPCHEM\1\DATA\AO040602.D

37398 170379 156465

			(BFB)	(IS1)	(IS2)	(IS3)
				26713	121699	111761
				16028	730194	67057
File	Sample	DL	Surrogate Recovery %	Internal Standard Responses		
AO040603.D	ALCS1UG-040617		95	26450	123600	109377
AO040604.D	AMB1UG-040617		90	26038	118374	102379
AO040620.D	ALCS1UGD-040617		98	24809	117535	100863
AO040621.D	C1704014-001A		96	25396	113281	97086
AO040622.D	C1704014-001A	MS	97	26903	116940	105999
AO040623.D	C1704014-001A	MSD	99	26299	120898	106126
AO040624.D	C1704014-002A		89	24868	113360	102277
AO040625.D	C1704014-004A		92	25596	114646	102450
AO040626.D	C1704014-006A		88	25816	110508	98499
AO040627.D	C1704014-007A		91	24957	110993	99559
AO040628.D	C1704014-008A		93	25088	108028	95812
AO040629.D	C1704014-010A		92	24485	107880	98198
AO040630.D	C1704014-012A		103	25278	111053	100304
AO040631.D	C1704014-013A		102	25079	113761	101873

t - fails 24hr time check * - fails criteria

Created: Thu May 04 12:00:40 2017 MSD #1/

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AO040702.D
Tune Time : 7 Apr 2017 11:20 am

Daily Calibration File : C:\HPCHEM\1\DATA\AO040702.D

32494 139901 124351

				(IS1)	(IS2)	(IS3)
			(BFB)	23210	99215	88822
				13926	59529	53293
File	Sample	DL	Surrogate Recovery %	Internal Standard Responses		
AO040703.D	ALCS1UG-040717		97	22420 ✓	98698	86489
AO040704.D	AMB1UG-040717		86	21100	92197	83384
AO040706.D	C1704014-012A	10X	91	20808	86837	77606
AO040707.D	C1704014-013A	10X	92	19443	85901	76902
AO040708.D	C1704014-003A		109	20468	96070	92232
AO040709.D	C1704014-005A		118	24680	109137	104661
AO040710.D	C1704014-009A		113	27394	125972	121869
AO040711.D	C1704014-011A		109	30170	132762	121408
AO040712.D	C1704014-014A		107	31361	139148	131462
AO040713.D	C1704014-015A		116	31915	147799	139968
AO040714.D	C1704014-003A	10x	95	31326	147339	127930
AO040716.D	C1704014-005A	90x	92	26112	119025	102419
AO040719.D	C1704014-011A	10x	93	21591	93800	84591
AO040721.D	C1704014-014A	9x	95	20532	89989	83171
AO040722.D	C1704014-014A	90x	89	20827	88198	80228
AO040723.D	C1704014-015A	10x	94	20780	88679	79938
AO040725.D	ALCS1UGD-040717		97	19313	89890	78098

t - fails 24hr time check * - fails criteria

Created: Thu May 04 12:02:38 2017 MSD #1/

CENTEK LABORATORIES, LLC

Date: *04-May-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID ALCS1UG-040617	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141660

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9700	0.15	1	0	97.0	70	130				
Chloroethane	1.090	0.15	1	0	109	70	130				
cis-1,2-Dichloroethene	0.9700	0.15	1	0	97.0	70	130				
trans-1,2-Dichloroethene	0.9500	0.15	1	0	95.0	70	130				
Trichloroethene	0.9700	0.040	1	0	97.0	70	130				
Vinyl chloride	0.9700	0.040	1	0	97.0	70	130				

Sample ID ALCS1UG-040717	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/7/2017	SeqNo: 141731

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9900	0.15	1	0	99.0	70	130				
Chloroethane	1.180	0.15	1	0	118	70	130				
cis-1,2-Dichloroethene	1.000	0.15	1	0	100	70	130				
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130				
Trichloroethene	1.060	0.040	1	0	106	70	130				
Vinyl chloride	1.150	0.040	1	0	115	70	130				

Sample ID ALCS1UGD-040617	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9900	0.15	1	0	99.0	70	130	0.97	2.04	30	
Chloroethane	1.000	0.15	1	0	100	70	130	1.09	8.61	30	

Qualifiers:

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

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID ALCS1UGD-040617	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	0.9600	0.15	1	0	96.0	70	130	0.97	1.04	30	
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130	0.95	3.11	30	
Trichloroethene	1.000	0.040	1	0	100	70	130	0.97	3.05	30	
Vinyl chloride	1.060	0.040	1	0	106	70	130	0.97	8.87	30	

Sample ID ALCS1UGD-040717	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/8/2017	SeqNo: 141732

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.080	0.15	1	0	108	70	130	0.99	8.70	30	
Chloroethane	1.180	0.15	1	0	118	70	130	1.18	0	30	
cis-1,2-Dichloroethene	1.120	0.15	1	0	112	70	130	1	11.3	30	
trans-1,2-Dichloroethene	1.070	0.15	1	0	107	70	130	0.98	8.78	30	
Trichloroethene	1.100	0.040	1	0	110	70	130	1.06	3.70	30	
Vinyl chloride	1.240	0.040	1	0	124	70	130	1.15	7.53	30	

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

CENTEK LABORATORIES, LLC

Date: *04-May-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID C1704014-001A MS	SampType: MS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: 691-B19-IAQ-1	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141726

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9100	0.15	1	0	91.0	70	130				
Chloroethane	1.040	0.15	1	0	104	70	130				
cis-1,2-Dichloroethene	1.230	0.15	1	0.33	90.0	70	130				
trans-1,2-Dichloroethene	0.9500	0.15	1	0	95.0	70	130				
Trichloroethene	1.390	0.040	1	0.4	99.0	70	130				
Vinyl chloride	1.030	0.040	1	0	103	70	130				

Sample ID C1704014-001A MS	SampType: MSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: 691-B19-IAQ-1	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141727

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.000	0.15	1	0	100	70	130	0.91	9.42	30	
Chloroethane	1.040	0.15	1	0	104	70	130	1.04	0	30	
cis-1,2-Dichloroethene	1.320	0.15	1	0.33	99.0	70	130	1.23	7.06	30	
trans-1,2-Dichloroethene	0.9700	0.15	1	0	97.0	70	130	0.95	2.08	30	
Trichloroethene	1.370	0.040	1	0.4	97.0	70	130	1.39	1.45	30	
Vinyl chloride	1.030	0.040	1	0	103	70	130	1.03	0	30	

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *04-May-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID AMB1UG-040617	SampType: MBLK	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Sample ID AMB1UG-040717	SampType: MBLK	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/7/2017	SeqNo: 141730

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Qualifiers:

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

DATA USABILITY SUMMARY REPORT

for

LaBella Associates, P.C.

300 State Street

Rochester, NY 14614

691 ST PAUL SITE
Project 2170436
SDG: C1703015
Sampled 3/3/2017

TO-15 AIR SAMPLES

SV-1	(C1703015-01)
SV-2	(C1703015-02)
SV-3	(C1703015-03)
SV-2	(C1703015-04)
DUPLICATE	(C1703015-05)
AMBIENT AIR	(C1703015-06)

DATA ASSESSMENT

A TO-15 data package containing analytical results for six air samples was received from LaBella Associates, P.C. on 22May17. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the 691 St. Paul Site, were identified by Chain of Custody documents and traceable through the work of Centek Laboratories, LLC, the laboratory contracted for analysis. The analyses were performed using US EPA Method TO-15 and addressed measurements of sixty-three volatile organic compounds. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-31, Rev. #4, October 2006, Volatile Organic Analysis of Ambient Air in Canisters by Method TO-15) was used as a technical reference.

The chloroethane concentration found in SV-1 has been qualified as an estimation due to a high surrogate standard recovery.

The trichloroethene concentration found in SV-3 has been qualified as an estimation due to a high spiked sample recovery.

CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results presenting a usable estimation of the conditions at the time of sampling have been flagged "J". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 25 May 17

James B. Baldwin
DATAVAL, Inc.

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the date of sampling. TO-15 samples must be analyzed within 14 days of collection.

This sample delivery group contained six air samples that were collected in 1-liter SUMMA canisters. Sampling was completed on 03Mar17. The canisters were shipped back to the laboratory, via FedEx, on 04Mar17 and were received on 07Mar17. Although the sample canisters were received intact, custody seals were not present on the packaging. It is noted that SV-3 was collected in a 1.4-liter canister to facilitate the preparation of MS/MSD samples.

Although the SUMMA canisters were set in the laboratory to collect 8-hour samples, sampling was terminated at a gauge reading of -5"Hg to comply with the ASP requirement of 5±1"Hg. The discrepancies between vacuum readings recorded following sampling and prior to analysis are assumed to reflect the quality of the cylinder vacuum gauges.

SAMPLE	PRIOR TO SHIPMENT ("Hg)	PRIOR TO SAMPLING ("Hg)	POST SAMPLING ("Hg)	LAB ANALYSIS ("Hg)
SV-1	-30	-30	-5	-2
SV-2	-30	-30	-5	-1
SV-3	-30	-30	-5	-1
SV-4	-30	-28	-5	-3
DUPLICATE	-30	-28	-5	-3
AMBIENT AIR	-30	-30	-5	-1

The analysis of this group of samples was completed between 08Mar17 and 09Mar17, satisfying the ASP holding time limitation.

It is noted that sampling start and stop times were not provided. This made it impossible to determine if the proper sampling rate was maintained during sample collection.

CANISTER CERTIFICATION

The canisters used for this project were pressure tested at 30 psig for 24 hours. Each canister demonstrated a change ≤0.5 psig over this period.

The canisters for this project were cleaned in four batches. A blank analysis of a clean canister from each of these batches was free of targeted analyte contamination.

BLANKS

Blanks are analyzed to evaluate various sources of sample contam-

ination. Trip Blanks monitor sampling activities, sample transport, and storage. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

One method blank was analyzed with this group of samples. This blank demonstrated acceptable chromatography and were free of targeted analyte contamination.

MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

BFB ion abundance criteria was reported from standards run before the initial instrument calibration and prior to the analysis of program samples on 08Mar17. Both of these checks satisfied the ASP acceptance criteria.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration check standards verify instrument stability.

The initial instrument calibration was performed on 27Feb17. Standards of 0.04, 0.10, 0.15, 0.30, 0.50, 0.75, 1.0, 1.25, 1.50 and 2.0 ppbV were included. Each targeted analyte produced the required levels of instrument response and demonstrated an acceptable degree of linearity during this calibration.

A continuing calibration check standard was analyzed on 08Mar17, prior to the 24-hour period of instrument operation that included samples from this program. When compared to the initial calibration, each targeted analyte produced the required levels of instrument response and demonstrated an acceptable degree of linearity during this check.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Although surrogate summary sheets were properly prepared, an incorrect acceptance criteria was applied. When compared to the ASP requirements, unacceptably high recoveries were reported for the bromofluorobenzene additions to SV-1 and SV-2. The chloroethane (CLEANE) concentration found in SV-1 has been qualified as an estimation based on these indications of positive bias. The remaining results from SV-1 and SV-2 were negative and remain unqualified.

INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than 40%. When compared to the preceding calibration check, retention times may not vary by more than 10 seconds.

The laboratory recorded the response of each internal standard addition to this group of samples and the response obtained from the preceding CCV standard. Although the control limits based on the response of the CCV were not reported, they were calculated by this reviewer. When compared to these limits, unacceptable performance was reported for the chlorobenzene-d5 additions to SV-1, SV-2, SV-3 and the DUPLICATE. This performance had no impact on reported data, however, because none of the targeted analytes were associated with this internal standard.

Internal standard retention times were not addressed. The ASP retention time acceptance criteria was calculated by this reviewer. The retention times produced by each program sample satisfied these requirements.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS

Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

SV-3 was selected for matrix spiking. The six targeted analytes were added to two volumes of this sample. The recoveries reported for these additions included a high trichloroethene (155%) result. The trichloroethene (TCE) concentration found in SV-3 has been qualified as an estimation based on this indication of positive bias.

A pair of spiked blanks (LCS/LCSD) was also analyzed with this delivery group. Both of these spiked blanks produced acceptable recoveries of the six targeted analytes.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

The blind duplicate sample that was included in this delivery group was not identified.

REPORTED ANALYTES

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument print-

outs. Reference mass spectra were provided to confirm the identification of each analyte that was detected in this group of samples.

SUMMARY OF QUALIFIED DATA

691 ST PAUL SITE

SAMPLED 3/3/2017

		SURROGATE CLEANE	SPIKE TCE
SV-1	(C1703015-01)	0.34J	
SV-2	(C1703015-02)		
SV-3	(C1703015-03)		40J
SV-2	(C1703015-04)		
DUPLICATE	(C1703015-05)		
AMBIENT AIR	(C1703015-06)		

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-1
Lab Order:	C1703015	**Tag Number:**	542.256
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
Chloroethane	0.34 J	0.40	J	ug/m3	1	3/8/2017 1:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/8/2017 1:28:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 1:28:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

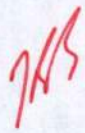
Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-2
Lab Order:	C1703015	**Tag Number:**	237.402
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 2:09:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/8/2017 2:09:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 2:09:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.



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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-3
Lab Order:	C1703015	**Tag Number:**	1206.249
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:48:00 PM
Chloroethane	0.29	0.40	J	ug/m3	1	3/8/2017 2:48:00 PM
cis-1,2-Dichloroethene	0.71	0.59		ug/m3	1	3/8/2017 2:48:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:48:00 PM
Trichloroethene	40 J	8.1		ug/m3	10	3/8/2017 11:34:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 2:48:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-4
Lab Order:	C1703015	**Tag Number:**	290.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 4:59:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 4:59:00 PM
cis-1,2-Dichloroethene –	4.1	0.59		ug/m3	1	3/8/2017 4:59:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 4:59:00 PM
Trichloroethene –	48	8.1		ug/m3	10	3/9/2017 12:47:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 4:59:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Duplicate
Lab Order:	C1703015	**Tag Number:**	1184.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 5:39:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 5:39:00 PM
cis-1,2-Dichloroethene	3.9	0.59		ug/m3	1	3/8/2017 5:39:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 5:39:00 PM
Trichloroethene	47	8.1		ug/m3	10	3/9/2017 2:01:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 5:39:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Ambient Air
Lab Order:	C1703015	**Tag Number:**	556.267
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 12:48:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	3/8/2017 12:48:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	3/8/2017 12:48:00 PM

Qualifiers:

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

Date: 27-Mar-17

CENTEK LABORATORIES, LLC

QC SUMMARY REPORT
SURROGATE RECOVERIES

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St
Test No: TO-15 **Matrix:** A

Sample ID	BR4FBZ
ALCS1UG-030817	105
ALCS1UGD-030817	104
AMB1UG-030817	85.0
C1703015-001A	239 *
C1703015-002A	235 *
C1703015-003A	97.0
C1703015-003A MS	170 *
C1703015-003A MSD	173 *
C1703015-004A	100
C1703015-005A	98.0
C1703015-006A	87.0

Acronym	Surrogate	QC Limits
BR4FBZ	= Bromofluorobenzene	~~70-130~~ 80-120

* Surrogate recovery outside acceptance limits

Centek Laboratories, LLC

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AO030803.D
Tune Time : 8 Mar 2017 10:33 am

Daily Calibration File : C:\HPCHEM\1\DATA\AO030803.D

72250 326026 275715

				(BFB)	(IS1)	(IS2)	(IS3)
					51607	232876	196939
					30964	139726	118163
File	Sample		DL	Surrogate Recovery %	Internal Standard Responses		
AO030804.D	ALCS1UG-030817		105		54344	232438	196865
AO030805.D	AMB1UG-030817		85		51456	199472	169731
AO030806.D	C1703015-006A		87		47960	186316	173836
AO030807.D	C1703015-001A		239*		59338	270574	278336
AO030808.D	C1703015-002A		235*		72867	317032	316562*
AO030809.D	C1703015-003A		166*		80896	366728	336237*
AO030810.D	C1703015-003A	MS	170*		80202	356830	344072*
AO030811.D	C1703015-003A	MSD	173*		79391	370639	337498*
AO030812.D	C1703015-004A		190*		76299	343779	323940*
AO030813.D	C1703015-005A		187*		77699	348681	330439*
AO030822.D	C1703015-003A	10X	97		53827	227536	201273
AO030824.D	C1703015-004A	10X	100		46536	210199	197259
AO030826.D	C1703015-005A	10X	98		46525	198463	190799
AO030828.D	ALCS1UGD-030817		104		45106	199550	175594

t - fails 24hr time check * - fails criteria

Created: Mon Mar 27 11:04:40 2017 MSD #1/

Retention Times

CCV	9.64	12.03	16.90
C1703015-1	9.65	12.04	16.90
-2	9.65	12.03	16.90
-3	9.65	12.03	16.90
-3 10X	9.65	12.04	16.90
-4	9.65	12.03	16.90
-4 10X	9.65	12.03	16.90
-5	9.65	12.03	16.90
-5 10X	9.65	12.03	16.90
-6	9.65	12.03	16.90

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 0.25CT-TCE-VC

Sample ID ALCS1UG-030817	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12014
Client ID: ZZZZZ	Batch ID: R12014	TestNo: TO-15		Analysis Date: 3/8/2017	SeqNo: 140535

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.060	0.15	1	0	106	70	130				
Chloroethane	0.9000	0.15	1	0	90.0	70	130				
cis-1,2-Dichloroethene	1.100	0.15	1	0	110	70	130				
trans-1,2-Dichloroethene	1.070	0.15	1	0	107	70	130				
Trichloroethene	1.060	0.040	1	0	106	70	130				
Vinyl chloride	0.8700	0.040	1	0	87.0	70	130				

Sample ID ALCS1UGD-030817	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12014
Client ID: ZZZZZ	Batch ID: R12014	TestNo: TO-15		Analysis Date: 3/9/2017	SeqNo: 140536

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.100	0.15	1	0	110	70	130	1.06	3.70	30	
Chloroethane	1.000	0.15	1	0	100	70	130	0.9	10.5	30	
cis-1,2-Dichloroethene	1.130	0.15	1	0	113	70	130	1.1	2.69	30	
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	70	130	1.07	2.76	30	
Trichloroethene	1.100	0.040	1	0	110	70	130	1.06	3.70	30	
Vinyl chloride	0.9100	0.040	1	0	91.0	70	130	0.87	4.49	30	

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 0.25CT-TCE-VC

Sample ID	AMB1UG-030817	SampType:	MBLK	TestCode:	0.25CT-TCE-	Units:	ppbV	Prep Date:		RunNo:	12014
Client ID:	ZZZZZ	Batch ID:	R12014	TestNo:	TO-15			Analysis Date:	3/8/2017	SeqNo:	140534

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 1ugM3_TO15

Sample ID C1703015-003A MS SampType: MS TestCode: 1ugM3_TO15 Units: ppbV Prep Date: RunNo: 12014
Client ID: SV-3 Batch ID: R12014 TestNo: TO-15 Analysis Date: 3/8/2017 SeqNo: 140546

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.090	0.15	1	0	109	70	130				
Chloroethane	0.8100	0.15	1	0.11	70.0	70	130				
cis-1,2-Dichloroethene	1.400	0.15	1	0.18	122	70	130				
trans-1,2-Dichloroethene	1.140	0.15	1	0	114	70	130				
Trichloroethene	9.890	0.15	1	8.34	155	70	130				S
Vinyl chloride	0.7200	0.15	1	0	72.0	70	130				

Sample ID C1703015-003A MS SampType: MSD TestCode: 1ugM3_TO15 Units: ppbV Prep Date: RunNo: 12014
Client ID: SV-3 Batch ID: R12014 TestNo: TO-15 Analysis Date: 3/8/2017 SeqNo: 140547

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.160	0.15	1	0	116	70	130	1.09	6.22	30	
Chloroethane	0.8600	0.15	1	0.11	75.0	70	130	0.81	5.99	30	
cis-1,2-Dichloroethene	1.440	0.15	1	0.18	126	70	130	1.4	2.82	30	
trans-1,2-Dichloroethene	1.180	0.15	1	0	118	70	130	1.14	3.45	30	
Trichloroethene	9.550	0.15	1	8.34	121	70	130	9.89	3.50	30	
Vinyl chloride	0.7500	0.15	1	0	75.0	70	130	0.72	4.08	30	

Qualifiers:

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

LABELLA Associates, D.P.C. | Engineering Architecture Environmental Planning

APPENDIX 3

Laboratory Analytical Reports

TO-15 Package Review Checklist

Client: La Bella Project 691 St Paul St. SDG: A1704014

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

Comments:

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

Comments:

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

Comments:

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

Comments:

TO-15 Package Review Checklist

Client: LaBella Project: 691 St. Paul St SDG: C1704014

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

Comments:

Raw Quality Control Data

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

Comments:

Logbooks

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

Additional Comments:

Section Supervisor: Will Dahl Date: 5/8/17

QC Supervisor: [signature] Date: 5/8/17

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206
Phone (315) 431-9730 * Emergency 24/7 (315) 416-2752
NYSDOH ELAP Certificate No. 11830

Analytical Report

Daniel Noll
LaBella Associates, P.C.
300 State Street, Suite 201
Rochester, NY 14614

TEL: (585) 454-6110
FAX (585) 454-3066

RE: 691 St Paul Street

Wednesday, April 12, 2017
Order No.: C1704014

Dear Daniel Noll:

Centek Laboratories, LLC received 15 sample(s) on 4/5/2017 for the analyses presented in the following report.

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

Centek Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

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

Centek Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory. We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

This report cannot be reproduced except in its entirety, without prior written authorization.

Sincerely,

William Dobbin
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, tetrahydrofuran, 4-PCH, sulfur derived and silcon series compounds.

Centek Laboratories, LLC Terms and Conditions

Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.CentekLabs.com. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in an canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any dameges of equipment.

Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit application on file to extend credit. Purchase orders or checks information must be submitted for us to release results

Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:
Same day TAT = 200%
Next business day TAT by Noon = 150%
Next business day TAT by 6:00pm = 100%
Second business day TAT by 6:00pm = 75%
Third business day TAT by 6:00pm = 50%
Fourth business day TAT by 6:00pm = 35%
Fifth business day = Standard

Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of

liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

ASP CAT B DELIVERABLE PACKAGE
Table of Contents

CENTEK LABORATORIES, LLC

Date: *08-May-17*

CLIENT: LaBella Associates, P.C.

Project: 691 St Paul Street

Lab Order: C1704014

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80
Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

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

NYSDEC ASP samples:
Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (±2", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (±1", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,±1". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.

Centek Labs - Chain of Custody

Centek Laboratories

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

Vapor Intrusion & IAQ

Site Name: 691 St. Paul St.
Project: 2170820
PO#: 2170820
Quote # Q-
Canister Order #:

Detection Limit	Report Level
☐ 5ppbv	☐ Level I
☐ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☒ Cat "B" Like
☒ See email (X)	

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
Business Days	☒	0%	
Business Days	☐	25%	
Business Days	☐	50%	
Business Days	☐	75%	
Next Day by 5pm	☐	100%	
Next Day by Noon	☐	150%	
Same Day	☐	200%	

For Same and Next Day TAT Please Notify Lab

Company: LaBella Assoc. DPC

Report to: Dan Noll
Address: 300 State St. Suite 200
City, State, Zip Rochester, NY 14614
Email: DNoll@labellapc.com
Phone: (585) 454-6110

Company: **Check Here If Same:** ☒

Invoice to:
Address:
City, State, Zip
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** Rec'd/Analysis	Comments
691-B19-IAQ-1	4/1/2017	1321	1163	*Select List	30", 4"	-4 , -4	regulator MS/MSD malfunction
691-B19-IAQ-2		1188	306	of six (6)	30", 9"	-9 , -9	placed to replace above sample
691-B19-SVI		362	446	VOCs; per	30", 9"	-9 , -9	
691-B15-IAQ		87	299	email, via	27.5", 3"	-3 , -3	
691-B15-SVI		550	266	USEPA TO-15	30", 2"	-2 , -3	
691-OUTDOOR-040	2017	240	340		28", 8"	-8 , -8	
691-DUPLICATE		101	299		27.5", 3"	-3 , -3	
691-NE-IAQ	KAM 94 ~~170~~	~~3987~~	379 KAM		~~28~~", 1"	-1 , -2	
691-NE-SVI	KAM 1186	~~1186~~	~~445~~	145 KAM	30", 3"	-3 , -3	
691-SB1-IAQ		170	387		?, 5"	-5 , -5	
691-SB1-SVI		203	372		30", 6"	-6 , -6	
691-SB5A-IAQ		367	251		30", 2"	-2 , -2	
691-SB5B-IAQ		285	344		30", 3"	-3 , -3	
691-SB5A-SVI		475	1170		28", 2"	-2 , -2	
691-SB5B-SVI		467	1167		29.5", 0.5"	-1 , -1	
					/	/	
					/	/	
					/	/	

Chain of Custody	Print Name	Signature	Date/Time
Sampled by:	Kyle R. Miller		4/1/2017
Relinquished by:	Kyle Miller	FEDEX	4/4/17 pm
Received at Lab by:	NICK MANDARINO		4-5-17

Courier: CIRCLE ONE
FedEx UPS Pickup/Dropoff

**For LAB USE ONLY
Work Order # C1704014

* By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

CENTEK LABORATORIES, LLC

Date: *08-May-17*

CLIENT: LaBella Associates, P.C.
Project: 691 St Paul Street
Lab Order: C1704014

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1704014-001A	691-B19-IAQ-1	1321.1163	4/1/2017	4/5/2017
C1704014-002A	691-B19-IAQ-2	1188.306	4/1/2017	4/5/2017
C1704014-003A	691-B19-SVI	362.446	4/1/2017	4/5/2017
C1704014-004A	691-B15-IAQ	87.299	4/1/2017	4/5/2017
C1704014-005A	691-B15-SVI	550.266	4/1/2017	4/5/2017
C1704014-006A	691-Outdoor-04012017	240.340	4/1/2017	4/5/2017
C1704014-007A	691-Duplicate	101.299	4/1/2017	4/5/2017

CLIENT:	LaBella Associates, P.C.
Project:	691 St Paul Street
Lab Order:	C1704014

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1704014-008A	691-NE-IAQ	94.379	4/1/2017	4/5/2017
C1704014-009A	691-NE-SVI	1186.145	4/1/2017	4/5/2017
C1704014-010A	691-SB1-IAQ	170.387	4/1/2017	4/5/2017
C1704014-011A	691-SB1-SVI	203.372	4/1/2017	4/5/2017
C1704014-012A	691-SB5A-IAQ	367.251	4/1/2017	4/5/2017
C1704014-013A	691-SB5B-IAQ	285.344	4/1/2017	4/5/2017
C1704014-014A	691-SB5A-SVI	475.1170	4/1/2017	4/5/2017
C1704014-015A	691-SB5B-SVI	467.1167	4/1/2017	4/5/2017

CENTEK LABORATORIES, LLC

Sample Receipt Checklist

Client Name LABELLA - ROCHESTER | Date and Time Receive 4/5/2017

Work Order Numbe C1704014 | Received by NM

Checklist completed by [signature] 4-5-17 (Signature / Date) | Reviewed by WD 4/5/17 (Initials / Date)

Matrix: | Carrier name: FedEx Ground

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

Adjusted? _____ Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Lab Order: C1704014
Client: LaBella Associates, P.C.
Project: 691 St Paul Street

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C1704014-001A	691-B19-IAQ-1	4/1/2017	Air	1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/6/2017
C1704014-002A	691-B19-IAQ-2			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-003A	691-B19-SVI			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-004A	691-B15-IAQ			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-005A	691-B15-SVI			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-006A	691-Outdoor-04012017			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-007A	691-Duplicate			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-008A	691-NE-IAQ			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-009A	691-NE-SVI			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-010A	691-SB1-IAQ			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-011A	691-SB1-SVI			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-012A	691-SB5A-IAQ			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-013A	691-SB5B-IAQ			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
C1704014-014A	691-SB5A-SVI			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/8/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/8/2017
C1704014-015A	691-SB5B-SVI			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/8/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			4/7/2017

CANISTER ORDER

CENTEK LABORATORIES, LLC
Air Quality Testing...It's a Gas
143 Midler Park Drive * Syracuse, NY 13206
TEL: 315-431-9730 * FAX: 315-431-9731

6417

08-May-17

SHIPPED TO:

Company: LaBella Associates, P.C.
Contact: Benjamin Stracuzzi
Address: 300 State Street, Suite 201
Rochester, NY 14614
Phone: (585) 454-6110
Quote ID: 0
Project:
PO: 2170820

Submitted By:
MadeBy: jan
Ship Date: 3/28/2017
VIA: FedEx Ground
Due Date: 3/29/2017

Bottle Code	Bottle Type	TEST(s)	QTY
MC1400CC	1.4L Mini-Can	1ug/m3 w/ 0.25ug/M3 CT-TCE-VC	1
MC1000CC	1L Mini-Can	1ug/m3 w/ 0.25ug/M3 CT-TCE-VC	20

Can / Reg ID	Description
87	1L Mini-Can - 1104 VI
94	1L Mini-Can - 1086 VI
101	1L Mini-Can - 1101 VI
106	1L Mini-Can - 1056 VI
130	1L Mini-Can - 1078 VI
139	1L Mini-Can - 1113 VI
145	Time-Set Reg - 640 VI
170	1L Mini-Can - 1141 VI
203	1L Mini-Can - 1158 VI
240	1L Mini-Can - 1172 VI
251	Time-Set Reg - 689 VI
258	Time-Set Reg - 696 VI
266	Time-Set Reg - 704 VI
268	Time-Set Reg - 706 VI
285	1L Mini-Can - 1061 VI
286	1L Mini-Can - 1262 VI
299	Time-Set Reg - 722 VI
306	Time-Set Reg - 729 VI
324	1L Mini-Can - 1287 VI
328	1L Mini-Can - 1291 VI
339	Time-Set Reg - 736 VI
340	Time-Set Reg - 737 VI
344	Time-Set Reg - 741 VI
362	1L Mini-Can - 1311 VI
367	1L Mini-Can - 1316 VI
372	Time-Set Reg - 746 VI
379	Time-Set Reg - 753 VI
387	Time-Set Reg - 761 VI
446	Time-Set Reg - 825 VI
467	1L Mini-Can - 1371 VI
475	1L Mini-Can - 1377 VI
550	1L Mini-Can - 118 VI

SHIPPED TO:

Company:	LaBella Associates, P.C.
Contact:	Benjamin Stracuzzi
Address:	300 State Street, Suite 201
	Rochester, NY 14614
Phone:	(585) 454-6110
Quote ID:	0
Project:	
PO:	2170820

Submitted By:

MadeBy:	jan
Ship Date:	3/28/2017
VIA:	FedEx Ground
Due Date:	3/29/2017

Bottle Code	Bottle Type	TEST(s)	QTY
1163	Time-Set Reg-0676 VI		
1166	Time-Set Reg-0791 VI		
1167	Time-Set Reg-0792 VI		
1168	Time-Set Reg-0793 VI		
1170	Time-Set Reg-0795 VI		
1171	Time-Set Reg-0796 VI		
1186	1L Mini-Can - 1235 VI		
1188	1L Mini-Can - 1256 VI		
1321	1.4L Mini-Can - 0252 VI		

Comments: 20 (1L) @ 8hr + Ms/MSD +helium shroud and detector +clay +tubing WAC 031317A-C, 032017 D-H

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-1
Lab Order:	C1704014	**Tag Number:**	1321.1163
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-4			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/6/2017 9:55:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/6/2017 9:55:00 PM
cis-1,2-Dichloroethene	0.33	0.15		ppbV	1	4/6/2017 9:55:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/6/2017 9:55:00 PM
Trichloroethene	0.40	0.040		ppbV	1	4/6/2017 9:55:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/6/2017 9:55:00 PM
Surr: Bromofluorobenzene	96.0	70-130		%REC	1	4/6/2017 9:55:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-1
Lab Order:	C1704014	**Tag Number:**	1321.1163
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/6/2017 9:55:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/6/2017 9:55:00 PM
cis-1,2-Dichloroethene	1.3	0.59		ug/m3	1	4/6/2017 9:55:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/6/2017 9:55:00 PM
Trichloroethene	2.1	0.21		ug/m3	1	4/6/2017 9:55:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/6/2017 9:55:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-2
Lab Order:	C1704014	**Tag Number:**	1188.306
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-9			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:09:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 12:09:00 AM
cis-1,2-Dichloroethene	0.29	0.15		ppbV	1	4/7/2017 12:09:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:09:00 AM
Trichloroethene	0.39	0.040		ppbV	1	4/7/2017 12:09:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 12:09:00 AM
Surr: Bromofluorobenzene	89.0	70-130		%REC	1	4/7/2017 12:09:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-2
Lab Order:	C1704014	**Tag Number:**	1188.306
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:09:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 12:09:00 AM
cis-1,2-Dichloroethene	1.1	0.59		ug/m3	1	4/7/2017 12:09:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:09:00 AM
Trichloroethene	2.1	0.21		ug/m3	1	4/7/2017 12:09:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 12:09:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-SVI
Lab Order:	C1704014	**Tag Number:**	362.446
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-9			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
Trichloroethene	4.8	0.40		ppbV	10	4/7/2017 8:07:00 PM
Vinyl chloride	0.080	0.040		ppbV	1	4/7/2017 3:23:00 PM
Surr: Bromofluorobenzene	109	70-130		%REC	1	4/7/2017 3:23:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-SVI
Lab Order:	C1704014	**Tag Number:**	362.446
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 3:23:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
Trichloroethene	26	2.1		ug/m3	10	4/7/2017 8:07:00 PM
Vinyl chloride	0.20	0.10		ug/m3	1	4/7/2017 3:23:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-IAQ
Lab Order:	C1704014	**Tag Number:**	87.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:50:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 12:50:00 AM
cis-1,2-Dichloroethene	0.40	0.15		ppbV	1	4/7/2017 12:50:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:50:00 AM
Trichloroethene	0.41	0.040		ppbV	1	4/7/2017 12:50:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 12:50:00 AM
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	4/7/2017 12:50:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-IAQ
Lab Order:	C1704014	**Tag Number:**	87.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:50:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 12:50:00 AM
cis-1,2-Dichloroethene	1.6	0.59		ug/m3	1	4/7/2017 12:50:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:50:00 AM
Trichloroethene	2.2	0.21		ug/m3	1	4/7/2017 12:50:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 12:50:00 AM

Qualifiers:

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

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-SVI
Lab Order:	C1704014	**Tag Number:**	550.266
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:03:00 PM
Chloroethane	0.14	0.15	J	ppbV	1	4/7/2017 4:03:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:03:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:03:00 PM
Trichloroethene	40	3.6		ppbV	90	4/7/2017 9:20:00 PM
Vinyl chloride	0.11	0.040		ppbV	1	4/7/2017 4:03:00 PM
Surr: Bromofluorobenzene	118	70-130		%REC	1	4/7/2017 4:03:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-SVI
Lab Order:	C1704014	**Tag Number:**	550.266
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
Chloroethane	0.37	0.40	J	ug/m3	1	4/7/2017 4:03:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
Trichloroethene	220	19		ug/m3	90	4/7/2017 9:20:00 PM
Vinyl chloride	0.28	0.10		ug/m3	1	4/7/2017 4:03:00 PM

Qualifiers:

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

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Outdoor-04012017
Lab Order:	C1704014	**Tag Number:**	240.340
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-8			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
Trichloroethene	< 0.040	0.040		ppbV	1	4/7/2017 1:31:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 1:31:00 AM
Surr: Bromofluorobenzene	88.0	70-130		%REC	1	4/7/2017 1:31:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Outdoor-04012017
Lab Order:	C1704014	**Tag Number:**	240.340
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 1:31:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
Trichloroethene	< 0.21	0.21		ug/m3	1	4/7/2017 1:31:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 1:31:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Duplicate
Lab Order:	C1704014	**Tag Number:**	101.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:12:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 2:12:00 AM
cis-1,2-Dichloroethene	0.42	0.15		ppbV	1	4/7/2017 2:12:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:12:00 AM
Trichloroethene	0.41	0.040		ppbV	1	4/7/2017 2:12:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 2:12:00 AM
Surr: Bromofluorobenzene	91.0	70-130		%REC	1	4/7/2017 2:12:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Duplicate
Lab Order:	C1704014	**Tag Number:**	101.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:12:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 2:12:00 AM
cis-1,2-Dichloroethene	1.7	0.59		ug/m3	1	4/7/2017 2:12:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:12:00 AM
Trichloroethene	2.2	0.21		ug/m3	1	4/7/2017 2:12:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 2:12:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-IAQ
Lab Order:	C1704014	**Tag Number:**	94.379
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
Trichloroethene	< 0.040	0.040		ppbV	1	4/7/2017 2:52:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 2:52:00 AM
Surr: Bromofluorobenzene	93.0	70-130		%REC	1	4/7/2017 2:52:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-IAQ
Lab Order:	C1704014	**Tag Number:**	94.379
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 2:52:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
Trichloroethene	< 0.21	0.21		ug/m3	1	4/7/2017 2:52:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 2:52:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-SVI
Lab Order:	C1704014	**Tag Number:**	1186.145
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
Trichloroethene	0.72	0.040		ppbV	1	4/7/2017 5:28:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 5:28:00 PM
Surr: Bromofluorobenzene	113	70-130		%REC	1	4/7/2017 5:28:00 PM

Qualifiers:

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

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-SVI
Lab Order:	C1704014	**Tag Number:**	1186.145
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 5:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
Trichloroethene	3.9	0.21		ug/m3	1	4/7/2017 5:28:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 5:28:00 PM

Qualifiers:

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

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-IAQ
Lab Order:	C1704014	**Tag Number:**	170.387
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-5			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:33:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 3:33:00 AM
cis-1,2-Dichloroethene	0.66	0.15		ppbV	1	4/7/2017 3:33:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:33:00 AM
Trichloroethene	0.24	0.040		ppbV	1	4/7/2017 3:33:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 3:33:00 AM
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	4/7/2017 3:33:00 AM

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-IAQ
Lab Order:	C1704014	**Tag Number:**	170.387
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:33:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 3:33:00 AM
cis-1,2-Dichloroethene	2.6	0.59		ug/m3	1	4/7/2017 3:33:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:33:00 AM
Trichloroethene	1.3	0.21		ug/m3	1	4/7/2017 3:33:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 3:33:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-SVI
Lab Order:	C1704014	**Tag Number:**	203.372
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-6			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 6:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 6:09:00 PM
cis-1,2-Dichloroethene	13	1.5		ppbV	10	4/7/2017 11:10:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 6:09:00 PM
Trichloroethene	0.74	0.040		ppbV	1	4/7/2017 6:09:00 PM
Vinyl chloride	0.15	0.040		ppbV	1	4/7/2017 6:09:00 PM
Surr: Bromofluorobenzene	109	70-130		%REC	1	4/7/2017 6:09:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-SVI
Lab Order:	C1704014	**Tag Number:**	203.372
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 6:09:00 PM
cis-1,2-Dichloroethene	52	5.9		ug/m3	10	4/7/2017 11:10:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:09:00 PM
Trichloroethene	4.0	0.21		ug/m3	1	4/7/2017 6:09:00 PM
Vinyl chloride	0.38	0.10		ug/m3	1	4/7/2017 6:09:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-IAQ
Lab Order:	C1704014	**Tag Number:**	367.251
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:13:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 4:13:00 AM
cis-1,2-Dichloroethene	3.3	1.5		ppbV	10	4/7/2017 1:50:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:13:00 AM
Trichloroethene	1.2	0.040		ppbV	1	4/7/2017 4:13:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 4:13:00 AM
Surr: Bromofluorobenzene	103	70-130		%REC	1	4/7/2017 4:13:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-IAQ
Lab Order:	C1704014	**Tag Number:**	367.251
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:13:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 4:13:00 AM
cis-1,2-Dichloroethene	13	5.9		ug/m3	10	4/7/2017 1:50:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:13:00 AM
Trichloroethene	6.5	0.21		ug/m3	1	4/7/2017 4:13:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 4:13:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-IAQ
Lab Order:	C1704014	**Tag Number:**	285.344
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:53:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 4:53:00 AM
cis-1,2-Dichloroethene	3.1	1.5		ppbV	10	4/7/2017 2:27:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:53:00 AM
Trichloroethene	1.3	0.040		ppbV	1	4/7/2017 4:53:00 AM
Vinyl chloride	0.060	0.040		ppbV	1	4/7/2017 4:53:00 AM
Surr: Bromofluorobenzene	102	70-130		%REC	1	4/7/2017 4:53:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-IAQ
Lab Order:	C1704014	**Tag Number:**	285.344
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:53:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 4:53:00 AM
cis-1,2-Dichloroethene	12	5.9		ug/m3	10	4/7/2017 2:27:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:53:00 AM
Trichloroethene	6.8	0.21		ug/m3	1	4/7/2017 4:53:00 AM
Vinyl chloride	0.15	0.10		ug/m3	1	4/7/2017 4:53:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-SVI
Lab Order:	C1704014	**Tag Number:**	475.1170
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 6:50:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 6:50:00 PM
cis-1,2-Dichloroethene	44	14		ppbV	90	4/8/2017 1:00:00 AM
trans-1,2-Dichloroethene	0.41	0.15		ppbV	1	4/7/2017 6:50:00 PM
Trichloroethene	3.7	0.36		ppbV	9	4/8/2017 12:23:00 AM
Vinyl chloride	0.19	0.040		ppbV	1	4/7/2017 6:50:00 PM
Surr: Bromofluorobenzene	107	70-130		%REC	1	4/7/2017 6:50:00 PM

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-SVI
Lab Order:	C1704014	**Tag Number:**	475.1170
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:50:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 6:50:00 PM
cis-1,2-Dichloroethene	170	55		ug/m3	90	4/8/2017 1:00:00 AM
trans-1,2-Dichloroethene	1.6	0.59		ug/m3	1	4/7/2017 6:50:00 PM
Trichloroethene	20	1.9		ug/m3	9	4/8/2017 12:23:00 AM
Vinyl chloride	0.49	0.10		ug/m3	1	4/7/2017 6:50:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-SVI
Lab Order:	C1704014	**Tag Number:**	467.1167
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 7:30:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 7:30:00 PM
cis-1,2-Dichloroethene	5.8	1.5		ppbV	10	4/8/2017 1:37:00 AM
trans-1,2-Dichloroethene	0.18	0.15		ppbV	1	4/7/2017 7:30:00 PM
Trichloroethene	11	0.40		ppbV	10	4/8/2017 1:37:00 AM
Vinyl chloride	0.11	0.040		ppbV	1	4/7/2017 7:30:00 PM
Surr: Bromofluorobenzene	116	70-130		%REC	1	4/7/2017 7:30:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-SVI
Lab Order:	C1704014	**Tag Number:**	467.1167
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 7:30:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 7:30:00 PM
cis-1,2-Dichloroethene	23	5.9		ug/m3	10	4/8/2017 1:37:00 AM
trans-1,2-Dichloroethene	0.71	0.59		ug/m3	1	4/7/2017 7:30:00 PM
Trichloroethene	57	2.1		ug/m3	10	4/8/2017 1:37:00 AM
Vinyl chloride	0.28	0.10		ug/m3	1	4/7/2017 7:30:00 PM

Qualifiers:

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

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

QUALITY CONTROL SUMMARY

Date: 04-May-17

CENTEK LABORATORIES, LLC

QC SUMMARY REPORT
SURROGATE RECOVERIES

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street
Test No: TO-15 **Matrix:** A

Sample ID	BR4FBZ
ALCS1UG-040617	95.0
ALCS1UG-040717	97.0
ALCS1UGD-040617	98.0
ALCS1UGD-040717	97.0
AMB1UG-040617	90.0
AMB1UG-040717	86.0
C1704014-001A	96.0
C1704014-001A MS	97.0
C1704014-001A MSD	99.0
C1704014-002A	89.0
C1704014-003A	109
C1704014-004A	92.0
C1704014-005A	118
C1704014-006A	88.0
C1704014-007A	91.0
C1704014-008A	93.0
C1704014-009A	113
C1704014-010A	92.0
C1704014-011A	109
C1704014-012A	103
C1704014-013A	102
C1704014-014A	107
C1704014-015A	116

Acronym	Surrogate	QC Limits
BR4FBZ	= Bromofluorobenzene	70-130

* Surrogate recovery outside acceptance limits

I

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AO040602.D
Tune Time : 6 Apr 2017 9:31 am

Daily Calibration File : C:\HPCHEM\1\DATA\AO040602.D

			(BFB)	(IS1)	(IS2)	(IS3)
				26713	121699	111761
File	Sample	DL	Surrogate Recovery %	Internal Standard Responses		
AO040603.D	ALCS1UG-040617		95	26450	123600	109377
AO040604.D	AMB1UG-040617		90	26038	118374	102379
AO040620.D	ALCS1UGD-040617		98	24809	117535	100863
AO040621.D	C1704014-001A		96	25396	113281	97086
AO040622.D	C1704014-001A	MS	97	26903	116940	105999
AO040623.D	C1704014-001A	MSD	99	26299	120898	106126
AO040624.D	C1704014-002A		89	24868	113360	102277
AO040625.D	C1704014-004A		92	25596	114646	102450
AO040626.D	C1704014-006A		88	25816	110508	98499
AO040627.D	C1704014-007A		91	24957	110993	99559
AO040628.D	C1704014-008A		93	25088	108028	95812
AO040629.D	C1704014-010A		92	24485	107880	98198
AO040630.D	C1704014-012A		103	25278	111053	100304
AO040631.D	C1704014-013A		102	25079	113761	101873

t - fails 24hr time check * - fails criteria

Created: Thu May 04 12:00:40 2017 MSD #1/

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AO040702.D
Tune Time : 7 Apr 2017 11:20 am

Daily Calibration File : C:\HPCHEM\1\DATA\AO040702.D

			(BFB)	(IS1)	(IS2)	(IS3)
				23210	99215	88822
File	Sample	DL	Surrogate Recovery %	Internal Standard Responses		
AO040703.D	ALCS1UG-040717		97	22420	98698	86489
AO040704.D	AMB1UG-040717		86	21100	92197	83384
AO040706.D	C1704014-012A	10X	91	20808	86837	77606
AO040707.D	C1704014-013A	10X	92	19443	85901	76902
AO040708.D	C1704014-003A		109	20468	96070	92232
AO040709.D	C1704014-005A		118	24680	109137	104661
AO040710.D	C1704014-009A		113	27394	125972	121869
AO040711.D	C1704014-011A		109	30170	132762	121408
AO040712.D	C1704014-014A		107	31361	139148	131462
AO040713.D	C1704014-015A		116	31915	147799	139968
AO040714.D	C1704014-003A	10x	95	31326	147339	127930
AO040716.D	C1704014-005A	90x	92	26112	119025	102419
AO040719.D	C1704014-011A	10x	93	21591	93800	84591
AO040721.D	C1704014-014A	9x	95	20532	89989	83171
AO040722.D	C1704014-014A	90x	89	20827	88198	80228
AO040723.D	C1704014-015A	10x	94	20780	88679	79938
AO040725.D	ALCS1UGD-040717		97	19313	89890	78098

t - fails 24hr time check * - fails criteria

Created: Thu May 04 12:02:38 2017 MSD #1/

Date: *04-May-17*

CENTEK LABORATORIES, LLC

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID ALCS1UG-040617	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141660

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9700	0.15	1	0	97.0	70	130				
Chloroethane	1.090	0.15	1	0	109	70	130				
cis-1,2-Dichloroethene	0.9700	0.15	1	0	97.0	70	130				
trans-1,2-Dichloroethene	0.9500	0.15	1	0	95.0	70	130				
Trichloroethene	0.9700	0.040	1	0	97.0	70	130				
Vinyl chloride	0.9700	0.040	1	0	97.0	70	130				

Sample ID ALCS1UG-040717	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/7/2017	SeqNo: 141731

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9900	0.15	1	0	99.0	70	130				
Chloroethane	1.180	0.15	1	0	118	70	130				
cis-1,2-Dichloroethene	1.000	0.15	1	0	100	70	130				
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130				
Trichloroethene	1.060	0.040	1	0	106	70	130				
Vinyl chloride	1.150	0.040	1	0	115	70	130				

Sample ID ALCS1UGD-040617	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9900	0.15	1	0	99.0	70	130	0.97	2.04	30	
Chloroethane	1.000	0.15	1	0	100	70	130	1.09	8.61	30	

Qualifiers:

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

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID: ALCS1UGD-040617	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	0.9600	0.15	1	0	96.0	70	130	0.97	1.04	30	
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130	0.95	3.11	30	
Trichloroethene	1.000	0.040	1	0	100	70	130	0.97	3.05	30	
Vinyl chloride	1.060	0.040	1	0	106	70	130	0.97	8.87	30	

Sample ID: ALCS1UGD-040717	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/8/2017	SeqNo: 141732

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.080	0.15	1	0	108	70	130	0.99	8.70	30	
Chloroethane	1.180	0.15	1	0	118	70	130	1.18	0	30	
cis-1,2-Dichloroethene	1.120	0.15	1	0	112	70	130	1	11.3	30	
trans-1,2-Dichloroethene	1.070	0.15	1	0	107	70	130	0.98	8.78	30	
Trichloroethene	1.100	0.040	1	0	110	70	130	1.06	3.70	30	
Vinyl chloride	1.240	0.040	1	0	124	70	130	1.15	7.53	30	

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *04-May-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID	C1704014-001A MS	SampType:	MS	TestCode:	0.25CT-TCE-	Units:	ppbV	Prep Date:		RunNo:	12114
Client ID:	691-B19-IAQ-1	Batch ID:	R12114	TestNo:	TO-15			Analysis Date:	4/6/2017	SeqNo:	141726

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9100	0.15	1	0	91.0	70	130				
Chloroethane	1.040	0.15	1	0	104	70	130				
cis-1,2-Dichloroethene	1.230	0.15	1	0.33	90.0	70	130				
trans-1,2-Dichloroethene	0.9500	0.15	1	0	95.0	70	130				
Trichloroethene	1.390	0.040	1	0.4	99.0	70	130				
Vinyl chloride	1.030	0.040	1	0	103	70	130				

Sample ID	C1704014-001A MS	SampType:	MSD	TestCode:	0.25CT-TCE-	Units:	ppbV	Prep Date:		RunNo:	12114
Client ID:	691-B19-IAQ-1	Batch ID:	R12114	TestNo:	TO-15			Analysis Date:	4/6/2017	SeqNo:	141727

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.000	0.15	1	0	100	70	130	0.91	9.42	30	
Chloroethane	1.040	0.15	1	0	104	70	130	1.04	0	30	
cis-1,2-Dichloroethene	1.320	0.15	1	0.33	99.0	70	130	1.23	7.06	30	
trans-1,2-Dichloroethene	0.9700	0.15	1	0	97.0	70	130	0.95	2.08	30	
Trichloroethene	1.370	0.040	1	0.4	97.0	70	130	1.39	1.45	30	
Vinyl chloride	1.030	0.040	1	0	103	70	130	1.03	0	30	

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *04-May-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID AMB1UG-040617	SampType: MBLK	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Sample ID AMB1UG-040717	SampType: MBLK	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/7/2017	SeqNo: 141730

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Qualifiers:

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

Name	Amount	IDL#1	IDL#2	IDL#3	IDL#4	IDL#5	IDL#6	IDL#7	Average	StdDev	%Rec	IDL
Propylene	0.15	0.16	0.15	0.16	0.14	0.16	0.14	0.16	0.153	0.010	98.1	0.030
Freon 12	0.15	0.18	0.17	0.17	0.17	0.18	0.17	0.17	0.173	0.005	86.8	0.015
Chloromethane	0.15	0.19	0.18	0.16	0.18	0.18	0.2	0.17	0.180	0.013	83.3	0.041
Freon 114	0.15	0.18	0.17	0.17	0.17	0.18	0.17	0.18	0.174	0.005	86.1	0.017
Vinyl Chloride	0.15	0.17	0.16	0.16	0.15	0.16	0.15	0.15	0.157	0.008	95.5	0.024
Butane	0.15	0.18	0.16	0.17	0.18	0.18	0.19	0.19	0.179	0.011	84.0	0.034
1,3-butadiene	0.15	0.21	0.2	0.2	0.22	0.17	0.18	0.23	0.201	0.021	74.5	0.066
Bromomethane	0.15	0.18	0.2	0.21	0.18	0.22	0.16	0.21	0.194	0.021	77.2	0.068
Chloroethane	0.15	0.19	0.19	0.16	0.19	0.19	0.18	0.19	0.184	0.011	81.4	0.036
Ethanol	0.15	0.16	0.16	0.18	0.17	0.19	0.18	0.19	0.176	0.013	85.4	0.040
Acrolein	0.15	0.22	0.17	0.19	0.16	0.18	0.21	0.17	0.186	0.022	80.8	0.070
Vinyl Bromide	0.15	0.17	0.15	0.16	0.16	0.17	0.17	0.17	0.164	0.008	91.3	0.025
Freon 11	0.15	0.18	0.17	0.17	0.18	0.19	0.17	0.18	0.177	0.008	84.7	0.024
Acetone	0.15	0.2	0.17	0.18	0.15	0.15	0.18	0.14	0.167	0.021	89.7	0.067
Pentane	0.15	0.18	0.17	0.18	0.16	0.17	0.2	0.16	0.174	0.014	86.1	0.044
Isopropyl alcohol	0.15	0.22	0.2	0.19	0.2	0.19	0.21	0.19	0.200	0.012	75.0	0.036
1,1-dichloroethene	0.15	0.2	0.17	0.19	0.19	0.19	0.18	0.18	0.186	0.010	80.8	0.031
Freon 113	0.15	0.17	0.16	0.18	0.18	0.18	0.17	0.17	0.173	0.008	86.8	0.024
t-Butyl alcohol	0.15	0.21	0.2	0.2	0.21	0.2	0.2	0.18	0.200	0.010	75.0	0.031
Methylene chloride	0.15	0.2	0.18	0.19	0.18	0.2	0.19	0.17	0.187	0.011	80.2	0.035
Allyl chloride	0.15	0.18	0.17	0.16	0.18	0.18	0.2	0.18	0.179	0.012	84.0	0.038
Carbon disulfide	0.15	0.2	0.17	0.19	0.19	0.2	0.18	0.19	0.189	0.011	79.5	0.034
trans-1,2-dichloroethene	0.15	0.15	0.14	0.14	0.14	0.16	0.14	0.15	0.146	0.008	102.9	0.025
methyl tert-butyl ether	0.15	0.14	0.14	0.14	0.13	0.15	0.14	0.13	0.139	0.007	108.2	0.022
1,1-dichloroethane	0.15	0.17	0.15	0.16	0.15	0.17	0.16	0.16	0.160	0.008	93.8	0.026
Vinyl acetate	0.15	0.14	0.13	0.14	0.13	0.13	0.13	0.12	0.131	0.007	114.1	0.022
Methyl Ethyl Ketone	0.15	0.17	0.17	0.16	0.16	0.15	0.13	0.12	0.151	0.020	99.1	0.061
cis-1,2-dichloroethene	0.15	0.15	0.14	0.16	0.15	0.16	0.15	0.14	0.150	0.008	100.0	0.026
Hexane	0.15	0.12	0.14	0.13	0.13	0.13	0.12	0.12	0.127	0.008	118.0	0.024
Ethyl acetate	0.15	0.16	0.17	0.14	0.15	0.14	0.16	0.13	0.150	0.014	100.0	0.044
Chloroform	0.15	0.16	0.16	0.16	0.16	0.17	0.16	0.17	0.163	0.005	92.1	0.015
Tetrahydrofuran	0.15	0.15	0.13	0.15	0.15	0.15	0.15	0.14	0.146	0.008	102.9	0.025
1,2-dichloroethane	0.15	0.16	0.15	0.16	0.16	0.17	0.16	0.17	0.161	0.007	92.9	0.022
1,1,1-trichloroethane	0.15	0.17	0.16	0.17	0.17	0.16	0.17	0.17	0.167	0.005	89.7	0.015
Cyclohexane	0.15	0.14	0.14	0.14	0.15	0.15	0.14	0.14	0.143	0.005	105.0	0.015
Carbon tetrachloride	0.15	0.13	0.15	0.15	0.15	0.15	0.15	0.16	0.149	0.009	101.0	0.028
Benzene	0.15	0.15	0.16	0.16	0.15	0.16	0.16	0.16	0.157	0.005	95.5	0.015
Methyl methacrylate	0.15	0.15	0.15	0.14	0.14	0.14	0.15	0.11	0.140	0.014	107.1	0.044
1,4-dioxane	0.15	0.18	0.18	0.19	0.18	0.15	0.17	0.12	0.167	0.024	89.7	0.076

Centek Laboratories
IDL Study

1ug/M3 Detection Limit
January 2016

Method TO-15A
Units=ppb

Name	Amount	IDL#1	IDL#2	IDL#3	IDL#4	IDL#5	IDL#6	IDL#7	Average	StdDev	%Rec	IDL
2,2,4-trimethylpentane	0.15	0.15	0.15	0.15	0.16	0.14	0.16	0.15	0.151	0.007	99.1	0.022
Heptane	0.15	0.12	0.13	0.13	0.12	0.13	0.13	0.13	0.127	0.005	118.0	0.015
Trichloroethene	0.15	0.14	0.15	0.14	0.15	0.15	0.14	0.15	0.146	0.005	102.9	0.017
1,2-dichloropropane	0.15	0.16	0.17	0.17	0.16	0.17	0.16	0.16	0.164	0.005	91.3	0.017
Bromodichloromethane	0.15	0.16	0.16	0.16	0.15	0.16	0.17	0.16	0.160	0.006	93.8	0.018
cis-1,3-dichloropropene	0.15	0.13	0.13	0.14	0.14	0.13	0.13	0.13	0.133	0.005	112.9	0.015
trans-1,3-dichloropropene	0.15	0.16	0.13	0.13	0.14	0.14	0.14	0.16	0.143	0.013	105.0	0.039
1,1,2-trichloroethane	0.15	0.16	0.15	0.16	0.15	0.16	0.18	0.17	0.161	0.011	92.9	0.034
Toluene	0.15	0.14	0.14	0.14	0.13	0.16	0.14	0.15	0.143	0.010	105.0	0.030
Methyl Isobutyl Ketone	0.15	0.18	0.18	0.18	0.18	0.16	0.18	0.15	0.173	0.013	86.8	0.039
Dibromochloromethane	0.15	0.16	0.16	0.17	0.18	0.16	0.17	0.18	0.169	0.009	89.0	0.028
Methyl Butyl Ketone	0.15	0.17	0.16	0.18	0.17	0.16	0.17	0.14	0.164	0.013	91.3	0.040
1,2-dibromoethane	0.15	0.16	0.17	0.16	0.16	0.16	0.16	0.17	0.163	0.005	92.1	0.015
Tetrachloroethylene	0.15	0.16	0.17	0.16	0.16	0.16	0.17	0.17	0.164	0.005	91.3	0.017
Chlorobenzene	0.15	0.16	0.16	0.16	0.17	0.15	0.17	0.17	0.163	0.008	92.1	0.024
1,1,1,2-tetrachloroethane	0.15	0.17	0.17	0.17	0.18	0.16	0.18	0.17	0.171	0.007	87.5	0.022
Ethylbenzene	0.15	0.13	0.14	0.14	0.14	0.12	0.14	0.13	0.134	0.008	111.7	0.025
m&p-xylene	0.3	0.25	0.25	0.25	0.23	0.25	0.25	0.25	0.247	0.008	121.4	0.024
Nonane	0.15	0.11	0.11	0.11	0.11	0.1	0.1	0.11	0.107	0.005	140.0	0.015
Styrene	0.15	0.12	0.13	0.13	0.11	0.12	0.13	0.12	0.123	0.008	122.1	0.024
Bromoform	0.15	0.15	0.15	0.16	0.15	0.15	0.17	0.16	0.156	0.008	96.3	0.025
o-xylene	0.15	0.11	0.12	0.12	0.14	0.14	0.12	0.11	0.123	0.013	122.1	0.039
Cumene	0.15	0.12	0.13	0.13	0.12	0.13	0.13	0.13	0.127	0.005	118.0	0.015
Bromofluorobenzene	1	0.88	0.9	0.9	0.87	0.89	0.89	0.9	0.890	0.012	112.4	0.036
1,1,2,2-tetrachloroethane	0.15	0.16	0.16	0.17	0.16	0.17	0.17	0.16	0.164	0.005	91.3	0.017
Propylbenzene	0.15	0.13	0.12	0.13	0.13	0.11	0.13	0.11	0.123	0.010	122.1	0.030
2-Chlorotoluene	0.15	0.13	0.13	0.13	0.14	0.13	0.12	0.13	0.130	0.006	115.4	0.018
4-ethyltoluene	0.15	0.11	0.12	0.12	0.12	0.13	0.13	0.11	0.120	0.008	125.0	0.026
1,3,5-trimethylbenzene	0.15	0.12	0.13	0.14	0.12	0.13	0.13	0.13	0.129	0.007	116.7	0.022
1,2,4-trimethylbenzene	0.15	0.12	0.13	0.12	0.12	0.13	0.12	0.12	0.123	0.005	122.1	0.015
1,3-dichlorobenzene	0.15	0.14	0.14	0.14	0.13	0.14	0.13	0.14	0.137	0.005	109.4	0.015
benzyl chloride	0.15	0.13	0.16	0.13	0.15	0.13	0.15	0.16	0.144	0.014	104.0	0.044
1,4-dichlorobenzene	0.15	0.13	0.11	0.12	0.12	0.12	0.12	0.13	0.121	0.007	123.5	0.022
1,2,3-trimethylbenzene	0.15	0.12	0.11	0.12	0.12	0.12	0.11	0.11	0.116	0.005	129.6	0.017
1,2-dichlorobenzene	0.15	0.13	0.14	0.14	0.14	0.14	0.14	0.13	0.137	0.005	109.4	0.015
1,2,4-trichlorobenzene	0.15	0.1	0.11	0.1	0.11	0.11	0.12	0.1	0.107	0.008	140.0	0.024
Naphthalene	0.15	0.13	0.13	0.14	0.11	0.12	0.14	0.12	0.127	0.011	118.0	0.035
Hexachloro-1,3-butadiene	0.15	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.164	0.005	91.3	0.017

Name	Amount	IDL#1	IDL#2	IDL#3	IDL#4	IDL#5	IDL#6	IDL#7	Average	StdDev	%Rec	IDL
Vinyl Chloride	0.1	0.11	0.11	0.09	0.09	0.1	0.09	0.1	0.099	0.009	101.4	0.028
Carbon tetrachloride	0.1	0.1	0.11	0.08	0.09	0.09	0.09	0.09	0.093	0.010	107.7	0.030
Trichloroethene	0.1	0.1	0.1	0.07	0.08	0.08	0.08	0.08	0.084	0.011	118.6	0.036
Tetrachloroethylene	0.1	0.11	0.12	0.09	0.09	0.1	0.09	0.09	0.099	0.012	101.4	0.038
Naphthalene	0.1	0.09	0.08	0.07	0.06	0.06	0.07	0.06	0.070	0.012	142.9	0.036

GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

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

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

Percent Relative Standard Deviation (%RSD)

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

Percent Difference (%D)

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

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

Sample Calculations

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

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

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

SAMPLE DATA

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-1
Lab Order:	C1704014	**Tag Number:**	1321.1163
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-4			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/6/2017 9:55:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/6/2017 9:55:00 PM
cis-1,2-Dichloroethene	0.33	0.15		ppbV	1	4/6/2017 9:55:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/6/2017 9:55:00 PM
Trichloroethene	0.40	0.040		ppbV	1	4/6/2017 9:55:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/6/2017 9:55:00 PM
Surr: Bromofluorobenzene	96.0	70-130		%REC	1	4/6/2017 9:55:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-1
Lab Order:	C1704014	**Tag Number:**	1321.1163
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/6/2017 9:55:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/6/2017 9:55:00 PM
cis-1,2-Dichloroethene	1.3	0.59		ug/m3	1	4/6/2017 9:55:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/6/2017 9:55:00 PM
Trichloroethene	2.1	0.21		ug/m3	1	4/6/2017 9:55:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/6/2017 9:55:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040621.D Vial: 21
Acq On : 6 Apr 2017 9:55 pm Operator: RJP
Sample : C1704014-001A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:02:25 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.57	128	25396	1.00	ppb	0.03
35) 1,4-difluorobenzene	11.95	114	113281	1.00	ppb	0.02
50) Chlorobenzene-d5	16.83	117	97086	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.47	95	63494	0.96	ppb	0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 96.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.37	61	17307	0.33	ppb	96
44) Trichloroethene	12.79	130	20426	0.40	ppb	92

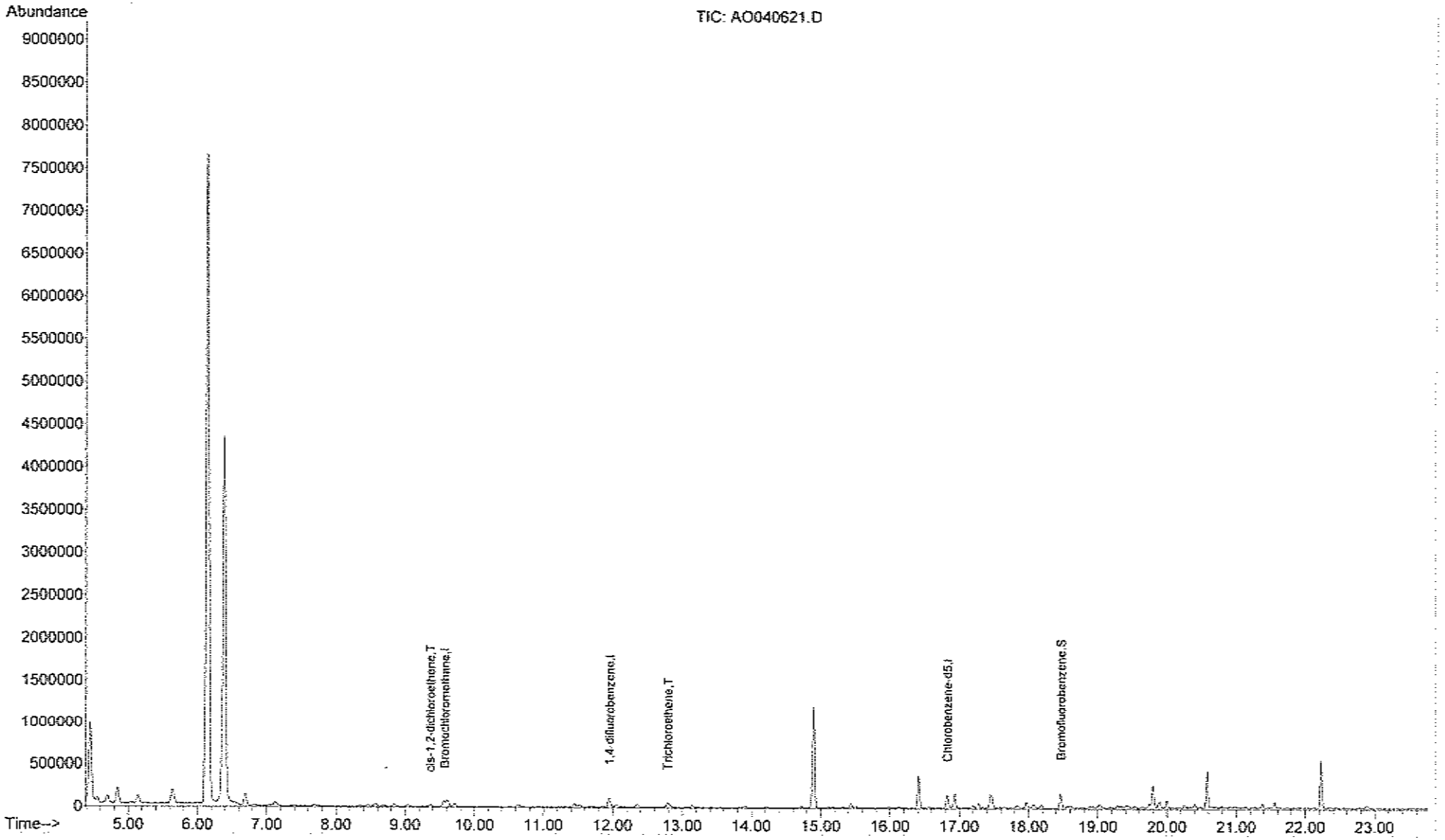
(#) = qualifier out of range (m) = manual integration (+) = signals summed

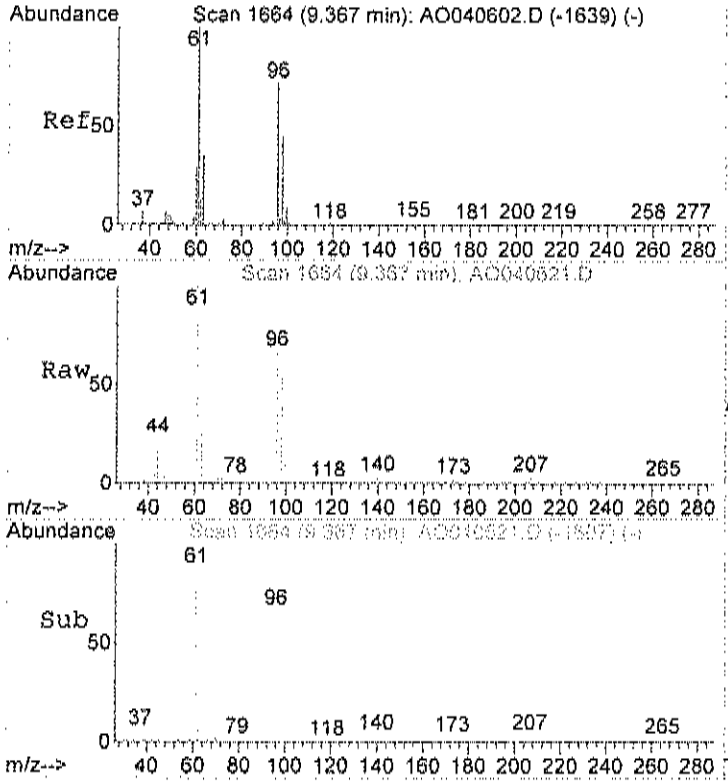
Data File : C:\HPCHEM\1\DATA\AO040621.D
Acq On : 6 Apr 2017 9:55 pm
Sample : C1704014-001A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:03 2017

Vial: 21
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

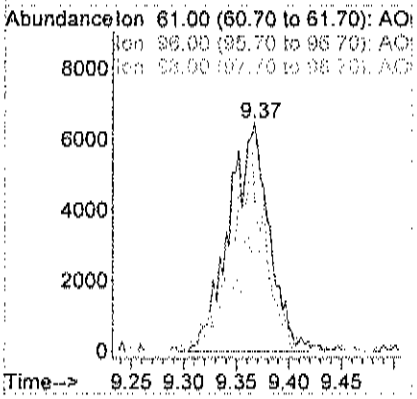


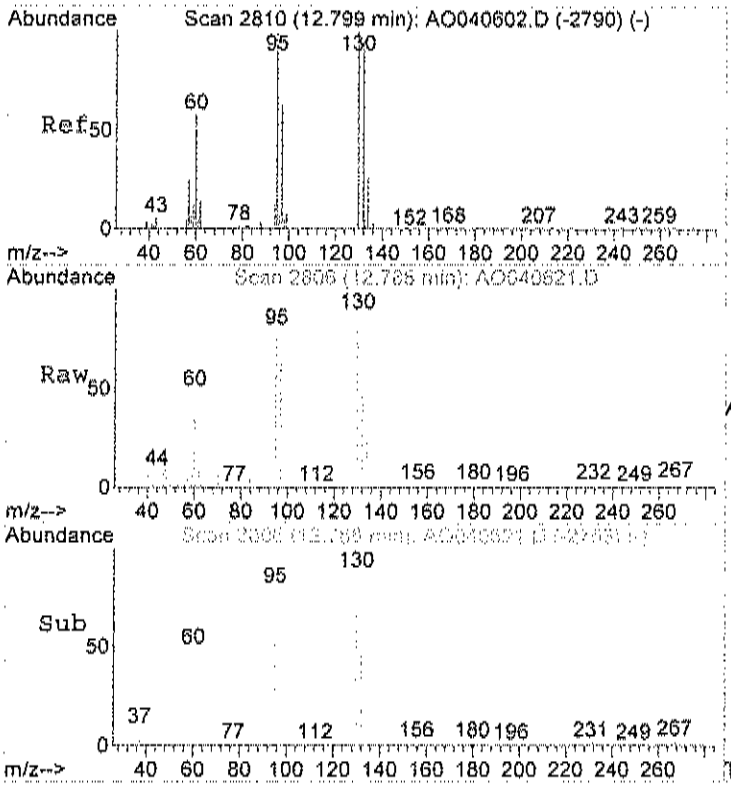


#29
cis-1,2-dichloroethene
Concen: 0.33 ppb
RT: 9.37 min Scan# 1664
Delta R.T. 0.02 min
Lab File: AO040621.D
Acq: 6 Apr 2017 9:55 pm

Tgt Ion: 61 Resp: 17307

Ion	Ratio	Lower	Upper
61	100		
96	74.6	58.1	98.1
98	52.6	29.3	69.3

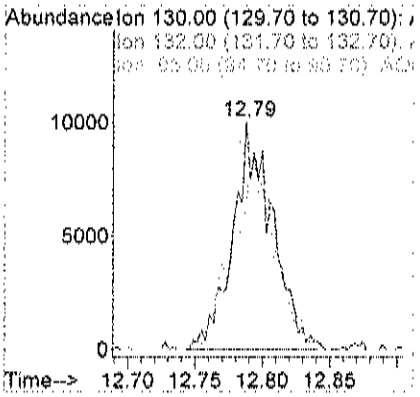




#44
Trichloroethene
Concen: 0.40 ppb
RT: 12.79 min Scan# 2806
Delta R.T. 0.01 min
Lab File: AO040621.D
Acq: 6 Apr 2017 9:55 pm

Tgt Ion:130 Resp: 20426

Ion	Ratio	Lower	Upper
130	100		
132	92.8	69.9	109.9
95	108.3	76.3	116.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-2
Lab Order:	C1704014	**Tag Number:**	1188.306
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-9			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:09:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 12:09:00 AM
cis-1,2-Dichloroethene	0.29	0.15		ppbV	1	4/7/2017 12:09:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:09:00 AM
Trichloroethene	0.39	0.040		ppbV	1	4/7/2017 12:09:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 12:09:00 AM
Surr: Bromofluorobenzene	89.0	70-130		%REC	1	4/7/2017 12:09:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-IAQ-2
Lab Order:	C1704014	**Tag Number:**	1188.306
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:09:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 12:09:00 AM
cis-1,2-Dichloroethene	1.1	0.59		ug/m3	1	4/7/2017 12:09:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:09:00 AM
Trichloroethene	2.1	0.21		ug/m3	1	4/7/2017 12:09:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 12:09:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040624.D Vial: 22
Acq On : 7 Apr 2017 12:09 am Operator: RJP
Sample : C1704014-002A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:04 2017 Quant Results File: A331_1UG.RES

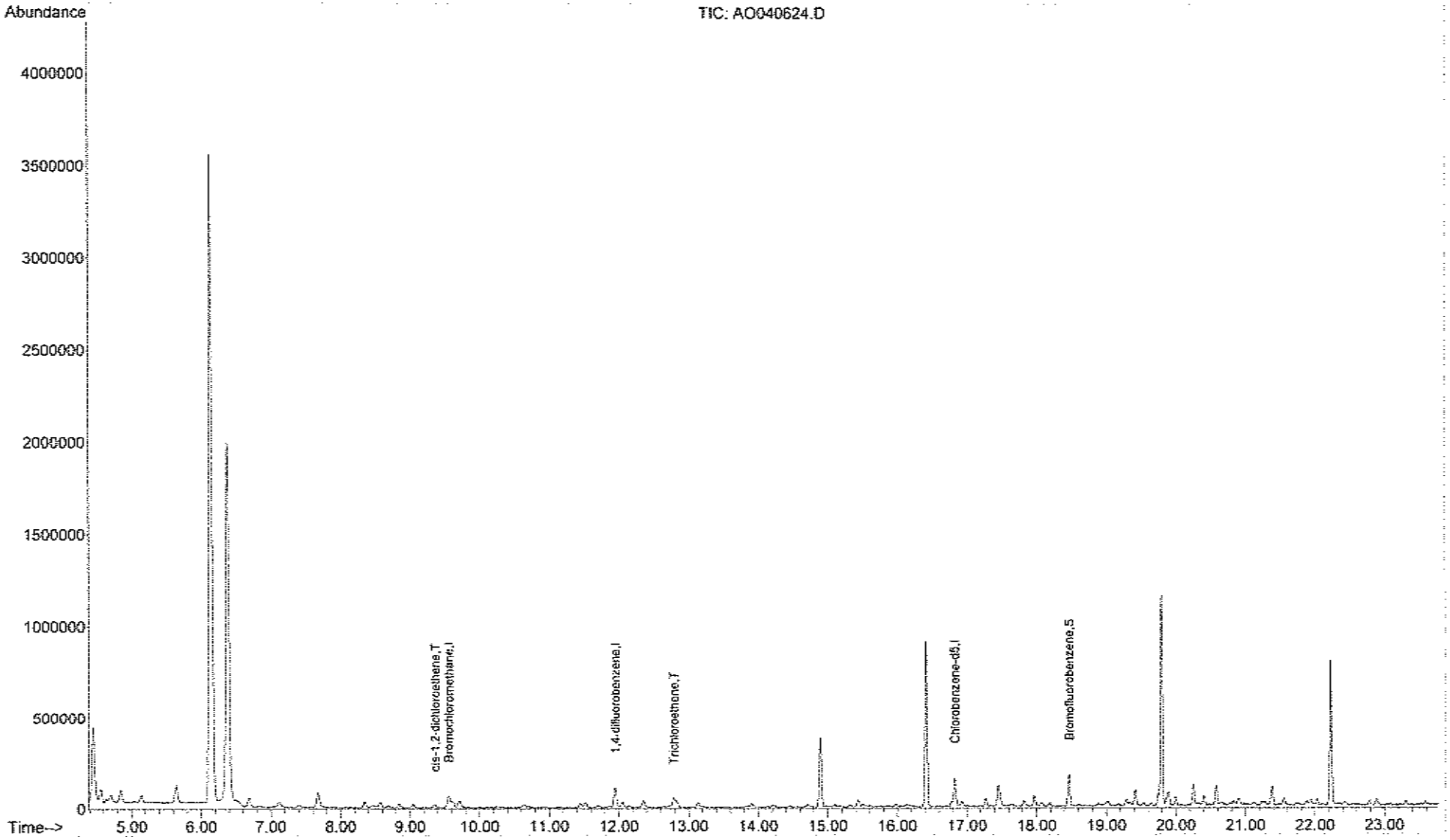
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

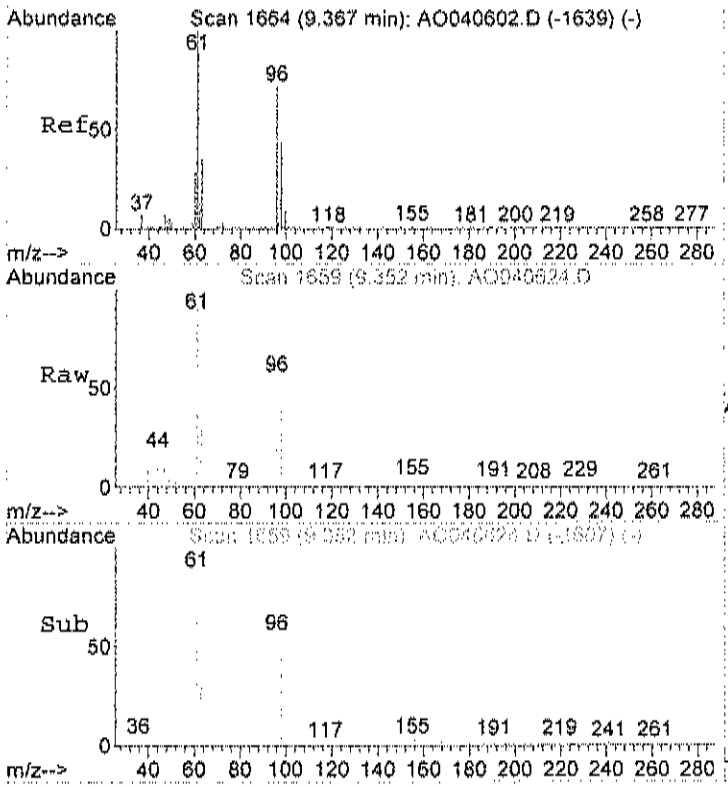
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	24868	1.00	ppb	0.01
35) 1,4-difluorobenzene	11.94	114	113360	1.00	ppb	0.00
50) Chlorobenzene-d5	16.83	117	102277	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	62337	0.89	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 89.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.35	61	15114	0.29	ppb	97
44) Trichloroethene	12.79	130	19716	0.39	ppb	95

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

Data File : C:\HPCHEM\1\DATA\AO040624.D Vial: 22
Acq On : 7 Apr 2017 12:09 am Operator: RJP
Sample : C1704014-002A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:24 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

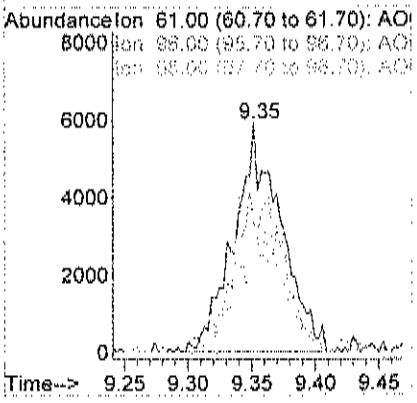


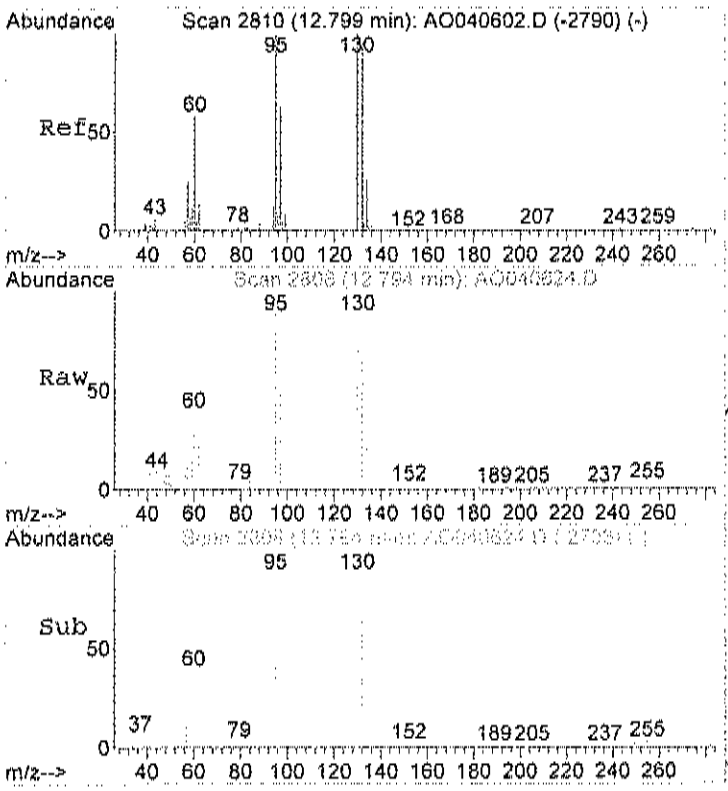


#29
cis-1,2-dichloroethene
Concen: 0.29 ppb
RT: 9.35 min Scan# 1659
Delta R.T. 0.01 min
Lab File: AO040624.D
Acq: 7 Apr 2017 12:09 am

Tgt Ion: 61 Resp: 15114

Ion	Ratio	Lower	Upper
61	100		
96	75.2	58.1	98.1
98	50.4	29.3	69.3

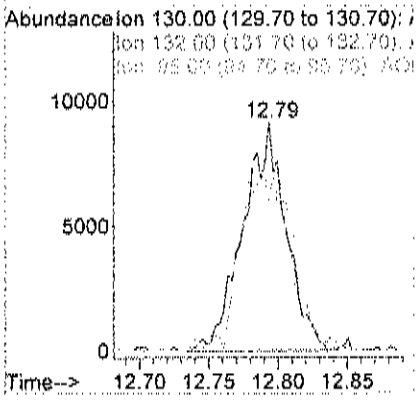




#44
Trichloroethene
Concen: 0.39 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.01 min
Lab File: AO040624.D
Acq: 7 Apr 2017 12:09 am

Tgt Ion:130 Resp: 19716

Ion	Ratio	Lower	Upper
130	100		
132	89.9	69.9	109.9
95	105.7	76.3	116.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-SVI
Lab Order:	C1704014	**Tag Number:**	362.446
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-9			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:23:00 PM
Trichloroethene	4.8	0.40		ppbV	10	4/7/2017 8:07:00 PM
Vinyl chloride	0.080	0.040		ppbV	1	4/7/2017 3:23:00 PM
Surr: Bromofluorobenzene	109	70-130		%REC	1	4/7/2017 3:23:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B19-SVI
Lab Order:	C1704014	**Tag Number:**	362,446
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 3:23:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:23:00 PM
Trichloroethene	26	2.1		ug/m3	10	4/7/2017 8:07:00 PM
Vinyl chloride	0.20	0.10		ug/m3	1	4/7/2017 3:23:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040708.D Vial: 8
Acq On : 7 Apr 2017 3:23 pm Operator: RJP
Sample : C1704014-003A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 15:59:23 2017 Quant Results File: A331_1UG.RES

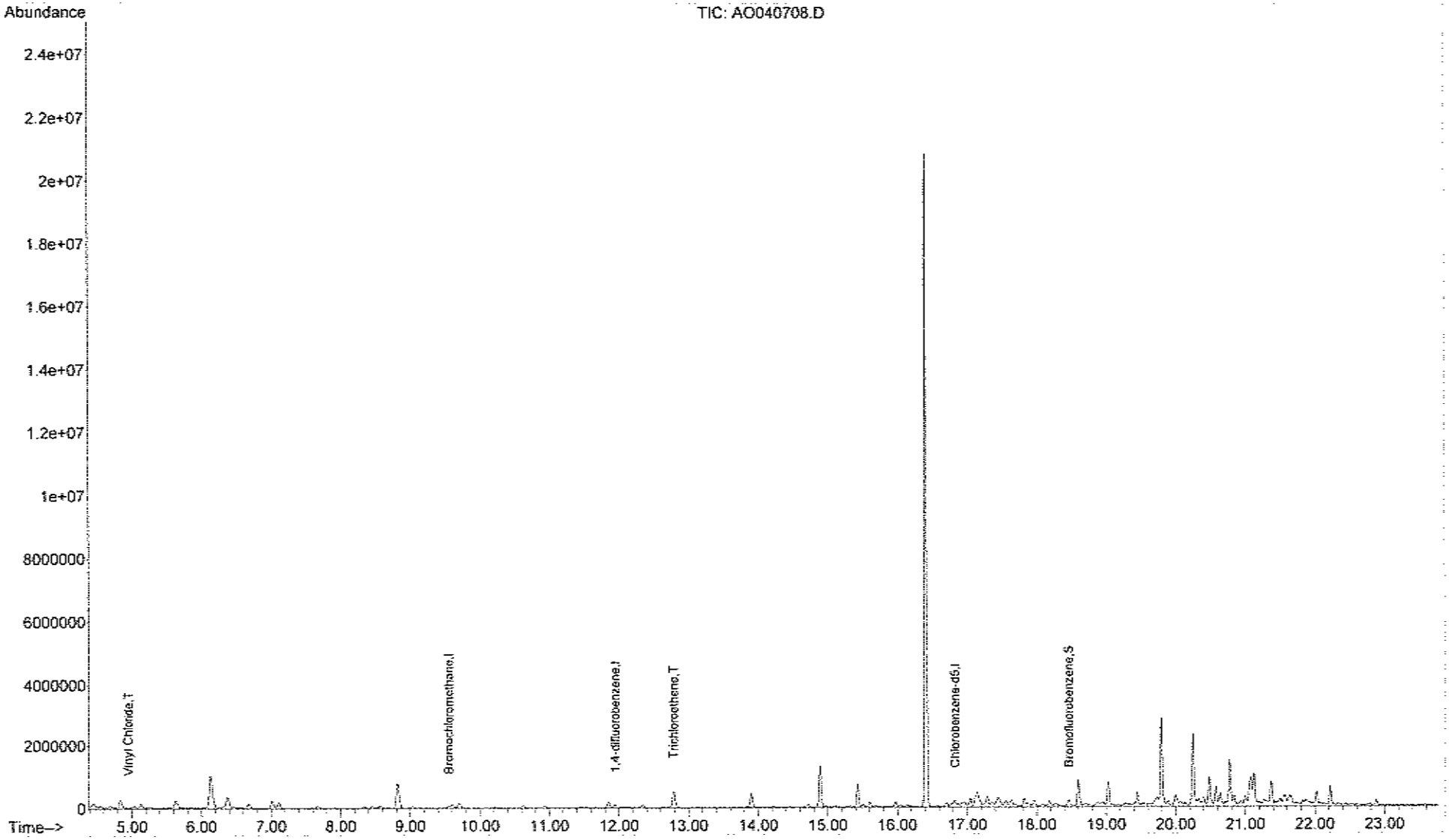
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

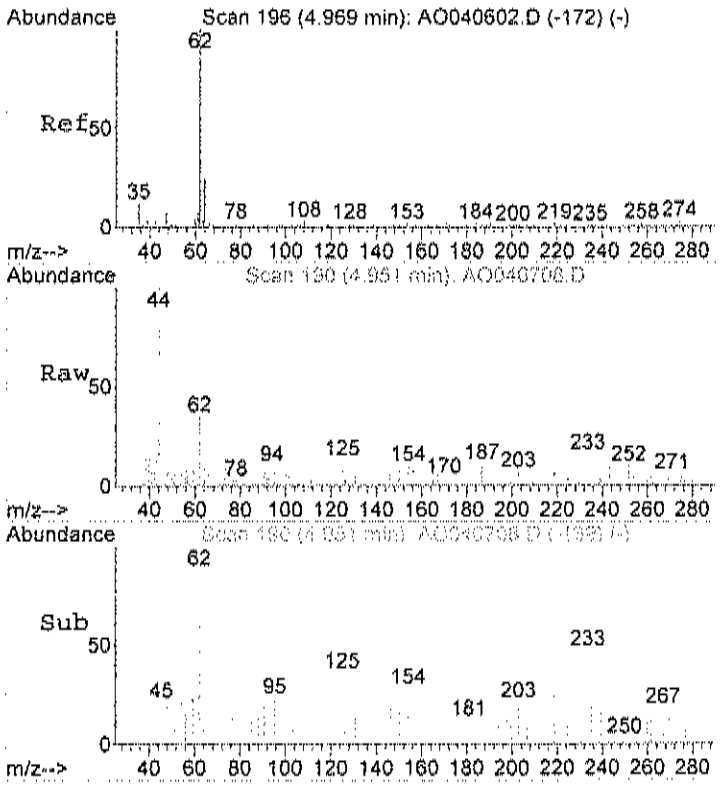
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.55	128	20468	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.94	114	96070	1.00	ppb	0.00
50) Chlorobenzene-d5	16.82	117	92232	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	68296	1.09	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 109.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.95	62	3018	0.08	ppb	79
44) Trichloroethene	12.78	130	203569	4.71	ppb	91

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

Data File : C:\HPCHEM\1\DATA\AO040708.D Vial: 8
Acq On : 7 Apr 2017 3:23 pm Operator: RJP
Sample : C1704014-003A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:07 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

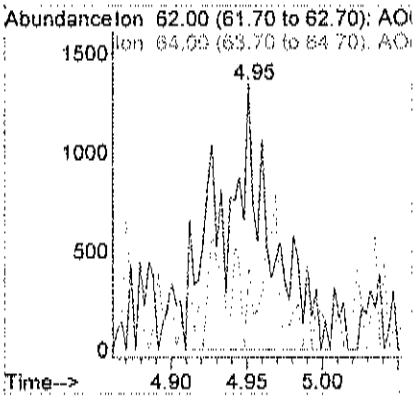


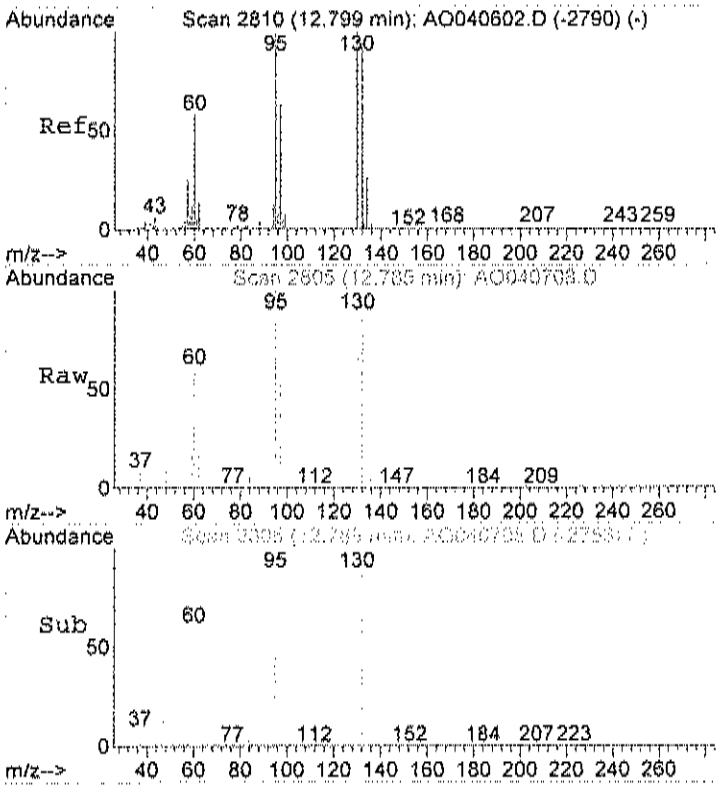


#6
Vinyl Chloride
Concen: 0.08 ppb
RT: 4.95 min Scan# 190
Delta R.T. 0.00 min
Lab File: AO040708.D
Acq: 7 Apr 2017 3:23 pm

Tgt Ion: 62 Resp: 3018

Ion	Ratio	Lower	Upper
62	100		
64	17.7	0.0	58.6

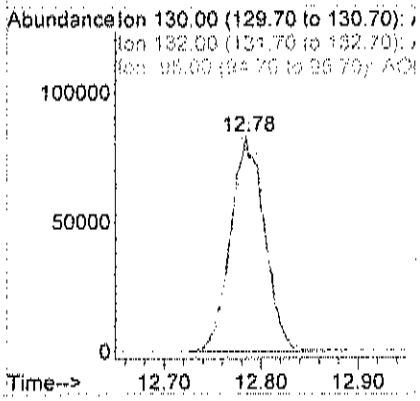




#44
Trichloroethene
Concen: 4.71 ppb
RT: 12.78 min Scan# 2805
Delta R.T. 0.01 min
Lab File: AO040708.D
Acq: 7 Apr 2017 3:23 pm

Tgt Ion:130 Resp: 203569

Ion	Ratio	Lower	Upper
130	100		
132	96.4	69.9	109.9
95	107.5	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040714.D Vial: 14
Acq On : 7 Apr 2017 8:07 pm Operator: RJP
Sample : C1704014-003A 10x Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:49 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

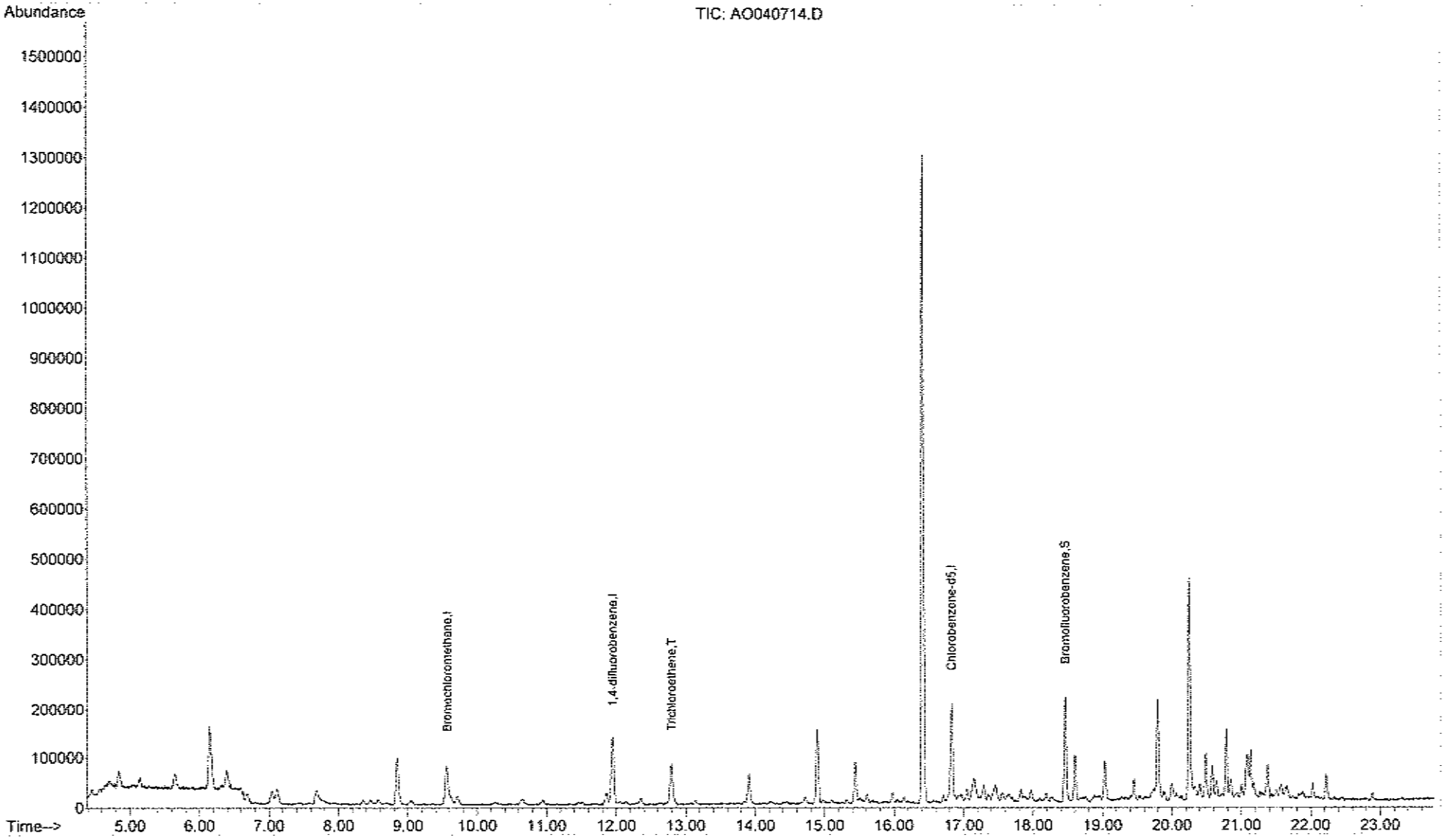
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	31326	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	147339	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	127930	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.47	95	83018	0.95	ppb	0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 95.00%			
Target Compounds						Qvalue
44) Trichloroethene	12.79	130	31747	0.48	ppb	92

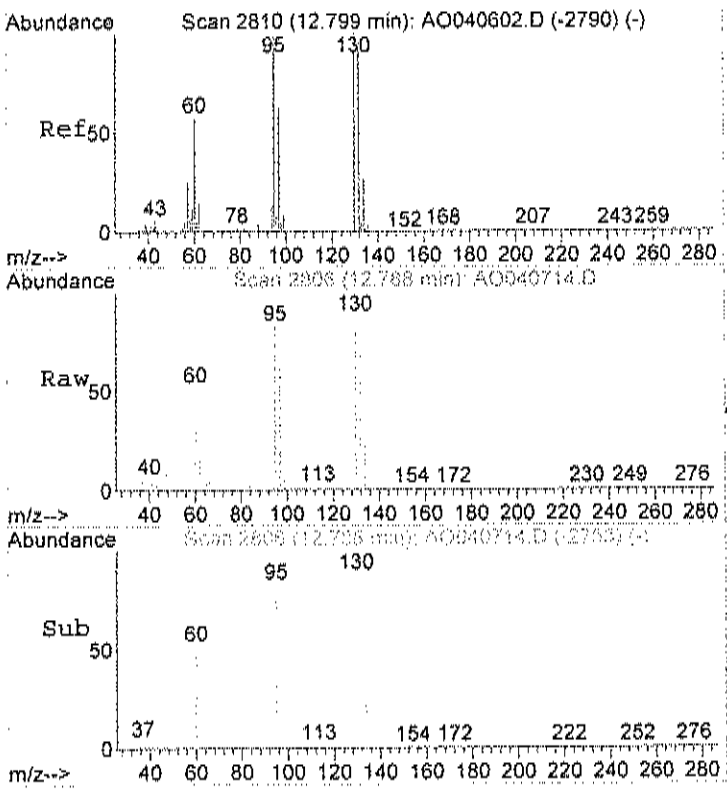
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040714.D
Acq On : 7 Apr 2017 8:07 pm
Sample : C1704014-003A 10x
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:57 2017

Vial: 14
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

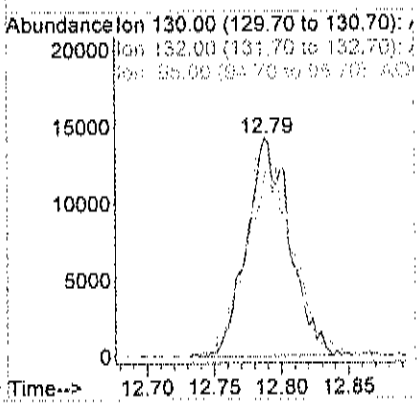




#44
Trichloroethene
Concen: 0.48 ppb
RT: 12.79 min Scan# 2806
Delta R.T. 0.01 min
Lab File: AO040714.D
Acq: 7 Apr 2017 8:07 pm

Tgt Ion:130 Resp: 31747

Ion	Ratio	Lower	Upper
130	100		
132	95.8	69.9	109.9
95	105.6	76.3	116.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-IAQ
Lab Order:	C1704014	**Tag Number:**	87.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:50:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 12:50:00 AM
cis-1,2-Dichloroethene	0.40	0.15		ppbV	1	4/7/2017 12:50:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 12:50:00 AM
Trichloroethene	0.41	0.040		ppbV	1	4/7/2017 12:50:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 12:50:00 AM
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	4/7/2017 12:50:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-IAQ
Lab Order:	C1704014	**Tag Number:**	87.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:50:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 12:50:00 AM
cis-1,2-Dichloroethene	1.6	0.59		ug/m3	1	4/7/2017 12:50:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 12:50:00 AM
Trichloroethene	2.2	0.21		ug/m3	1	4/7/2017 12:50:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 12:50:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040625.D Vial: 23
Acq On : 7 Apr 2017 12:50 am Operator: RJP
Sample : C1704014-004A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:05 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	25596	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	114646	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	102450	1.00	ppb	0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	63996	0.92	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.37	61	21474	0.40	ppb	91
44) Trichloroethene	12.79	130	21262	0.41	ppb	95

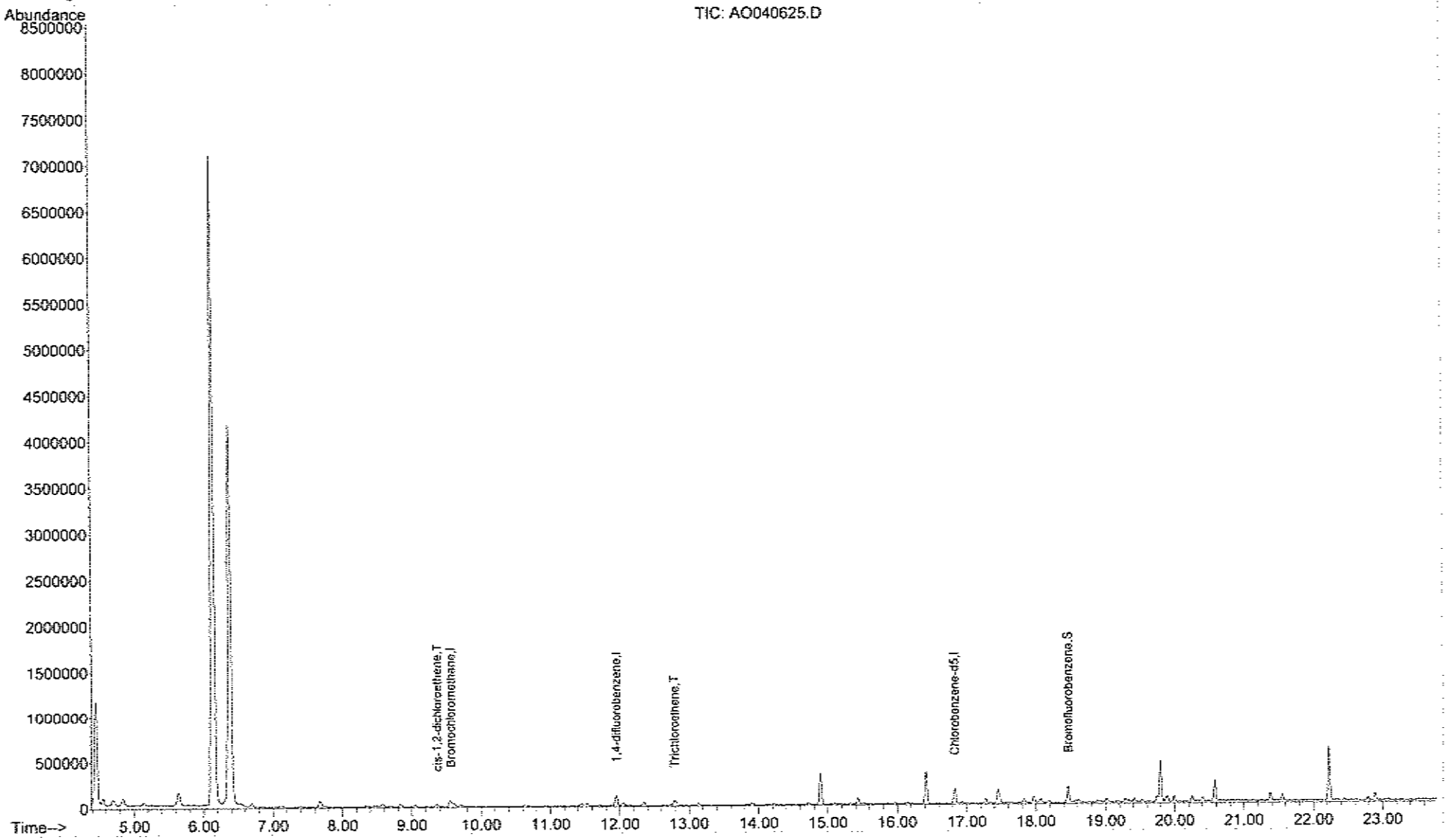
(#) = qualifier out of range (m) = manual integration (+) = signals summed

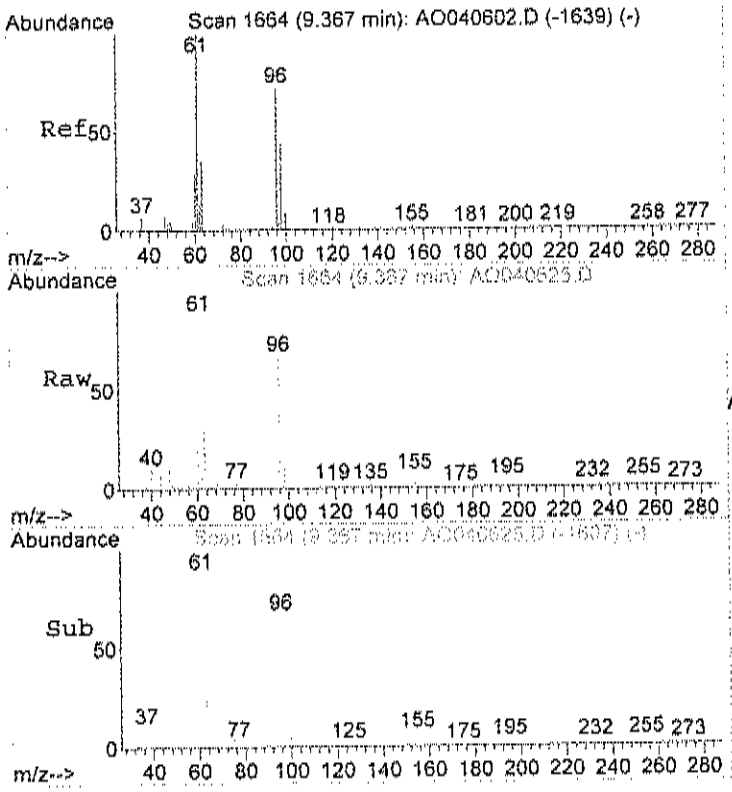
Data File : C:\HPCHEM\1\DATA\AO040625.D
Acq On : 7 Apr 2017 12:50 am
Sample : C1704014-004A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:25 2017

Vial: 23
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

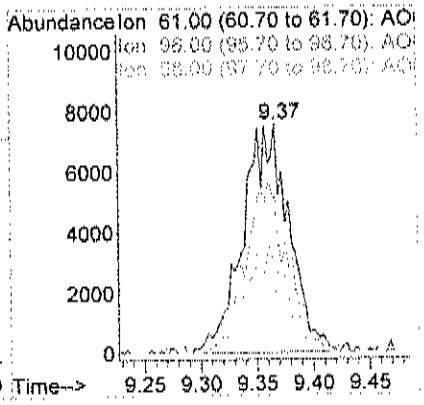


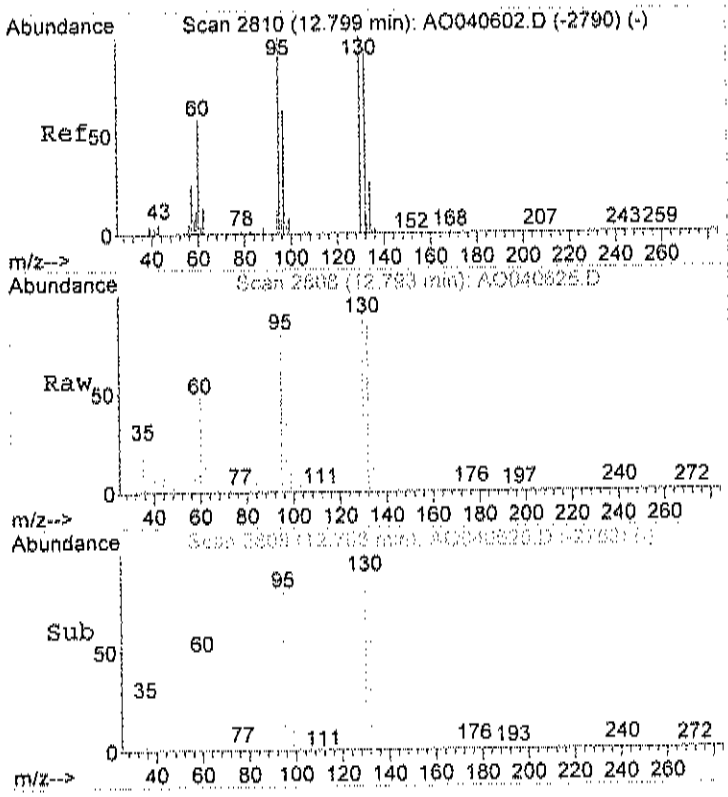


#29
cis-1,2-dichloroethene
Concen: 0.40 ppb
RT: 9.37 min Scan# 1664
Delta R.T. 0.02 min
Lab File: AO040625.D
Acq: 7 Apr 2017 12:50 am

Tgt Ion: 61 Resp: 21474

Ion	Ratio	Lower	Upper
61	100		
96	71.4	58.1	98.1
98	41.9	29.3	69.3

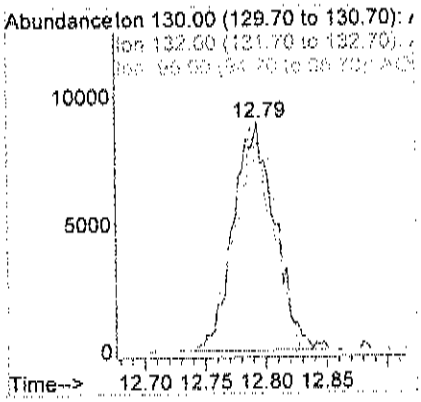




#44
Trichloroethene
Concen: 0.41 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.01 min
Lab File: AO040625.D
Acq: 7 Apr 2017 12:50 am

Tgt Ion:130 Resp: 21262

Ion	Ratio	Lower	Upper
130	100		
132	86.9	69.9	109.9
95	102.2	76.3	116.3



CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-SVI
Lab Order:	C1704014	**Tag Number:**	550.266
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:03:00 PM
Chloroethane	0.14	0.15	J	ppbV	1	4/7/2017 4:03:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:03:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:03:00 PM
Trichloroethene	40	3.6		ppbV	90	4/7/2017 9:20:00 PM
Vinyl chloride	0.11	0.040		ppbV	1	4/7/2017 4:03:00 PM
Surr: Bromofluorobenzene	118	70-130		%REC	1	4/7/2017 4:03:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-B15-SVI
Lab Order:	C1704014	**Tag Number:**	550.266
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
Chloroethane	0.37	0.40	J	ug/m3	1	4/7/2017 4:03:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:03:00 PM
Trichloroethene	220	19		ug/m3	90	4/7/2017 9:20:00 PM
Vinyl chloride	0.28	0.10		ug/m3	1	4/7/2017 4:03:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040709.D Vial: 9
Acq On : 7 Apr 2017 4:03 pm Operator: RJP
Sample : C1704014-005A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 16:58:03 2017 Quant Results File: A331_1UG.RES

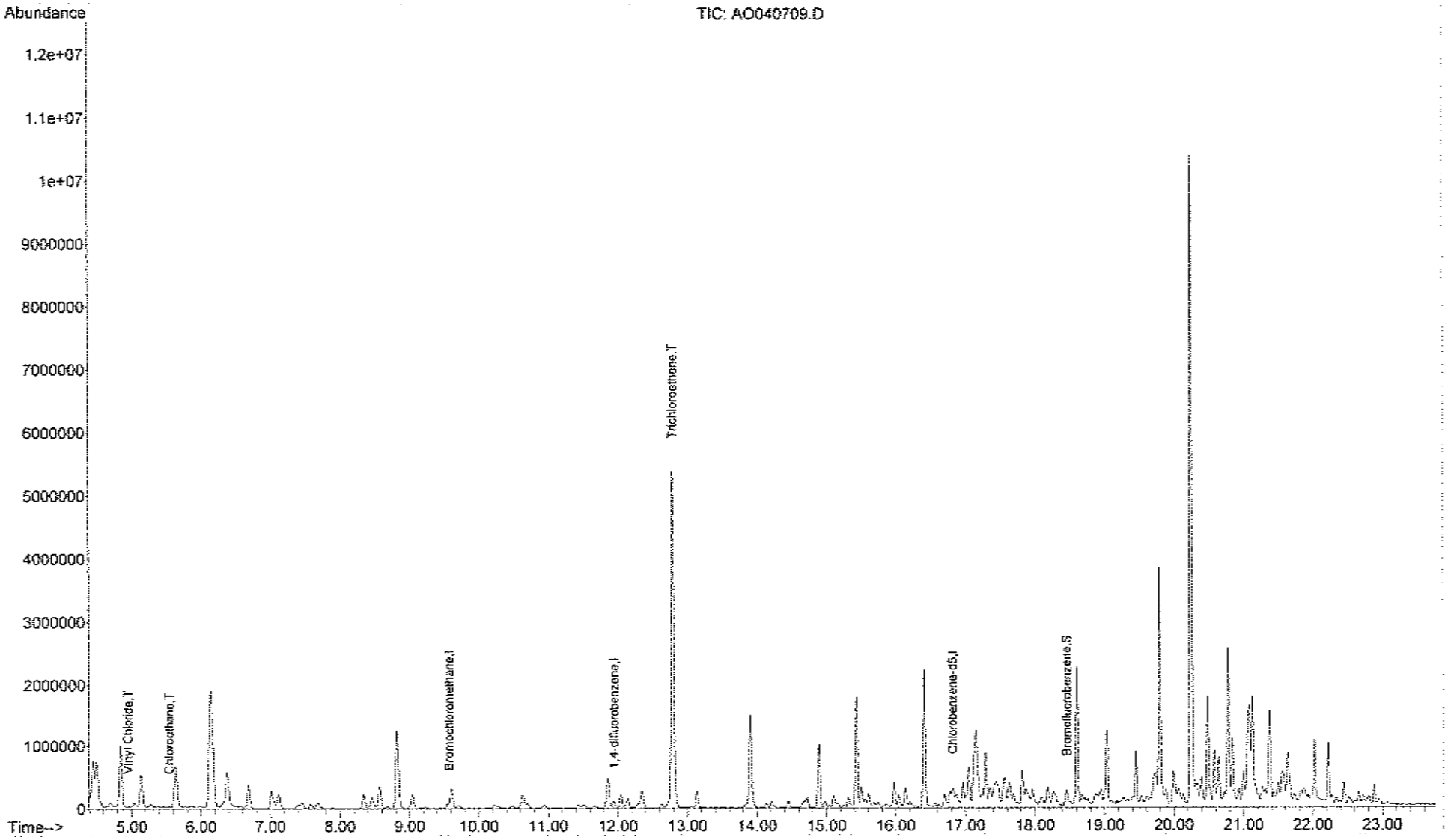
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

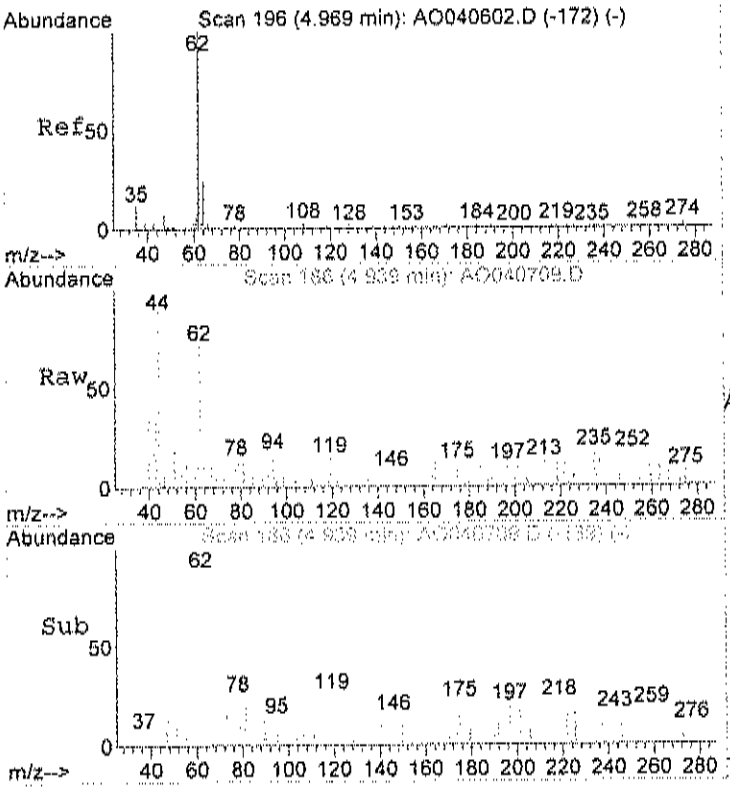
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	24680	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.94	114	109137	1.00	ppb	0.00
50) Chlorobenzene-d5	16.83	117	104661	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	84188	1.18	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 118.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.94	62	4732	0.11	ppb	97
10) Chloroethane	5.53	64	2571	0.14	ppb	92
44) Trichloroethene	12.79	130	2088134	42.51	ppb	92

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

Data File : C:\HPCHEM\1\DATA\AO040709.D Vial: 9
Acq On : 7 Apr 2017 4:03 pm Operator: RJP
Sample : C1704014-005A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:08 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

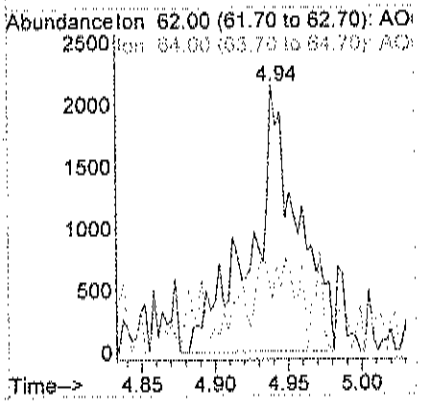


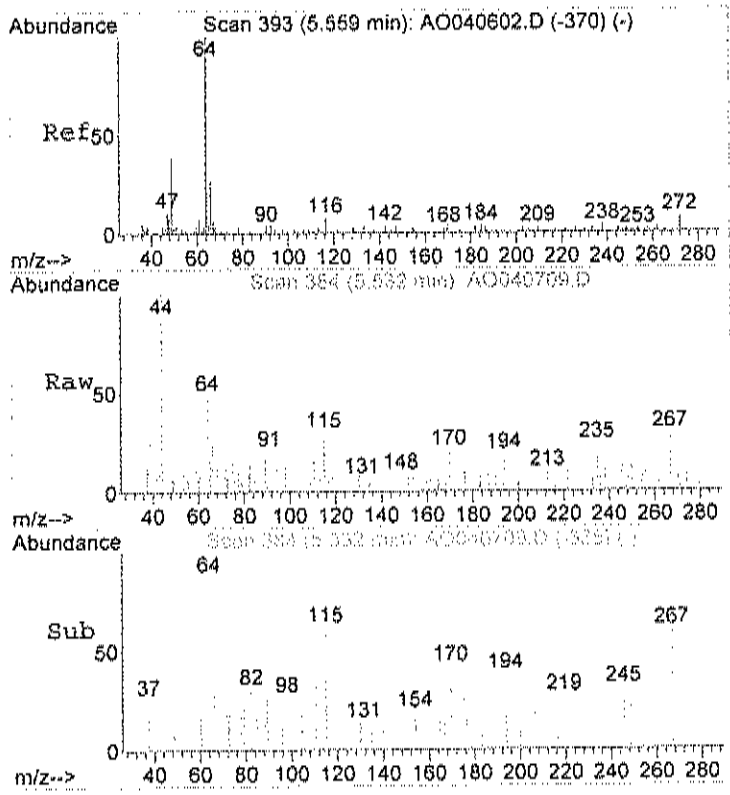


#6
Vinyl Chloride
Concen: 0.11 ppb
RT: 4.94 min Scan# 186
Delta R.T. -0.01 min
Lab File: AO040709.D
Acq: 7 Apr 2017 4:03 pm

Tgt Ion: 62 Resp: 4732

Ion	Ratio	Lower	Upper
62	100		
64	27.2	0.0	58.6

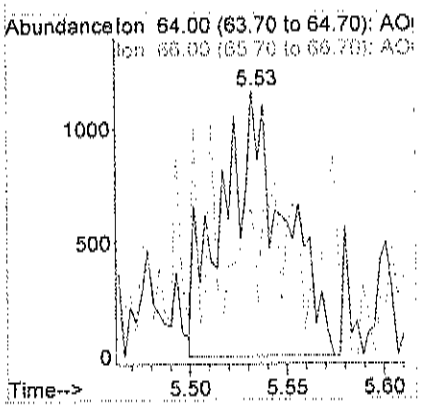


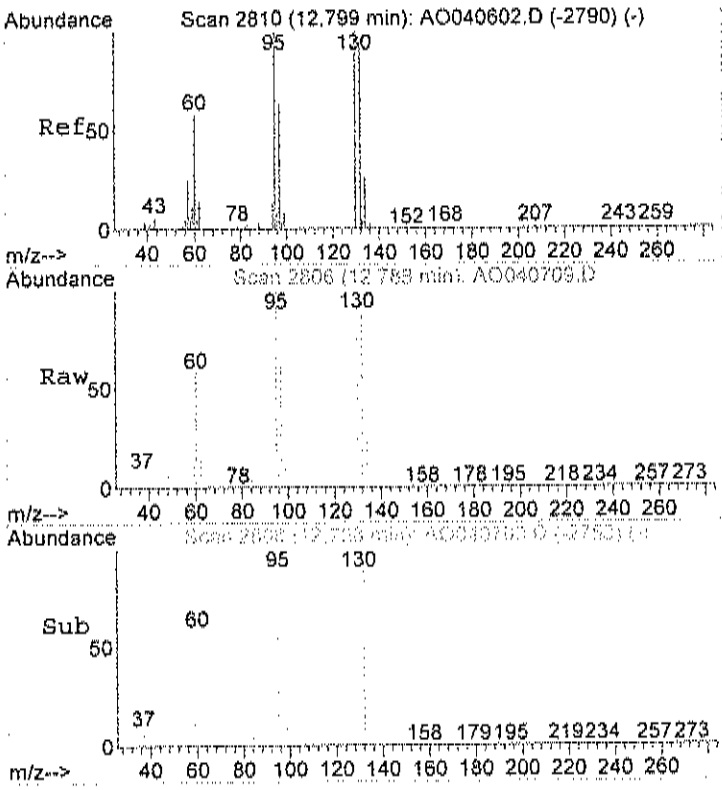


#10
Chloroethane
Concen: 0.14 ppb
RT: 5.53 min Scan# 384
Delta R.T. -0.00 min
Lab File: AO040709.D
Acq: 7 Apr 2017 4:03 pm

Tgt Ion: 64 Resp: 2571

Ion	Ratio	Lower	Upper
64	100		
66	32.5	22.7	34.1

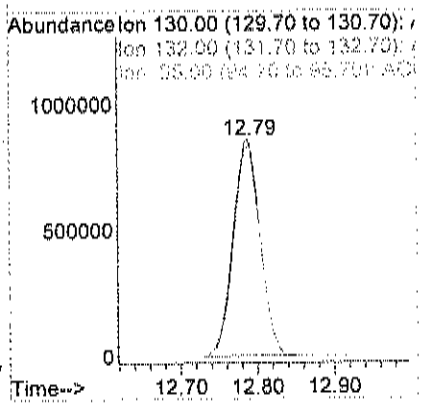




#44
Trichloroethene
Concen: 42.51 ppb
RT: 12.79 min Scan# 2806
Delta R.T. 0.01 min
Lab File: AO040709.D
Acq: 7 Apr 2017 4:03 pm

Tgt Ion:130 Resp: 2088134

Ion	Ratio	Lower	Upper
130	100		
132	95.8	69.9	109.9
95	106.5	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040716.D Vial: 16
Acq On : 7 Apr 2017 9:20 pm Operator: RJP
Sample : C1704014-005A 90x Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:51 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

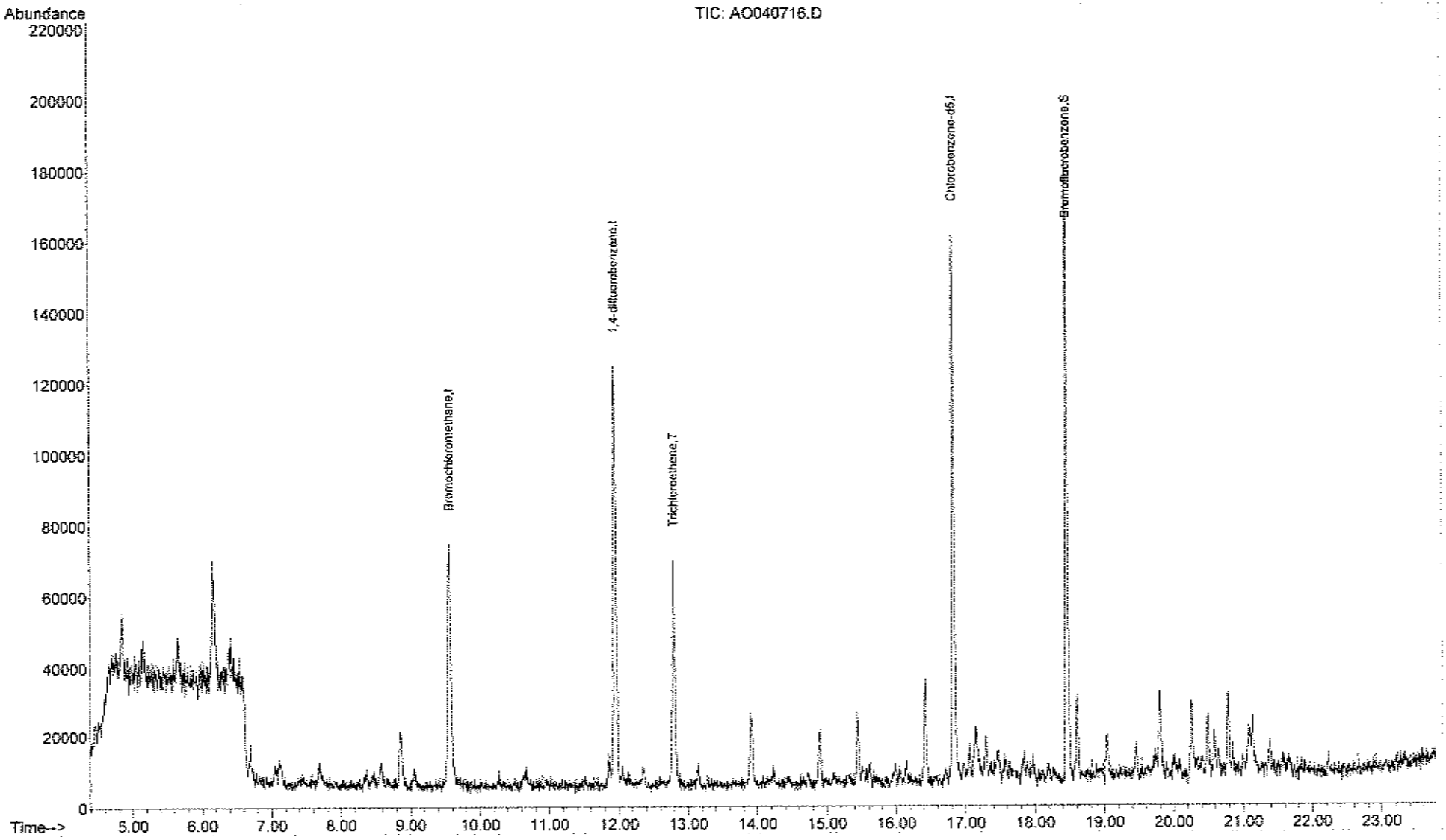
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	26112	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	119025	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	102419	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	63983	0.92	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue
44) Trichloroethene	12.79	130	23989	0.45	ppb	87

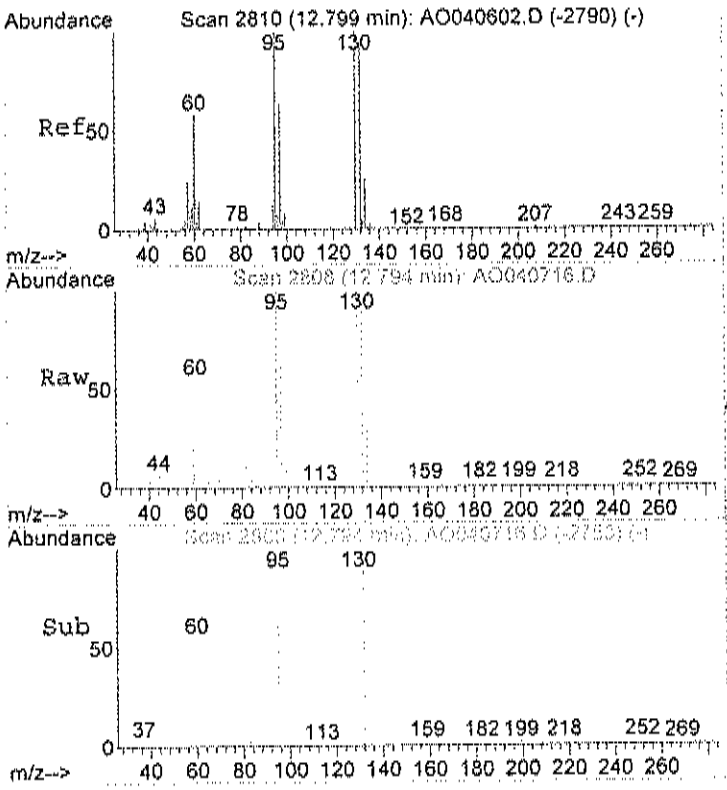
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040716.D
Acq On : 7 Apr 2017 9:20 pm
Sample : C1704014-005A 90x
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:59 2017

Vial: 16
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

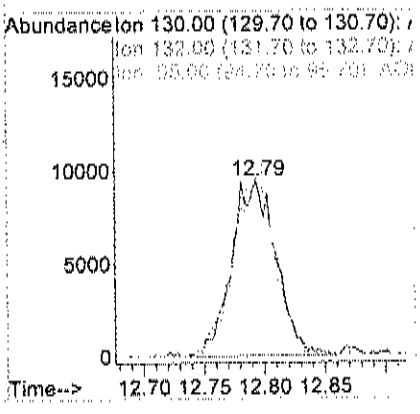




#44
Trichloroethene
Concen: 0.45 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.01 min
Lab File: AO040716.D
Acq: 7 Apr 2017 9:20 pm

Tgt Ion:130 Resp: 23989

Ion	Ratio	Lower	Upper
130	100		
132	101.1	69.9	109.9
95	110.6	76.3	116.3



CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Outdoor-04012017
Lab Order:	C1704014	**Tag Number:**	240.340
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-8			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 1:31:00 AM
Trichloroethene	< 0.040	0.040		ppbV	1	4/7/2017 1:31:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 1:31:00 AM
Surr: Bromofluorobenzene	88.0	70-130		%REC	1	4/7/2017 1:31:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Outdoor-04012017
Lab Order:	C1704014	**Tag Number:**	240.340
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 1:31:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 1:31:00 AM
Trichloroethene	< 0.21	0.21		ug/m3	1	4/7/2017 1:31:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 1:31:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040626.D Vial: 24
Acq On : 7 Apr 2017 1:31 am Operator: RJP
Sample : C1704014-006A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:06 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	25816	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	110508	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	98499	1.00	ppb	0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	58874	0.88	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 88.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
AO040626.D A331_1UG.M Thu May 04 11:28:45 2017 MSD1 Page 1

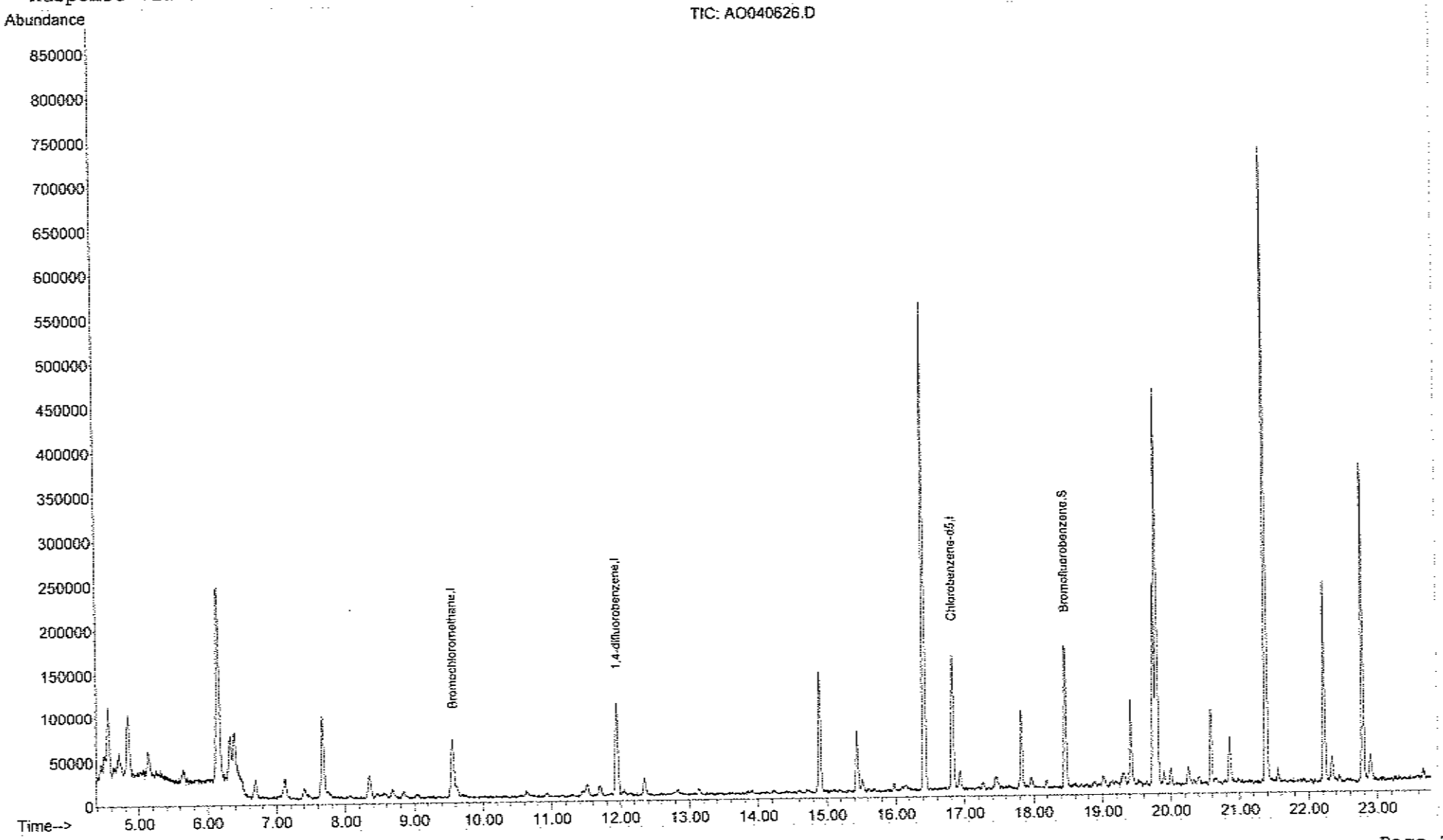
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040626.D
Acq On : 7 Apr 2017 1:31 am
Sample : C1704014-006A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:25 2017

Vial: 24
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



AO040626.D A331_1UG.M Thu May 04 11:28:46 2017 MSD1

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Duplicate
Lab Order:	C1704014	**Tag Number:**	101.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:12:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 2:12:00 AM
cis-1,2-Dichloroethene	0.42	0.15		ppbV	1	4/7/2017 2:12:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:12:00 AM
Trichloroethene	0.41	0.040		ppbV	1	4/7/2017 2:12:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 2:12:00 AM
Surr: Bromofluorobenzene	91.0	70-130		%REC	1	4/7/2017 2:12:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-Duplicate
Lab Order:	C1704014	**Tag Number:**	101.299
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:12:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 2:12:00 AM
cis-1,2-Dichloroethene	1.7	0.59		ug/m3	1	4/7/2017 2:12:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:12:00 AM
Trichloroethene	2.2	0.21		ug/m3	1	4/7/2017 2:12:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 2:12:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040627.D
Acq On : 7 Apr 2017 2:12 am
Sample : C1704014-007A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:07 2017

Vial: 25
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.57	128	24957	1.00	ppb	0.03
35) 1,4-difluorobenzene	11.94	114	110993	1.00	ppb	0.00
50) Chlorobenzene-d5	16.83	117	99559	1.00	ppb	0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	61990	0.91	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 91.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.36	61	21892	0.42	ppb	93
44) Trichloroethene	12.79	130	20378	0.41	ppb	92

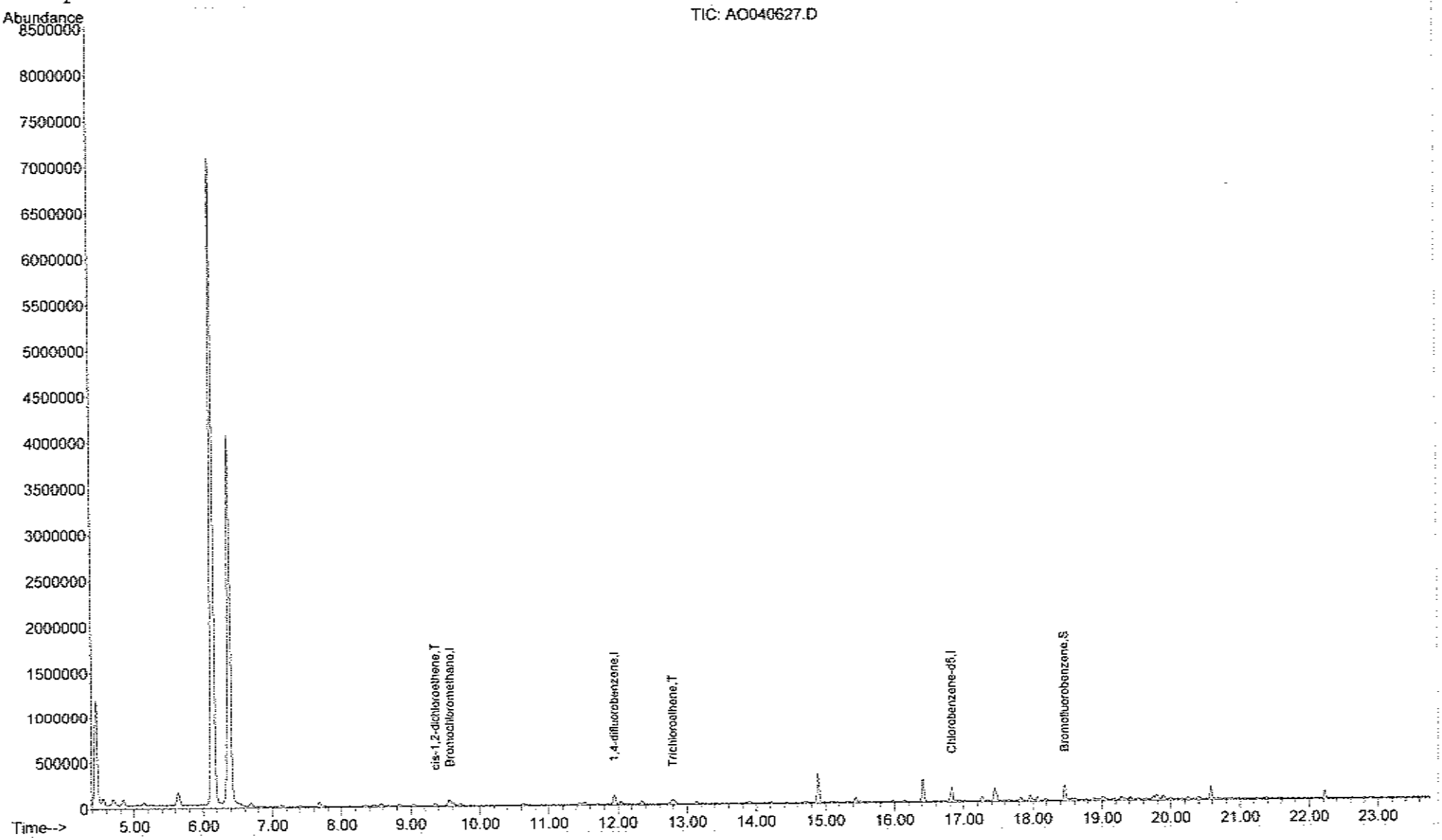
(#) = qualifier out of range (m) = manual integration (+) = signals summed

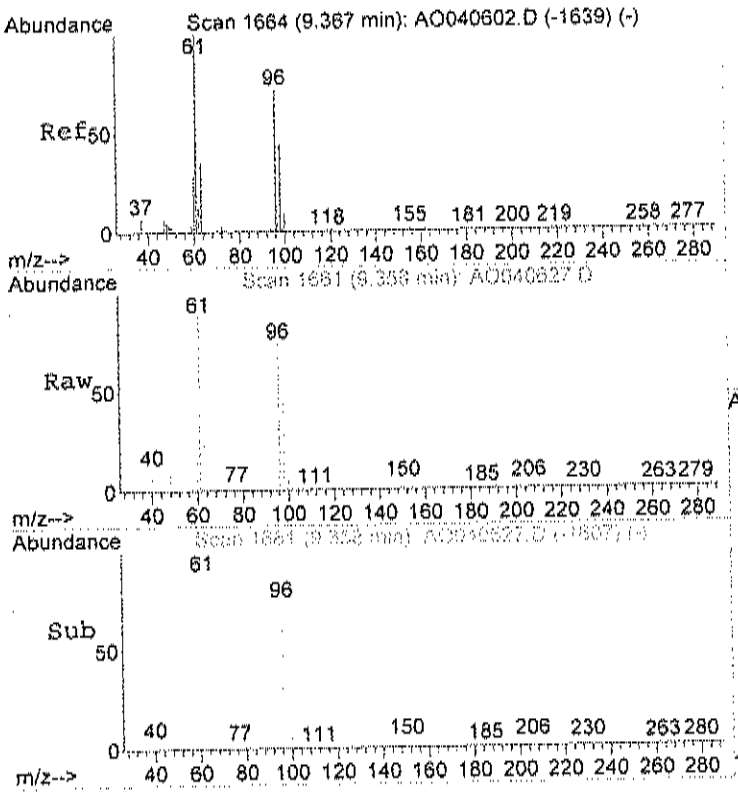
Data File : C:\HPCHEM\1\DATA\AO040627.D
Acq On : 7 Apr 2017 2:12 am
Sample : C1704014-007A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:26 2017

Vial: 25
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

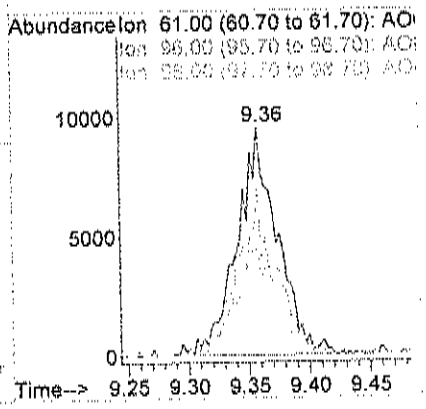


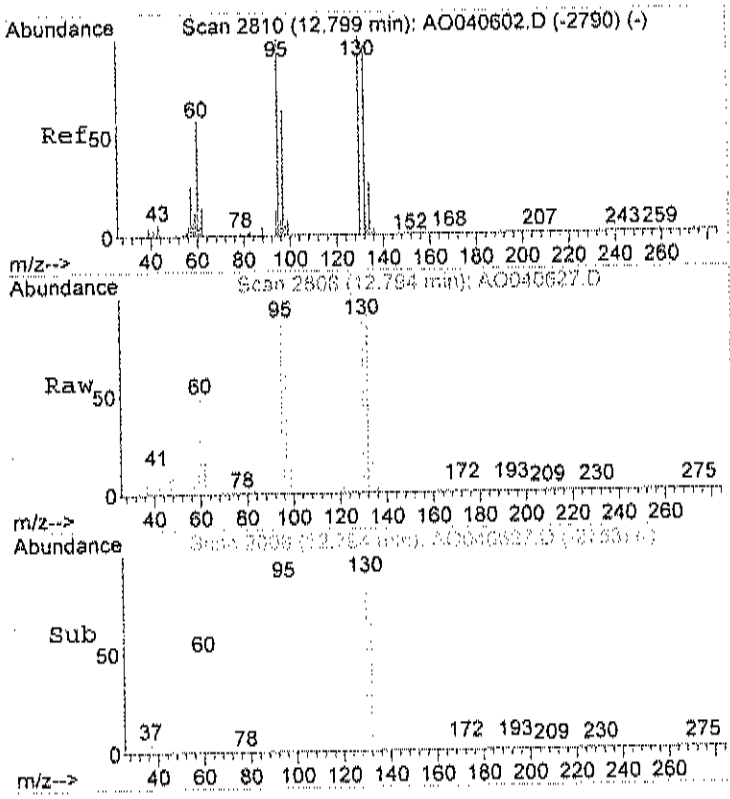


#29
cis-1,2-dichloroethene
Concen: 0.42 ppb
RT: 9.36 min Scan# 1661
Delta R.T. 0.01 min
Lab File: AO040627.D
Acq: 7 Apr 2017 2:12 am

Tgt Ion: 61 Resp: 21892

Ion	Ratio	Lower	Upper
61	100		
96	68.4	58.1	98.1
98	48.2	29.3	69.3

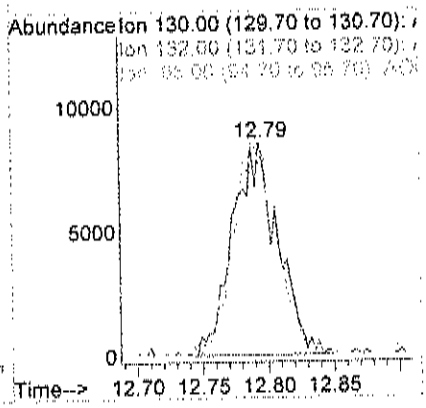




#44
Trichloroethene
Concen: 0.41 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.01 min
Lab File: AO040627.D
Acq: 7 Apr 2017 2:12 am

Tgt Ion:130 Resp: 20378

Ion	Ratio	Lower	Upper
130	100		
132	97.4	69.9	109.9
95	104.4	76.3	116.3



CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-IAQ
Lab Order:	C1704014	**Tag Number:**	94.379
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 2:52:00 AM
Trichloroethene	< 0.040	0.040		ppbV	1	4/7/2017 2:52:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 2:52:00 AM
Surr: Bromofluorobenzene	93.0	70-130		%REC	1	4/7/2017 2:52:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-IAQ
Lab Order:	C1704014	**Tag Number:**	94.379
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 2:52:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 2:52:00 AM
Trichloroethene	< 0.21	0.21		ug/m3	1	4/7/2017 2:52:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 2:52:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040628.D Vial: 26
Acq On : 7 Apr 2017 2:52 am Operator: RJP
Sample : C1704014-008A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:08 2017 Quant Results File: A331_1UG.RES

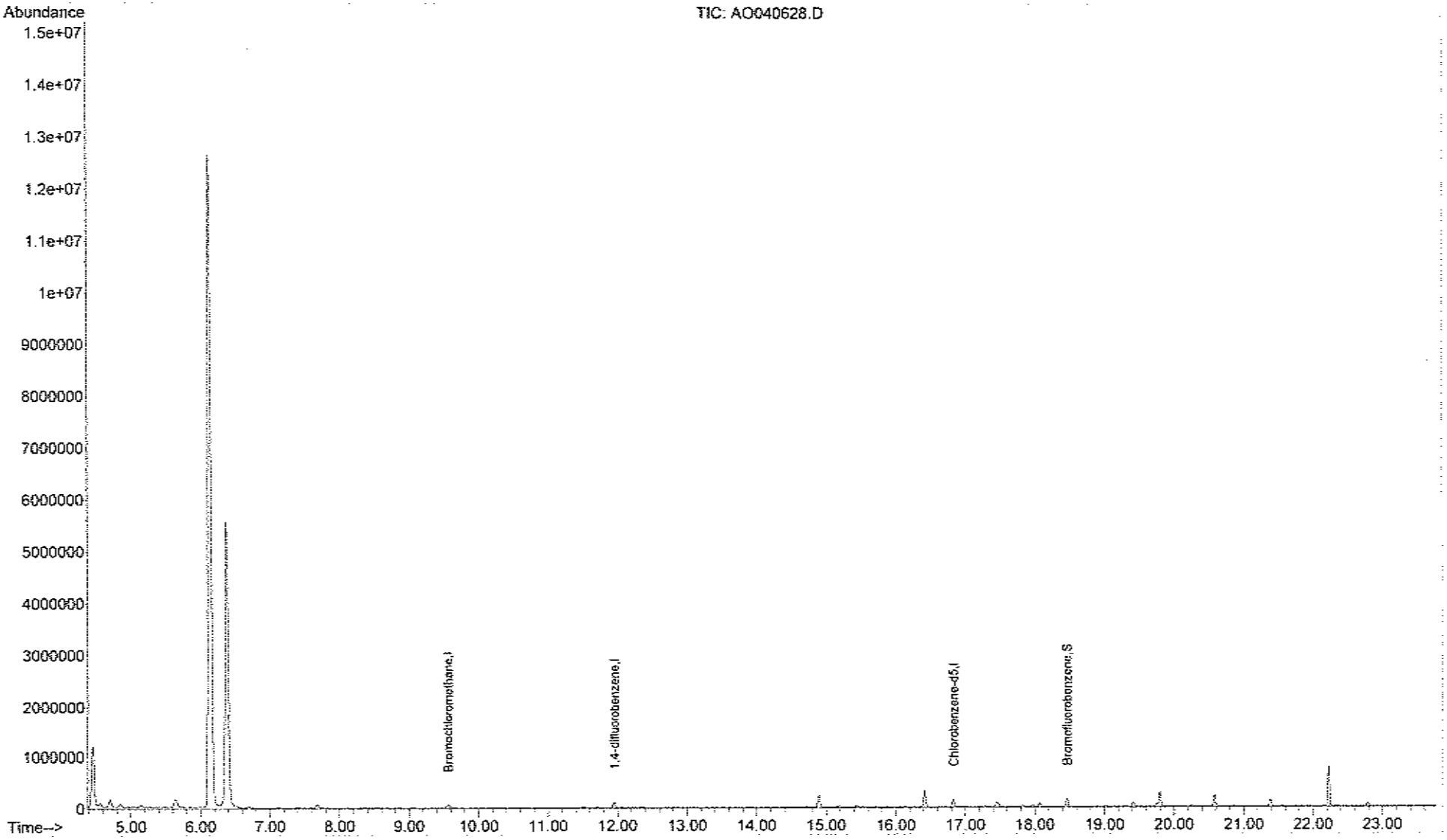
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	25088	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	108028	1.00	ppb	0.02
50) Chlorobenzene-d5	16.83	117	95812	1.00	ppb	0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.47	95	60915	0.93	ppb	0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 93.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA\AO040628.D Vial: 26
Acq On : 7 Apr 2017 2:52 am Operator: RJP
Sample : C1704014-008A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:27 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-SVI
Lab Order:	C1704014	**Tag Number:**	1186.145
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 5:28:00 PM
Trichloroethene	0.72	0.040		ppbV	1	4/7/2017 5:28:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 5:28:00 PM
Surr: Bromofluorobenzene	113	70-130		%REC	1	4/7/2017 5:28:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-NE-SVI
Lab Order:	C1704014	**Tag Number:**	1186.145
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 5:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 5:28:00 PM
Trichloroethene	3.9	0.21		ug/m3	1	4/7/2017 5:28:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 5:28:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040710.D Vial: 10
Acq On : 7 Apr 2017 5:28 pm Operator: RJP
Sample : C1704014-009A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:58:21 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	27394	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	125972	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	121869	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	94050m	1.13	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 113.00%			
Target Compounds						Qvalue
44) Trichloroethene	12.79	130	40805	0.72	ppb	86

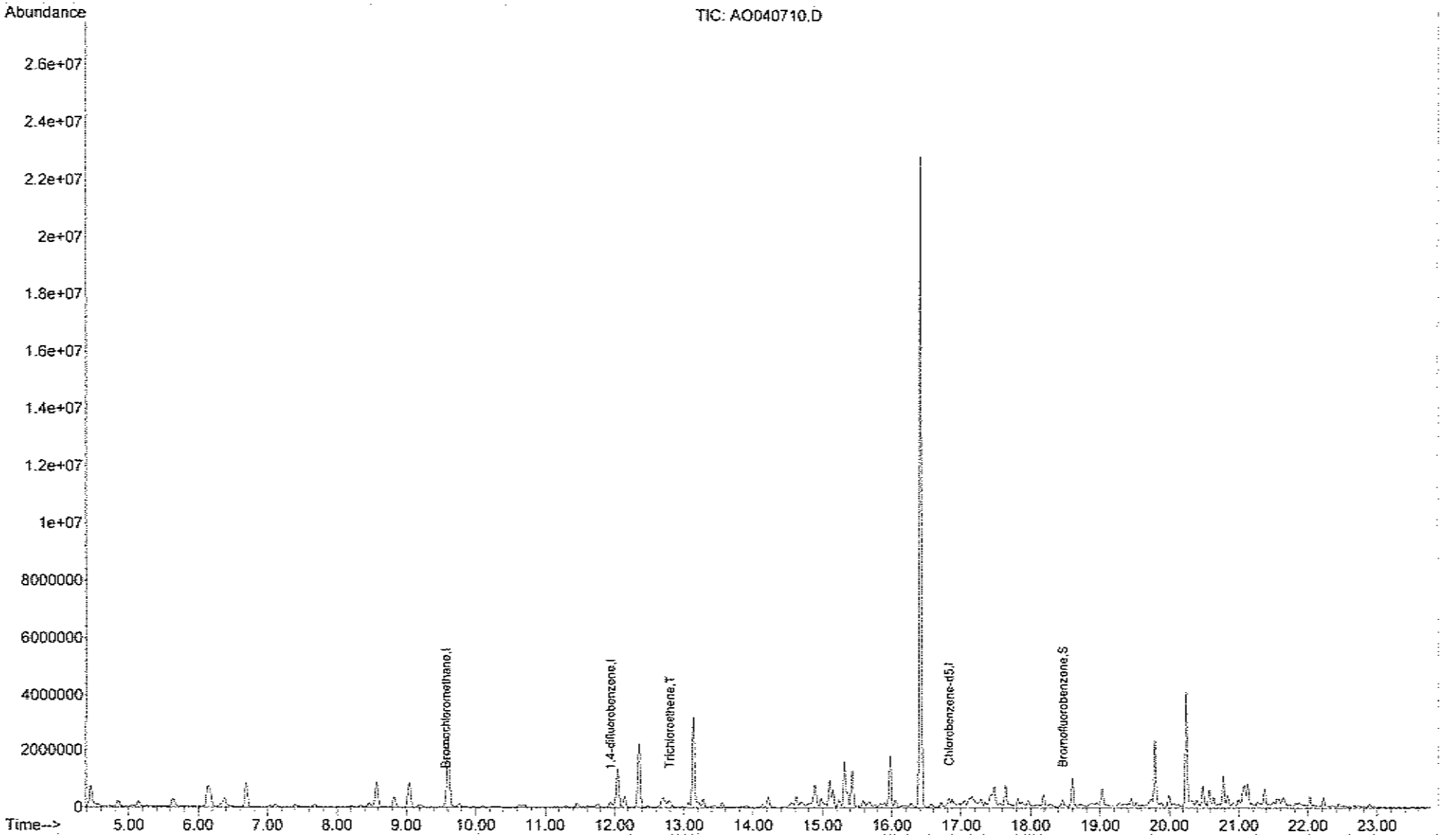
(#) = qualifier out of range (m) = manual integration (+) = signals summed

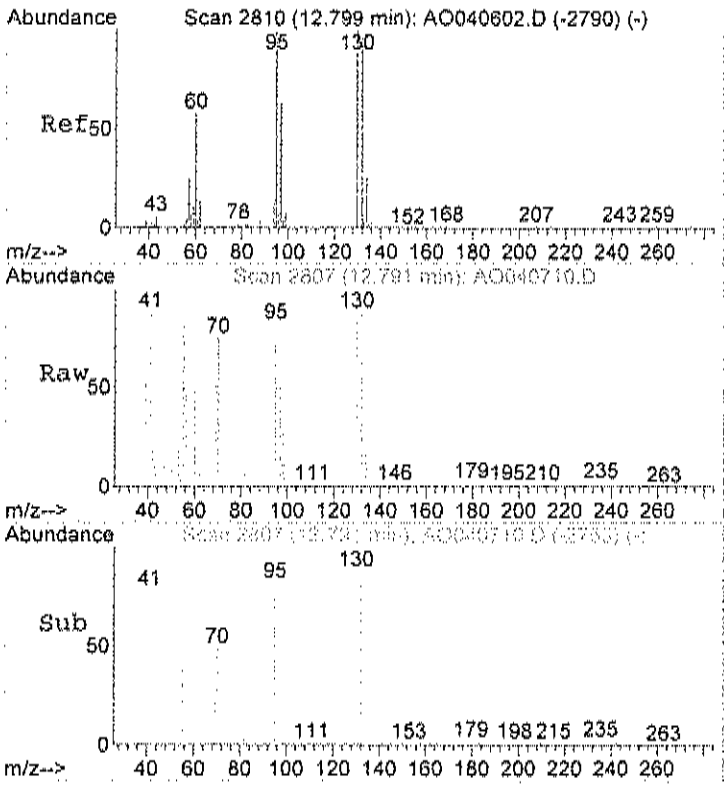
Data File : C:\HPCHEM\1\DATA\AO040710.D
Acq On : 7 Apr 2017 5:28 pm
Sample : C1704014-009A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:10 2017

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

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

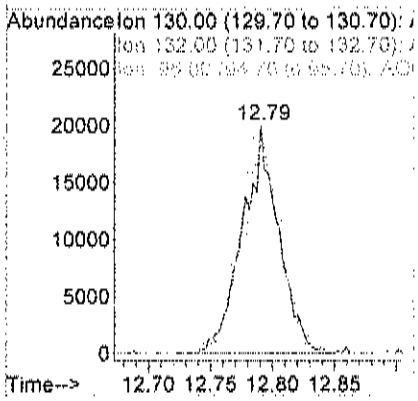




#44
Trichloroethene
Concen: 0.72 ppb
RT: 12.79 min Scan# 2807
Delta R.T. 0.01 min
Lab File: AO040710.D
Acq: 7 Apr 2017 5:28 pm

Tgt Ion:130 Resp: 40805

Ion	Ratio	Lower	Upper
130	100		
132	99.9	69.9	109.9
95	113.5	76.3	116.3



CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-IAQ
Lab Order:	C1704014	**Tag Number:**	170.387
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-5			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:33:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 3:33:00 AM
cis-1,2-Dichloroethene	0.66	0.15		ppbV	1	4/7/2017 3:33:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 3:33:00 AM
Trichloroethene	0.24	0.040		ppbV	1	4/7/2017 3:33:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 3:33:00 AM
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	4/7/2017 3:33:00 AM

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-IAQ
Lab Order:	C1704014	**Tag Number:**	170.387
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:33:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 3:33:00 AM
cis-1,2-Dichloroethene	2.6	0.59		ug/m3	1	4/7/2017 3:33:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 3:33:00 AM
Trichloroethene	1.3	0.21		ug/m3	1	4/7/2017 3:33:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 3:33:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040629.D Vial: 27
Acq On : 7 Apr 2017 3:33 am Operator: RJP
Sample : C1704014-010A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:09 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

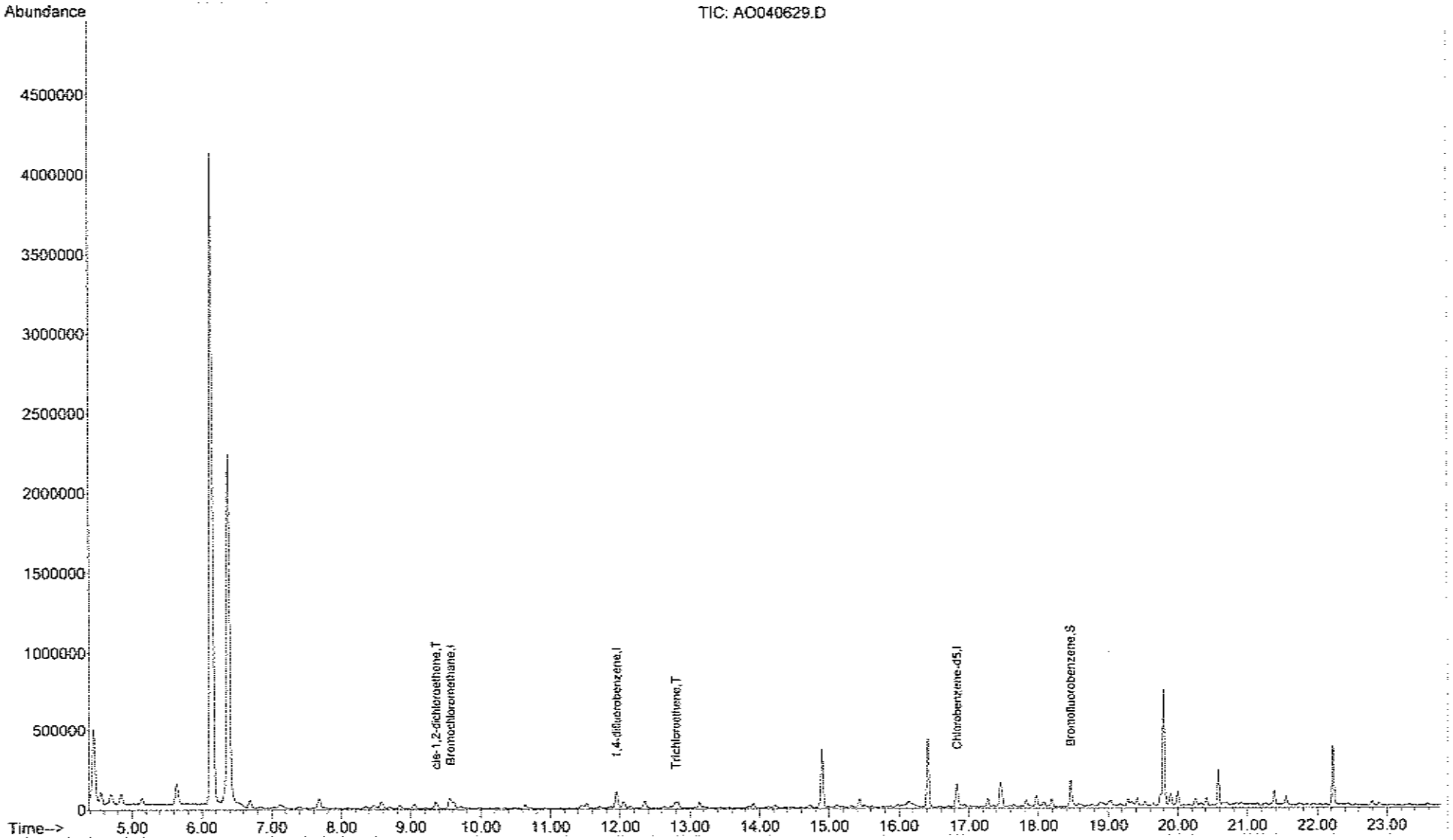
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.56	128	24485	1.00	ppb		0.02
35) 1,4-difluorobenzene	11.95	114	107880	1.00	ppb		0.01
50) Chlorobenzene-d5	16.83	117	98198	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.47	95	61676	0.92	ppb		0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%				
Target Compounds							Qvalue
29) cis-1,2-dichloroethene	9.36	61	33781	0.66	ppb		98
44) Trichloroethene	12.79	130	11462	0.24	ppb	#	81

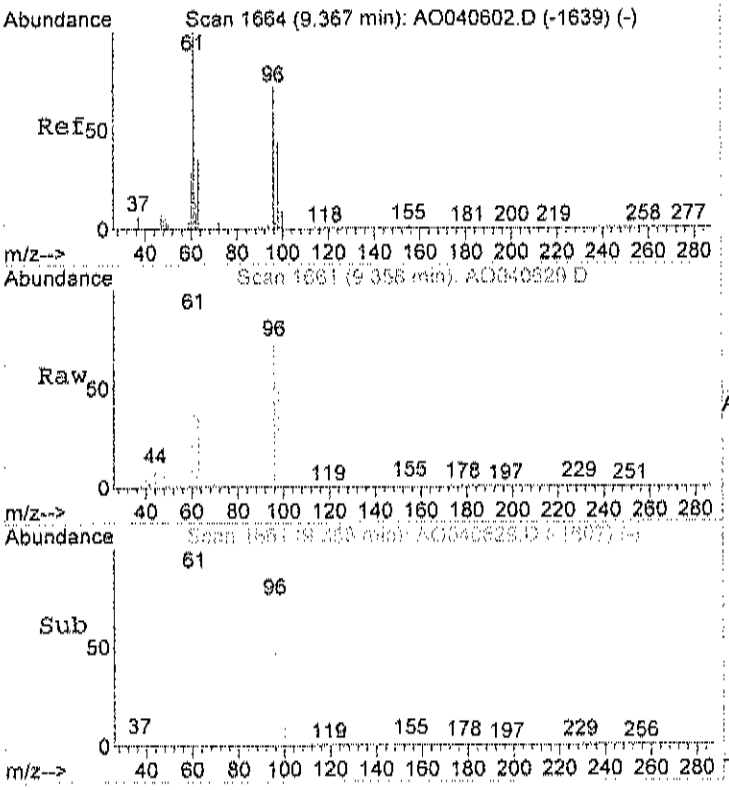
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040629.D Vial: 27
Acq On : 7 Apr 2017 3:33 am Operator: RJP
Sample : C1704014-010A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:28 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

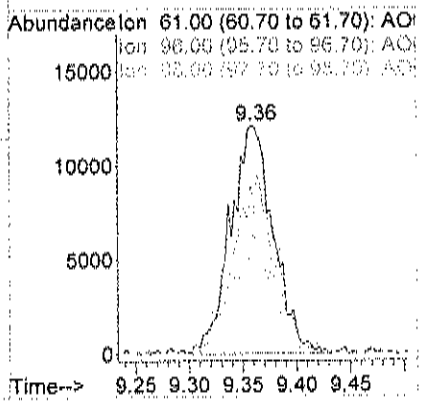


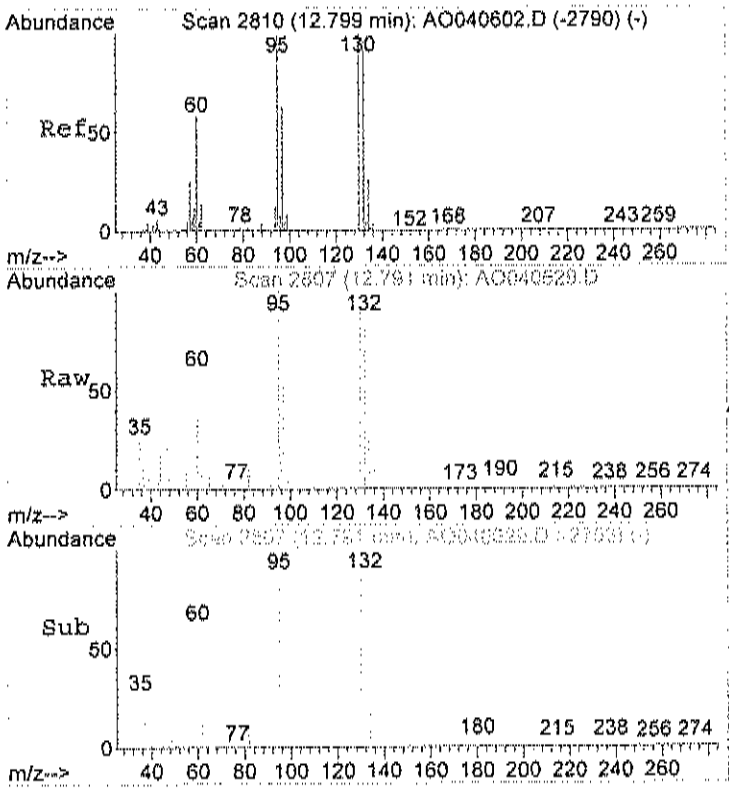


#29
cis-1,2-dichloroethene
Concen: 0.66 ppb
RT: 9.36 min Scan# 1661
Delta R.T. 0.01 min
Lab File: AO040629.D
Acq: 7 Apr 2017 3:33 am

Tgt Ion: 61 Resp: 33781

Ion	Ratio	Lower	Upper
61	100		
96	75.3	58.1	98.1
98	48.7	29.3	69.3

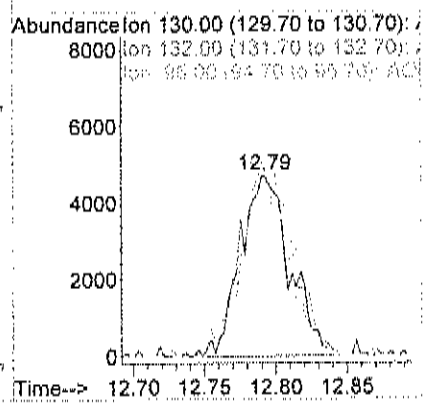




#44
Trichloroethene
Concen: 0.24 ppb
RT: 12.79 min Scan# 2807
Delta R.T. 0.01 min
Lab File: AO040629.D
Acq: 7 Apr 2017 3:33 am

Tgt Ion:130 Resp: 11462

Ion	Ratio	Lower	Upper
130	100		
132	100.4	69.9	109.9
95	122.7	76.3	116.3#



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-SVI
Lab Order:	C1704014	**Tag Number:**	203.372
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-6			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 6:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 6:09:00 PM
cis-1,2-Dichloroethene	13	1.5		ppbV	10	4/7/2017 11:10:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 6:09:00 PM
Trichloroethene	0.74	0.040		ppbV	1	4/7/2017 6:09:00 PM
Vinyl chloride	0.15	0.040		ppbV	1	4/7/2017 6:09:00 PM
Surr: Bromofluorobenzene	109	70-130		%REC	1	4/7/2017 6:09:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB1-SVI
Lab Order:	C1704014	**Tag Number:**	203.372
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 6:09:00 PM
cis-1,2-Dichloroethene	52	5.9		ug/m3	10	4/7/2017 11:10:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:09:00 PM
Trichloroethene	4.0	0.21		ug/m3	1	4/7/2017 6:09:00 PM
Vinyl chloride	0.38	0.10		ug/m3	1	4/7/2017 6:09:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040711.D Vial: 11
Acq On : 7 Apr 2017 6:09 pm Operator: RJP
Sample : C1704014-011A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:58:50 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

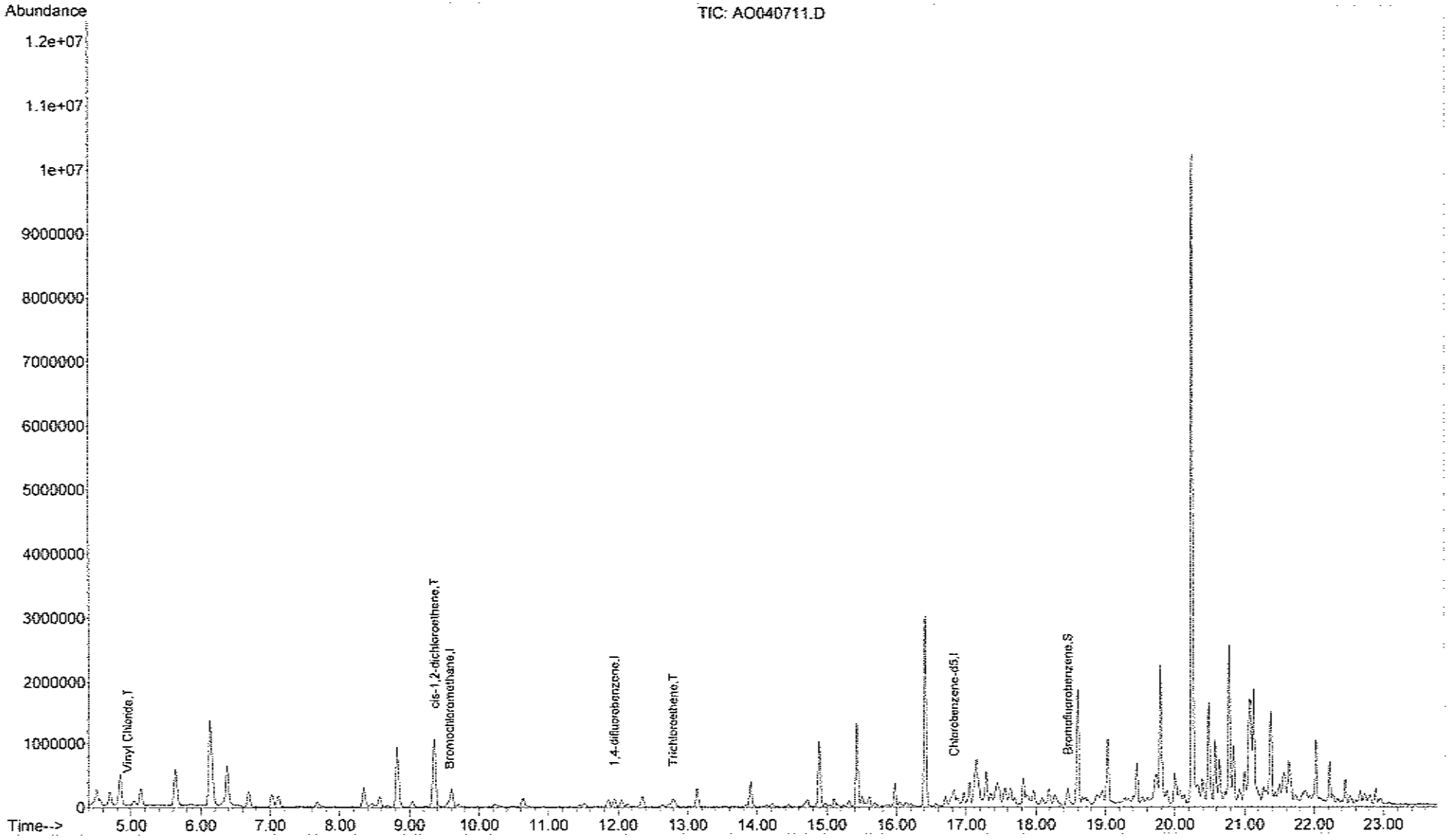
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	30170	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.94	114	132762	1.00	ppb	0.00
50) Chlorobenzene-d5	16.83	117	121408	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	90648	1.09	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 109.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.95	62	7786	0.15	ppb	99
29) cis-1,2-dichloroethene	9.35	61	931425	14.87	ppb	97
44) Trichloroethene	12.79	130	44293	0.74	ppb	86

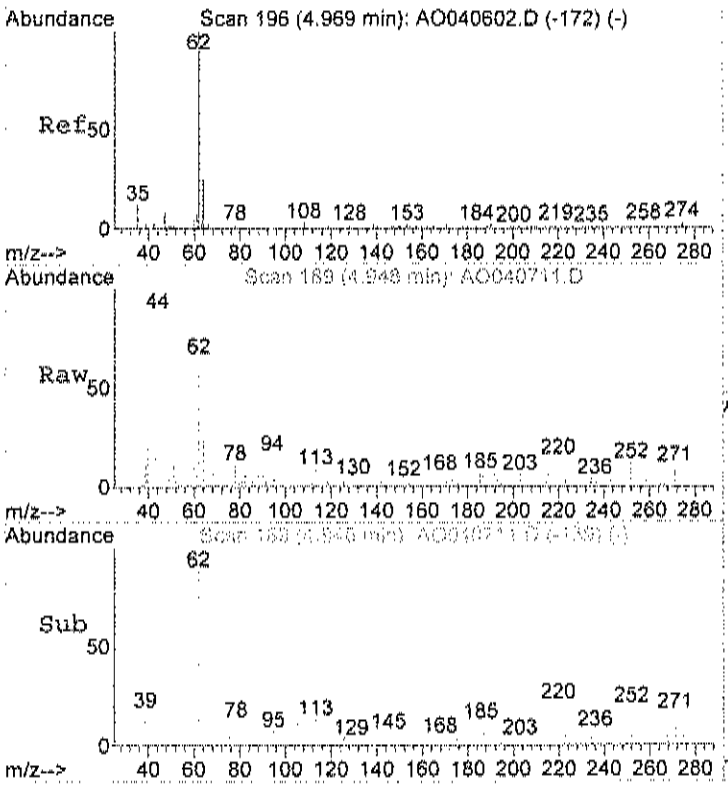
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040711.D Vial: 11
Acq On : 7 Apr 2017 6:09 pm Operator: RJP
Sample : C1704014-011A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:13 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

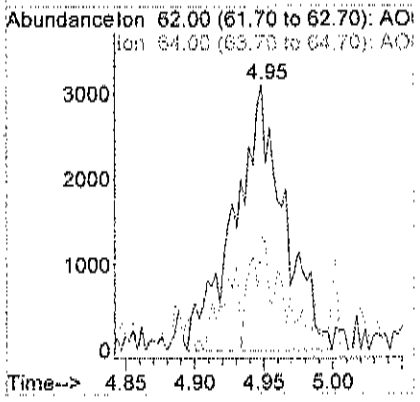


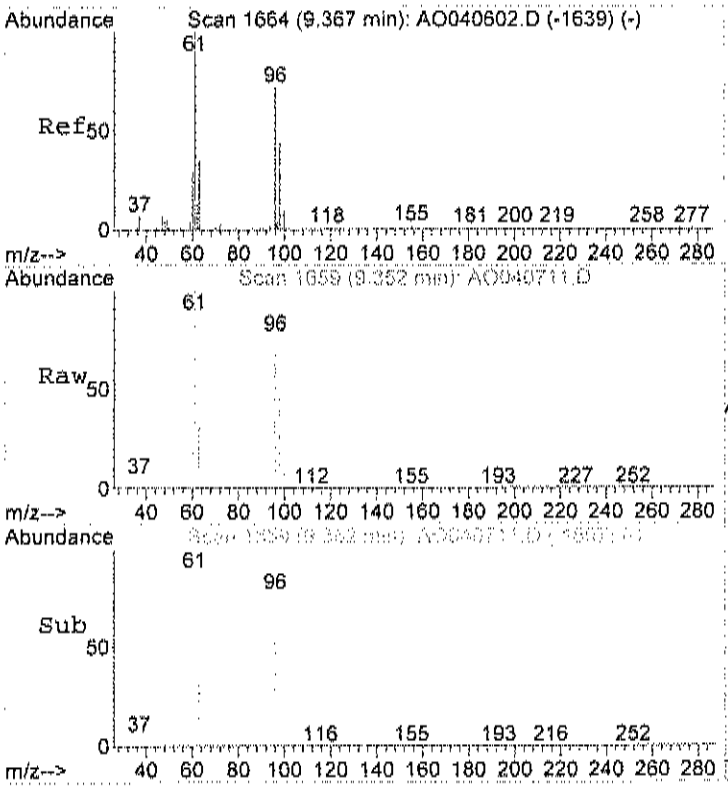


#6
Vinyl Chloride
Concen: 0.15 ppb
RT: 4.95 min Scan# 189
Delta R.T. 0.00 min
Lab File: AO040711.D
Acq: 7 Apr 2017 6:09 pm

Tgt Ion: 62 Resp: 7786

Ion	Ratio	Lower	Upper
62	100		
64	28.2	0.0	58.6

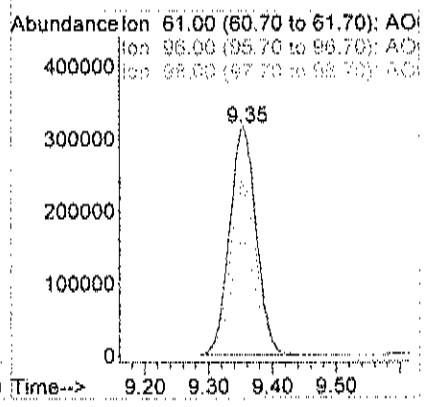


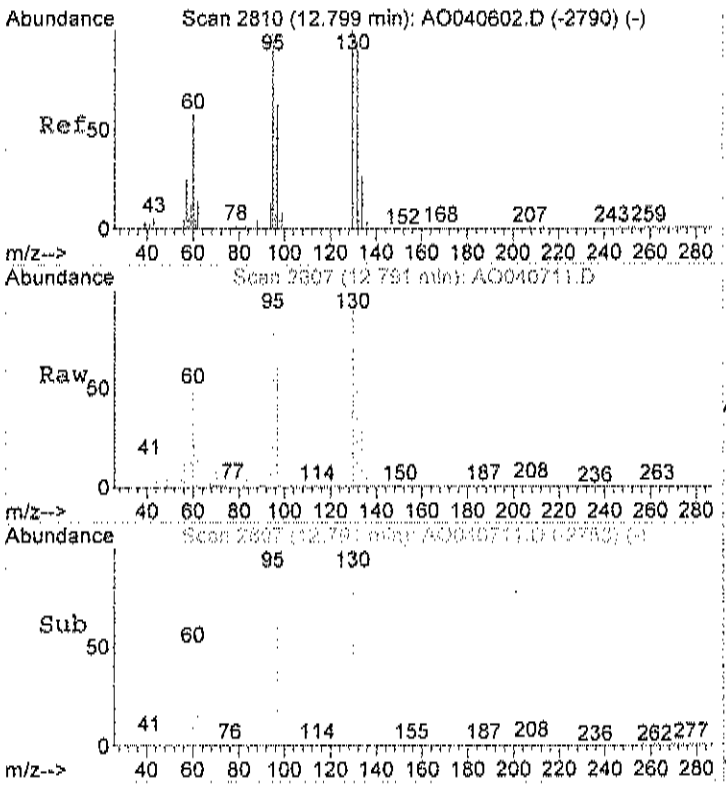


#29
cis-1,2-dichloroethene
Concen: 14.87 ppb
RT: 9.35 min Scan# 1659
Delta R.T. 0.01 min
Lab File: AO040711.D
Acq: 7 Apr 2017 6:09 pm

Tgt Ion: 61 Resp: 931425

Ion	Ratio	Lower	Upper
61	100		
96	74.8	58.1	98.1
98	48.9	29.3	69.3

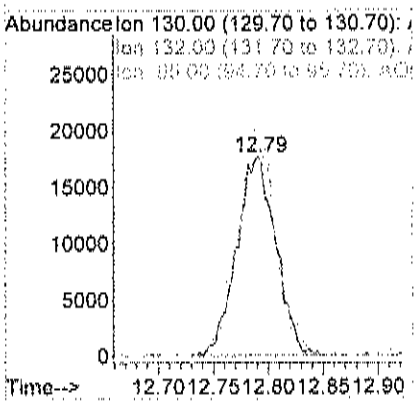




#44
Trichloroethene
Concen: 0.74 ppb
RT: 12.79 min Scan# 2807
Delta R.T. 0.01 min
Lab File: AO040711.D
Acq: 7 Apr 2017 6:09 pm

Tgt Ion:130 Resp: 44293

Ion	Ratio	Lower	Upper
130	100		
132	101.5	69.9	109.9
95	111.9	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040719.D Vial: 19
Acq On : 7 Apr 2017 11:10 pm Operator: RJP
Sample : C1704014-011A 10x Inst : MSD #1
Misc : A331_1UG Multipir: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:54 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

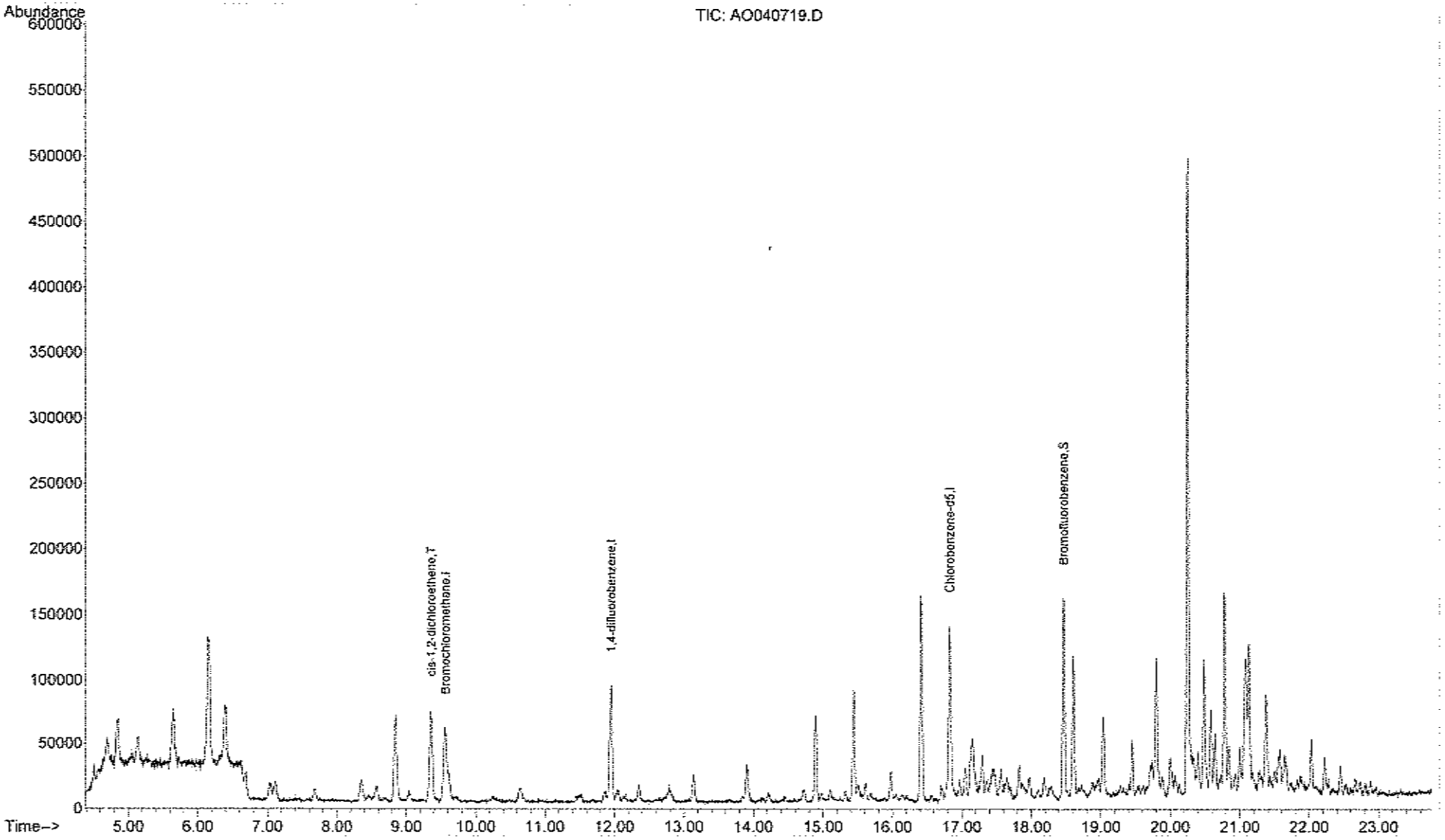
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	21591	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	93800	1.00	ppb	0.02
50) Chlorobenzene-d5	16.83	117	84591	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	53420	0.93	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 93.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.35	61	58406	1.30	ppb	96

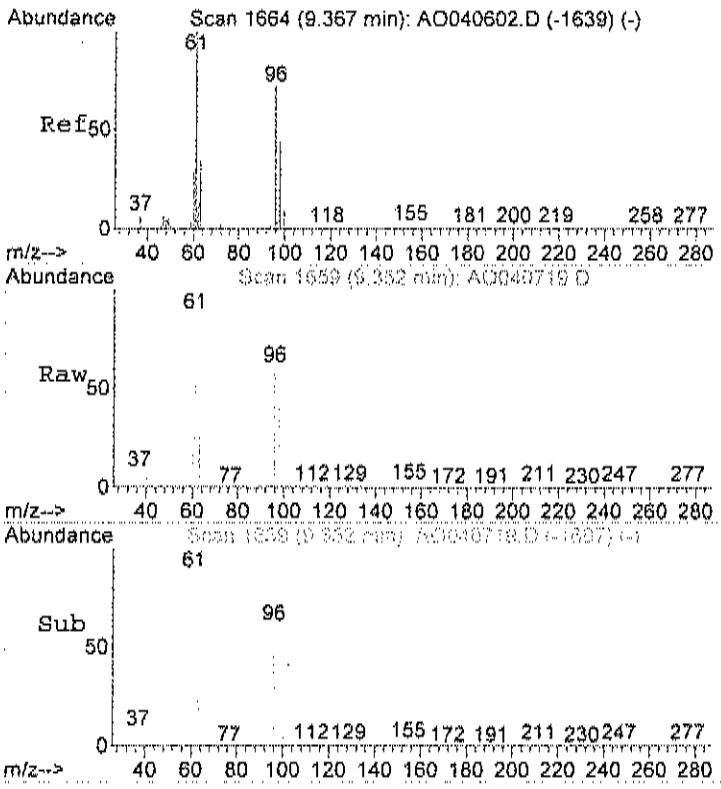
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040719.D Vial: 19
Acq On : 7 Apr 2017 11:10 pm Operator: RJP
Sample : C1704014-011A 10x Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 15:00 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

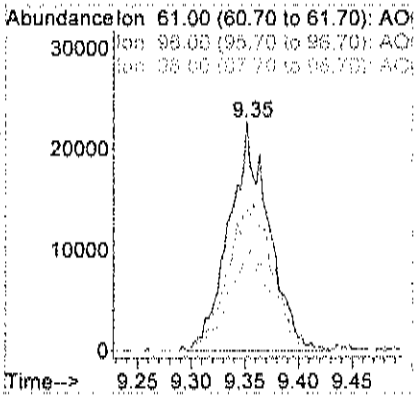




#29
cis-1,2-dichloroethene
Concen: 1.30 ppb
RT: 9.35 min Scan# 1659
Delta R.T. 0.01 min
Lab File: AO040719.D
Acq: 7 Apr 2017 11:10 pm

Tgt Ion: 61 Resp: 58406

Ion	Ratio	Lower	Upper
61	100		
96	73.9	58.1	98.1
98	46.7	29.3	69.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-IAQ
Lab Order:	C1704014	**Tag Number:**	367.251
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:13:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 4:13:00 AM
cis-1,2-Dichloroethene	3.3	1.5		ppbV	10	4/7/2017 1:50:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:13:00 AM
Trichloroethene	1.2	0.040		ppbV	1	4/7/2017 4:13:00 AM
Vinyl chloride	< 0.040	0.040		ppbV	1	4/7/2017 4:13:00 AM
Surr: Bromofluorobenzene	103	70-130		%REC	1	4/7/2017 4:13:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-IAQ
Lab Order:	C1704014	**Tag Number:**	367.251
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:13:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 4:13:00 AM
cis-1,2-Dichloroethene	13	5.9		ug/m3	10	4/7/2017 1:50:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:13:00 AM
Trichloroethene	6.5	0.21		ug/m3	1	4/7/2017 4:13:00 AM
Vinyl chloride	< 0.10	0.10		ug/m3	1	4/7/2017 4:13:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040630.D Vial: 28
Acq On : 7 Apr 2017 4:13 am Operator: RJP
Sample : C1704014-012A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:10 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

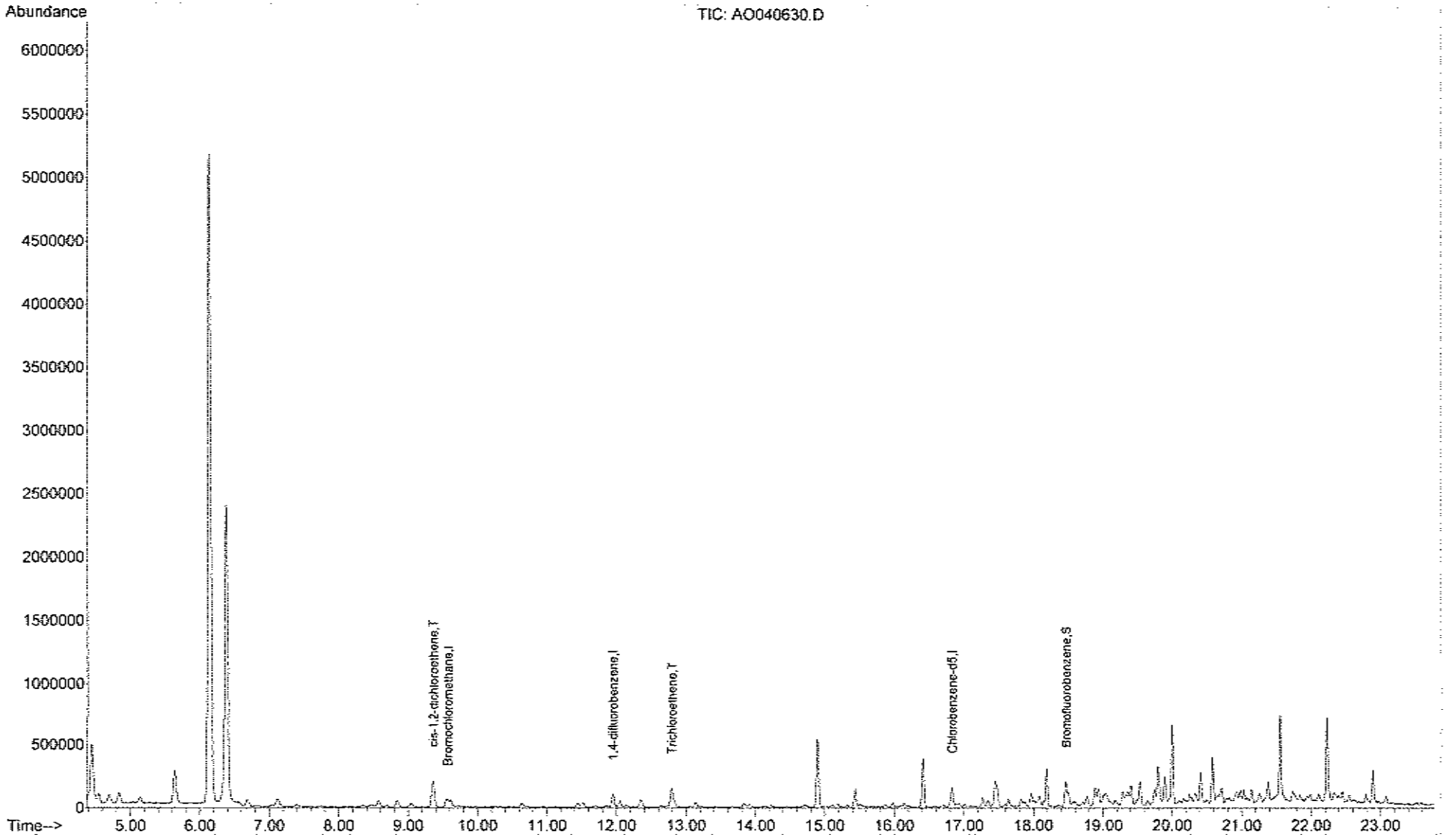
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	25278	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	111053	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	100304	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.47	95	70272	1.03	ppb	0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 103.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.36	61	184718	3.52	ppb	92
44) Trichloroethene	12.79	130	60313	1.21	ppb	88

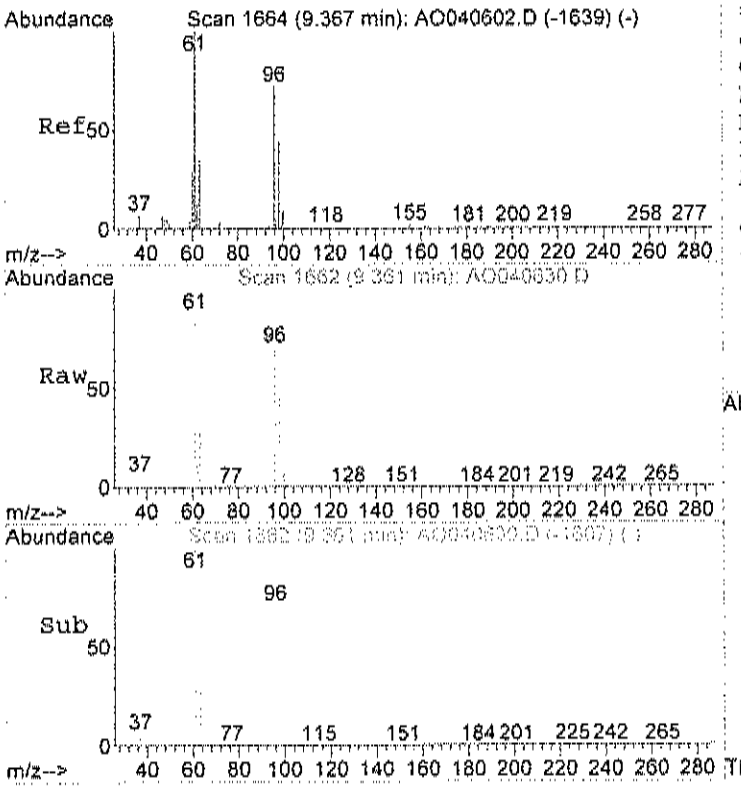
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040630.D Vial: 28
Acq On : 7 Apr 2017 4:13 am Operator: RJP
Sample : C1704014-012A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:29 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

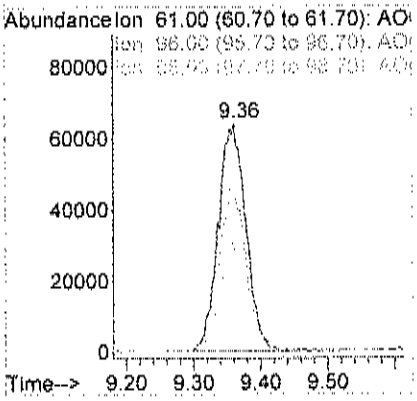


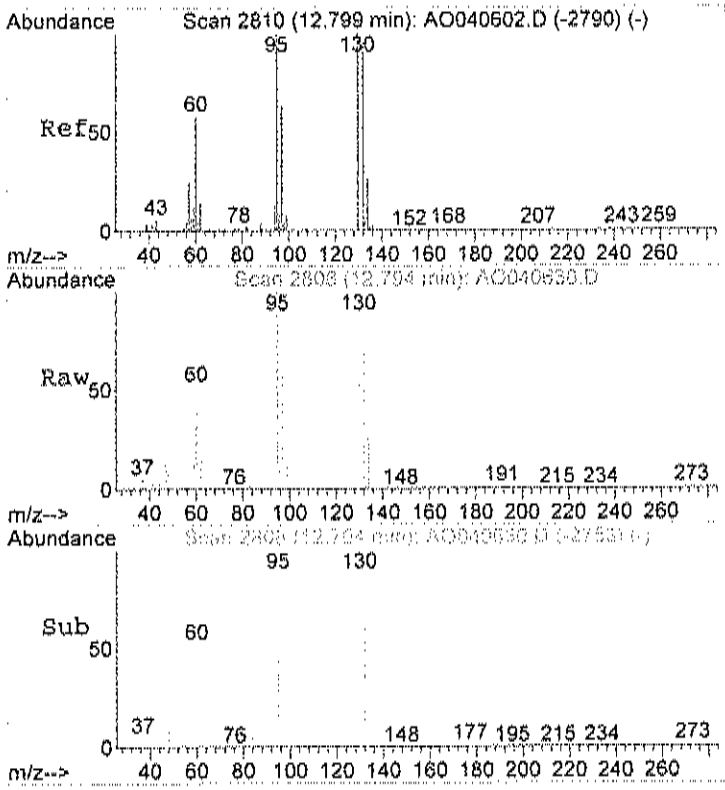


#29
cis-1,2-dichloroethene
Concen: 3.52 ppb
RT: 9.36 min Scan# 1662
Delta R.T. 0.01 min
Lab File: AO040630.D
Acq: 7 Apr 2017 4:13 am

Tgt Ion: 61 Resp: 184718

Ion	Ratio	Lower	Upper
61	100		
96	70.4	58.1	98.1
98	45.4	29.3	69.3

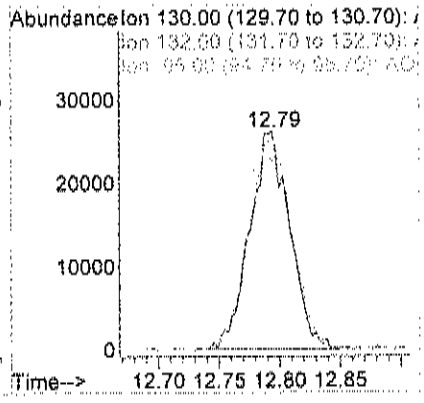




#44
Trichloroethene
Concen: 1.21 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.01 min
Lab File: AO040630.D
Acq: 7 Apr 2017 4:13 am

Tgt Ion:130 Resp: 60313

Ion	Ratio	Lower	Upper
130	100		
132	98.4	69.9	109.9
95	111.1	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040706.D Vial: 6
Acq On : 7 Apr 2017 1:50 pm Operator: RJP
Sample : C1704014-012A 10X Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 14:58:05 2017 Quant Results File: A331_1UG.RES

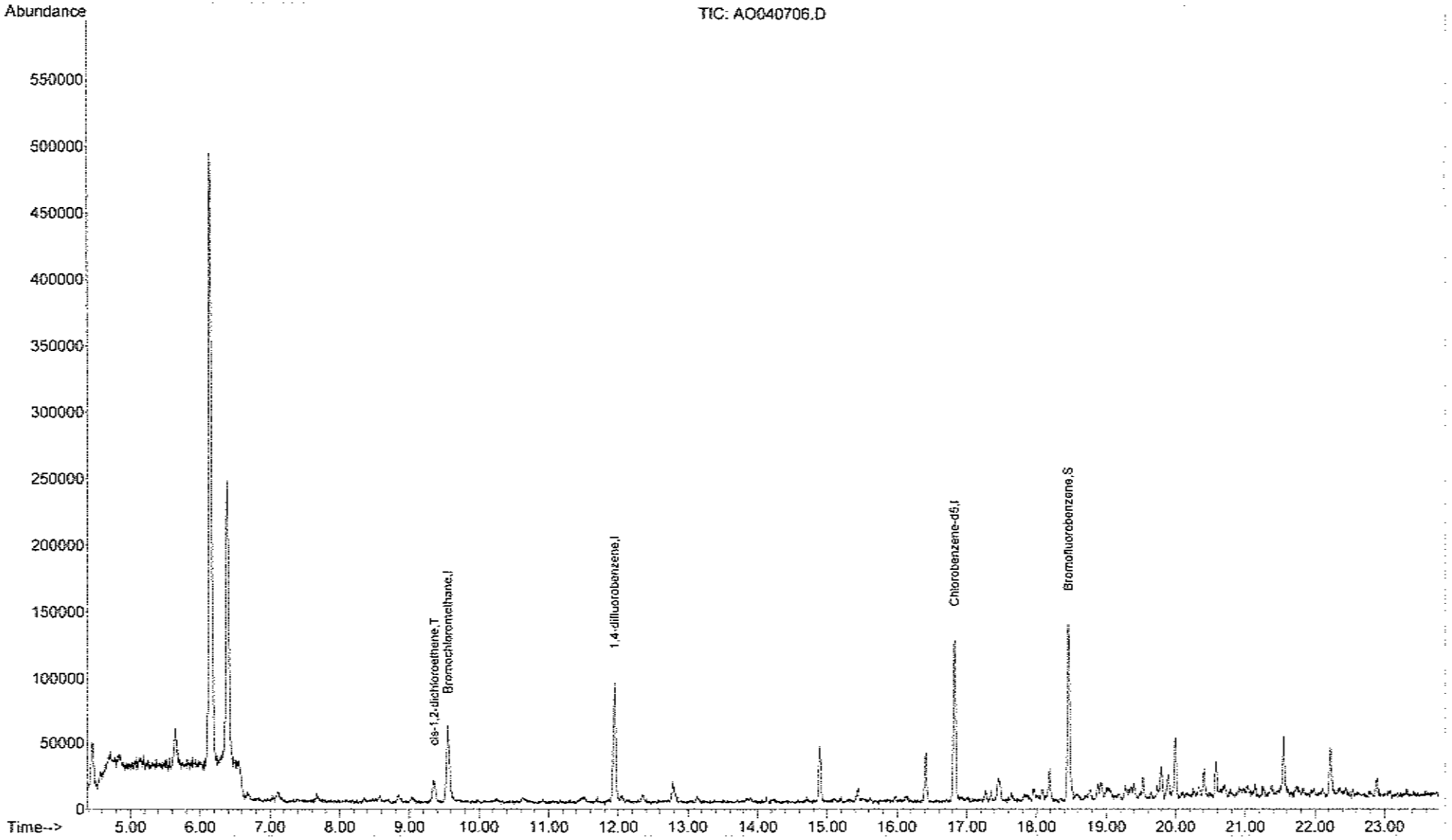
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

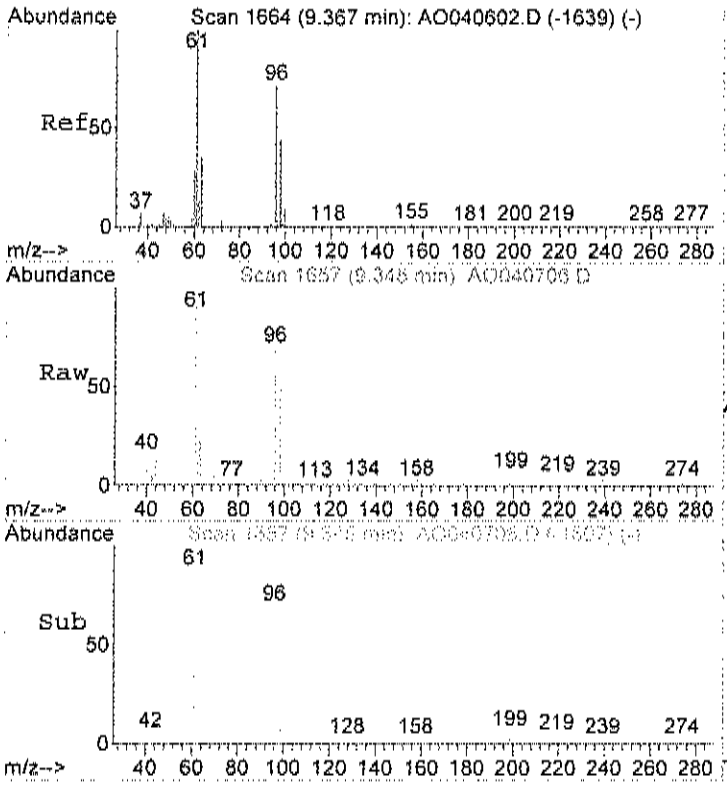
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	20808	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.94	114	86837	1.00	ppb	0.00
50) Chlorobenzene-d5	16.82	117	77606	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	48257	0.91	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 91.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.35	61	14150	0.33	ppb	91

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

Data File : C:\HPCHEM\1\DATA\AO040706.D Vial: 6
Acq On : 7 Apr 2017 1:50 pm Operator: RJP
Sample : C1704014-012A 10X Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:56 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

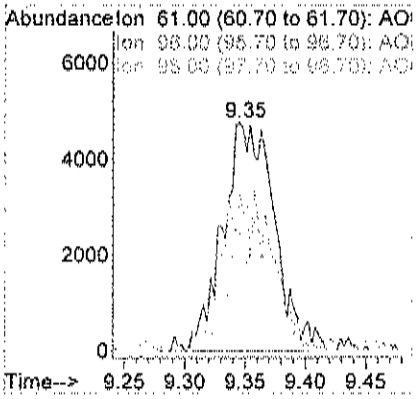




#29
cis-1,2-dichloroethene
Concen: 0.33 ppb
RT: 9.35 min Scan# 1657
Delta R.T. -0.00 min
Lab File: AO040706.D
Acq: 7 Apr 2017 1:50 pm

Tgt Ion: 61 Resp: 14150

Ion	Ratio	Lower	Upper
61	100		
96	67.0	58.1	98.1
98	47.3	29.3	69.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-IAQ
Lab Order:	C1704014	**Tag Number:**	285.344
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:53:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 4:53:00 AM
cis-1,2-Dichloroethene	3.1	1.5		ppbV	10	4/7/2017 2:27:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 4:53:00 AM
Trichloroethene	1.3	0.040		ppbV	1	4/7/2017 4:53:00 AM
Vinyl chloride	0.060	0.040		ppbV	1	4/7/2017 4:53:00 AM
Surr: Bromofluorobenzene	102	70-130		%REC	1	4/7/2017 4:53:00 AM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-IAQ
Lab Order:	C1704014	**Tag Number:**	285.344
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:53:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 4:53:00 AM
cis-1,2-Dichloroethene	12	5.9		ug/m3	10	4/7/2017 2:27:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 4:53:00 AM
Trichloroethene	6.8	0.21		ug/m3	1	4/7/2017 4:53:00 AM
Vinyl chloride	0.15	0.10		ug/m3	1	4/7/2017 4:53:00 AM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040631.D Vial: 29
Acq On : 7 Apr 2017 4:53 am Operator: RJP
Sample : C1704014-013A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:11 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

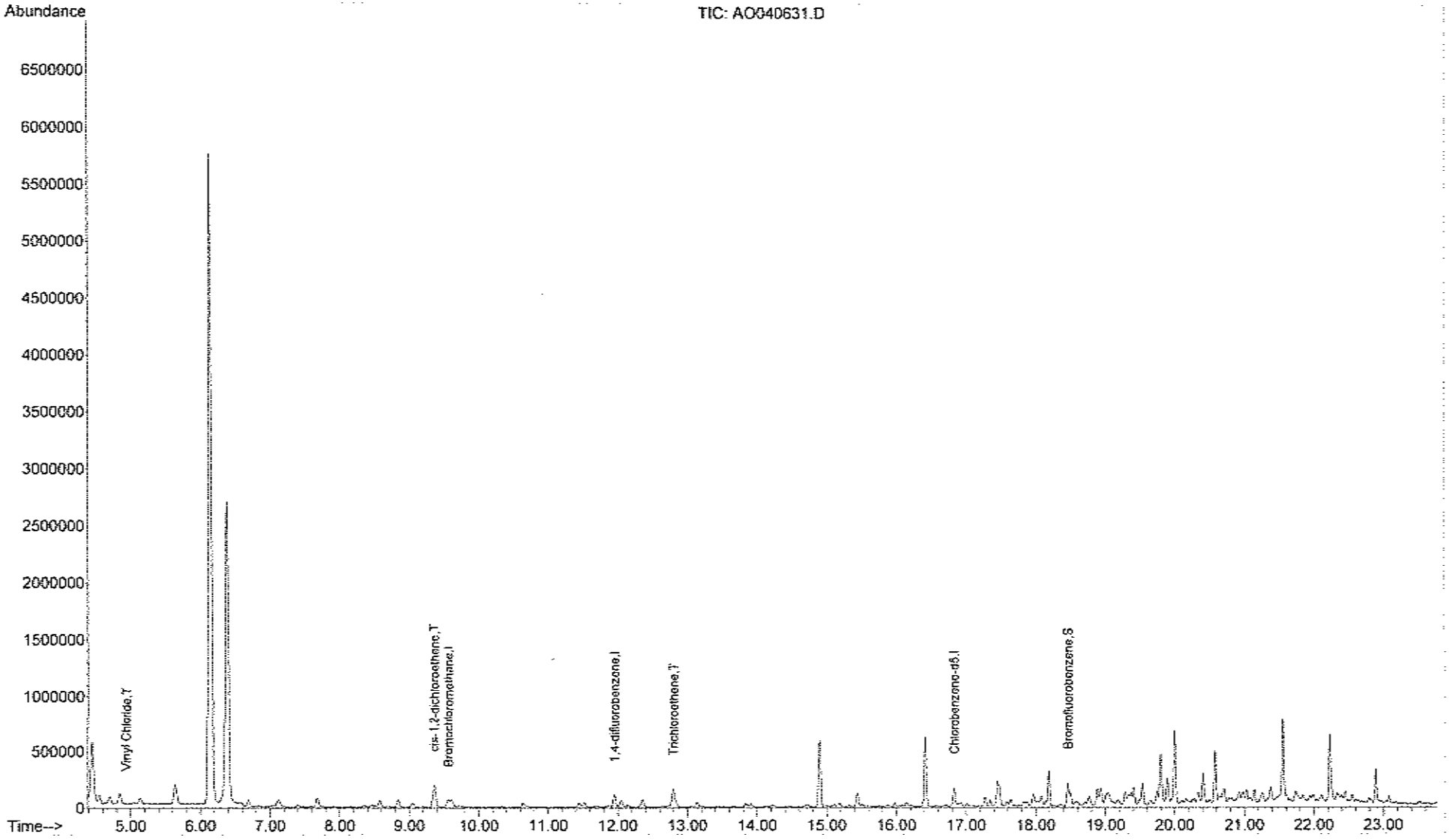
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	25079	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	113761	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	101873	1.00	ppb	0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	70702	1.02	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 102.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.94	62	2495	0.06	ppb	70
29) cis-1,2-dichloroethene	9.36	61	175403	3.37	ppb	94
44) Trichloroethene	12.79	130	65059	1.27	ppb	92

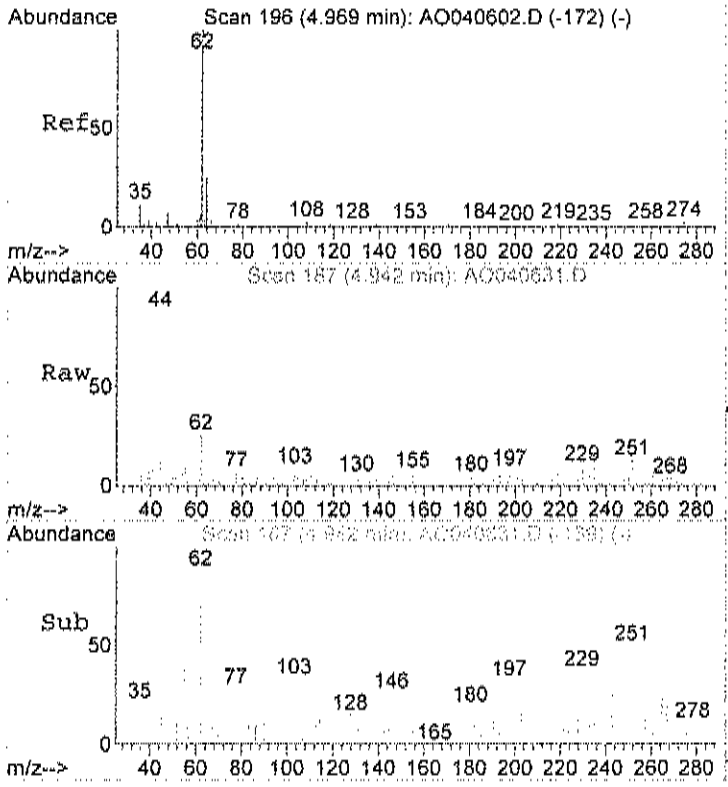
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040631.D Vial: 29
Acq On : 7 Apr 2017 4:53 am Operator: RJP
Sample : C1704014-013A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 7 13:31 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

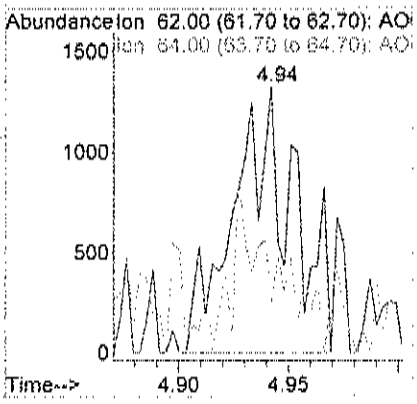


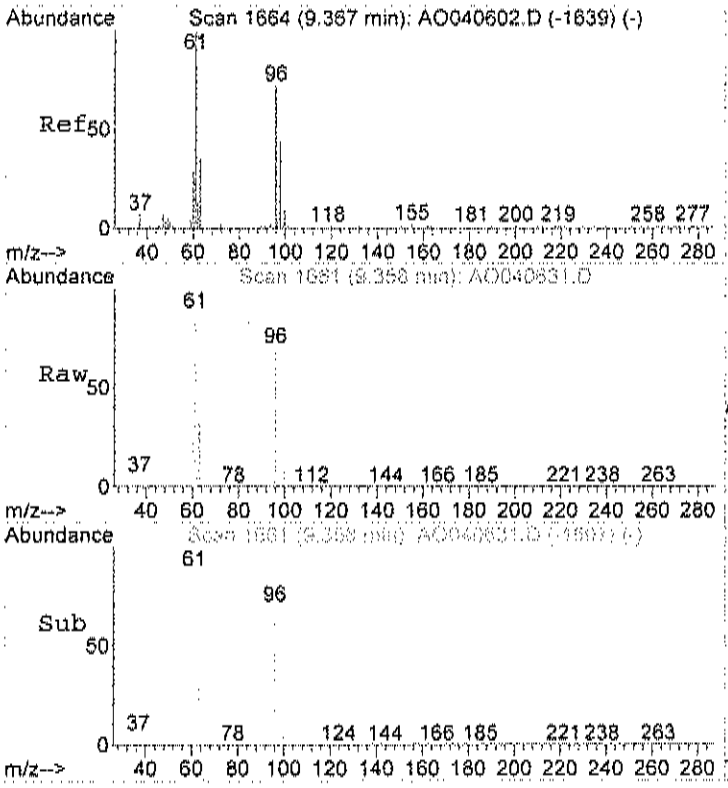


#6
Vinyl Chloride
Concen: 0.06 ppb
RT: 4.94 min Scan# 187
Delta R.T. -0.01 min
Lab File: AO040631.D
Acq: 7 Apr 2017 4:53 am

Tgt Ion: 62 Resp: 2495

Ion	Ratio	Lower	Upper
62	100		
64	44.7	0.0	58.6

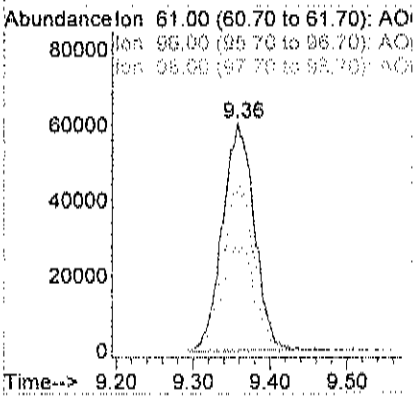


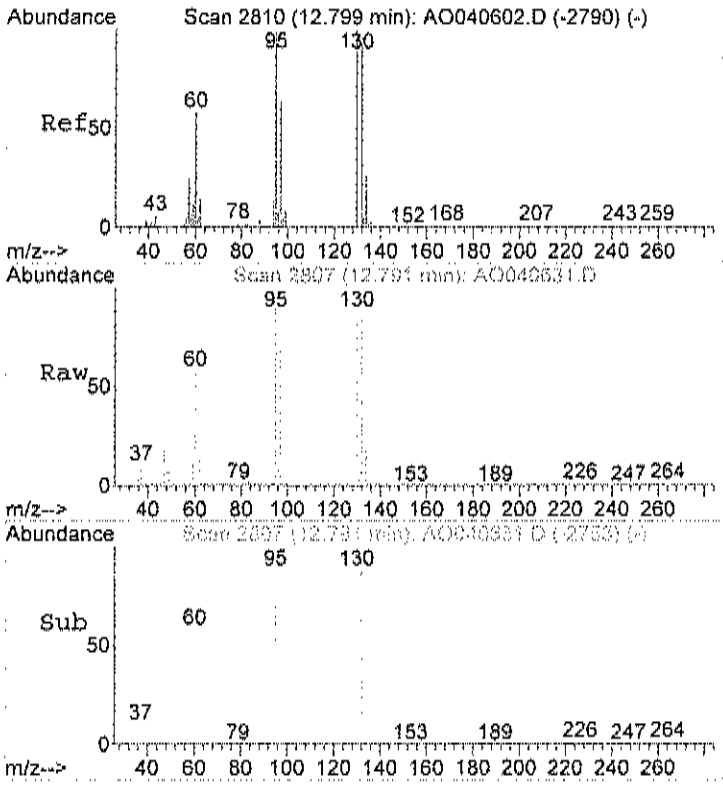


#29
cis-1,2-dichloroethene
Concen: 3.37 ppb
RT: 9.36 min Scan# 1661
Delta R.T. 0.01 min
Lab File: AO040631.D
Acq: 7 Apr 2017 4:53 am

Tgt Ion: 61 Resp: 175403

Ion	Ratio	Lower	Upper
61	100		
96	72.2	58.1	98.1
98	46.4	29.3	69.3

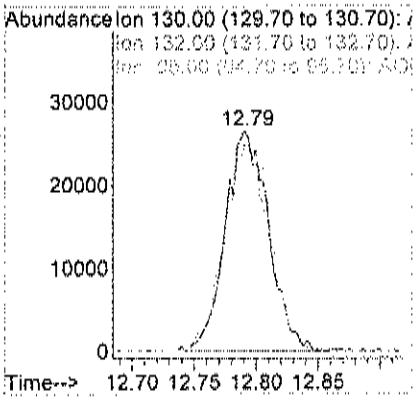




#44
Trichloroethene
Concen: 1.27 ppb
RT: 12.79 min Scan# 2807
Delta R.T. 0.01 min
Lab File: AO040631.D
Acq: 7 Apr 2017 4:53 am

Tgt Ion:130 Resp: 65059

Ion	Ratio	Lower	Upper
130	100		
132	94.1	69.9	109.9
95	107.1	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040707.D Vial: 7
Acq On : 7 Apr 2017 2:27 pm Operator: RJP
Sample : C1704014-013A 10X Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 14:58:20 2017 Quant Results File: A331_1UG.RES

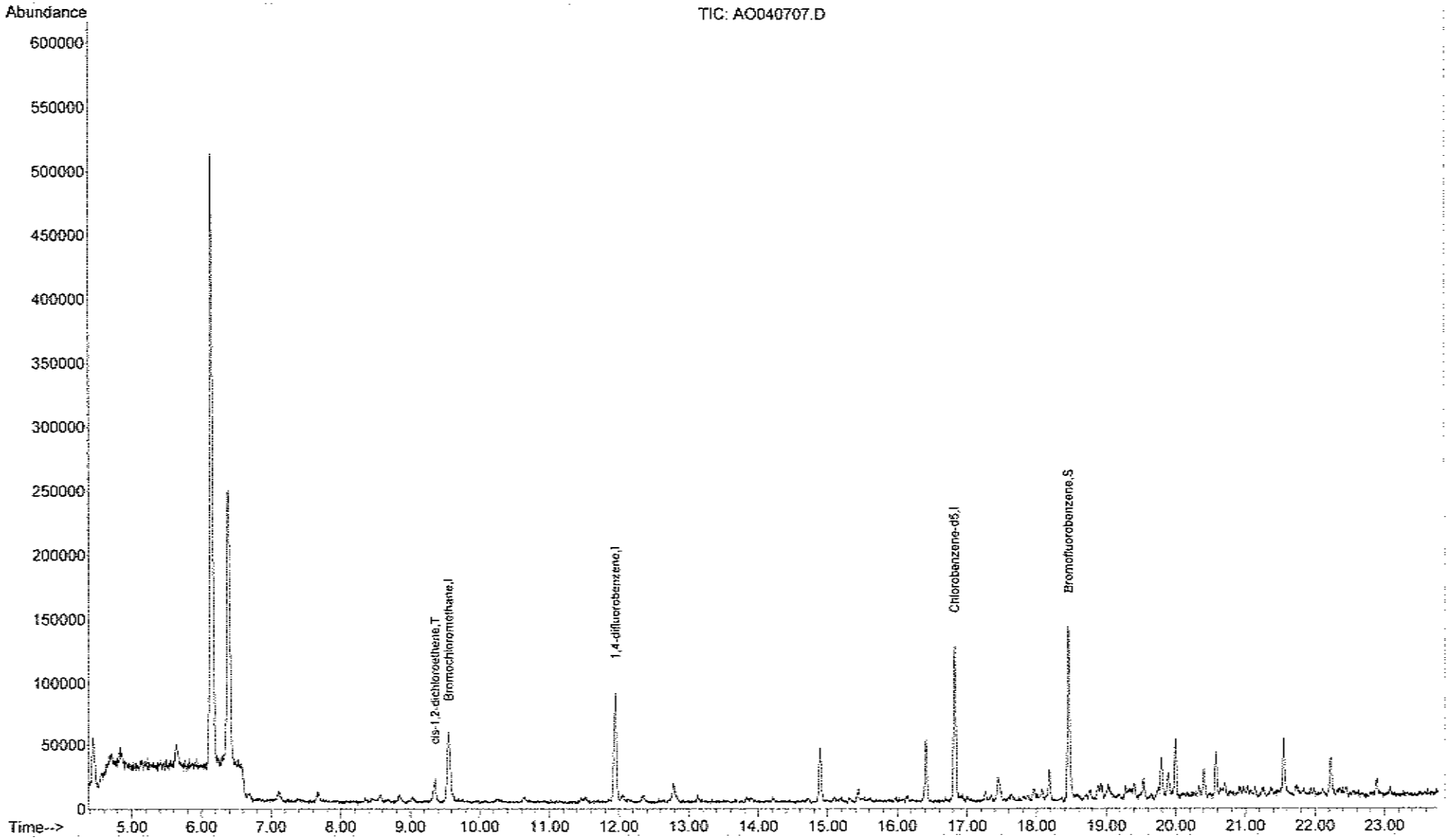
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

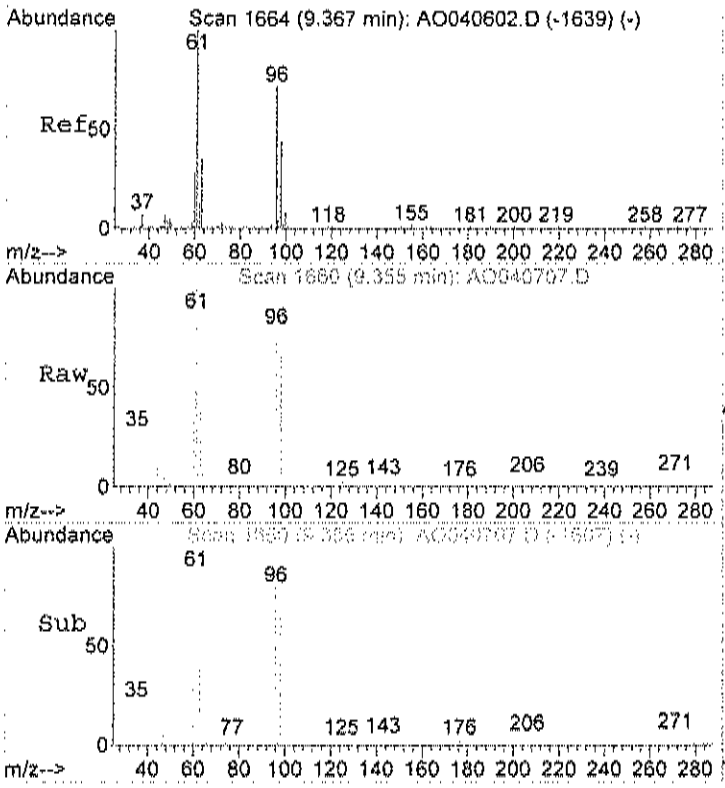
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	19443	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	85901	1.00	ppb	0.01
50) Chlorobenzene-d5	16.82	117	76902	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	48147	0.92	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.35	61	12708	0.31	ppb	96

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

Data File : C:\HPCHEM\1\DATA\AO040707.D Vial: 7
Acq On : 7 Apr 2017 2:27 pm Operator: RJP
Sample : C1704014-013A 10X Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:57 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

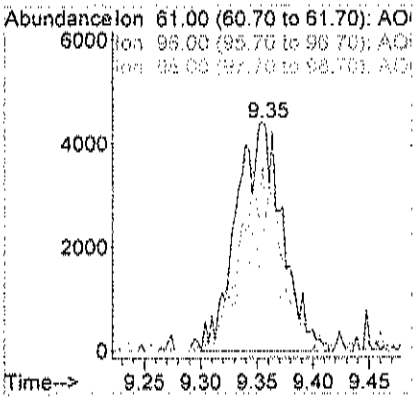




#29
cis-1,2-dichloroethene
Concen: 0.31 ppb
RT: 9.35 min Scan# 1660
Delta R.T. 0.01 min
Lab File: AO040707.D
Acq: 7 Apr 2017 2:27 pm

Tgt Ion: 61 Resp: 12708

Ion	Ratio	Lower	Upper
61	100		
96	73.9	58.1	98.1
98	47.4	29.3	69.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-SVI
Lab Order:	C1704014	**Tag Number:**	475.1170
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-2			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 6:50:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 6:50:00 PM
cis-1,2-Dichloroethene	44	14		ppbV	90	4/8/2017 1:00:00 AM
trans-1,2-Dichloroethene	0.41	0.15		ppbV	1	4/7/2017 6:50:00 PM
Trichloroethene	3.7	0.36		ppbV	9	4/8/2017 12:23:00 AM
Vinyl chloride	0.19	0.040		ppbV	1	4/7/2017 6:50:00 PM
Surr: Bromofluorobenzene	107	70-130		%REC	1	4/7/2017 6:50:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5A-SVI
Lab Order:	C1704014	**Tag Number:**	475.1170
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 6:50:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 6:50:00 PM
cis-1,2-Dichloroethene	170	55		ug/m3	90	4/8/2017 1:00:00 AM
trans-1,2-Dichloroethene	1.6	0.59		ug/m3	1	4/7/2017 6:50:00 PM
Trichloroethene	20	1.9		ug/m3	9	4/8/2017 12:23:00 AM
Vinyl chloride	0.49	0.10		ug/m3	1	4/7/2017 6:50:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040712.D Vial: 12
Acq On : 7 Apr 2017 6:50 pm Operator: RJP
Sample : C1704014-014A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:04 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

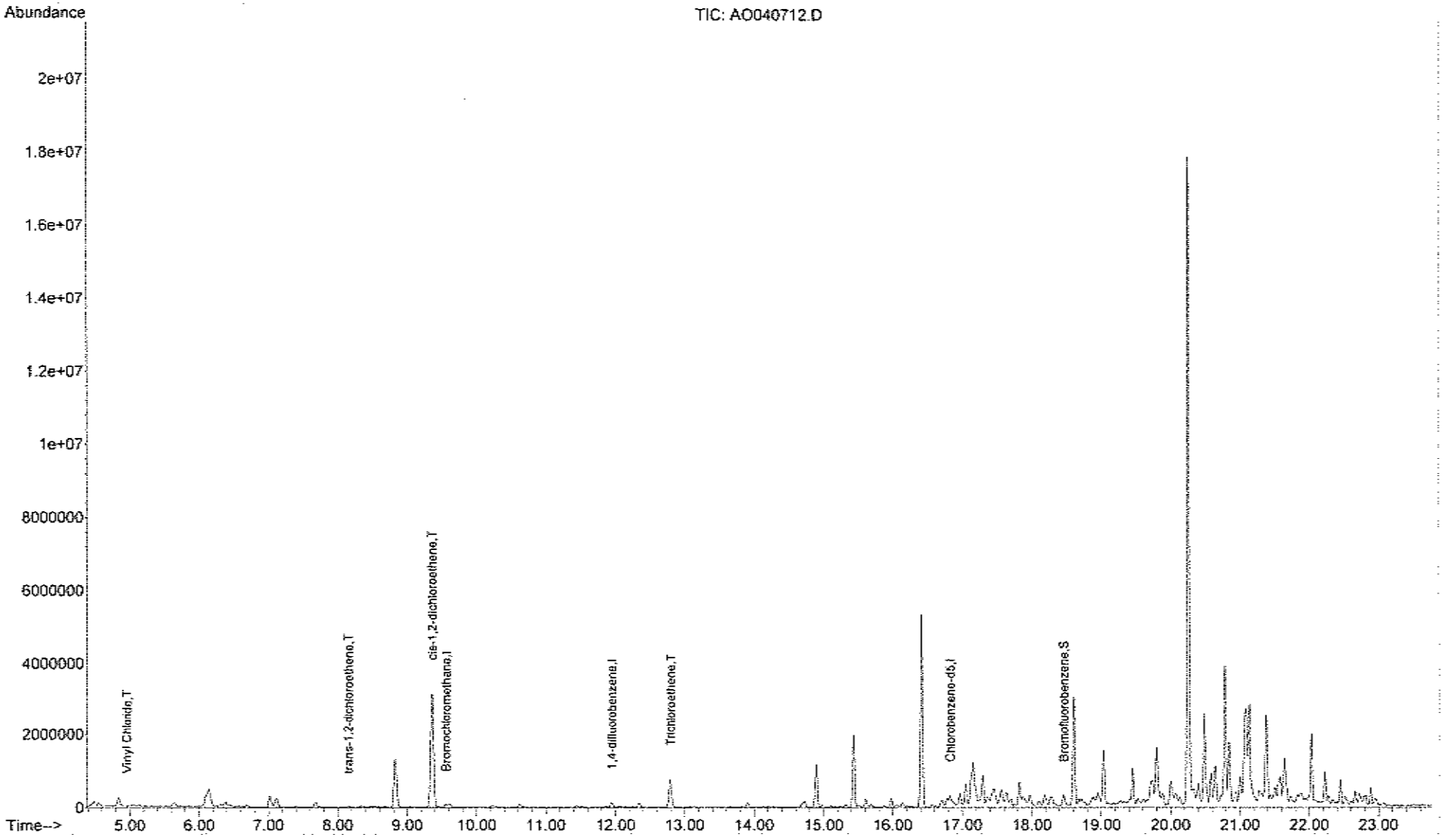
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	31361	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	139148	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	131462	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	96106	1.07	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 107.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.95	62	10310m	0.19	ppb	
24) trans-1,2-dichloroethene	8.15	61	27880	0.41	ppb	96
29) cis-1,2-dichloroethene	9.35	61	2758473	42.35	ppb	98
44) Trichloroethene	12.79	130	321836	5.14	ppb	92

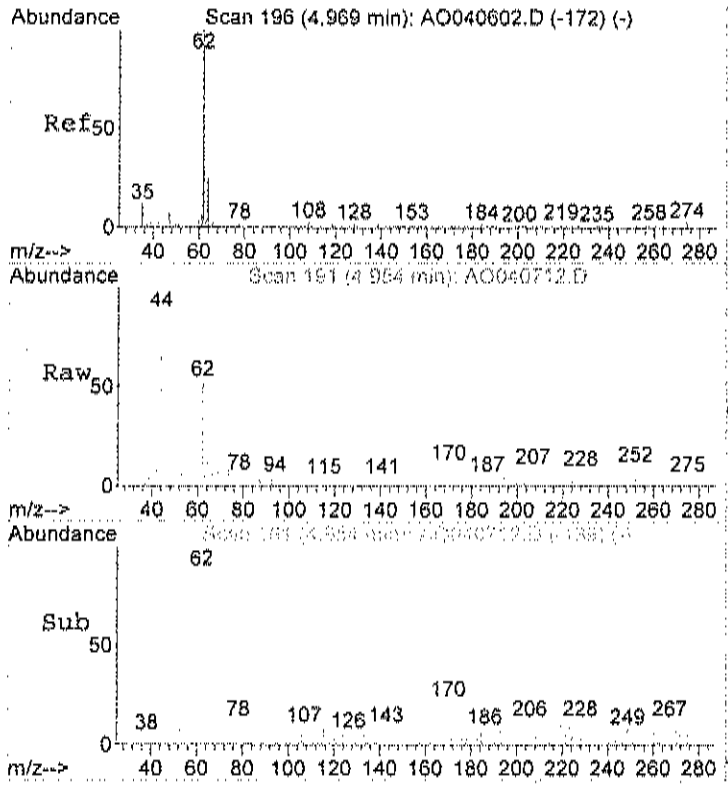
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040712.D Vial: 12
Acq On : 7 Apr 2017 6:50 pm Operator: RJP
Sample : C1704014-014A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:14 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

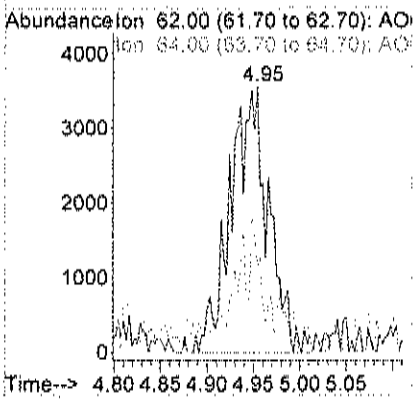


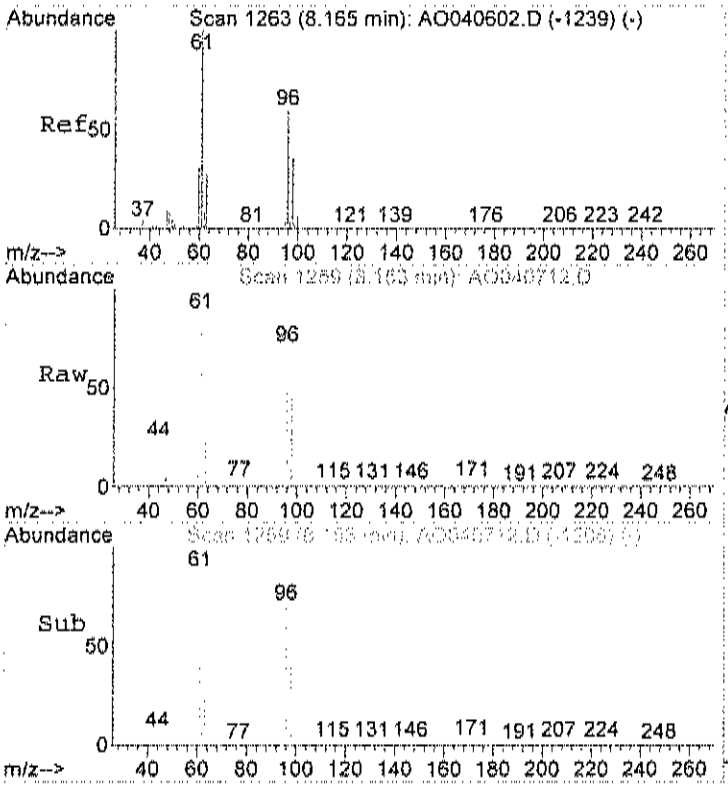


#6
Vinyl Chloride
Concen: 0.19 ppb m
RT: 4.95 min Scan# 191
Delta R.T. 0.01 min
Lab File: AO040712.D
Acq: 7 Apr 2017 6:50 pm

Tgt Ion: 62 Resp: 10310

Ion	Ratio	Lower	Upper
62	100		
64	45.0	0.0	58.6

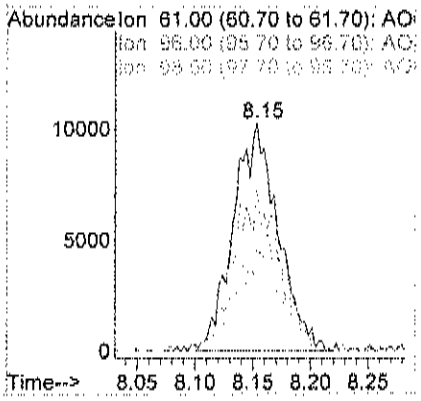


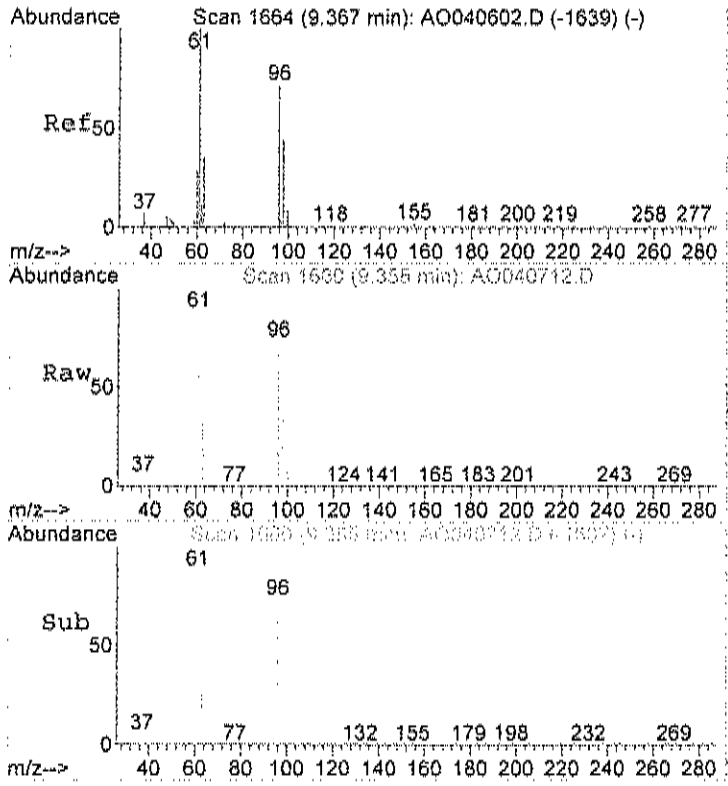


#24
trans-1,2-dichloroethene
Concen: 0.41 ppb
RT: 8.15 min Scan# 1259
Delta R.T. 0.01 min
Lab File: AO040712.D
Acq: 7 Apr 2017 6:50 pm

Tgt Ion: 61 Resp: 27880

Ion	Ratio	Lower	Upper
61	100		
96	72.0	48.2	88.2
98	47.7	29.0	69.0

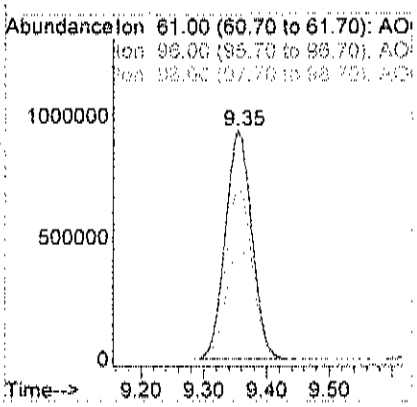


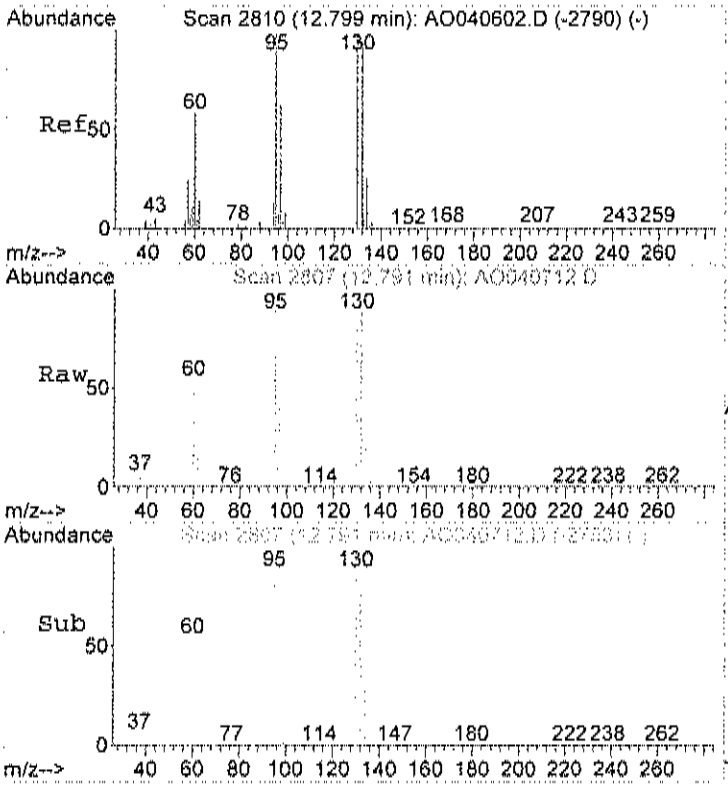


#29
cis-1,2-dichloroethene
Concen: 42.35 ppb
RT: 9.35 min Scan# 1660
Delta R.T. 0.01 min
Lab File: AO040712.D
Acq: 7 Apr 2017 6:50 pm

Tgt Ion: 61 Resp: 2758473

Ion	Ratio	Lower	Upper
61	100		
96	75.1	58.1	98.1
98	48.9	29.3	69.3

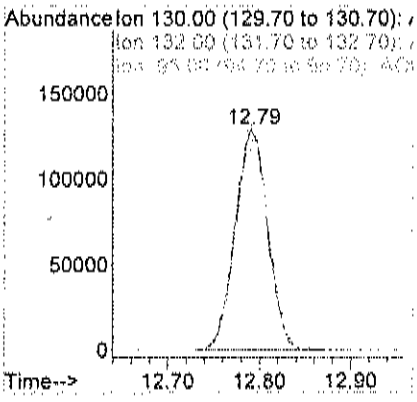




#44
Trichloroethene
Concen: 5.14 ppb
RT: 12.79 min Scan# 2807
Delta R.T. 0.01 min
Lab File: AO040712.D
Acq: 7 Apr 2017 6:50 pm

Tgt Ion:130 Resp: 321836

Ion	Ratio	Lower	Upper
130	100		
132	96.4	69.9	109.9
95	104.9	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040721.D
Acq On : 8 Apr 2017 12:23 am
Sample : C1704014-014A 9x
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:56 2017

Vial: 21
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

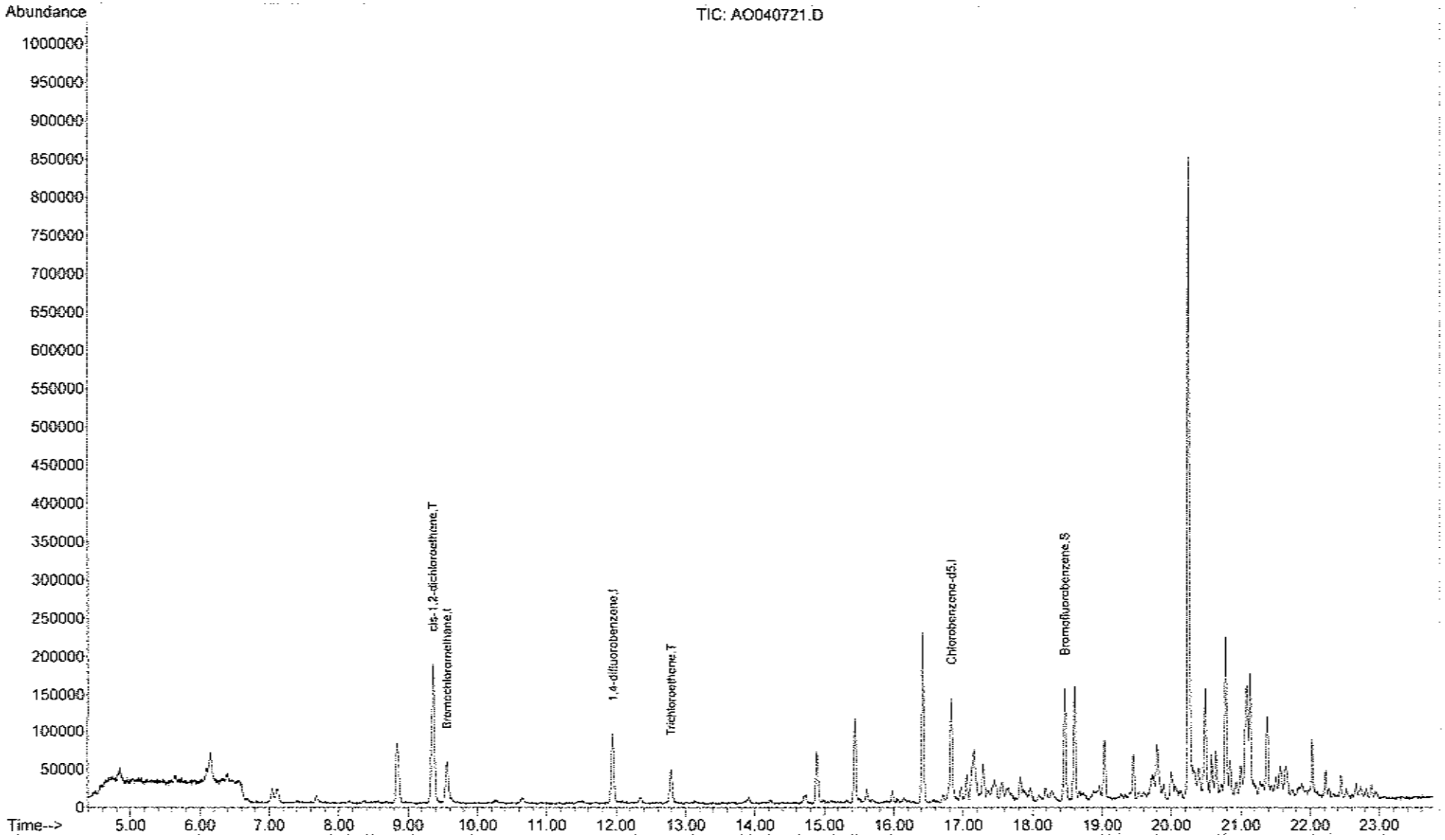
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	20532	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	89989	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	83171	1.00	ppb	0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	53731	0.95	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 95.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.35	61	156424	3.67	ppb	94
44) Trichloroethene	12.79	130	16628	0.41	ppb	94

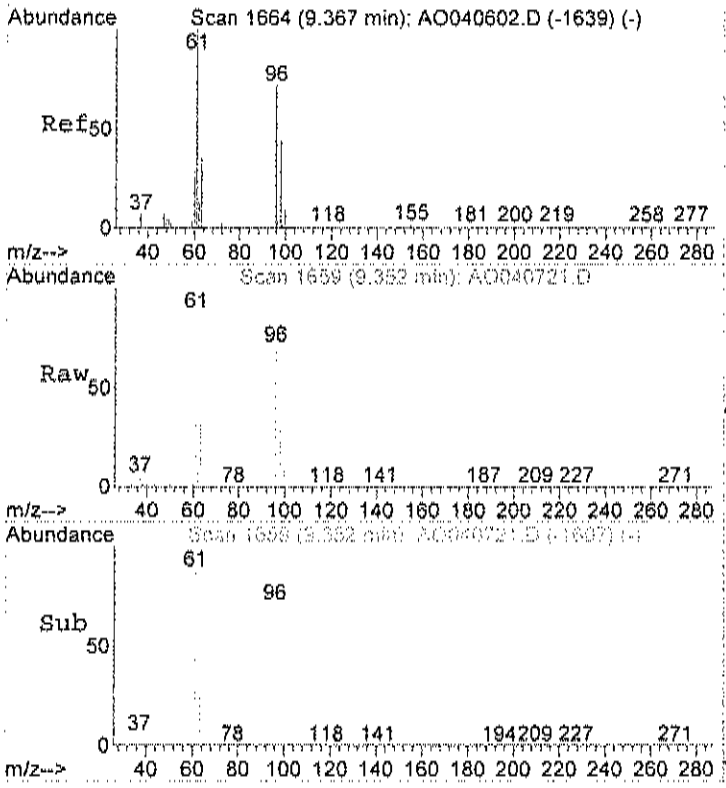
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040721.D Vial: 21
Acq On : 8 Apr 2017 12:23 am Operator: RJP
Sample : C1704014-014A 9x Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 11 15:01 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

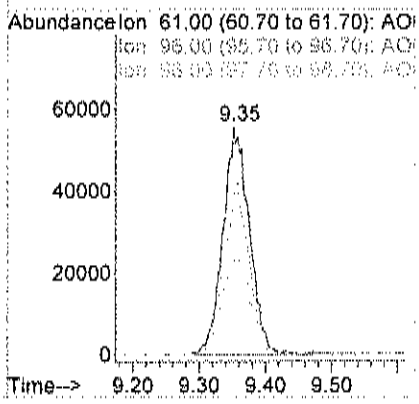


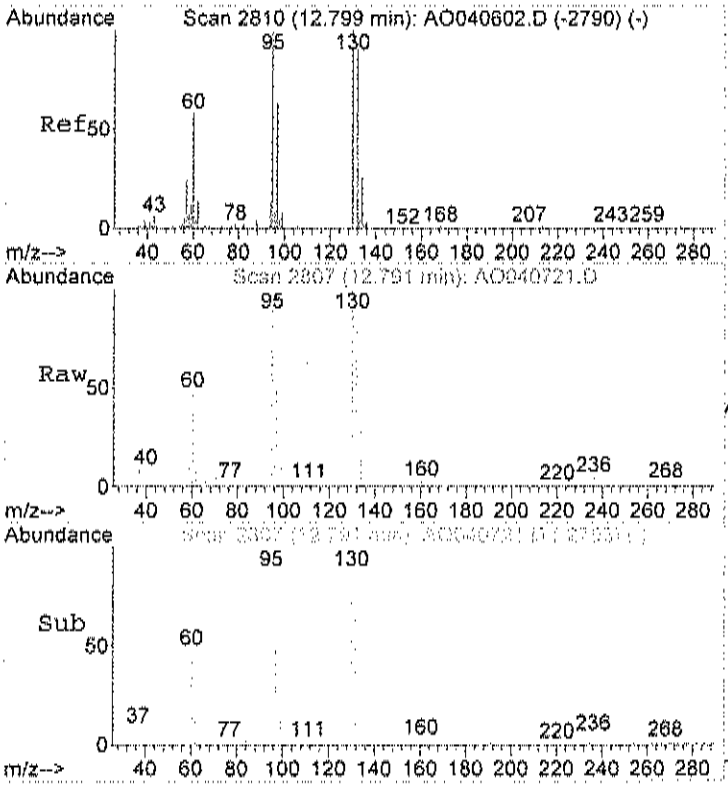


#29
cis-1,2-dichloroethene
Concen: 3.67 ppb
RT: 9.35 min Scan# 1659
Delta R.T. 0.01 min
Lab File: AO040721.D
Acq: 8 Apr 2017 12:23 am

Tgt Ion: 61 Resp: 156424

Ion	Ratio	Lower	Upper
61	100		
96	71.9	58.1	98.1
98	46.2	29.3	69.3

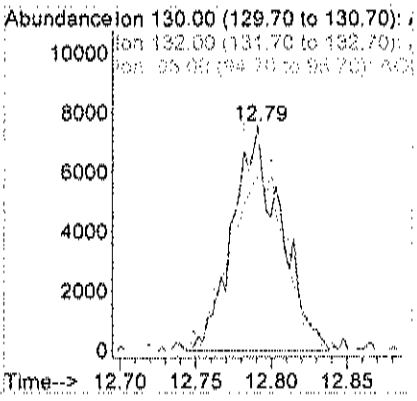




#44
Trichloroethene
Concen: 0.41 ppb
RT: 12.79 min Scan# 2807
Delta R.T. 0.01 min
Lab File: AO040721.D
Acq: 8 Apr 2017 12:23 am

Tgt Ion:130 Resp: 16628

Ion	Ratio	Lower	Upper
130	100		
132	91.5	69.9	109.9
95	105.8	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040722.D Vial: 22
Acq On : 8 Apr 2017 1:00 am Operator: RJP
Sample : C1704014-014A 90x Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:57 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	20827	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.94	114	88198	1.00	ppb	0.00
50) Chlorobenzene-d5	16.83	117	80228	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	48670	0.89	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 89.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.36	61	21151	0.49	ppb	96

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

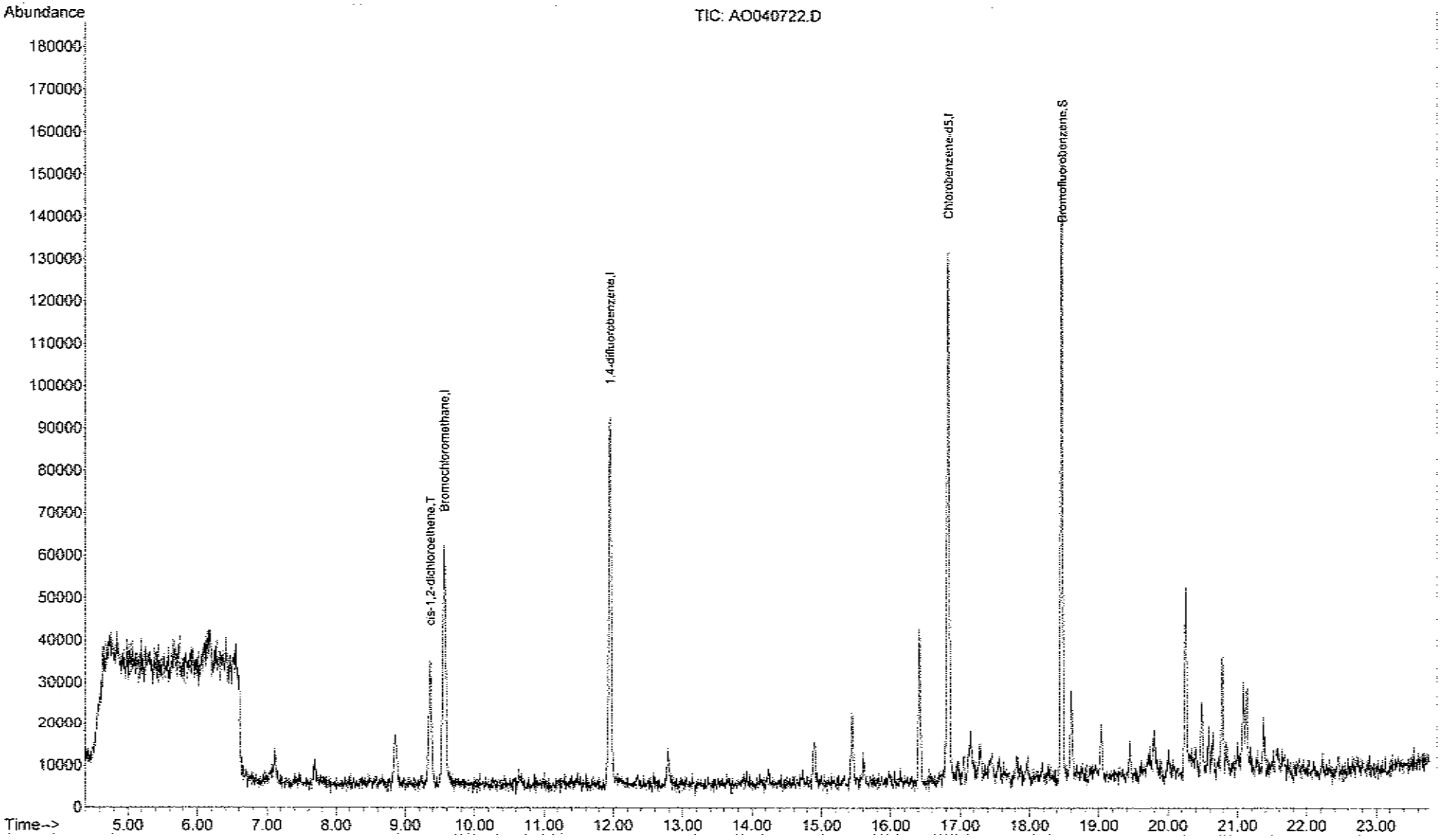
Quantitation Report (QT Reviewed)

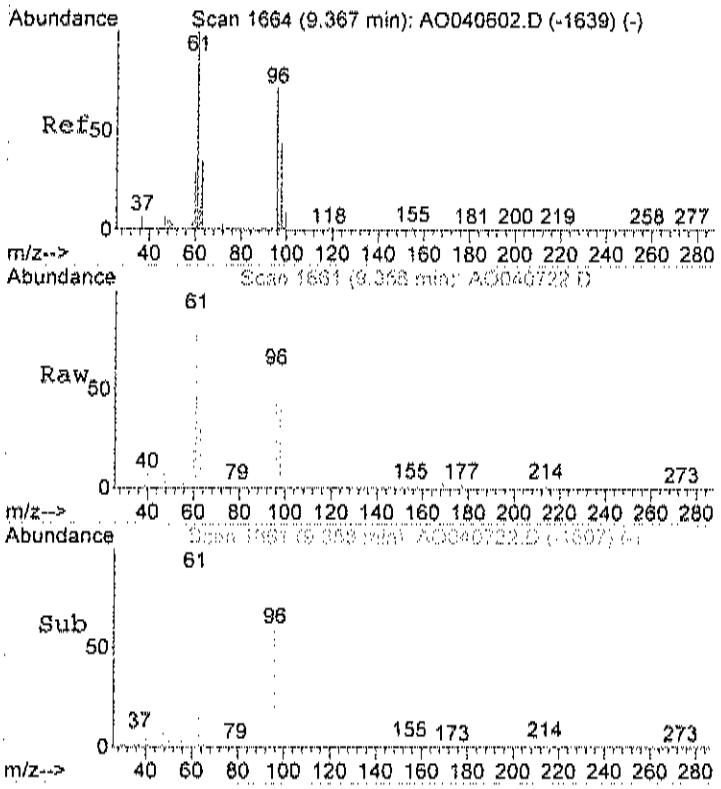
Data File : C:\HPCHEM\1\DATA\AO040722.D
Acq On : 8 Apr 2017 1:00 am
Sample : C1704014-014A 90x
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 15:02 2017

Vial: 22
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

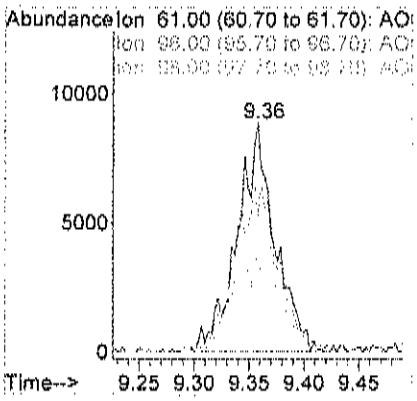




#29
cis-1,2-dichloroethene
Concen: 0.49 ppb
RT: 9.36 min Scan# 1661
Delta R.T. 0.01 min
Lab File: AO040722.D
Acq: 8 Apr 2017 1:00 am

Tgt Ion: 61 Resp: 21151

Ion	Ratio	Lower	Upper
61	100		
96	83.8	58.1	98.1
98	48.9	29.3	69.3



Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-SVI
Lab Order:	C1704014	**Tag Number:**	467.1167
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		4/5/2017
Lab Vacuum Out	-30			"Hg		4/5/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	4/7/2017 7:30:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	4/7/2017 7:30:00 PM
cis-1,2-Dichloroethene	5.8	1.5		ppbV	10	4/8/2017 1:37:00 AM
trans-1,2-Dichloroethene	0.18	0.15		ppbV	1	4/7/2017 7:30:00 PM
Trichloroethene	11	0.40		ppbV	10	4/8/2017 1:37:00 AM
Vinyl chloride	0.11	0.040		ppbV	1	4/7/2017 7:30:00 PM
Surr: Bromofluorobenzene	116	70-130		%REC	1	4/7/2017 7:30:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *04-May-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	691-SB5B-SVI
Lab Order:	C1704014	**Tag Number:**	467.1167
Project:	691 St Paul Street	**Collection Date:**	4/1/2017
Lab ID:	C1704014-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	4/7/2017 7:30:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	4/7/2017 7:30:00 PM
cis-1,2-Dichloroethene	23	5.9		ug/m3	10	4/8/2017 1:37:00 AM
trans-1,2-Dichloroethene	0.71	0.59		ug/m3	1	4/7/2017 7:30:00 PM
Trichloroethene	57	2.1		ug/m3	10	4/8/2017 1:37:00 AM
Vinyl chloride	0.28	0.10		ug/m3	1	4/7/2017 7:30:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040713.D Vial: 13
Acq On : 7 Apr 2017 7:30 pm Operator: RJP
Sample : C1704014-015A Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:20 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

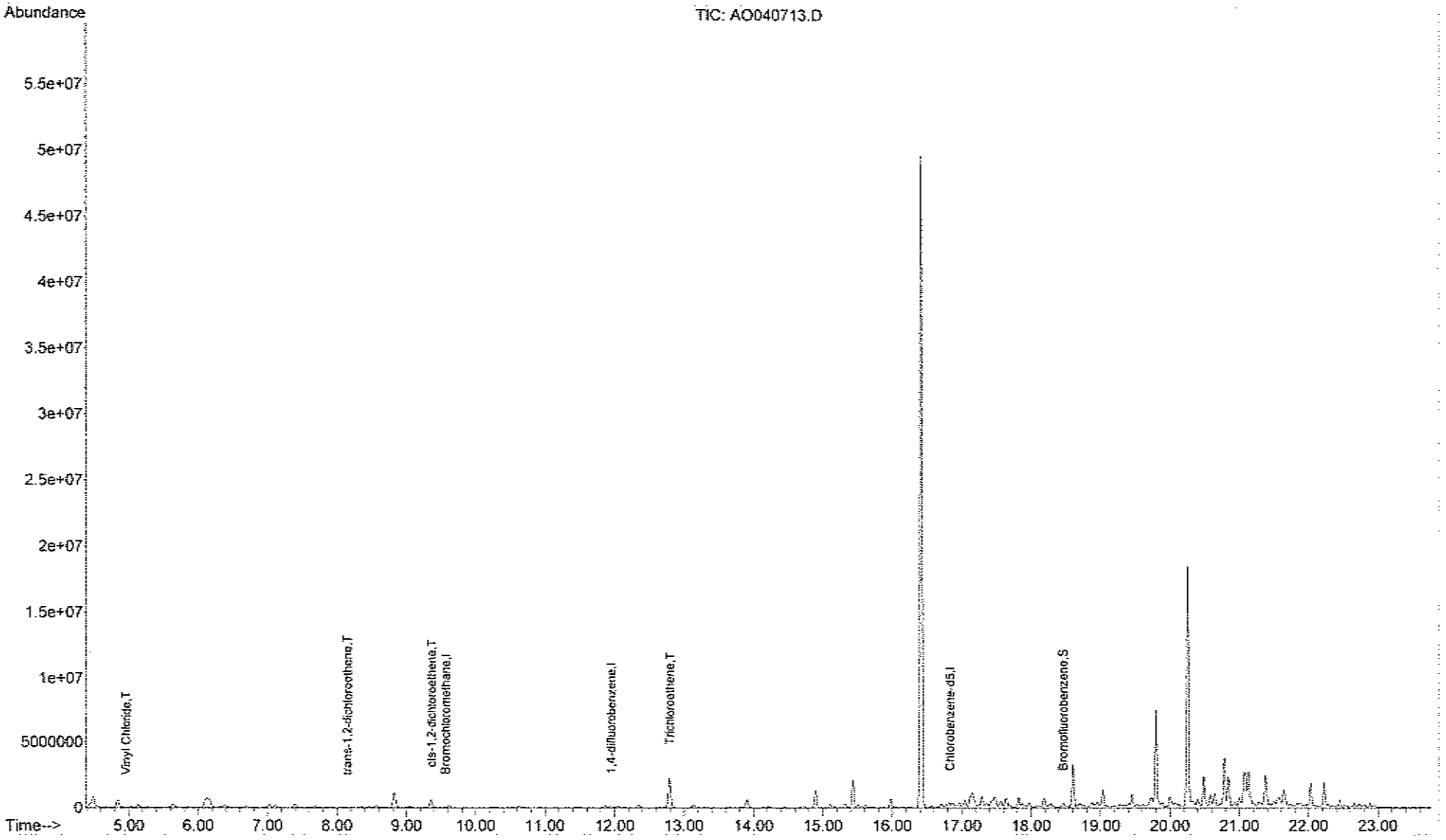
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	31915	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	147799	1.00	ppb	0.02
50) Chlorobenzene-d5	16.83	117	139968	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.47	95	110484	1.16	ppb	0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 116.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.95	62	6094	0.11	ppb	95
24) trans-1,2-dichloroethene	8.15	61	12259	0.18	ppb	94
29) cis-1,2-dichloroethene	9.35	61	537761	8.11	ppb	98
44) Trichloroethene	12.79	130	949109	14.27	ppb	92

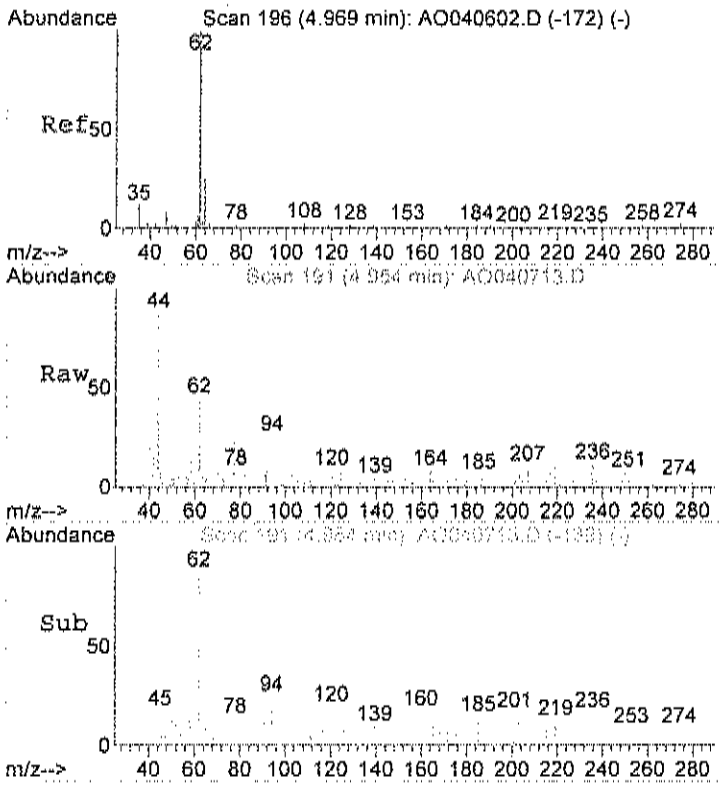
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040713.D
Acq On : 7 Apr 2017 7:30 pm
Sample : C1704014-015A
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:16 2017

Vial: 13
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

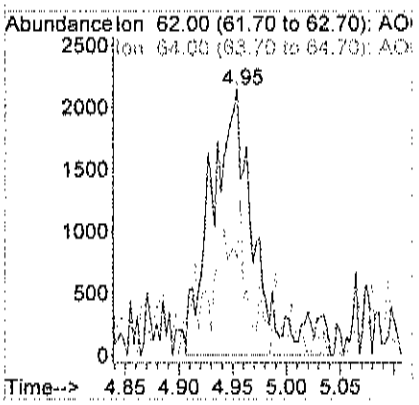


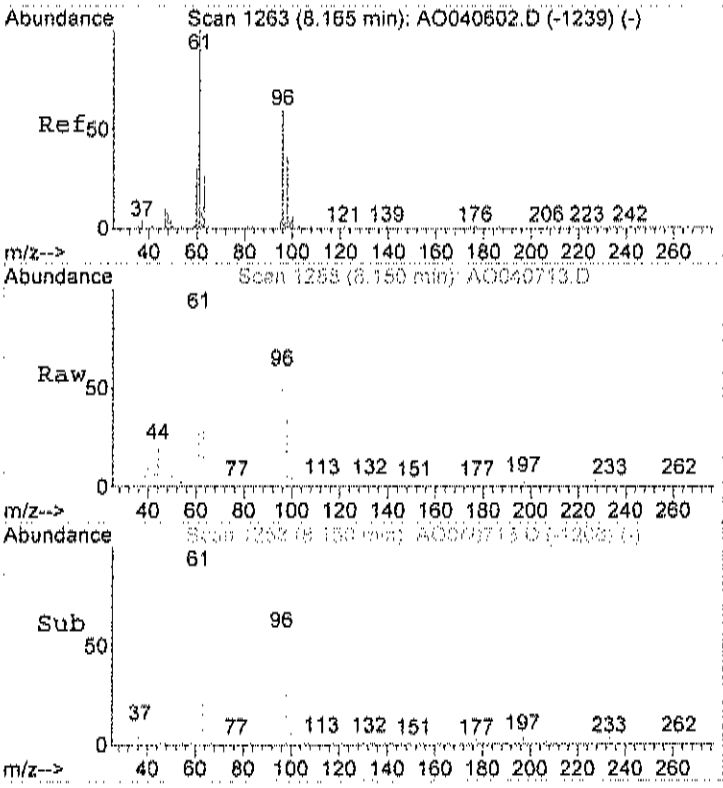


#6
Vinyl Chloride
Concen: 0.11 ppb
RT: 4.95 min Scan# 191
Delta R.T. 0.01 min
Lab File: AO040713.D
Acq: 7 Apr 2017 7:30 pm

Tgt Ion: 62 Resp: 6094

Ion	Ratio	Lower	Upper
62	100		
64	31.0	0.0	58.6

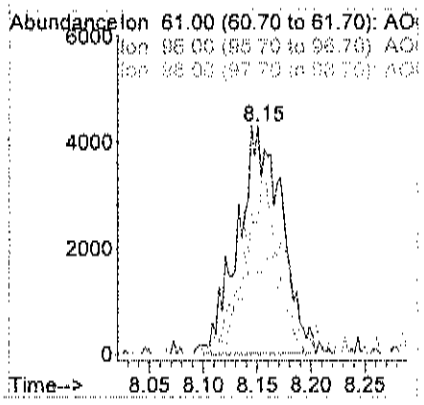


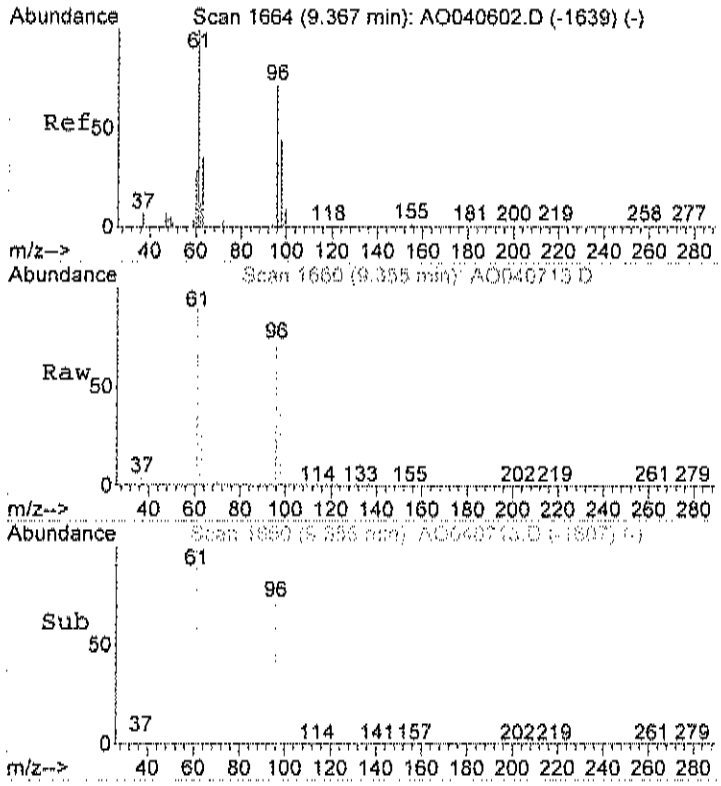


#24
trans-1,2-dichloroethene
Concen: 0.18 ppb
RT: 8.15 min Scan# 1258
Delta R.T. 0.01 min
Lab File: AO040713.D
Acq: 7 Apr 2017 7:30 pm

Tgt Ion: 61 Resp: 12259

Ion	Ratio	Lower	Upper
61	100		
96	65.3	48.2	88.2
98	42.2	29.0	69.0

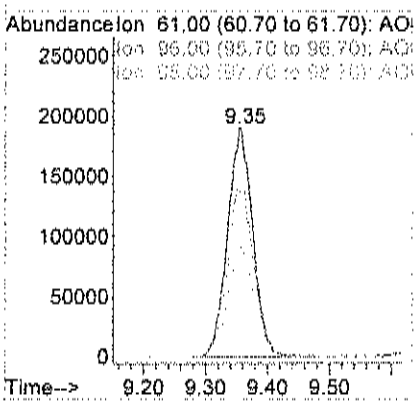


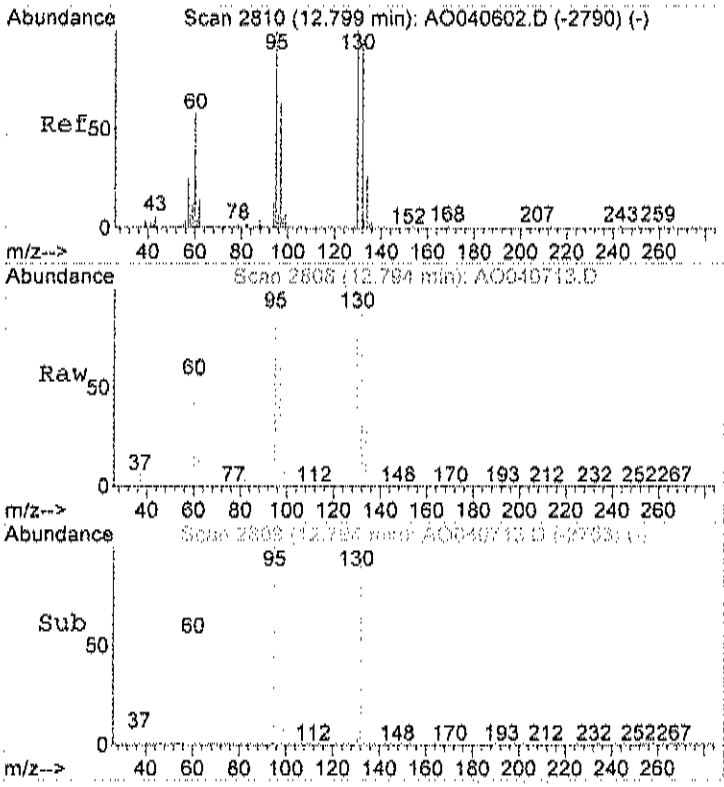


#29
cis-1,2-dichloroethene
Concen: 8.11 ppb
RT: 9.35 min Scan# 1660
Delta R.T. 0.01 min
Lab File: AO040713.D
Acq: 7 Apr 2017 7:30 pm

Tgt Ion: 61 Resp: 537761

Ion	Ratio	Lower	Upper
61	100		
96	76.0	58.1	98.1
98	49.0	29.3	69.3

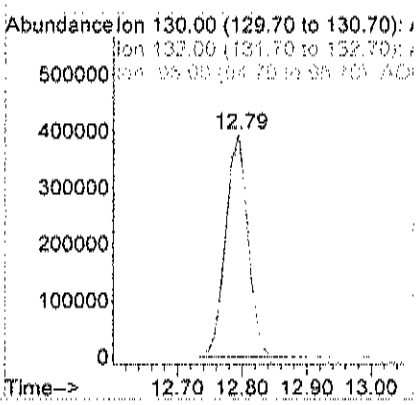




#44
Trichloroethene
Concen: 14.27 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.01 min
Lab File: AO040713.D
Acq: 7 Apr 2017 7:30 pm

Tgt Ion:130 Resp: 949109

Ion	Ratio	Lower	Upper
130	100		
132	96.1	69.9	109.9
95	104.5	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040723.D Vial: 23
Acq On : 8 Apr 2017 1:37 am Operator: RJP
Sample : C1704014-015A 10x Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 08:59:58 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

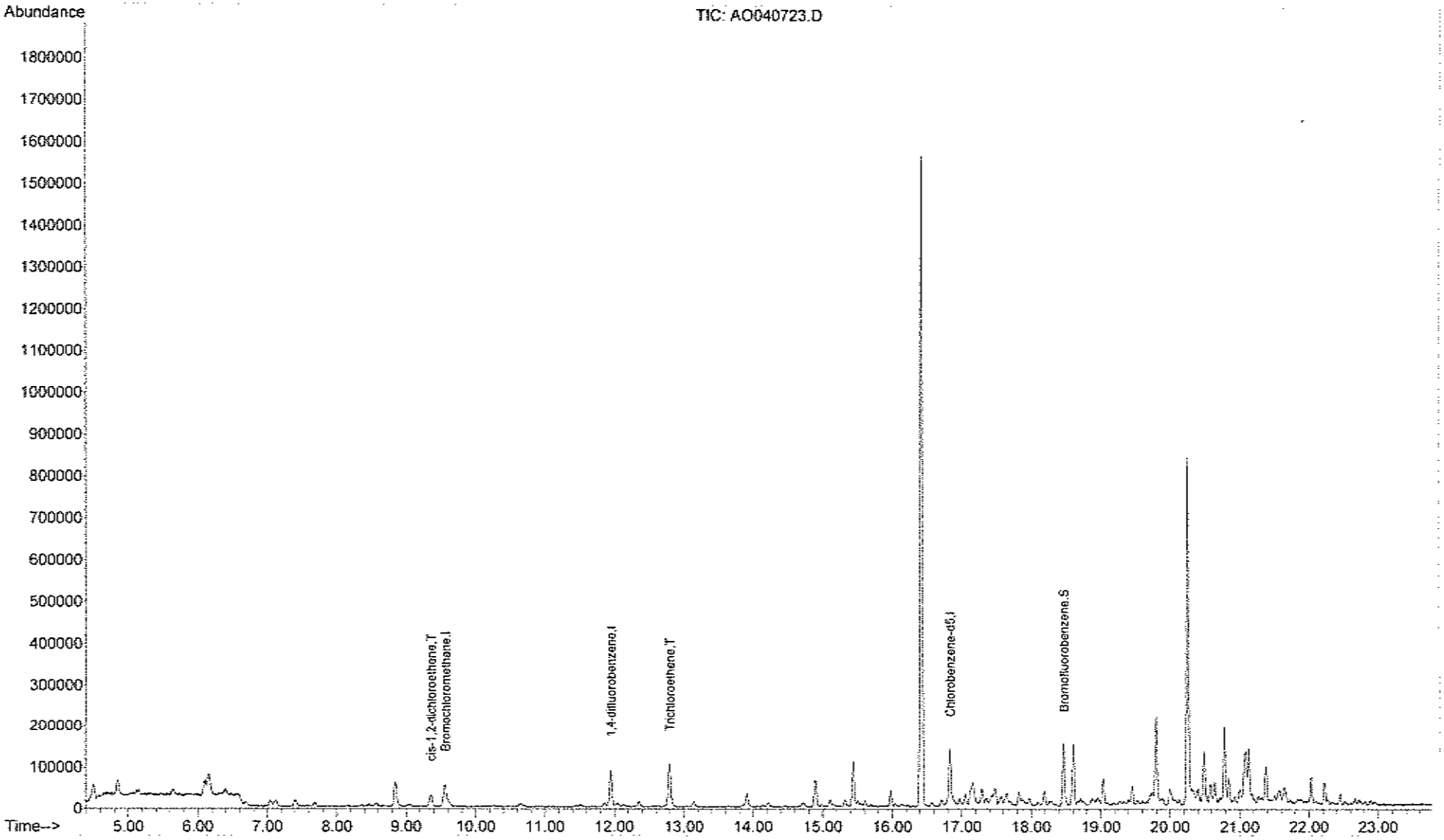
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.57	128	20780	1.00	ppb	0.03
35) 1,4-difluorobenzene	11.95	114	88679	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	79938	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	51379	0.94	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 94.00%			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.35	61	25038	0.58	ppb	97
44) Trichloroethene	12.79	130	42344	1.06	ppb	94

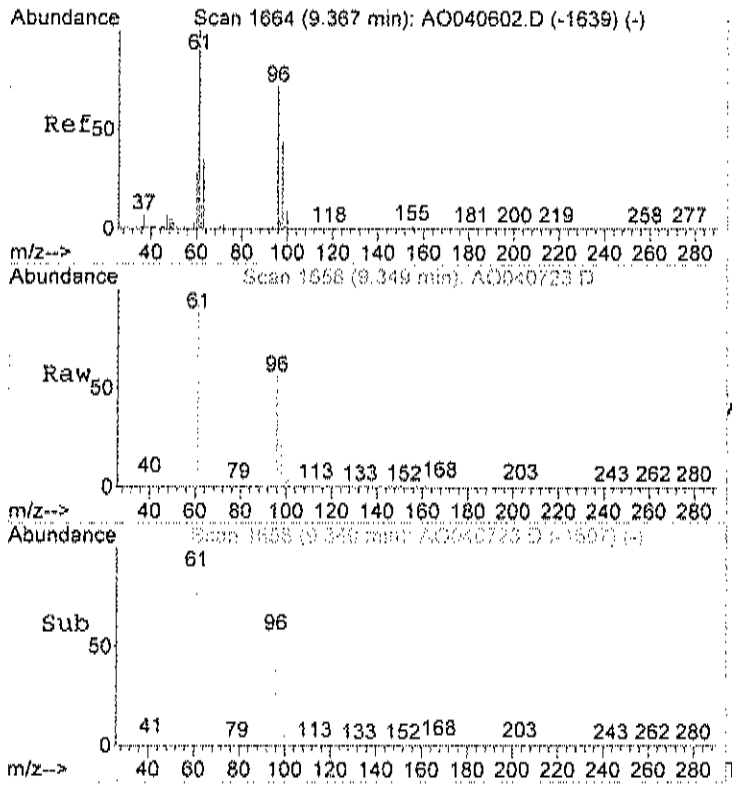
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040723.D
Acq On : 8 Apr 2017 1:37 am
Sample : C1704014-015A 10x
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 15:03 2017

Vial: 23
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration

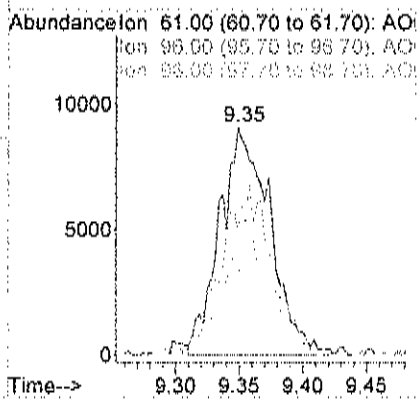


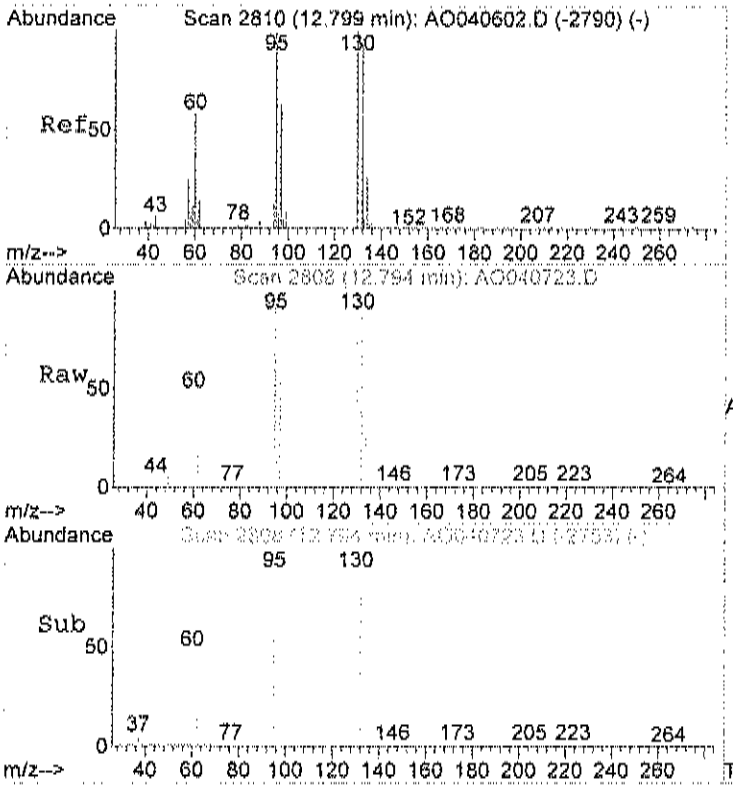


#29
cis-1,2-dichloroethene
Concen: 0.58 ppb
RT: 9.35 min Scan# 1658
Delta R.T. 0.00 min
Lab File: AO040723.D
Acq: 8 Apr 2017 1:37 am

Tgt Ion: 61 Resp: 25038

Ion	Ratio	Lower	Upper
61	100		
96	73.3	58.1	98.1
98	49.2	29.3	69.3

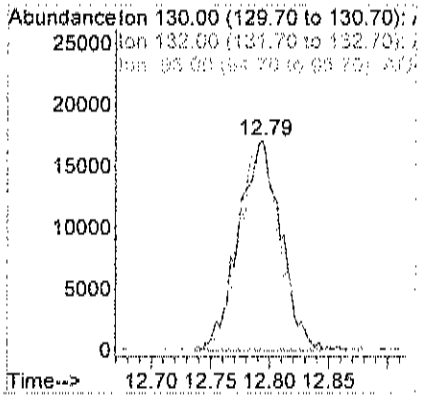




#44
Trichloroethene
Concen: 1.06 ppb
RT: 12.79 min Scan# 2808
Delta R.T. 0.02 min
Lab File: AO040723.D
Acq: 8 Apr 2017 1:37 am

Tgt Ion:130 Resp: 42344

Ion	Ratio	Lower	Upper
130	100		
132	93.3	69.9	109.9
95	104.5	76.3	116.3



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS DATA

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INITIAL CALIBRATION

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Initial Calibration

Calibration Files
0.04 =AO033112.D 0.10 =AO033111.D 0.15 =AO033110.D
0.30 =AO033109.D 0.50 =AO033108.D 0.75 =AO033107.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene			1.544	1.513	1.429	1.374	1.425	4.95
3)	T	Freon 12			9.344	8.388	8.315	8.416	8.232	6.60
4)	T	Chloromethane			1.409	1.204	1.135	1.140	1.163	9.33
5)	T	Freon 114			7.169	6.615	6.534	6.541	6.407	6.09
6)	T	Vinyl Chloride	1.962	2.151	1.926	1.794	1.697	1.723	1.763	11.15
7)	T	Butane			2.243	1.863	1.888	1.759	1.798	11.56
8)	T	1,3-butadiene			1.385	1.332	1.172	1.185	1.165	12.44
9)	T	Bromomethane			2.616	2.776	2.328	2.341	2.375	8.93
10)	T	Chloroethane			0.809	0.822	0.754	0.711	0.733	7.64
11)	T	Ethanol			0.675	0.699	0.533	0.570	0.576	12.29
12)	T	Acrolein			0.825	0.551	0.639	0.600	0.604	16.23
13)	T	Vinyl Bromide			2.774	2.435	2.310	2.408	2.385	7.43
14)	T	Freon 11			9.323	8.425	8.442	8.349	8.237	6.73
15)	T	Acetone			0.812	0.684	0.652	0.612	0.645	11.74
16)	T	Pentane			1.425	1.259	1.237	1.280	1.262	5.84
17)	T	Isopropyl alcoh			2.299	2.338	2.046	2.193	2.143	5.78
18)	T	1,1-dichloroeth			1.456	1.286	1.356	1.296	1.300	5.86
19)	T	Freon 113			3.463	3.043	3.112	3.108	3.107	4.91
20)	t	t-Butyl alcohol			3.473	3.294	2.983	3.062	3.171	4.82
21)	T	Methylene chlor			1.418	1.293	1.316	1.229	1.268	5.89
22)	T	Allyl chloride			1.815	1.621	1.533	1.658	1.615	5.58
23)	T	Carbon disulfid			4.523	4.199	4.065	4.123	4.058	5.82
24)	T	trans-1,2-dichl			2.380	2.240	2.149	2.167	2.189	4.11
25)	T	methyl tert-but			4.329	4.263	4.015	4.265	4.148	3.02
26)	T	1,1-dichloroeth			2.962	2.740	2.777	2.701	2.710	4.53
27)	T	Vinyl acetate			4.485	3.391	3.300	3.441	3.495	11.70
28)	T	Methyl Ethyl Ke			0.644	0.662	0.679	0.661	0.665	2.29
29)	T	cis-1,2-dichlor			2.251	2.073	2.073	2.093	2.077	3.80
30)	T	Hexane			1.947	1.942	1.910	1.981	1.907	2.73
31)	T	Ethyl acetate			4.499	4.398	4.247	4.265	4.254	3.36
32)	T	Chloroform			4.143	3.779	3.803	3.825	3.793	4.47
33)	T	Tetrahydrofuran			1.517	1.442	1.411	1.445	1.421	3.36
34)	T	1,2-dichloroeth			3.011	2.729	2.856	2.889	2.807	4.09
35)	I	1,4-difluorobenzene	----------ISTD----------							
36)	T	1,1,1-trichloro			0.965	0.932	0.867	0.850	0.880	4.95
37)	T	Cyclohexane			0.447	0.521	0.424	0.446	0.444	7.93
38)	T	Carbon tetrachl	1.015	1.032	1.008	0.916	0.883	0.885	0.932	6.53
39)	T	Benzene			1.006	0.976	0.907	0.899	0.920	5.07
40)	T	Methyl methacry			0.460	0.442	0.414	0.425	0.431	3.31
41)	T	1,4-dioxane			0.212	0.220	0.173	0.171	0.190	9.21
42)	T	2,2,4-trimethyl			1.489	1.363	1.366	1.380	1.383	3.42
43)	T	Heptane			0.511	0.476	0.485	0.473	0.480	2.80
44)	T	Trichloroethene	0.522	0.481	0.479	0.441	0.420	0.438	0.450	7.35
45)	T	1,2-dichloropro			0.390	0.338	0.340	0.339	0.339	6.32
46)	T	Bromodichlorome			0.935	0.878	0.868	0.876	0.873	3.18
47)	T	cis-1,3-dichlor			0.623	0.564	0.542	0.535	0.559	4.98
48)	T	trans-1,3-dichl			0.558	0.532	0.524	0.530	0.532	2.79
49)	T	1,1,2-trichloro			0.427	0.425	0.407	0.399	0.407	3.32
50)	I	Chlorobenzene-d5	----------ISTD----------							
51)	T	Toluene			0.836	0.781	0.724	0.731	0.750	5.44

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

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Initial Calibration

Calibration Files
0.04 =AO033112.D 0.10 =AO033111.D 0.15 =AO033110.D
0.30 =AO033109.D 0.50 =AO033108.D 0.75 =AO033107.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
52)	T	Methyl Isobutyl			0.842	0.806	0.686	0.687	0.780	7.66
53)	T	Dibromochlorome			0.996	0.909	0.905	0.897	0.917	3.54
54)	T	Methyl Butyl Ke			0.769	0.697	0.572	0.590	0.702	11.13
55)	T	1,2-dibromoetha			0.817	0.783	0.729	0.745	0.761	3.66
56)	T	Tetrachloroethy		0.602	0.610	0.547	0.511	0.498	0.529	8.75
57)	T	Chlorobenzene			1.150	1.055	1.013	1.034	1.044	4.31
58)	T	Ethylbenzene			1.900	1.763	1.709	1.719	1.750	3.78
59)	T	m&p-xylene			1.484	1.529	1.451	1.491	1.477	1.75
60)	T	Nonane			0.859	0.833	0.787	0.794	0.818	2.84
61)	T	Styrene			0.989	0.906	0.877	0.898	0.919	3.61
62)	T	Bromoform			0.798	0.762	0.730	0.753	0.761	2.79
63)	T	o-xylene			1.520	1.458	1.380	1.415	1.424	3.14
64)	T	Cumene			2.030	1.935	1.787	1.817	1.851	4.65
65)	S	Bromofluorobenz	0.658	0.652	0.688	0.674	0.670	0.685	0.682	3.13
66)	T	1,1,2,2-tetrach			1.089	1.023	0.950	0.961	0.973	5.71
67)	T	Propylbenzene			0.523	0.488	0.460	0.469	0.476	4.49
68)	T	2-Chlorotoluene			0.467	0.480	0.433	0.424	0.440	4.85
69)	T	4-ethyltoluene			1.807	1.724	1.685	1.688	1.729	2.22
70)	T	1,3,5-trimethyl			1.560	1.598	1.507	1.507	1.538	2.14
71)	T	1,2,4-trimethyl			1.437	1.474	1.391	1.418	1.434	1.91
72)	T	1,3-dichloroben			0.840	0.891	0.842	0.922	0.902	4.60
73)	T	benzyl chloride			0.688	0.683	0.675	0.714	0.755	10.12
74)	T	1,4-dichloroben			0.809	0.797	0.798	0.837	0.834	4.08
75)	T	1,2,3-trimethyl			1.517	1.458	1.401	1.409	1.443	2.58
76)	T	1,2-dichloroben			0.890	0.863	0.835	0.860	0.869	2.82
77)	T	1,2,4-trichloro			0.197	0.215	0.220	0.242	0.257	18.07
78)	T	Naphthalene			0.504	0.604	0.546	0.603	0.661	18.21
79)	T	Hexachloro-1,3-			0.652	0.675	0.607	0.641	0.644	3.53

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033103.D Vial: 2
Acq On : 31 Mar 2017 3:35 pm Operator: RJP
Sample : A1UG_2.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:02:10 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.54	128	50190	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.93	114	230091	1.00	ppb		0.00
50) Chlorobenzene-d5	16.81	117	199884	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	141811	1.02	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 102.00%				
Target Compounds							Qvalue
2) Propylene	4.48	41	135733	1.89	ppb		86
3) Freon 12	4.55	85	771524	1.93	ppb		98
4) Chloromethane	4.71	50	104844m	1.87	ppb		
5) Freon 114	4.81	85	609896	1.97	ppb		97
6) Vinyl Chloride	4.94	62	156398	1.95	ppb		89
7) Butane	5.13	43	164187	2.02	ppb		91
8) 1,3-butadiene	5.07	39	103468m	1.80	ppb		
9) Bromomethane	5.35	94	217749	1.89	ppb		94
10) Chloroethane	5.52	64	67680	1.96	ppb	#	86
11) Ethanol	5.63	45	51068m	1.86	ppb		
12) Acrolein	5.99	56	55607m	1.85	ppb		
13) Vinyl Bromide	5.89	106	226013	1.92	ppb		93
14) Freon 11	6.31	101	757784	1.88	ppb		100
15) Acetone	6.13	58	57430	1.92	ppb	#	75
16) Pentane	6.68	42	120588	1.90	ppb	#	36
17) Isopropyl alcohol	6.37	45	202779	1.88	ppb	#	100
18) 1,1-dichloroethene	6.98	96	126324	2.06	ppb		90
19) Freon 113	7.38	101	301800	2.02	ppb		91
20) t-Butyl alcohol	7.01	59	316399	2.00	ppb		98
21) Methylene chloride	7.10	84	118066	1.91	ppb	#	77
22) Allyl chloride	7.23	41	156544	1.98	ppb		91
23) Carbon disulfide	7.44	76	383855	1.96	ppb		84
24) trans-1,2-dichloroethene	8.13	61	217211	2.07	ppb		90
25) methyl tert-butyl ether	8.43	73	407448	2.00	ppb		92
26) 1,1-dichloroethane	8.37	63	259676	1.95	ppb		94
27) Vinyl acetate	8.52	43	333912m	2.03	ppb		
28) Methyl Ethyl Ketone	8.82	72	65520	1.90	ppb		100
29) cis-1,2-dichloroethene	9.34	61	201214	1.99	ppb		94
30) Hexane	9.59	57	185188	1.95	ppb		88
31) Ethyl acetate	9.60	43	410515	2.00	ppb		97
32) Chloroform	9.69	83	367120	1.97	ppb		98
33) Tetrahydrofuran	10.20	42	140362	2.05	ppb		92
34) 1,2-dichloroethane	10.60	62	271231	1.98	ppb		98
36) 1,1,1-trichloroethane	10.93	97	396083	2.03	ppb		97
37) Cyclohexane	11.84	56	201108	2.20	ppb		98
38) Carbon tetrachloride	11.69	117	412399	2.05	ppb		99
39) Benzene	11.50	78	414323	2.08	ppb		92
40) Methyl methacrylate	13.00	41	194914	2.00	ppb		96
41) 1,4-dioxane	12.79	58	86895	2.08	ppb	#	56
42) 2,2,4-trimethylpentane	12.81	57	633637	2.08	ppb		92
43) Heptane	13.12	43	221392	2.06	ppb		96
44) Trichloroethene	12.77	130	198590	2.05	ppb		93
45) 1,2-dichloropropane	12.49	63	151921	2.04	ppb		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033103.D Vial: 2
Acq On : 31 Mar 2017 3:35 pm Operator: RJP
Sample : A1UG_2.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:02:10 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

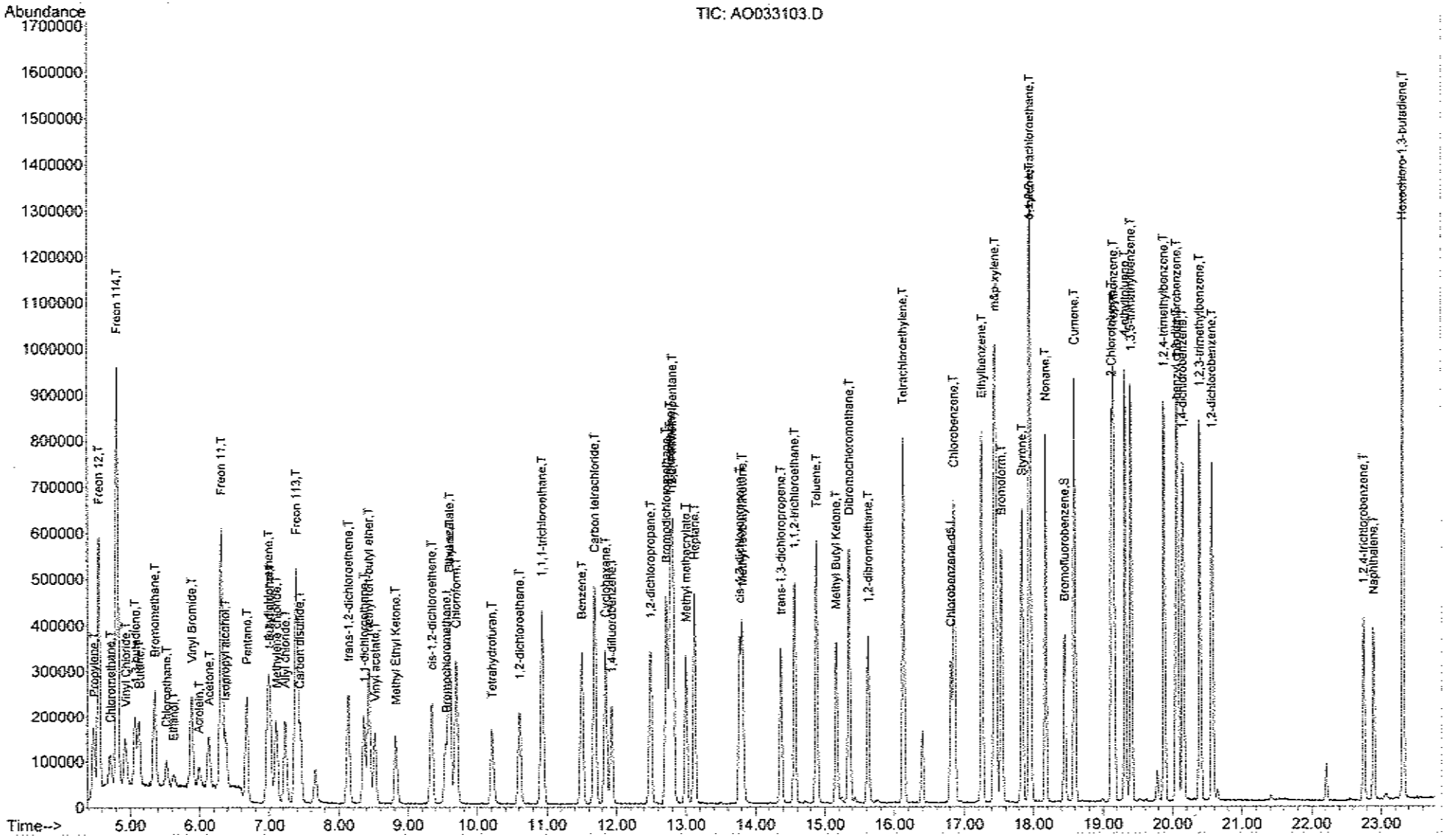
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.72	83	401238	2.07	ppb		99
47)	cis-1,3-dichloropropene	13.77	75	254736	2.05	ppb		97
48)	trans-1,3-dichloropropene	14.36	75	247830	2.13	ppb		96
49)	1,1,2-trichloroethane	14.56	97	180605	2.01	ppb		99
51)	Toluene	14.88	92	291345	1.94	ppb	#	85
52)	Methyl Isobutyl Ketone	13.81	43	322762	2.00	ppb		95
53)	Dibromochloromethane	15.35	129	364835	2.03	ppb		92
54)	Methyl Butyl Ketone	15.16	43	303971	2.09	ppb		96
55)	1,2-dibromoethane	15.62	107	300368	1.96	ppb		97
56)	Tetrachloroethylene	16.13	164	199230	1.98	ppb		98
57)	Chlorobenzene	16.86	112	411684	1.99	ppb		95
58)	Ethylbenzene	17.26	91	694504	2.04	ppb		98
59)	m&p-xylene	17.45	91	1170790	4.00	ppb		99
60)	Nonane	18.17	43	331734	2.03	ppb		92
61)	Styrene	17.84	104	371528	2.06	ppb		100
62)	Bromoform	17.54	173	311868	2.08	ppb		100
63)	o-xylene	17.95	91	562995	2.01	ppb		93
64)	Cumene	18.59	105	724745	1.99	ppb		99
66)	1,1,2,2-tetrachloroethane	17.95	83	373160	1.98	ppb		96
67)	Propylbenzene	19.16	120	186824	1.98	ppb	#	1
68)	2-Chlorotoluene	19.13	126	170125	1.95	ppb	#	1
69)	4-ethyltoluene	19.32	105	687148	1.98	ppb		100
70)	1,3,5-trimethylbenzene	19.41	105	616942	1.98	ppb		97
71)	1,2,4-trimethylbenzene	19.88	105	578466	2.03	ppb		95
72)	1,3-dichlorobenzene	20.08	146	374300m	2.04	ppb		
73)	benzyl chloride	20.05	91	346380	2.26	ppb		94
74)	1,4-dichlorobenzene	20.15	146	358330m	2.16	ppb		
75)	1,2,3-trimethylbenzene	20.40	105	575572	2.03	ppb		97
76)	1,2-dichlorobenzene	20.57	146	358230	2.11	ppb		98
77)	1,2,4-trichlorobenzene	22.75	180	131000	2.46	ppb		95
78)	Naphthalene	22.89	128	336587	2.51	ppb		95
79)	Hexachloro-1,3-butadiene	23.31	225	264113	2.05	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033103.D Vial: 2
Acq On : 31 Mar 2017 3:35 pm Operator: RJP
Sample : A1UG_2.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 9:53 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033104.D
Acq On : 31 Mar 2017 4:16 pm
Sample : A1UG_1.5
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:01:43 2017

Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.54	128	49197	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.93	114	224035	1.00	ppb		0.00
50) Chlorobenzene-d5	16.81	117	194095	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	139602	1.04	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 104.00%				
Target Compounds							Qvalue
2) Propylene	4.47	41	102672	1.45	ppb		89
3) Freon 12	4.55	85	561521	1.43	ppb		99
4) Chloromethane	4.71	50	81991m	1.49	ppb		
5) Freon 114	4.81	85	440539	1.46	ppb		95
6) Vinyl Chloride	4.93	62	113742	1.44	ppb		91
7) Butane	5.13	43	119938	1.50	ppb		95
8) 1,3-butadiene	5.07	39	70803m	1.25	ppb		
9) Bromomethane	5.35	94	161459	1.43	ppb		96
10) Chloroethane	5.52	64	51047	1.51	ppb	#	77
11) Ethanol	5.63	45	39277	1.46	ppb		86
12) Acrolein	5.99	56	37252	1.27	ppb		87
13) Vinyl Bromide	5.88	106	161219	1.40	ppb		92
14) Freon 11	6.30	101	563957	1.43	ppb		99
15) Acetone	6.13	58	44234	1.50	ppb	#	84
16) Pentane	6.68	42	87203	1.40	ppb	#	35
17) Isopropyl alcohol	6.38	45	150312	1.42	ppb	#	100
18) 1,1-dichloroethene	6.97	96	90564	1.51	ppb	#	88
19) Freon 113	7.38	101	223955	1.53	ppb		91
20) t-Butyl alcohol	7.02	59	226794	1.47	ppb		95
21) Methylene chloride	7.10	84	90177	1.49	ppb		84
22) Allyl chloride	7.23	41	114971	1.48	ppb		89
23) Carbon disulfide	7.44	76	279484	1.45	ppb		84
24) trans-1,2-dichloroethene	8.14	61	156541	1.52	ppb		92
25) methyl tert-butyl ether	8.44	73	296555	1.48	ppb		91
26) 1,1-dichloroethane	8.36	63	190247	1.46	ppb		94
27) Vinyl acetate	8.52	43	245094m	1.52	ppb		
28) Methyl Ethyl Ketone	8.82	72	48323	1.43	ppb		99
29) cis-1,2-dichloroethene	9.34	61	148832	1.50	ppb		91
30) Hexane	9.60	57	134826	1.45	ppb		88
31) Ethyl acetate	9.60	43	306467	1.52	ppb		96
32) Chloroform	9.69	83	263762	1.45	ppb		97
33) Tetrahydrofuran	10.21	42	101943	1.52	ppb		90
34) 1,2-dichloroethane	10.60	62	197805	1.47	ppb		96
36) 1,1,1-trichloroethane	10.93	97	288962	1.52	ppb		97
37) Cyclohexane	11.84	56	146732	1.65	ppb		98
38) Carbon tetrachloride	11.69	117	301856	1.54	ppb		100
39) Benzene	11.50	78	303620	1.57	ppb		91
40) Methyl methacrylate	13.00	41	145032	1.53	ppb		94
41) 1,4-dioxane	12.81	58	63132	1.55	ppb	#	51
42) 2,2,4-trimethylpentane	12.82	57	464131	1.57	ppb		92
43) Heptane	13.12	43	160113	1.53	ppb		96
44) Trichloroethene	12.78	130	144026	1.53	ppb		90
45) 1,2-dichloropropane	12.49	63	110806	1.53	ppb		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033104.D
Acq On : 31 Mar 2017 4:16 pm
Sample : A1UG_1.5
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:01:43 2017

Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.72	83	289231	1.53	ppb		96
47)	cis-1,3-dichloropropene	13.77	75	188783	1.56	ppb		98
48)	trans-1,3-dichloropropene	14.37	75	180108	1.59	ppb		96
49)	1,1,2-trichloroethane	14.57	97	137201	1.57	ppb		97
51)	Toluene	14.88	92	213554	1.46	ppb	#	82
52)	Methyl Isobutyl Ketone	13.81	43	238170	1.52	ppb		94
53)	Dibromochloromethane	15.35	129	265843	1.52	ppb		92
54)	Methyl Butyl Ketone	15.17	43	222239	1.57	ppb		97
55)	1,2-dibromoethane	15.62	107	217690	1.46	ppb		95
56)	Tetrachloroethylene	16.13	164	145863	1.49	ppb		97
57)	Chlorobenzene	16.86	112	296747	1.47	ppb		94
58)	Ethylbenzene	17.26	91	514456	1.56	ppb		99
59)	m&p-xylene	17.45	91	863655	3.04	ppb		98
60)	Nonane	18.17	43	238695	1.51	ppb		94
61)	Styrene	17.84	104	271617	1.55	ppb		99
62)	Bromoform	17.54	173	223130	1.53	ppb		99
63)	o-xylene	17.96	91	413467	1.52	ppb		94
64)	Cumene	18.59	105	525741	1.49	ppb		100
66)	1,1,2,2-tetrachloroethane	17.95	83	277397	1.52	ppb		97
67)	Propylbenzene	19.16	120	134109	1.46	ppb	#	1
68)	2-Chlorotoluene	19.12	126	126693	1.50	ppb	#	1
69)	4-ethyltoluene	19.32	105	509228	1.51	ppb		99
70)	1,3,5-trimethylbenzene	19.40	105	443048	1.47	ppb		98
71)	1,2,4-trimethylbenzene	19.88	105	426277	1.54	ppb		97
72)	1,3-dichlorobenzene	20.08	146	276528	1.55	ppb		98
73)	benzyl chloride	20.06	91	246509	1.66	ppb		94
74)	1,4-dichlorobenzene	20.16	146	249352	1.55	ppb		96
75)	1,2,3-trimethylbenzene	20.40	105	426217	1.55	ppb		98
76)	1,2-dichlorobenzene	20.57	146	262645	1.60	ppb		98
77)	1,2,4-trichlorobenzene	22.75	180	90071	1.74	ppb		95
78)	Naphthalene	22.89	128	235547	1.81	ppb		94
79)	Hexachloro-1,3-butadiene	23.31	225	191216	1.53	ppb		99

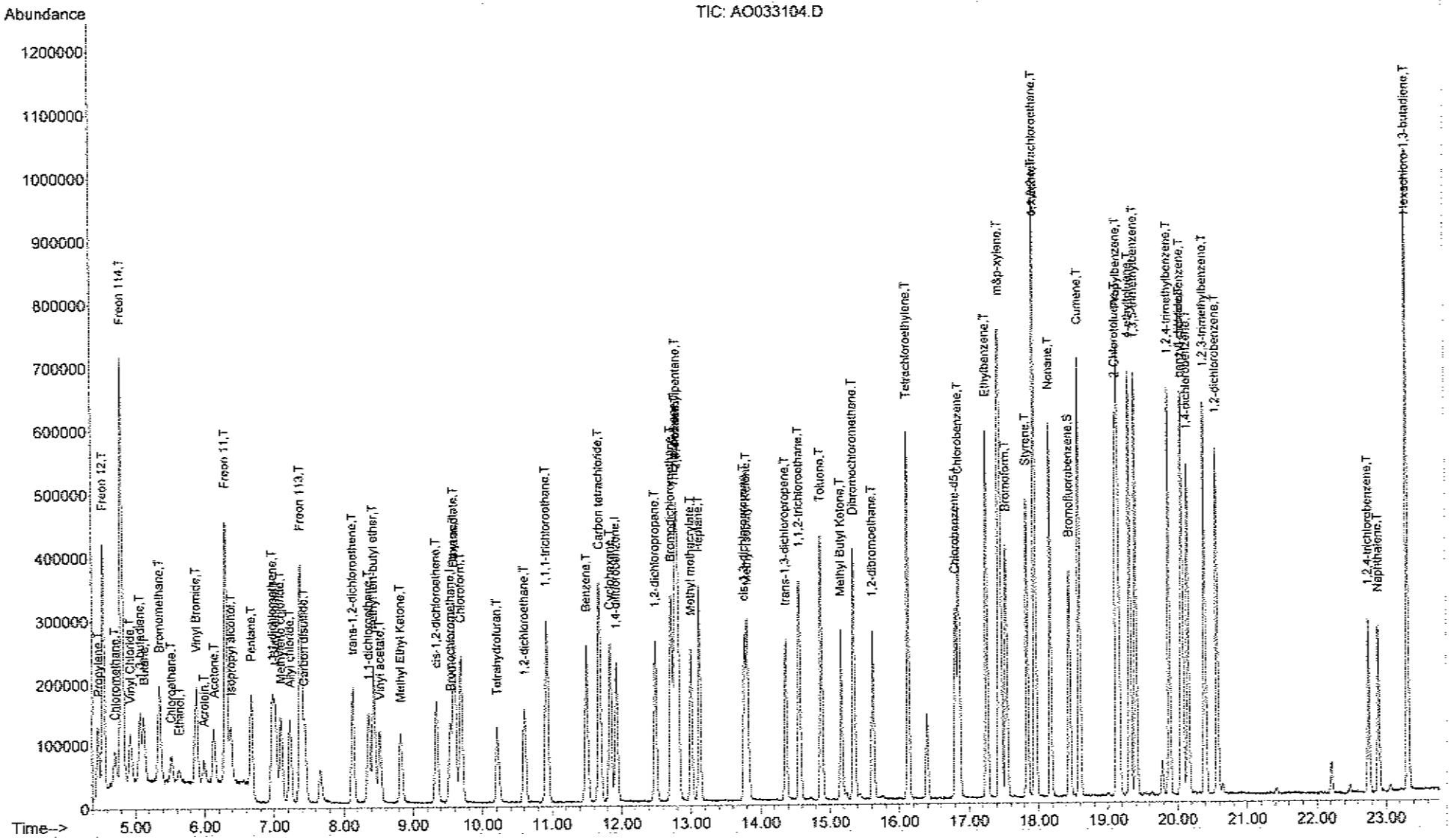
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO033104.D
Acq On : 31 Mar 2017 4:16 pm
Sample : A1UG_1.5
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 3 9:55 2017

Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033105.D
Acq On : 31 Mar 2017 4:57 pm
Sample : A1UG_1.25
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:01:19 2017

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

Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.54	128	46123	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.94	114	218725	1.00	ppb		0.00
50) Chlorobenzene-d5	16.81	117	193903	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	130135	0.97	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	4.48	41	78567	1.19	ppb		84
3) Freon 12	4.55	85	467760	1.27	ppb		98
4) Chloromethane	4.72	50	65723m	1.28	ppb		
5) Freon 114	4.82	85	357396	1.26	ppb		94
6) Vinyl Chloride	4.94	62	96877	1.31	ppb		90
7) Butane	5.14	43	100777	1.35	ppb		95
8) 1,3-butadiene	5.07	39	68213m	1.29	ppb		
9) Bromomethane	5.36	94	131929	1.25	ppb		93
10) Chloroethane	5.53	64	41303	1.30	ppb	#	84
11) Ethanol	5.63	45	31486	1.25	ppb		88
12) Acrolein	5.99	56	32448	1.18	ppb		89
13) Vinyl Bromide	5.89	106	136500	1.26	ppb		95
14) Freon 11	6.31	101	468764	1.27	ppb		99
15) Acetone	6.14	58	36412	1.32	ppb		85
16) Pentane	6.68	42	71803	1.23	ppb	#	31
17) Isopropyl alcohol	6.37	45	118797	1.20	ppb	#	100
18) 1,1-dichloroethene	6.98	96	74889	1.33	ppb	#	89
19) Freon 113	7.39	101	179185	1.30	ppb		91
20) t-Butyl alcohol	7.02	59	183128	1.26	ppb		96
21) Methylene chloride	7.10	84	72610	1.28	ppb	#	83
22) Allyl chloride	7.23	41	91853	1.26	ppb		95
23) Carbon disulfide	7.45	76	232308	1.29	ppb		84
24) trans-1,2-dichloroethene	8.14	61	126965	1.32	ppb		93
25) methyl tert-butyl ether	8.44	73	240569	1.28	ppb		91
26) 1,1-dichloroethane	8.37	63	154227	1.26	ppb		96
27) Vinyl acetate	8.52	43	201074m	1.33	ppb		
28) Methyl Ethyl Ketone	8.83	72	39068	1.23	ppb		97
29) cis-1,2-dichloroethene	9.35	61	120450	1.30	ppb		94
30) Hexane	9.60	57	110322	1.27	ppb		90
31) Ethyl acetate	9.60	43	246897	1.31	ppb		97
32) Chloroform	9.69	83	222198	1.30	ppb		99
33) Tetrahydrofuran	10.21	42	81151	1.29	ppb		89
34) 1,2-dichloroethane	10.60	62	164628	1.31	ppb		97
36) 1,1,1-trichloroethane	10.93	97	235511	1.27	ppb		100
37) Cyclohexane	11.85	56	121625	1.40	ppb		98
38) Carbon tetrachloride	11.69	117	248909	1.30	ppb		99
39) Benzene	11.50	78	246604	1.30	ppb		92
40) Methyl methacrylate	13.01	41	117282	1.27	ppb		97
41) 1,4-dioxane	12.80	58	50550	1.27	ppb	#	50
42) 2,2,4-trimethylpentane	12.82	57	379009	1.31	ppb		91
43) Heptane	13.13	43	129459	1.27	ppb		96
44) Trichloroethene	12.78	130	119946	1.30	ppb		93
45) 1,2-dichloropropane	12.49	63	88102	1.24	ppb		95

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033105.D Vial: 4
Acq On : 31 Mar 2017 4:57 pm Operator: RJP
Sample : A1UG_1.25 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:01:19 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

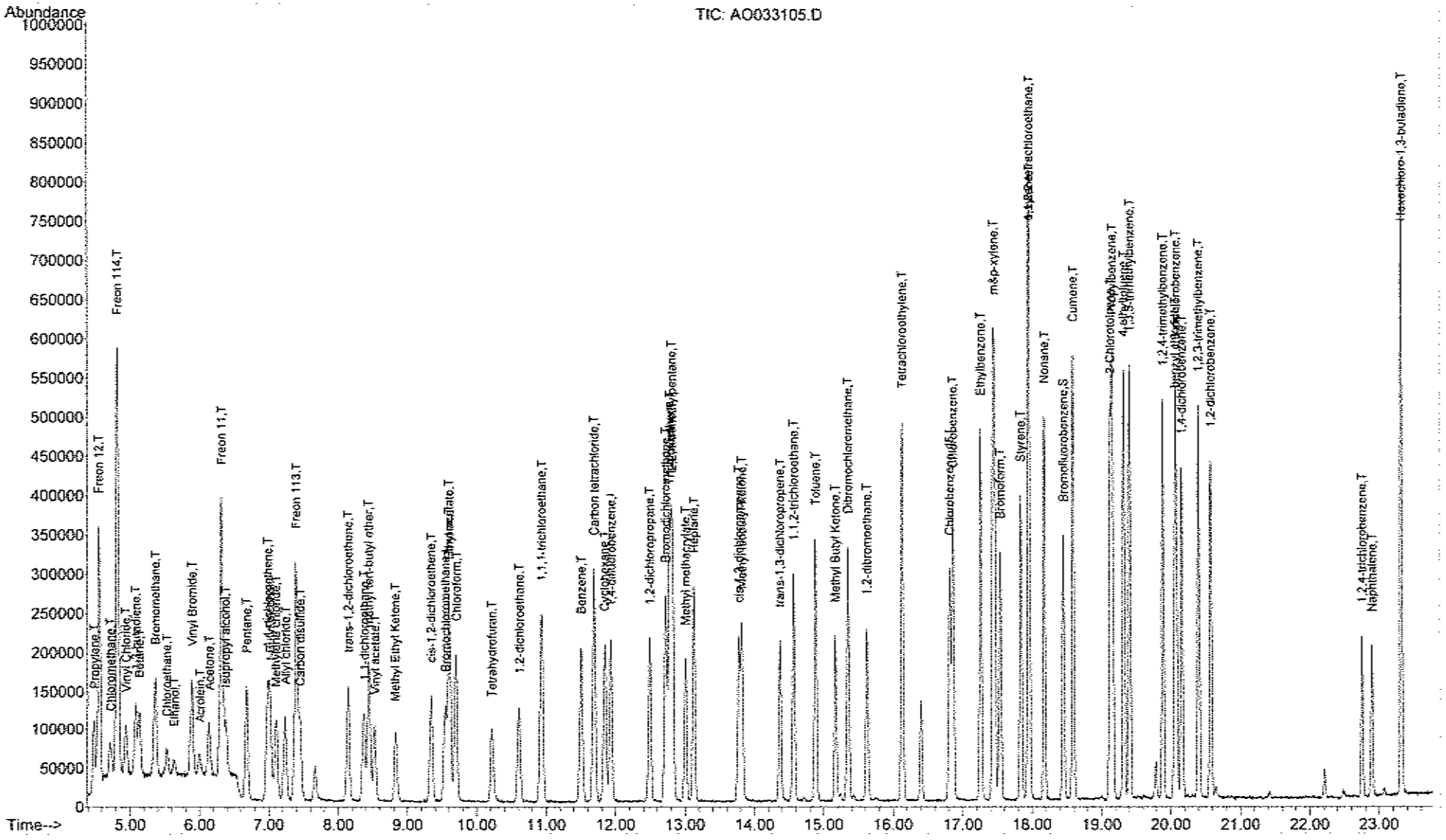
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.72	83	233632	1.27	ppb		98
47)	cis-1,3-dichloropropene	13.78	75	150325	1.27	ppb		98
48)	trans-1,3-dichloropropene	14.37	75	145587	1.32	ppb		98
49)	1,1,2-trichloroethane	14.57	97	111276	1.30	ppb		98
51)	Toluene	14.88	92	172202	1.18	ppb	#	83
52)	Methyl Isobutyl Ketone	13.82	43	190568	1.22	ppb		94
53)	Dibromochloromethane	15.35	129	219080	1.26	ppb		95
54)	Methyl Butyl Ketone	15.17	43	177195	1.25	ppb		96
55)	1,2-dibromoethane	15.62	107	180999	1.22	ppb		98
56)	Tetrachloroethylene	16.13	164	119394	1.22	ppb		97
57)	Chlorobenzene	16.86	112	246201	1.22	ppb		95
58)	Ethylbenzene	17.26	91	412665	1.25	ppb		100
59)	m&p-xylene	17.45	91	701907	2.47	ppb		98
60)	Nonane	18.18	43	195655	1.24	ppb		94
61)	Styrene	17.84	104	222122	1.27	ppb		88
62)	Bromoform	17.54	173	180532	1.24	ppb		98
63)	o-xylene	17.95	91	337985	1.24	ppb		93
64)	Cumene	18.59	105	435179	1.23	ppb		100
66)	1,1,2,2-tetrachloroethane	17.95	83	225167	1.23	ppb		97
67)	Propylbenzene	19.16	120	112167	1.22	ppb	#	1
68)	2-Chlorotoluene	19.13	126	102454	1.21	ppb	#	1
69)	4-ethyltoluene	19.32	105	417833	1.24	ppb		99
70)	1,3,5-trimethylbenzene	19.41	105	365290	1.21	ppb		100
71)	1,2,4-trimethylbenzene	19.89	105	343051	1.24	ppb		94
72)	1,3-dichlorobenzene	20.08	146	222984m	1.25	ppb		
73)	benzyl chloride	20.06	91	194194	1.31	ppb		94
74)	1,4-dichlorobenzene	20.16	146	206810m	1.29	ppb		
75)	1,2,3-trimethylbenzene	20.40	105	349260	1.27	ppb		97
76)	1,2-dichlorobenzene	20.57	146	206999	1.26	ppb		99
77)	1,2,4-trichlorobenzene	22.75	180	66634	1.29	ppb		93
78)	Naphthalene	22.89	128	171519	1.32	ppb		93
79)	Hexachloro-1,3-butadiene	23.32	225	149165	1.19	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033105.D Vial: 4
Acq On : 31 Mar 2017 4:57 pm Operator: RJP
Sample : A1UG_1.25 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:00 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTB Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033106.D Vial: 5
Acq On : 31 Mar 2017 5:36 pm Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:01:04 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.54	128	46112	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.93	114	220001	1.00	ppb		0.00
50) Chlorobenzene-d5	16.82	117	186025	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	128961	1.00	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%				
Target Compounds							Qvalue
2) Propylene	4.49	41	66145	1.00	ppb		96
3) Freon 12	4.56	85	368126	1.00	ppb		98
4) Chloromethane	4.72	50	51707m	1.01	ppb		
5) Freon 114	4.82	85	283775	1.00	ppb		95
6) Vinyl Chloride	4.95	62	73850	1.00	ppb		89
7) Butane	5.14	43	74701	1.00	ppb		92
8) 1,3-butadiene	5.09	39	49285m	0.93	ppb		
9) Bromomethane	5.36	94	105576	1.00	ppb		92
10) Chloroethane	5.54	64	31781	1.00	ppb	#	75
11) Ethanol	5.63	45	25232	1.00	ppb		83
12) Acrolein	6.00	56	27310m	0.99	ppb		
13) Vinyl Bromide	5.89	106	108238	1.00	ppb		93
14) Freon 11	6.31	101	370422	1.00	ppb		99
15) Acetone	6.14	58	27552	1.00	ppb	#	76
16) Pentane	6.68	42	58367	1.00	ppb	#	40
17) Isopropyl alcohol	6.38	45	99005	1.00	ppb	#	100
18) 1,1-dichloroethene	6.99	96	56363	1.00	ppb	#	87
19) Freon 113	7.39	101	137328	1.00	ppb		91
20) t-Butyl alcohol	7.02	59	145442	1.00	ppb		95
21) Methylene chloride	7.10	84	56713	1.00	ppb	#	77
22) Allyl chloride	7.24	41	72786	1.00	ppb		93
23) Carbon disulfide	7.45	76	180433	1.00	ppb		83
24) trans-1,2-dichloroethene	8.14	61	96246	1.00	ppb		97
25) methyl tert-butyl ether	8.44	73	187288	1.00	ppb		90
26) 1,1-dichloroethane	8.38	63	122504	1.00	ppb		95
27) Vinyl acetate	8.53	43	148055m	0.98	ppb		
28) Methyl Ethyl Ketone	8.83	72	31753	1.00	ppb		96
29) cis-1,2-dichloroethene	9.35	61	92886	1.00	ppb		92
30) Hexane	9.60	57	87106	1.00	ppb		89
31) Ethyl acetate	9.61	43	188952	1.00	ppb		96
32) Chloroform	9.70	83	171011	1.00	ppb		100
33) Tetrahydrofuran	10.22	42	62907	1.00	ppb		88
34) 1,2-dichloroethane	10.61	62	125908	1.00	ppb		95
36) 1,1,1-trichloroethane	10.93	97	186177	1.00	ppb		98
37) Cyclohexane	11.85	56	87220	1.00	ppb		93
38) Carbon tetrachloride	11.69	117	192761	1.00	ppb		100
39) Benzene	11.51	78	190289	1.00	ppb		91
40) Methyl methacrylate	13.01	41	93083	1.00	ppb		97
41) 1,4-dioxane	12.81	58	40035	1.00	ppb	#	56
42) 2,2,4-trimethylpentane	12.81	57	291037	1.00	ppb		90
43) Heptane	13.13	43	102640	1.00	ppb		99
44) Trichloroethene	12.78	130	92651	1.00	ppb		93
45) 1,2-dichloropropane	12.49	63	71331	1.00	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033106.D Vial: 5
Acq On : 31 Mar 2017 5:36 pm Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:01:04 2017 Quant Results File: A331_1UG.RES

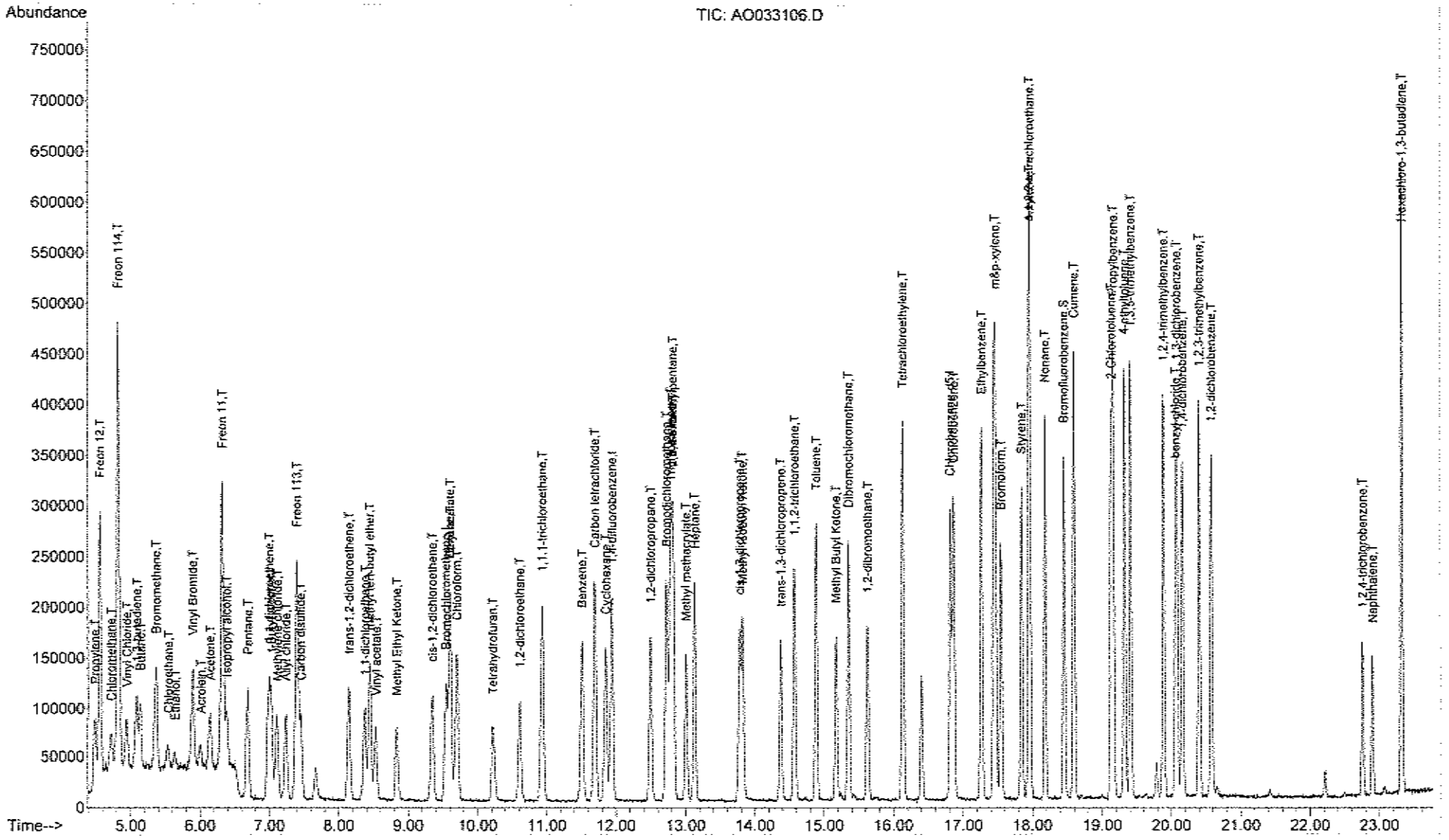
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.72	83	185244	1.00	ppb		98
47)	cis-1,3-dichloropropene	13.78	75	118799	1.00	ppb		96
48)	trans-1,3-dichloropropene	14.37	75	111119	1.00	ppb		95
49)	1,1,2-trichloroethane	14.57	97	85955	1.00	ppb		99
51)	Toluene	14.88	92	139995	1.00	ppb		88
52)	Methyl Isobutyl Ketone	13.82	43	149970	1.00	ppb		94
53)	Dibromochloromethane	15.35	129	167207	1.00	ppb		89
54)	Methyl Butyl Ketone	15.17	43	135647	1.00	ppb		96
55)	1,2-dibromoethane	15.62	107	142683	1.00	ppb		97
56)	Tetrachloroethylene	16.13	164	93558	1.00	ppb		100
57)	Chlorobenzene	16.86	112	192859	1.00	ppb		96
58)	Ethylbenzene	17.26	91	316266	1.00	ppb		100
59)	m&p-xylene	17.46	91	546554	2.01	ppb		98
60)	Nonane	18.18	43	151897	1.00	ppb		93
61)	Styrene	17.84	104	168155	1.00	ppb		99
62)	Bromoform	17.54	173	139588	1.00	ppb		98
63)	o-xylene	17.96	91	260479	1.00	ppb		93
64)	Cumene	18.59	105	339221	1.00	ppb		100
66)	1,1,2,2-tetrachloroethane	17.95	83	175288	1.00	ppb		96
67)	Propylbenzene	19.16	120	87986	1.00	ppb	#	1
68)	2-Chlorotoluene	19.12	126	81024	1.00	ppb	#	1
69)	4-ethyltoluene	19.32	105	322806	1.00	ppb		99
70)	1,3,5-trimethylbenzene	19.41	105	289695	1.00	ppb		98
71)	1,2,4-trimethylbenzene	19.89	105	264743	1.00	ppb		94
72)	1,3-dichlorobenzene	20.08	146	170760	1.00	ppb		99
73)	benzyl chloride	20.05	91	142227	1.00	ppb		92
74)	1,4-dichlorobenzene	20.16	146	154100	1.00	ppb		98
75)	1,2,3-trimethylbenzene	20.40	105	263431	1.00	ppb		94
76)	1,2-dichlorobenzene	20.58	146	157732	1.00	ppb		97
77)	1,2,4-trichlorobenzene	22.75	180	49634	1.00	ppb		96
78)	Naphthalene	22.90	128	124780	1.00	ppb		94
79)	Hexachloro-1,3-butadiene	23.31	225	119753	1.00	ppb		98

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

Data File : C:\HPCHEM\1\DATA\AO033106.D Vial: 5
Acq On : 31 Mar 2017 5:36 pm Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:01 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033107.D Vial: 6
Acq On : 31 Mar 2017 6:15 pm Operator: RJP
Sample : A1UG_0.75 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:02:35 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.54	128	44024	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.93	114	210749	1.00	ppb		0.00
50) Chlorobenzene-d5	16.82	117	183483	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	125665	0.99	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 99.00%				
Target Compounds							Qvalue
2) Propylene	4.49	41	45360	0.72	ppb		80
3) Freon 12	4.56	85	277878	0.79	ppb		97
4) Chloromethane	4.73	50	37635	0.77	ppb		89
5) Freon 114	4.82	85	215987	0.80	ppb		96
6) Vinyl Chloride	4.94	62	56874	0.81	ppb		90
7) Butane	5.14	43	58073	0.81	ppb		92
8) 1,3-butadiene	5.08	39	39119m	0.77	ppb		
9) Bromomethane	5.36	94	77287	0.77	ppb		93
10) Chloroethane	5.54	64	23478	0.77	ppb	#	63
11) Ethanol	5.64	45	18822m	0.78	ppb		
12) Acrolein	6.01	56	19805	0.75	ppb		92
13) Vinyl Bromide	5.89	106	79505	0.77	ppb		94
14) Freon 11	6.31	101	275669	0.78	ppb		98
15) Acetone	6.15	58	20215	0.77	ppb	#	67
16) Pentane	6.68	42	42253	0.76	ppb	#	39
17) Isopropyl alcohol	6.39	45	72401	0.77	ppb	#	100
18) 1,1-dichloroethene	6.98	96	42805	0.80	ppb	#	88
19) Freon 113	7.39	101	102624	0.78	ppb		92
20) t-Butyl alcohol	7.03	59	101096	0.73	ppb	#	94
21) Methylene chloride	7.11	84	40588	0.75	ppb	#	76
22) Allyl chloride	7.24	41	54748	0.79	ppb		89
23) Carbon disulfide	7.45	76	136144	0.79	ppb		83
24) trans-1,2-dichloroethene	8.14	61	71552	0.78	ppb		93
25) methyl tert-butyl ether	8.45	73	140829	0.79	ppb		90
26) 1,1-dichloroethane	8.37	63	89176	0.76	ppb		93
27) Vinyl acetate	8.53	43	113620m	0.79	ppb		
28) Methyl Ethyl Ketone	8.83	72	21826	0.72	ppb		94
29) cis-1,2-dichloroethene	9.34	61	69108	0.78	ppb		91
30) Hexane	9.60	57	65405	0.79	ppb		90
31) Ethyl acetate	9.61	43	140819	0.78	ppb		98
32) Chloroform	9.70	83	126305	0.77	ppb		99
33) Tetrahydrofuran	10.22	42	47717	0.79	ppb		88
34) 1,2-dichloroethane	10.62	62	95385	0.79	ppb		99
36) 1,1,1-trichloroethane	10.93	97	134349	0.75	ppb		98
37) Cyclohexane	11.85	56	70550	0.84	ppb		96
38) Carbon tetrachloride	11.69	117	139907	0.76	ppb		98
39) Benzene	11.50	78	142039	0.78	ppb		91
40) Methyl methacrylate	13.00	41	67157m	0.75	ppb		
41) 1,4-dioxane	12.81	58	26970	0.70	ppb	#	56
42) 2,2,4-trimethylpentane	12.82	57	218109	0.78	ppb		91
43) Heptane	13.13	43	74753	0.76	ppb		99
44) Trichloroethene	12.78	130	69266	0.78	ppb		94
45) 1,2-dichloropropane	12.49	63	53577	0.78	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033107.D Vial: 6
Acq On : 31 Mar 2017 6:15 pm Operator: RJP
Sample : A1UG_0.75 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:02:35 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.72	83	138457	0.78	ppb		100
47)	cis-1,3-dichloropropene	13.78	75	84571	0.74	ppb		97
48)	trans-1,3-dichloropropene	14.38	75	83731	0.79	ppb		97
49)	1,1,2-trichloroethane	14.57	97	63090	0.77	ppb		97
51)	Toluene	14.89	92	100613	0.73	ppb	#	83
52)	Methyl Isobutyl Ketone	13.82	43	94497	0.64	ppb		95
53)	Dibromochloromethane	15.36	129	123463	0.75	ppb		95
54)	Methyl Butyl Ketone	15.18	43	81165	0.61	ppb		97
55)	1,2-dibromoethane	15.62	107	102493	0.73	ppb		97
56)	Tetrachloroethylene	16.13	164	68551	0.74	ppb		99
57)	Chlorobenzene	16.86	112	142252	0.75	ppb		94
58)	Ethylbenzene	17.26	91	236565	0.76	ppb		100
59)	m&p-xylene	17.45	91	410271	1.53	ppb		99
60)	Nonane	18.18	43	109229	0.73	ppb		94
61)	Styrene	17.84	104	123584	0.75	ppb		98
62)	Bromoform	17.55	173	103675	0.75	ppb		98
63)	o-xylene	17.96	91	194699	0.76	ppb		93
64)	Cumene	18.59	105	250016	0.75	ppb		99
66)	1,1,2,2-tetrachloroethane	17.95	83	132210	0.76	ppb		97
67)	Propylbenzene	19.17	120	64596	0.74	ppb	#	1
68)	2-Chlorotoluene	19.13	126	58331	0.73	ppb	#	1
69)	4-ethyltoluene	19.33	105	232250	0.73	ppb		100
70)	1,3,5-trimethylbenzene	19.41	105	207423	0.73	ppb		98
71)	1,2,4-trimethylbenzene	19.89	105	195195	0.75	ppb		95
72)	1,3-dichlorobenzene	20.08	146	126865	0.75	ppb	#	55
73)	benzyl chloride	20.06	91	98302	0.70	ppb		93
74)	1,4-dichlorobenzene	20.16	146	115236	0.76	ppb	#	52
75)	1,2,3-trimethylbenzene	20.40	105	193918	0.75	ppb		93
76)	1,2-dichlorobenzene	20.57	146	118355	0.76	ppb		99
77)	1,2,4-trichlorobenzene	22.75	180	33339	0.68	ppb		92
78)	Naphthalene	22.90	128	82942	0.67	ppb		96
79)	Hexachloro-1,3-butadiene	23.32	225	88256	0.75	ppb		98

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

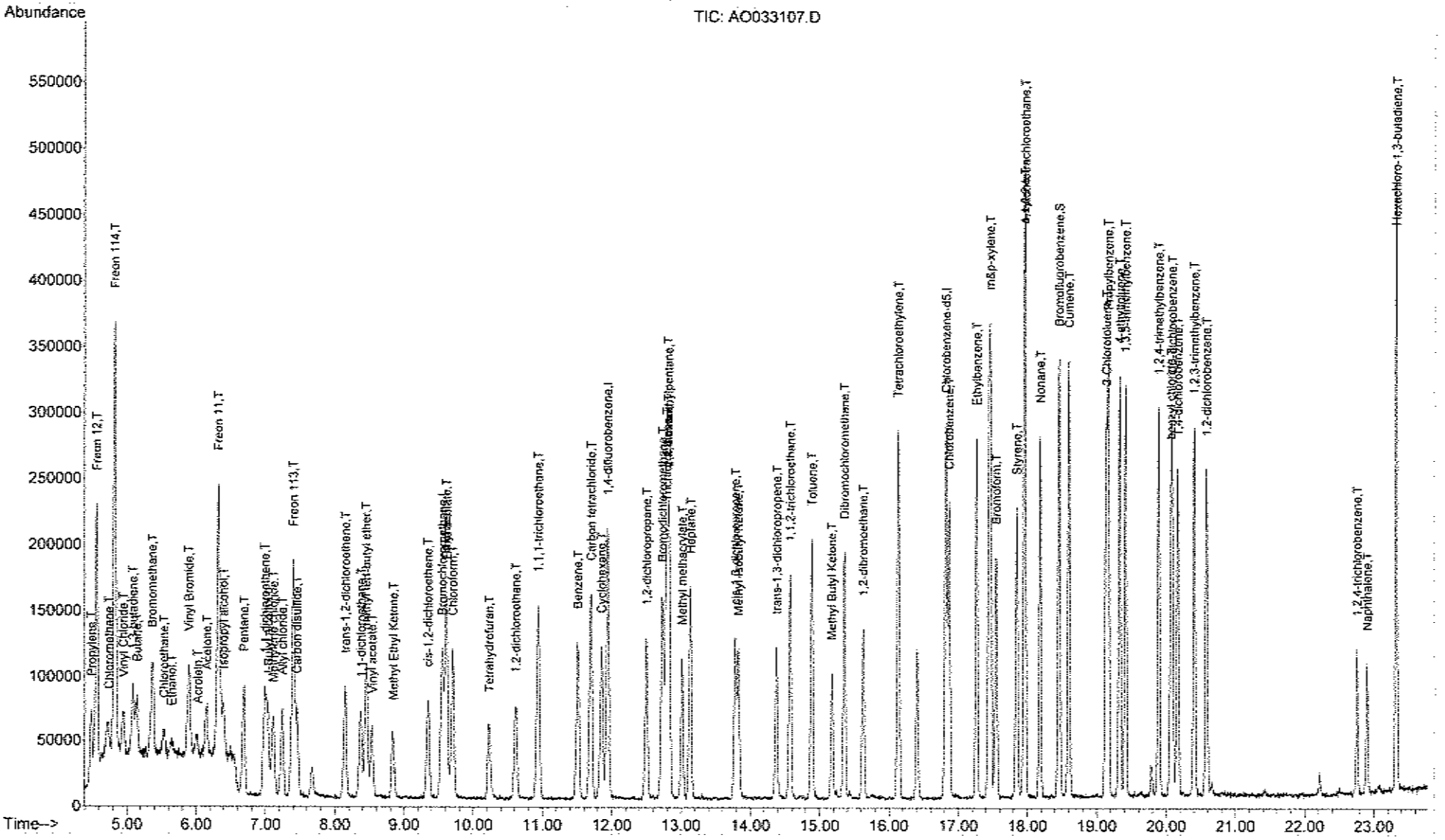
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033107.D
Acq On : 31 Mar 2017 6:15 pm
Sample : A1UG_0.75
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:02 2017

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

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033108.D Vial: 7
Acq On : 31 Mar 2017 6:53 pm Operator: RJP
Sample : A1UG_0.50 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:03:17 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.55	128	43920	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.93	114	204815	1.00	ppb		0.00
50) Chlorobenzene-d5	16.82	117	181136	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	121444	0.97	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	4.48	41	31388	0.50	ppb		79
3) Freon 12	4.56	85	182600	0.52	ppb		98
4) Chloromethane	4.72	50	24920	0.51	ppb		91
5) Freon 114	4.82	85	143482	0.53	ppb		96
6) Vinyl Chloride	4.95	62	37274	0.53	ppb		87
7) Butane	5.14	43	41459	0.58	ppb		92
8) 1,3-butadiene	5.08	39	25730m	0.51	ppb		
9) Bromomethane	5.35	94	51121	0.51	ppb		96
10) Chloroethane	5.53	64	16560	0.55	ppb	#	69
11) Ethanol	5.64	45	11702m	0.49	ppb		
12) Acrolein	6.00	56	14036	0.53	ppb		90
13) Vinyl Bromide	5.89	106	50717	0.49	ppb		91
14) Freon 11	6.31	101	185391	0.53	ppb		99
15) Acetone	6.15	58	14318	0.55	ppb	#	84
16) Pentane	6.68	42	27157	0.49	ppb	#	31
17) Isopropyl alcohol	6.38	45	44936	0.48	ppb	#	100
18) 1,1-dichloroethene	6.98	96	29783	0.55	ppb		93
19) Freon 113	7.40	101	68337	0.52	ppb		91
20) t-Butyl alcohol	7.03	59	65506	0.47	ppb		94
21) Methylene chloride	7.11	84	28901	0.54	ppb	#	82
22) Allyl chloride	7.23	41	33667	0.49	ppb		93
23) Carbon disulfide	7.45	76	89263	0.52	ppb		84
24) trans-1,2-dichloroethene	8.15	61	47197	0.51	ppb		95
25) methyl tert-butyl ether	8.45	73	88167	0.49	ppb		89
26) 1,1-dichloroethane	8.37	63	60989	0.52	ppb		96
27) Vinyl acetate	8.52	43	72472m	0.50	ppb		
28) Methyl Ethyl Ketone	8.84	72	14916	0.49	ppb		96
29) cis-1,2-dichloroethene	9.35	61	45517	0.51	ppb		92
30) Hexane	9.59	57	41945	0.51	ppb		88
31) Ethyl acetate	9.61	43	93257	0.52	ppb		96
32) Chloroform	9.70	83	83520	0.51	ppb		98
33) Tetrahydrofuran	10.23	42	30981	0.52	ppb		91
34) 1,2-dichloroethane	10.61	62	62717	0.52	ppb		93
36) 1,1,1-trichloroethane	10.94	97	88752	0.51	ppb		99
37) Cyclohexane	11.85	56	43436	0.53	ppb		98
38) Carbon tetrachloride	11.69	117	90406	0.50	ppb		95
39) Benzene	11.51	78	92910	0.52	ppb		90
40) Methyl methacrylate	13.01	41	42361	0.49	ppb		98
41) 1,4-dioxane	12.82	58	17766	0.48	ppb	#	46
42) 2,2,4-trimethylpentane	12.82	57	139898	0.52	ppb		89
43) Heptane	13.13	43	49667	0.52	ppb		98
44) Trichloroethene	12.78	130	43044	0.50	ppb		86
45) 1,2-dichloropropane	12.50	63	34841	0.52	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033108.D Vial: 7
Acq On : 31 Mar 2017 6:53 pm Operator: RJP
Sample : A1UG_0.50 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:03:17 2017 Quant Results File: A331_1UG.RES

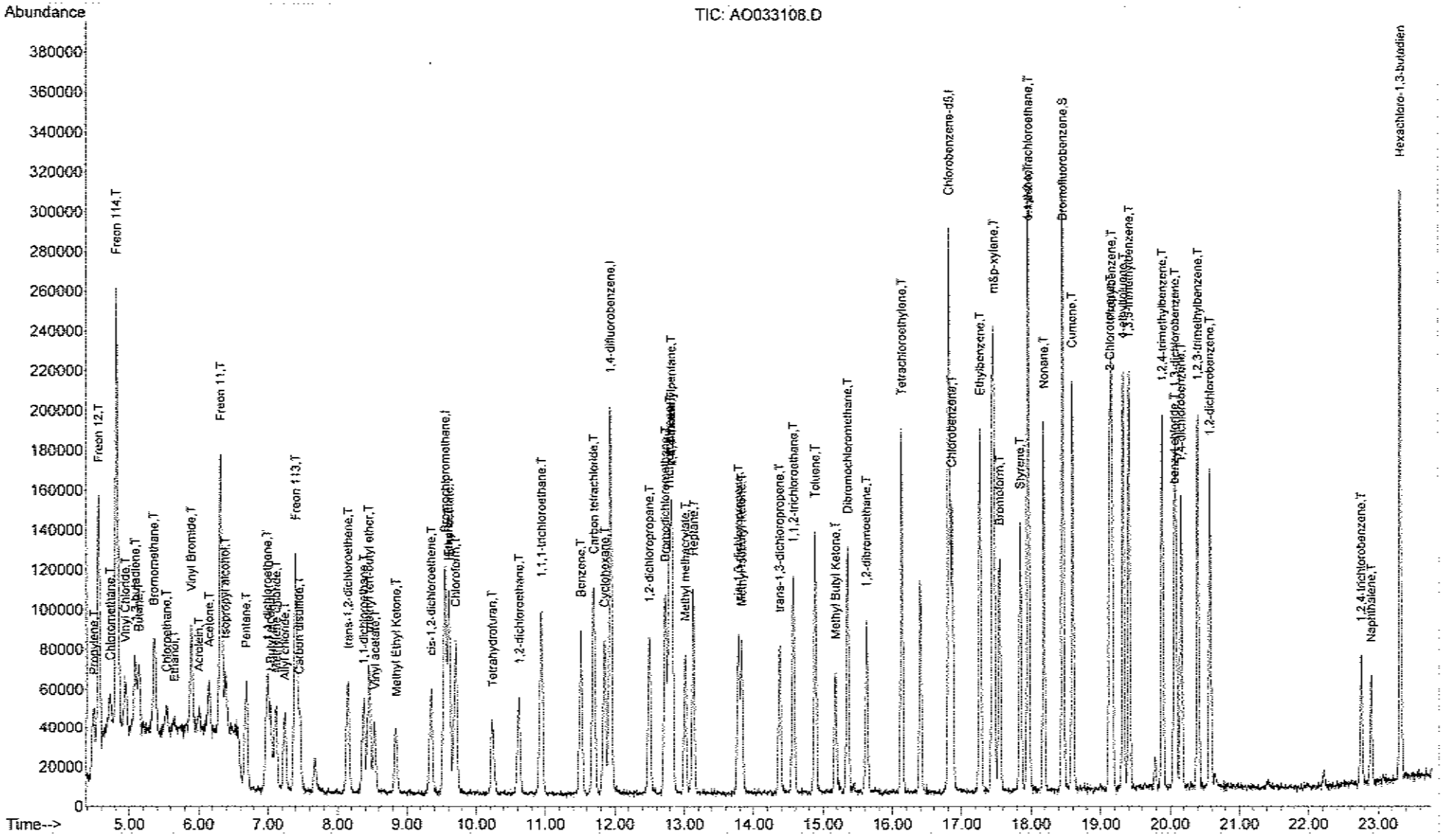
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.72	83	88899	0.52	ppb		99
47)	cis-1,3-dichloropropene	13.78	75	55495	0.50	ppb		98
48)	trans-1,3-dichloropropene	14.37	75	53706	0.52	ppb		91
49)	1,1,2-trichloroethane	14.57	97	41634	0.52	ppb		99
51)	Toluene	14.88	92	65569	0.48	ppb	#	82
52)	Methyl Isobutyl Ketone	13.83	43	62120	0.43	ppb		94
53)	Dibromochloromethane	15.36	129	81972	0.50	ppb		94
54)	Methyl Butyl Ketone	15.17	43	51833	0.39	ppb		95
55)	1,2-dibromoethane	15.62	107	66022	0.48	ppb		97
56)	Tetrachloroethylene	16.14	164	46315	0.51	ppb		98
57)	Chlorobenzene	16.87	112	91788	0.49	ppb		93
58)	Ethylbenzene	17.26	91	154803	0.50	ppb		100
59)	m&p-xylene	17.46	91	262800	0.99	ppb		100
60)	Nonane	18.18	43	71262	0.48	ppb		96
61)	Styrene	17.84	104	79431	0.49	ppb		97
62)	Bromoform	17.55	173	66152	0.49	ppb		98
63)	o-xylene	17.96	91	124998	0.49	ppb		94
64)	Cumene	18.60	105	161847	0.49	ppb		99
66)	1,1,2,2-tetrachloroethane	17.95	83	86064	0.50	ppb		97
67)	Propylbenzene	19.16	120	41634	0.49	ppb	#	1
68)	2-Chlorotoluene	19.13	126	39209	0.50	ppb	#	1
69)	4-ethyltoluene	19.32	105	152603	0.49	ppb		99
70)	1,3,5-trimethylbenzene	19.41	105	136526	0.48	ppb		99
71)	1,2,4-trimethylbenzene	19.89	105	126003	0.49	ppb		94
72)	1,3-dichlorobenzene	20.08	146	76215m	0.46	ppb		
73)	benzyl chloride	20.05	91	61148	0.44	ppb		93
74)	1,4-dichlorobenzene	20.16	146	72236m	0.48	ppb		
75)	1,2,3-trimethylbenzene	20.40	105	126884	0.49	ppb		97
76)	1,2-dichlorobenzene	20.58	146	75655	0.49	ppb		97
77)	1,2,4-trichlorobenzene	22.76	180	19912	0.41	ppb		93
78)	Naphthalene	22.90	128	49444	0.41	ppb		96
79)	Hexachloro-1,3-butadiene	23.32	225	55006	0.47	ppb		96

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

Data File : C:\HPCHEM\1\DATA\AO033108.D Vial: 7
Acq On : 31 Mar 2017 6:53 pm Operator: RJP
Sample : A1UG_0.50 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:05 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033109.D Vial: 8
Acq On : 31 Mar 2017 7:30 pm Operator: RJP
Sample : A1UG_0.30 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:03:49 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.56	128	44360	1.00	ppb		0.01
35) 1,4-difluorobenzene	11.94	114	201658	1.00	ppb		0.00
50) Chlorobenzene-d5	16.82	117	174946	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	117955	0.97	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	4.49	41	20130	0.32	ppb	#	57
3) Freon 12	4.55	85	111633	0.32	ppb		93
4) Chloromethane	4.72	50	16029	0.32	ppb		67
5) Freon 114	4.81	85	88039	0.32	ppb		96
6) Vinyl Chloride	4.94	62	23880	0.34	ppb		89
7) Butane	5.13	43	24791	0.34	ppb		92
8) 1,3-butadiene	5.09	39	17729m	0.35	ppb		
9) Bromomethane	5.35	94	36947	0.36	ppb		81
10) Chloroethane	5.53	64	10936	0.36	ppb	#	38
11) Ethanol	5.65	45	9308	0.38	ppb	#	67
12) Acrolein	6.01	56	7336m	0.28	ppb		
13) Vinyl Bromide	5.89	106	32409	0.31	ppb		95
14) Freon 11	6.32	101	112125	0.31	ppb		99
15) Acetone	6.14	58	9097	0.34	ppb	#	77
16) Pentane	6.69	42	16757	0.30	ppb	#	39
17) Isopropyl alcohol	6.39	45	31119	0.33	ppb	#	100
18) 1,1-dichloroethene	6.99	96	17110	0.32	ppb		92
19) Freon 113	7.39	101	40494	0.31	ppb		92
20) t-Butyl alcohol	7.03	59	43837	0.31	ppb	#	94
21) Methylene chloride	7.11	84	17210	0.32	ppb	#	76
22) Allyl chloride	7.23	41	21572	0.31	ppb		90
23) Carbon disulfide	7.45	76	55879	0.32	ppb		84
24) trans-1,2-dichloroethene	8.15	61	29814	0.32	ppb		91
25) methyl tert-butyl ether	8.45	73	56728	0.31	ppb		88
26) 1,1-dichloroethane	8.37	63	36458	0.31	ppb		98
27) Vinyl acetate	8.52	43	45130m	0.31	ppb		
28) Methyl Ethyl Ketone	8.84	72	8808	0.29	ppb	#	91
29) cis-1,2-dichloroethene	9.35	61	27589	0.31	ppb		95
30) Hexane	9.59	57	25849	0.31	ppb		89
31) Ethyl acetate	9.62	43	58527	0.32	ppb		97
32) Chloroform	9.70	83	50295	0.31	ppb		96
33) Tetrahydrofuran	10.23	42	19194	0.32	ppb		92
34) 1,2-dichloroethane	10.61	62	36324	0.30	ppb		93
36) 1,1,1-trichloroethane	10.94	97	56401	0.33	ppb		94
37) Cyclohexane	11.85	56	31511	0.39	ppb		87
38) Carbon tetrachloride	11.69	117	55427	0.31	ppb		96
39) Benzene	11.51	78	59047	0.34	ppb		93
40) Methyl methacrylate	13.02	41	26739	0.31	ppb		97
41) 1,4-dioxane	12.81	58	13328	0.36	ppb	#	47
42) 2,2,4-trimethylpentane	12.82	57	82460	0.31	ppb		87
43) Heptane	13.13	43	28810	0.31	ppb		97
44) Trichloroethene	12.78	130	26660	0.31	ppb		89
45) 1,2-dichloropropane	12.51	63	20460	0.31	ppb		96

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033109.D Vial: 8
Acq On : 31 Mar 2017 7:30 pm Operator: RJP
Sample : A1UG_0.30 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:03:49 2017 Quant Results File: A331_1UG.RES

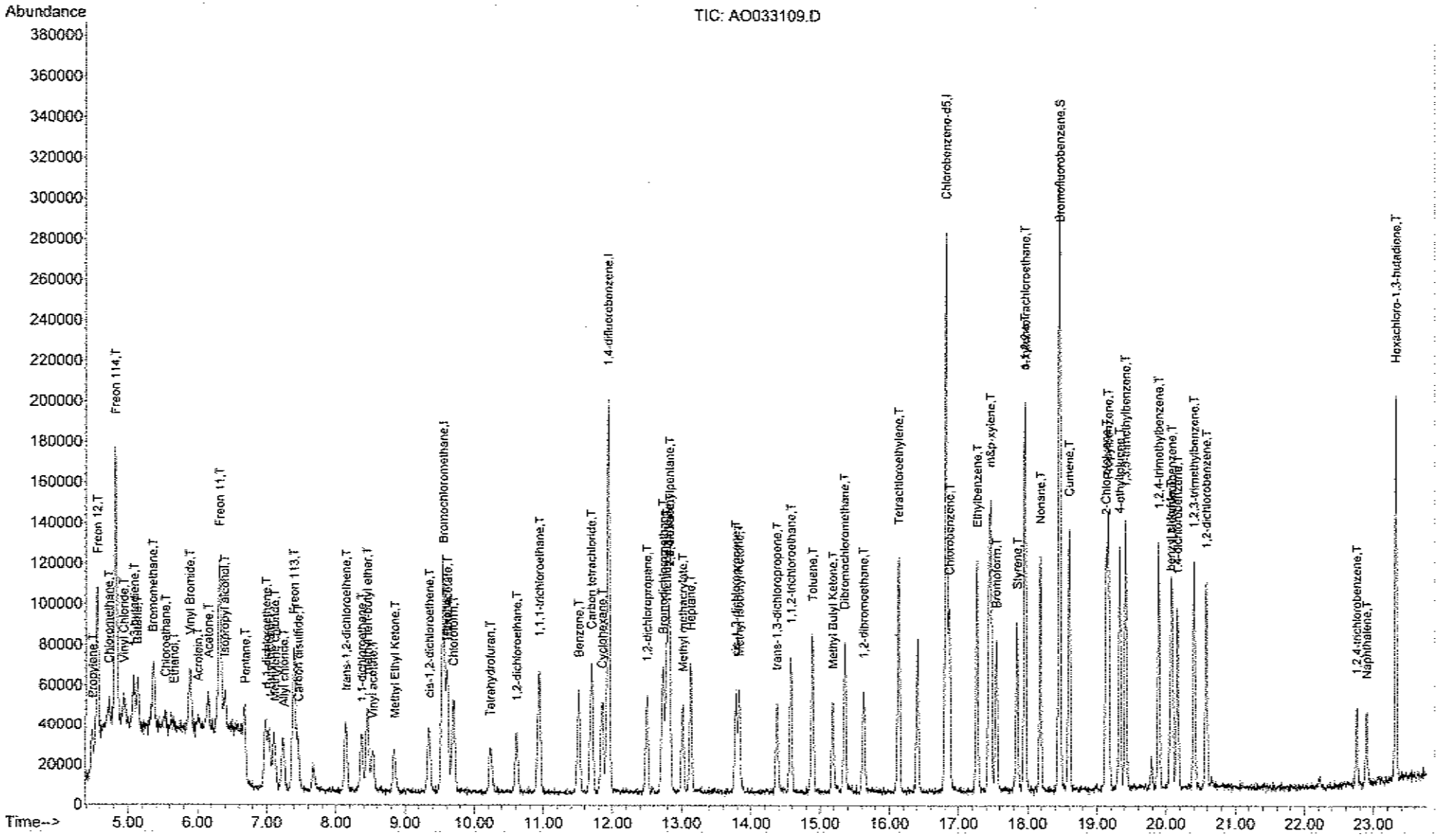
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.73	83	53117	0.31	ppb		95
47)	cis-1,3-dichloropropene	13.78	75	34145	0.31	ppb		95
48)	trans-1,3-dichloropropene	14.37	75	32186	0.32	ppb		94
49)	1,1,2-trichloroethane	14.57	97	25707	0.33	ppb		96
51)	Toluene	14.89	92	40986	0.31	ppb	#	83
52)	Methyl Isobutyl Ketone	13.82	43	42286	0.30	ppb		95
53)	Dibromochloromethane	15.35	129	47684	0.30	ppb		91
54)	Methyl Butyl Ketone	15.18	43	36598	0.29	ppb		96
55)	1,2-dibromoethane	15.62	107	41069	0.31	ppb		97
56)	Tetrachloroethylene	16.13	164	28697	0.33	ppb		95
57)	Chlorobenzene	16.86	112	55379	0.31	ppb		88
58)	Ethylbenzene	17.27	91	92529	0.31	ppb		97
59)	m&p-xylene	17.45	91	160464	0.63	ppb		100
60)	Nonane	18.18	43	43730	0.31	ppb		91
61)	Styrene	17.85	104	47576	0.30	ppb		98
62)	Bromoform	17.54	173	40010	0.30	ppb		97
63)	o-xylene	17.96	91	76534	0.31	ppb		93
64)	Cumene	18.60	105	101572	0.32	ppb		99
66)	1,1,2,2-tetrachloroethane	17.96	83	53717	0.33	ppb		98
67)	Propylbenzene	19.16	120	25611	0.31	ppb	#	1
68)	2-Chlorotoluene	19.13	126	25192	0.33	ppb	#	1
69)	4-ethyltoluene	19.32	105	90497m	0.30	ppb		
70)	1,3,5-trimethylbenzene	19.41	105	83853m	0.31	ppb		
71)	1,2,4-trimethylbenzene	19.89	105	77387	0.31	ppb		94
72)	1,3-dichlorobenzene	20.08	146	46758	0.29	ppb		99
73)	benzyl chloride	20.06	91	35829	0.27	ppb		91
74)	1,4-dichlorobenzene	20.16	146	41836	0.29	ppb		99
75)	1,2,3-trimethylbenzene	20.41	105	76513	0.31	ppb		95
76)	1,2-dichlorobenzene	20.58	146	45300	0.31	ppb		97
77)	1,2,4-trichlorobenzene	22.76	180	11306	0.24	ppb		87
78)	Naphthalene	22.89	128	31679	0.27	ppb		95
79)	Hexachloro-1,3-butadiene	23.32	225	35411	0.31	ppb		97

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

Data File : C:\HPCHEM\1\DATA\AO033109.D Vial: 8
Acq On : 31 Mar 2017 7:30 pm Operator: RJP
Sample : A1UG_0.30 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:06 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033110.D Vial: 9
Acq On : 31 Mar 2017 8:07 pm Operator: RJP
Sample : A1UG_0.15 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:04:16 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.54	128	42792	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.94	114	193548	1.00	ppb		0.00
50) Chlorobenzene-d5	16.82	117	165853	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	114097	0.99	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 99.00%				
Target Compounds							Qvalue
2) Propylene	4.49	41	9911	0.16	ppb	#	62
3) Freon 12	4.55	85	59977	0.18	ppb		99
4) Chloromethane	4.72	50	9041m	0.19	ppb		
5) Freon 114	4.82	85	46015	0.17	ppb		94
6) Vinyl Chloride	4.95	62	12362	0.18	ppb		85
7) Butane	5.14	43	14396	0.21	ppb		88
8) 1,3-butadiene	5.09	39	8893m	0.18	ppb		
9) Bromomethane	5.36	94	16794	0.17	ppb		95
10) Chloroethane	5.54	64	5195m	0.18	ppb		
11) Ethanol	5.65	45	4334m	0.19	ppb		
12) Acrolein	6.01	56	5298	0.21	ppb		88
13) Vinyl Bromide	5.89	106	17806	0.18	ppb		100
14) Freon 11	6.32	101	59840	0.17	ppb		99
15) Acetone	6.15	58	5209	0.20	ppb	#	67
16) Pentane	6.68	42	9149	0.17	ppb	#	29
17) Isopropyl alcohol	6.40	45	14755m	0.16	ppb		
18) 1,1-dichloroethene	7.00	96	9344	0.18	ppb		93
19) Freon 113	7.39	101	22230	0.17	ppb		89
20) t-Butyl alcohol	7.04	59	22290	0.17	ppb	#	91
21) Methylene chloride	7.11	84	9103	0.17	ppb	#	68
22) Allyl chloride	7.24	41	11651	0.17	ppb		87
23) Carbon disulfide	7.44	76	29034	0.17	ppb		90
24) trans-1,2-dichloroethene	8.15	61	15274	0.17	ppb		92
25) methyl tert-butyl ether	8.46	73	27786	0.16	ppb		89
26) 1,1-dichloroethane	8.38	63	19013	0.17	ppb		91
27) Vinyl acetate	8.53	43	28787	0.20	ppb		88
28) Methyl Ethyl Ketone	8.85	72	4136	0.14	ppb	#	80
29) cis-1,2-dichloroethene	9.35	61	14449	0.17	ppb		89
30) Hexane	9.60	57	12497	0.15	ppb		89
31) Ethyl acetate	9.62	43	28876	0.16	ppb		95
32) Chloroform	9.71	83	26592	0.17	ppb		96
33) Tetrahydrofuran	10.24	42	9740	0.17	ppb		92
34) 1,2-dichloroethane	10.61	62	19328	0.17	ppb		96
36) 1,1,1-trichloroethane	10.94	97	28019	0.17	ppb		99
37) Cyclohexane	11.85	56	12963	0.17	ppb		89
38) Carbon tetrachloride	11.70	117	29251	0.17	ppb		96
39) Benzene	11.51	78	29211	0.17	ppb		86
40) Methyl methacrylate	13.02	41	13355	0.16	ppb		99
41) 1,4-dioxane	12.81	58	6152	0.17	ppb	#	52
42) 2,2,4-trimethylpentane	12.82	57	43239	0.17	ppb		89
43) Heptane	13.14	43	14828	0.16	ppb		96
44) Trichloroethene	12.78	130	13911	0.17	ppb		87
45) 1,2-dichloropropane	12.51	63	11309	0.18	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033110.D Vial: 9
Acq On : 31 Mar 2017 8:07 pm Operator: RJP
Sample : A1UG_0.15 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 21:04:16 2017 Quant Results File: A331_1UG.RES

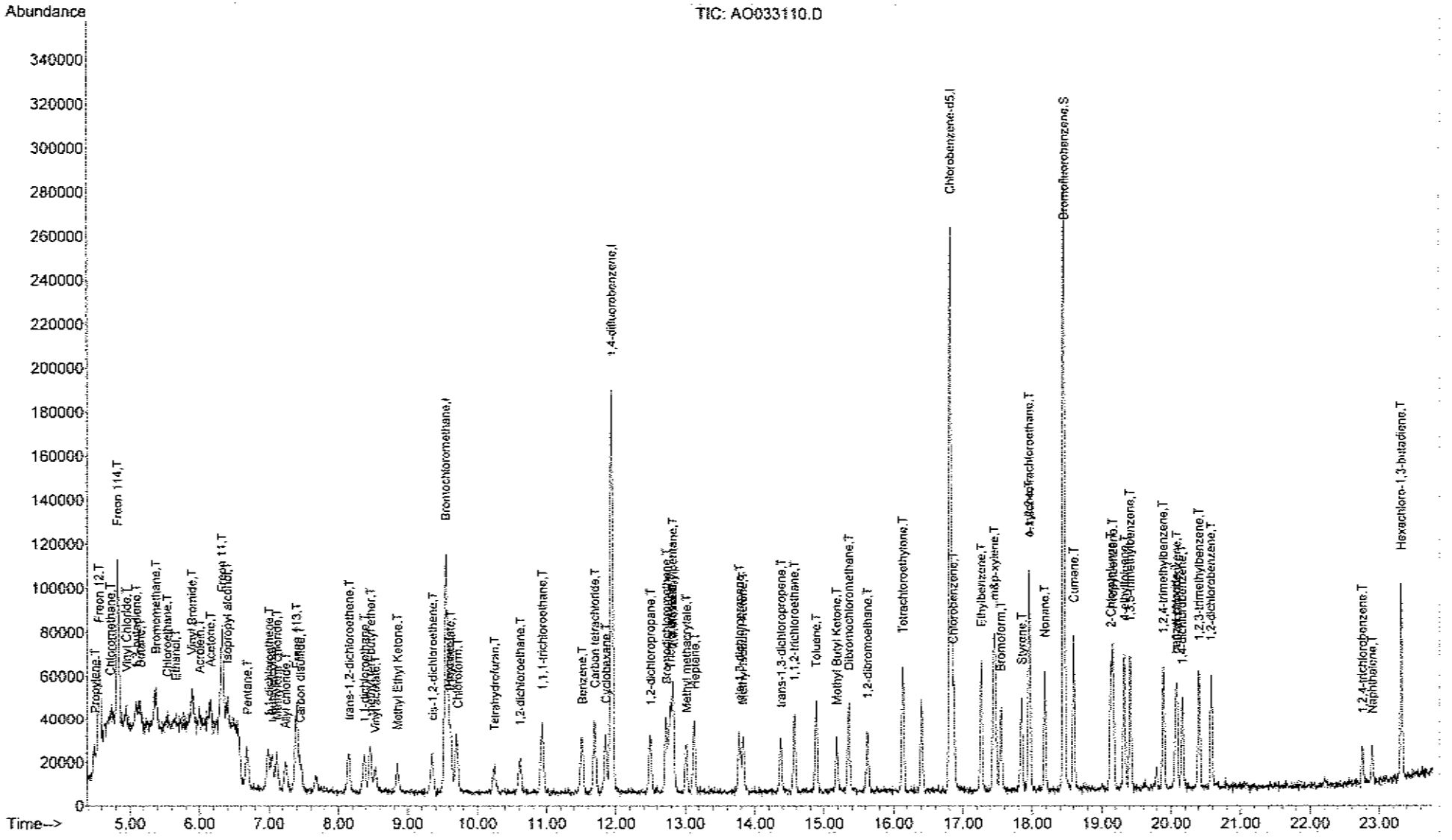
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.73	83	27155	0.17	ppb		94
47)	cis-1,3-dichloropropene	13.78	75	18076	0.17	ppb		99
48)	trans-1,3-dichloropropene	14.37	75	16213	0.17	ppb		96
49)	1,1,2-trichloroethane	14.57	97	12408	0.16	ppb		99
51)	Toluene	14.88	92	20793	0.17	ppb		85
52)	Methyl Isobutyl Ketone	13.83	43	20938	0.16	ppb		96
53)	Dibromochloromethane	15.36	129	24776	0.17	ppb		88
54)	Methyl Butyl Ketone	15.18	43	19129	0.16	ppb		94
55)	1,2-dibromoethane	15.62	107	20335	0.16	ppb		94
56)	Tetrachloroethylene	16.13	164	15170	0.18	ppb		99
57)	Chlorobenzene	16.86	112	28620	0.17	ppb		89
58)	Ethylbenzene	17.27	91	47280	0.17	ppb		100
59)	m&p-xylene	17.45	91	73840	0.30	ppb		95
60)	Nonane	18.18	43	21381	0.16	ppb		92
61)	Styrene	17.85	104	24592	0.16	ppb		93
62)	Bromoform	17.55	173	19862	0.16	ppb		96
63)	o-xylene	17.96	91	37803	0.16	ppb		96
64)	Cumene	18.60	105	50505	0.17	ppb		98
66)	1,1,2,2-tetrachloroethane	17.96	83	27102	0.17	ppb		96
67)	Propylbenzene	19.16	120	13021	0.17	ppb	#	1
68)	2-Chlorotoluene	19.13	126	11618	0.16	ppb	#	1
69)	4-ethyltoluene	19.33	105	44953	0.16	ppb		98
70)	1,3,5-trimethylbenzene	19.41	105	38812	0.15	ppb		98
71)	1,2,4-trimethylbenzene	19.89	105	35741	0.15	ppb		88
72)	1,3-dichlorobenzene	20.08	146	20897	0.14	ppb		97
73)	benzyl chloride	20.06	91	17111	0.13	ppb		95
74)	1,4-dichlorobenzene	20.16	146	20124	0.15	ppb		94
75)	1,2,3-trimethylbenzene	20.41	105	37732	0.16	ppb		97
76)	1,2-dichlorobenzene	20.58	146	22151	0.16	ppb		96
77)	1,2,4-trichlorobenzene	22.76	180	4904	0.11	ppb		91
78)	Naphthalene	22.90	128	12548	0.11	ppb		90
79)	Hexachloro-1,3-butadiene	23.33	225	16218	0.15	ppb		98

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

Data File : C:\HPCHEM\1\DATA\AO033110.D Vial: 9
Acq On : 31 Mar 2017 8:07 pm Operator: RJP
Sample : A1UG_0.15 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:07 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033111.D Vial: 10
Acq On : 31 Mar 2017 8:44 pm Operator: RJP
Sample : A1UG_0.10 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 22:13:02 2017 Quant Results File: A331_1UG.RES

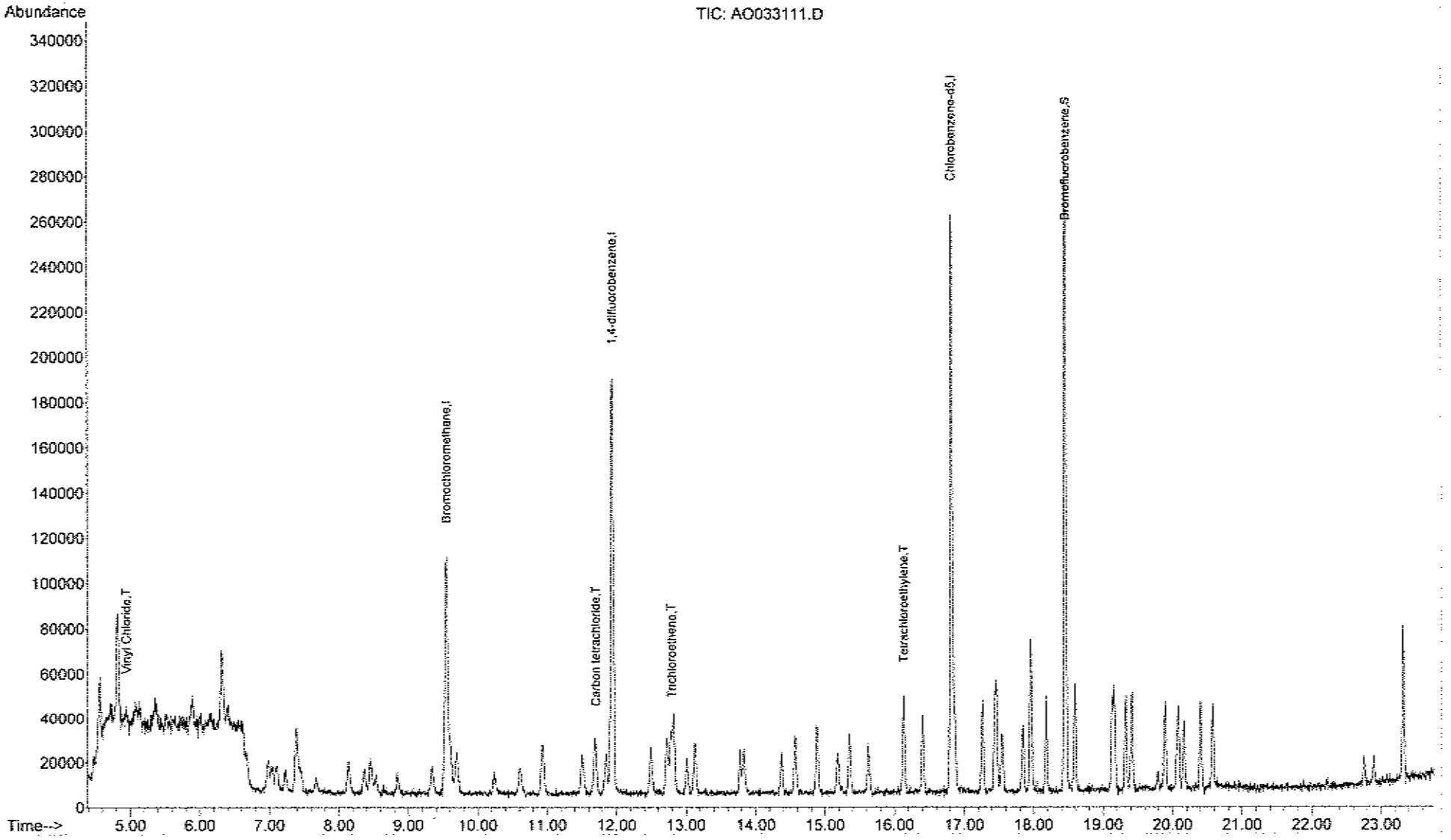
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.55	128	41392	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.94	114	192052	1.00	ppb	0.00
50) Chlorobenzene-d5	16.82	117	166270	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	108405	0.94	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 94.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	4.94	62	8904	0.13	ppb	66
38) Carbon tetrachloride	11.69	117	19812	0.12	ppb	96
44) Trichloroethene	12.78	130	9232	0.11	ppb	89
56) Tetrachloroethylene	16.14	164	10008	0.12	ppb	93

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

Data File : C:\HPCHEM\1\DATA\AO033111.D Vial: 10
Acq On : 31 Mar 2017 8:44 pm Operator: RJP
Sample : A1UG_0.10 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:09 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO033112.D Vial: 11
Acq On : 31 Mar 2017 9:20 pm Operator: RJP
Sample : A1UG_0.04 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 31 22:13:36 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Fri Mar 31 21:00:46 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.55	128	39334	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.94	114	186827	1.00	ppb		0.00
50) Chlorobenzene-d5	16.82	117	162286	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.45	95	106786	0.95	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 95.00%				
Target Compounds							Qvalue
6) Vinyl Chloride	4.93	62	3087	0.05	ppb		89
38) Carbon tetrachloride	11.70	117	7584	0.05	ppb		98
44) Trichloroethene	12.79	130	3902	0.05	ppb	#	23

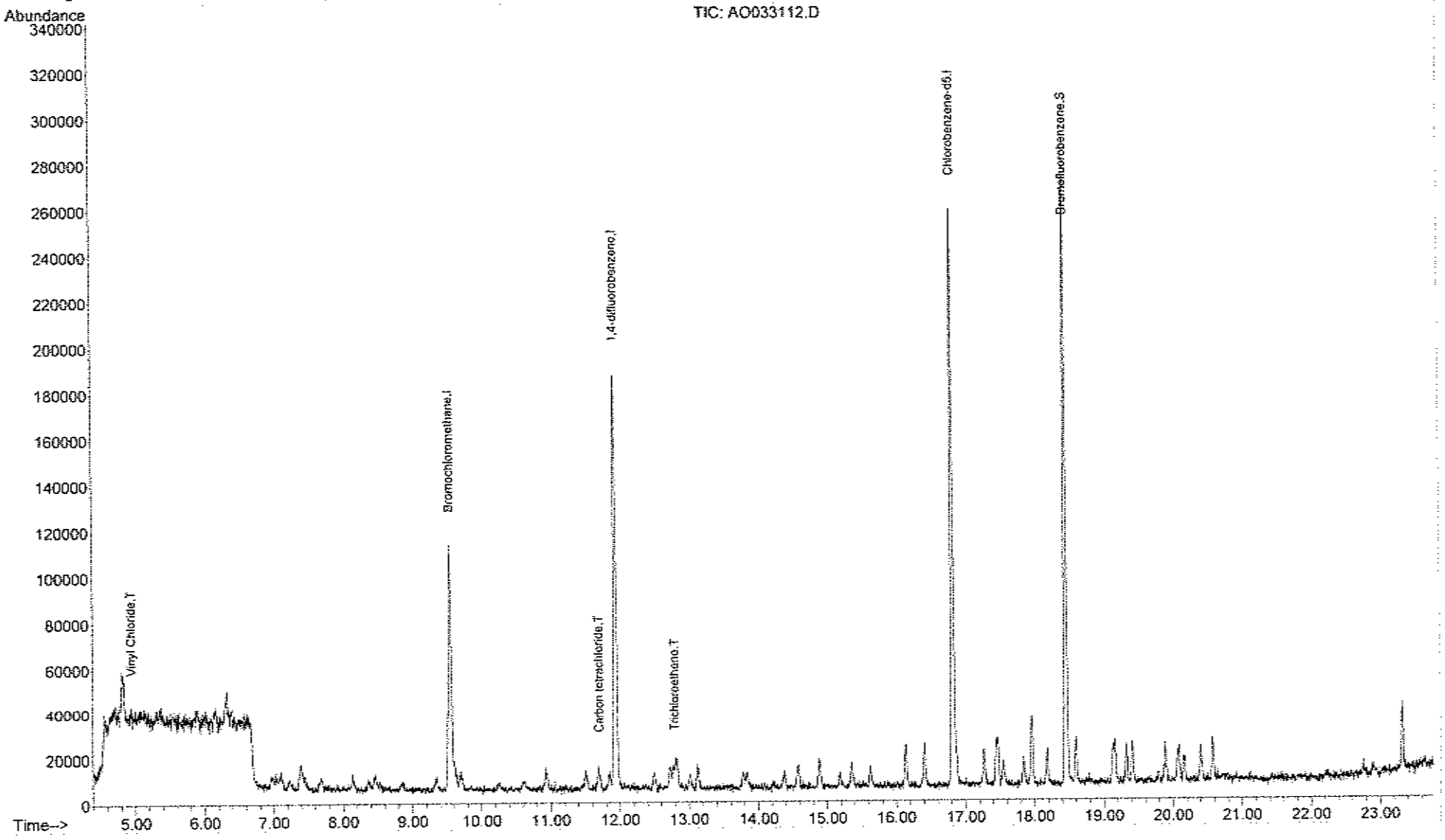
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO033112.D
Acq On : 31 Mar 2017 9:20 pm
Sample : A1UG_0.04
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 3 10:11 2017

Vial: 11
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:13:15 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO033106.D



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CALIBRATION VERIFICATION

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AO040602.D Vial: 2
Acq On : 6 Apr 2017 9:31 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	58	0.00
2	T	Propylene	1.425	1.538	-7.9	62	0.00
3	T	Freon 12	8.232	7.850	4.6	57	0.00
4	T	Chloromethane	1.163	1.228	-5.6	63	0.00
5	T	Freon 114	6.407	6.744	-5.3	63	0.00
6	T	Vinyl Chloride	1.763	1.645	6.7	60	0.00
7	T	Butane	1.798	1.735	3.5	62	0.00
8	T	1,3-butadiene	1.165	1.240	-6.4	67	0.00
9	T	Bromomethane	2.375	2.252	5.2	57	0.00
10	T	Chloroethane	0.733	0.732	0.1	62	0.00
11	T	Ethanol	0.576	0.494	14.2	52	0.00
12	T	Acrolein	0.604	0.474	21.5	46#	0.00
13	T	Vinyl Bromide	2.385	2.040	14.5	50	0.00
14	T	Freon 11	8.237	10.020	-21.6	72	0.00
15	T	Acetone	0.645	0.664	-2.9	64	0.00
16	T	Pentane	1.262	1.246	1.3	57	0.00
17	T	Isopropyl alcohol	2.143	2.170	-1.3	59	0.00
18	T	1,1-dichloroethene	1.300	1.185	8.8	56	0.00
19	T	Freon 113	3.107	3.062	1.4	60	0.00
20	t	t-Butyl alcohol	3.171	2.505	21.0	46#	0.00
21	T	Methylene chloride	1.268	1.230	3.0	58	0.00
22	T	Allyl chloride	1.615	1.358	15.9	50#	0.00
23	T	Carbon disulfide	4.058	3.972	2.1	59	0.00
24	T	trans-1,2-dichloroethene	2.189	2.057	6.0	57	0.00
25	T	methyl tert-butyl ether	4.148	3.676	11.4	52	0.00
26	T	1,1-dichloroethane	2.710	2.632	2.9	57	0.00
27	T	Vinyl acetate	3.495	3.889	-11.3	70	0.00
28	T	Methyl Ethyl Ketone	0.665	0.614	7.7	52	0.00
29	T	cis-1,2-dichloroethene	2.077	1.918	7.7	55	0.00
30	T	Hexane	1.907	1.788	6.2	55	0.00
31	T	Ethyl acetate	4.254	3.890	8.6	55	0.00
32	T	Chloroform	3.793	3.590	5.4	56	0.00
33	T	Tetrahydrofuran	1.421	1.284	9.6	55	0.00
34	T	1,2-dichloroethane	2.807	2.513	10.5	53	0.00
35	I	1,4-difluorobenzene	1.000	1.000	0.0	55	0.00
36	T	1,1,1-trichloroethane	0.880	0.890	-1.1	58	0.00
37	T	Cyclohexane	0.444	0.426	4.1	59	0.00
38	T	Carbon tetrachloride	0.932	0.926	0.6	58	0.00
39	T	Benzene	0.920	0.911	1.0	58	0.00
40	T	Methyl methacrylate	0.431	0.389	9.7	51	0.00
41	T	1,4-dioxane	0.190	0.162	14.7	49#	0.00
42	T	2,2,4-trimethylpentane	1.383	1.364	1.4	57	0.00
43	T	Heptane	0.480	0.462	3.7	55	0.00
44	T	Trichloroethene	0.450	0.443	1.6	58	0.00
45	T	1,2-dichloropropane	0.339	0.348	-2.7	59	0.00
46	T	Bromodichloromethane	0.873	0.877	-0.5	58	0.00
47	T	cis-1,3-dichloropropene	0.559	0.551	1.4	56	0.00
48	T	trans-1,3-dichloropropene	0.532	0.524	1.5	57	0.00
49	T	1,1,2-trichloroethane	0.407	0.427	-4.9	60	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AO040602.D Vial: 2
Acq On : 6 Apr 2017 9:31 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T	Toluene	0.750	0.686	8.5	55	0.00
52	T	Methyl Isobutyl Ketone	0.780	0.558	28.5	42#	0.00
53	T	Dibromochloromethane	0.917	0.883	3.7	59	0.00
54	T	Methyl Butyl Ketone	0.702	0.528	24.8	44#	0.00
55	T	1,2-dibromoethane	0.761	0.740	2.8	58	0.00
56	T	Tetrachloroethylene	0.529	0.507	4.2	61	0.00
57	T	Chlorobenzene	1.044	0.978	6.3	57	0.00
58	T	Ethylbenzene	1.750	1.612	7.9	57	0.00
59	T	m&p-xylene	1.477	1.367	7.4	56	0.00
60	T	Nonane	0.818	0.751	8.2	55	0.00
61	T	Styrene	0.919	0.821	10.7	55	0.00
62	T	Bromoform	0.761	0.735	3.4	59	0.00
63	T	o-xylene	1.424	1.330	6.6	57	0.00
64	T	Cumene	1.851	1.691	8.6	56	0.00
65	S	Bromofluorobenzene	0.682	0.680	0.3	59	0.00
66	T	1,1,2,2-tetrachloroethane	0.973	0.966	0.7	62	0.00
67	T	Propylbenzene	0.476	0.460	3.4	58	0.00
68	T	2-Chlorotoluene	0.440	0.428	2.7	59	0.00
69	T	4-ethyltoluene	1.729	1.571	9.1	54	0.00
70	T	1,3,5-trimethylbenzene	1.538	1.445	6.0	56	0.00
71	T	1,2,4-trimethylbenzene	1.434	1.300	9.3	55	0.00
72	T	1,3-dichlorobenzene	0.902	0.907	-0.6	59	0.00
73	T	benzyl chloride	0.755	0.754	0.1	59	0.00
74	T	1,4-dichlorobenzene	0.834	0.822	1.4	60	0.00
75	T	1,2,3-trimethylbenzene	1.443	1.318	8.7	56	0.00
76	T	1,2-dichlorobenzene	0.869	0.850	2.2	60	0.00
77	T	1,2,4-trichlorobenzene	0.257	0.268	-4.3	60	0.00
78	T	Naphthalene	0.661	0.565	14.5	51	0.00
79	T	Hexachloro-1,3-butadiene	0.644	0.635	1.4	59	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040602.D Vial: 2
Acq On : 6 Apr 2017 9:31 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 06 11:05:43 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.57	128	26713	1.00	ppb		0.03
35) 1,4-difluorobenzene	11.95	114	121699	1.00	ppb		0.02
50) Chlorobenzene-d5	16.83	117	111761	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.47	95	75986	1.00	ppb		0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%				
Target Compounds							Qvalue
2) Propylene	4.49	41	41087	1.08	ppb		85
3) Freon 12	4.57	85	209693	0.95	ppb		98
4) Chloromethane	4.73	50	32806	1.06	ppb		87
5) Freon 114	4.83	85	180160	1.05	ppb		94
6) Vinyl Chloride	4.97	62	43942	0.93	ppb		93
7) Butane	5.16	43	46357	0.97	ppb		87
8) 1,3-butadiene	5.09	39	33128m	1.06	ppb		
9) Bromomethane	5.38	94	60166	0.95	ppb		89
10) Chloroethane	5.56	64	19566	1.00	ppb		91
11) Ethanol	5.68	45	13202	0.86	ppb		85
12) Acrolein	6.02	56	12651	0.78	ppb		99
13) Vinyl Bromide	5.91	106	54506	0.86	ppb		95
14) Freon 11	6.33	101	267654	1.22	ppb		99
15) Acetone	6.17	58	17734	1.03	ppb	#	78
16) Pentane	6.69	42	33284	0.99	ppb	#	45
17) Isopropyl alcohol	6.41	45	57975	1.01	ppb	#	100
18) 1,1-dichloroethene	7.00	96	31668	0.91	ppb		89
19) Freon 113	7.41	101	81782	0.99	ppb		91
20) t-Butyl alcohol	7.05	59	66928	0.79	ppb	#	92
21) Methylene chloride	7.12	84	32863	0.97	ppb		85
22) Allyl chloride	7.25	41	36285	0.84	ppb		93
23) Carbon disulfide	7.47	76	106097	0.98	ppb		84
24) trans-1,2-dichloroethene	8.17	61	54946	0.94	ppb		93
25) methyl tert-butyl ether	8.47	73	98209	0.89	ppb		87
26) 1,1-dichloroethane	8.40	63	70315	0.97	ppb		98
27) Vinyl acetate	8.55	43	103887	1.11	ppb		91
28) Methyl Ethyl Ketone	8.87	72	16394	0.92	ppb		98
29) cis-1,2-dichloroethene	9.37	61	51232	0.92	ppb		95
30) Hexane	9.63	57	47775	0.94	ppb		89
31) Ethyl acetate	9.63	43	103920	0.91	ppb		98
32) Chloroform	9.72	83	95910	0.95	ppb		96
33) Tetrahydrofuran	10.25	42	34290	0.90	ppb		87
34) 1,2-dichloroethane	10.63	62	67117	0.90	ppb		95
36) 1,1,1-trichloroethane	10.96	97	108277	1.01	ppb		95
37) Cyclohexane	11.87	56	51864	0.96	ppb		98
38) Carbon tetrachloride	11.71	117	112693	0.99	ppb		98
39) Benzene	11.52	78	110859	0.99	ppb		91
40) Methyl methacrylate	13.03	41	47367	0.90	ppb		96
41) 1,4-dioxane	12.83	58	19760	0.85	ppb	#	61
42) 2,2,4-trimethylpentane	12.84	57	165964	0.99	ppb		90
43) Heptane	13.14	43	56271	0.96	ppb		95
44) Trichloroethene	12.80	130	53897	0.98	ppb		93
45) 1,2-dichloropropane	12.51	63	42378	1.03	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040602.D
Acq On : 6 Apr 2017 9:31 am
Sample : A1UG_1.0
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 06 11:05:43 2017

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.74	83	106680	1.00	ppb		96
47)	cis-1,3-dichloropropene	13.80	75	67019	0.99	ppb		97
48)	trans-1,3-dichloropropene	14.38	75	63822	0.99	ppb		95
49)	1,1,2-trichloroethane	14.58	97	51916	1.05	ppb		97
51)	Toluene	14.90	92	76639	0.91	ppb	#	83
52)	Methyl Isobutyl Ketone	13.84	43	62379m	0.72	ppb		
53)	Dibromochloromethane	15.37	129	98703	0.96	ppb		93
54)	Methyl Butyl Ketone	15.20	43	59023m	0.75	ppb		
55)	1,2-dibromoethane	15.64	107	82733	0.97	ppb		95
56)	Tetrachloroethylene	16.15	164	56610	0.96	ppb		99
57)	Chlorobenzene	16.87	112	109355	0.94	ppb		95
58)	Ethylbenzene	17.27	91	180188	0.92	ppb		97
59)	m&p-xylene	17.46	91	305465	1.85	ppb		100
60)	Nonane	18.19	43	83926	0.92	ppb		93
61)	Styrene	17.85	104	91731	0.89	ppb		98
62)	Bromoform	17.56	173	82114	0.97	ppb		100
63)	o-xylene	17.97	91	148687	0.93	ppb		93
64)	Cumene	18.61	105	189034	0.91	ppb		98
66)	1,1,2,2-tetrachloroethane	17.96	83	107989	0.99	ppb		97
67)	Propylbenzene	19.18	120	51380	0.97	ppb	#	1
68)	2-Chlorotoluene	19.14	126	47884	0.97	ppb	#	1
69)	4-ethyltoluene	19.34	105	175572	0.91	ppb		100
70)	1,3,5-trimethylbenzene	19.42	105	161521	0.94	ppb		99
71)	1,2,4-trimethylbenzene	19.90	105	145281	0.91	ppb		93
72)	1,3-dichlorobenzene	20.09	146	101408	1.01	ppb		97
73)	benzyl chloride	20.06	91	84267	1.00	ppb		94
74)	1,4-dichlorobenzene	20.17	146	91864	0.99	ppb		95
75)	1,2,3-trimethylbenzene	20.41	105	147288	0.91	ppb		93
76)	1,2-dichlorobenzene	20.59	146	94991	0.98	ppb		96
77)	1,2,4-trichlorobenzene	22.76	180	29991	1.05	ppb		99
78)	Naphthalene	22.91	128	63149	0.86	ppb		94
79)	Hexachloro-1,3-butadiene	23.33	225	70991	0.99	ppb		97

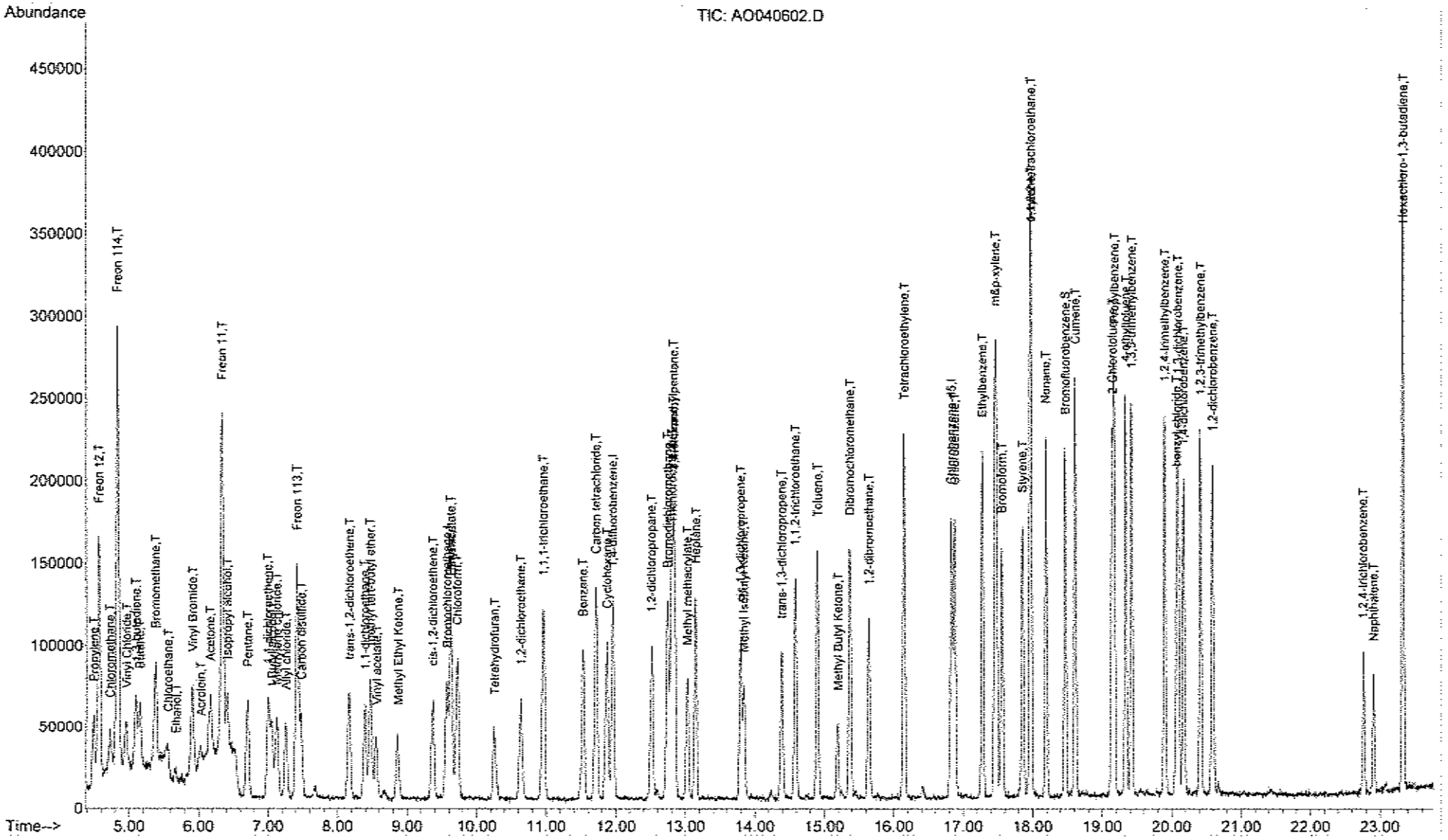
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040602.D
Acq On : 6 Apr 2017 9:31 am
Sample : A1UG_1.0
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 7 10:14 2017

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AO040702.D Vial: 2
Acq On : 7 Apr 2017 11:20 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	50	-0.02
2	T	Propylene	1.425	1.469	-3.1	52	0.00
3	T	Freon 12	8.232	9.830	-19.4	62	-0.01
4	T	Chloromethane	1.163	1.259	-8.3	56	-0.02
5	T	Freon 114	6.407	7.985	-24.6	65	-0.02
6	T	Vinyl Chloride	1.763	1.981	-12.4	62	-0.02
7	T	Butane	1.798	2.051	-14.1	64	-0.02
8	T	1,3-butadiene	1.165	1.307	-12.2	62	-0.01
9	T	Bromomethane	2.375	2.910	-22.5	64	-0.01
10	T	Chloroethane	0.733	0.845	-15.3	62	-0.03
11	T	Ethanol	0.576	0.568	1.4	52	-0.04
12	T	Acrolein	0.604	0.663	-9.8	56	-0.02
13	T	Vinyl Bromide	2.385	2.836	-18.9	61	-0.02
14	T	Freon 11	8.237	10.475	-27.2	66	0.00
15	T	Acetone	0.645	0.792	-22.8	67	-0.02
16	T	Pentane	1.262	1.188	5.9	47#	0.00
17	T	Isopropyl alcohol	2.143	2.346	-9.5	55	-0.03
18	T	1,1-dichloroethene	1.300	1.339	-3.0	55	-0.02
19	T	Freon 113	3.107	3.265	-5.1	55	-0.01
20	T	t-Butyl alcohol	3.171	2.625	17.2	42#	-0.02
21	T	Methylene chloride	1.268	1.314	-3.6	54	-0.01
22	T	Allyl chloride	1.615	1.415	12.4	45#	0.00
23	T	Carbon disulfide	4.058	4.135	-1.9	53	-0.01
24	T	trans-1,2-dichloroethene	2.189	2.150	1.8	52	-0.02
25	T	methyl tert-butyl ether	4.148	3.833	7.6	48#	-0.02
26	T	1,1-dichloroethane	2.710	2.713	-0.1	51	-0.02
27	T	Vinyl acetate	3.495	3.170	9.3	50#	-0.02
28	T	Methyl Ethyl Ketone	0.665	0.594	10.7	43#	-0.03
29	T	cis-1,2-dichloroethene	2.077	2.006	3.4	50	-0.02
30	T	Hexane	1.907	1.835	3.8	49#	-0.02
31	T	Ethyl acetate	4.254	3.961	6.9	49#	-0.02
32	T	Chloroform	3.793	3.922	-3.4	53	0.00
33	T	Tetrahydrofuran	1.421	1.277	10.1	47#	-0.02
34	T	1,2-dichloroethane	2.807	2.738	2.5	50	-0.01
35	I	1,4-difluorobenzene	1.000	1.000	0.0	45#	0.00
36	T	1,1,1-trichloroethane	0.880	1.005	-14.2	54	-0.01
37	T	Cyclohexane	0.444	0.448	-0.9	51	0.00
38	T	Carbon tetrachloride	0.932	1.012	-8.6	52	0.00
39	T	Benzene	0.920	1.006	-9.3	52	0.00
40	T	Methyl methacrylate	0.431	0.421	2.3	45#	-0.01
41	T	1,4-dioxane	0.190	0.186	2.1	46#	0.00
42	T	2,2,4-trimethylpentane	1.383	1.522	-10.1	52	0.00
43	T	Heptane	0.480	0.531	-10.6	51	0.00
44	T	Trichloroethene	0.450	0.502	-11.6	54	0.00
45	T	1,2-dichloropropane	0.339	0.391	-15.3	54	0.00
46	T	Bromodichloromethane	0.873	0.977	-11.9	52	0.00
47	T	cis-1,3-dichloropropene	0.559	0.609	-8.9	51	-0.01
48	T	trans-1,3-dichloropropene	0.532	0.577	-8.5	52	0.00
49	T	1,1,2-trichloroethane	0.407	0.462	-13.5	53	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AO040702.D Vial: 2
Acq On : 7 Apr 2017 11:20 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T	Toluene	0.750	0.788	-5.1	50#	0.00
52	T	Methyl Isobutyl Ketone	0.780	0.724	7.2	43#	-0.02
53	T	Dibromochloromethane	0.917	1.003	-9.4	53	0.00
54	T	Methyl Butyl Ketone	0.702	0.499	28.9	33#	-0.02
55	T	1,2-dibromoethane	0.761	0.829	-8.9	52	0.00
56	T	Tetrachloroethylene	0.529	0.570	-7.8	54	0.00
57	T	Chlorobenzene	1.044	1.168	-11.9	54	0.00
58	T	Ethylbenzene	1.750	1.875	-7.1	53	0.00
59	T	m&p-xylene	1.477	1.572	-6.4	51	0.00
60	T	Nonane	0.818	0.866	-5.9	51	0.00
61	T	Styrene	0.919	0.969	-5.4	51	0.00
62	T	Bromoform	0.761	0.848	-11.4	54	0.00
63	T	o-xylene	1.424	1.535	-7.8	52	0.00
64	T	Cumene	1.851	1.947	-5.2	51	0.00
65	S	Bromofluorobenzene	0.682	0.628	7.9	43#	0.00
66	T	1,1,2,2-tetrachloroethane	0.973	1.144	-17.6	58	0.00
67	T	Propylbenzene	0.476	0.524	-10.1	53	0.00
68	T	2-Chlorotoluene	0.440	0.474	-7.7	52	0.00
69	T	4-ethyltoluene	1.729	1.869	-8.1	51	0.00
70	T	1,3,5-trimethylbenzene	1.538	1.571	-2.1	48#	0.00
71	T	1,2,4-trimethylbenzene	1.434	1.465	-2.2	49#	0.00
72	T	1,3-dichlorobenzene	0.902	1.068	-18.4	56	0.00
73	T	benzyl chloride	0.755	0.804	-6.5	50	0.00
74	T	1,4-dichlorobenzene	0.834	0.944	-13.2	54	0.00
75	T	1,2,3-trimethylbenzene	1.443	1.458	-1.0	49#	0.00
76	T	1,2-dichlorobenzene	0.869	0.976	-12.3	55	0.00
77	T	1,2,4-trichlorobenzene	0.257	0.273	-6.2	49#	0.00
78	T	Naphthalene	0.661	0.561	15.1	40#	0.00
79	T	Hexachloro-1,3-butadiene	0.644	0.689	-7.0	51	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040702.D
Acq On : 7 Apr 2017 11:20 am
Sample : A1UG_1.0
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 07 12:17:46 2017

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.55	128	23210m	1.00	ppb		0.01
35) 1,4-difluorobenzene	11.95	114	99215	1.00	ppb		0.01
50) Chlorobenzene-d5	16.83	117	88822	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	55801	0.92	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%				
Target Compounds							Qvalue
2) Propylene	4.48	41	34098	1.03	ppb		77
3) Freon 12	4.56	85	228157	1.19	ppb		99
4) Chloromethane	4.71	50	29211m	1.08	ppb		
5) Freon 114	4.82	85	185325m	1.25	ppb		
6) Vinyl Chloride	4.95	62	45978	1.12	ppb		88
7) Butane	5.13	43	47604	1.14	ppb		91
8) 1,3-butadiene	5.08	39	30333m	1.12	ppb		
9) Bromomethane	5.36	94	67550	1.23	ppb		87
10) Chloroethane	5.53	64	19623	1.15	ppb	#	81
11) Ethanol	5.64	45	13180m	0.99	ppb		
12) Acrolein	6.00	56	15386	1.10	ppb		83
13) Vinyl Bromide	5.89	106	65815	1.19	ppb		94
14) Freon 11	6.32	101	243134m	1.27	ppb		
15) Acetone	6.15	58	18392	1.23	ppb	#	73
16) Pentane	6.69	42	27574	0.94	ppb	#	32
17) Isopropyl alcohol	6.38	45	54446	1.09	ppb	#	100
18) 1,1-dichloroethene	6.98	96	31071	1.03	ppb		95
19) Freon 113	7.40	101	75784	1.05	ppb		90
20) t-Butyl alcohol	7.03	59	60918	0.83	ppb	#	90
21) Methylene chloride	7.11	84	30497	1.04	ppb	#	74
22) Allyl chloride	7.24	41	32834	0.88	ppb		92
23) Carbon disulfide	7.46	76	95964	1.02	ppb		82
24) trans-1,2-dichloroethene	8.14	61	49908	0.98	ppb		94
25) methyl tert-butyl ether	8.45	73	88965	0.92	ppb		89
26) 1,1-dichloroethane	8.38	63	62978	1.00	ppb		94
27) Vinyl acetate	8.54	43	73585m	0.91	ppb		
28) Methyl Ethyl Ketone	8.83	72	13784	0.89	ppb		96
29) cis-1,2-dichloroethene	9.35	61	46549	0.97	ppb		97
30) Hexane	9.61	57	42588	0.96	ppb		88
31) Ethyl acetate	9.62	43	91942	0.93	ppb		97
32) Chloroform	9.71	83	91036	1.03	ppb		97
33) Tetrahydrofuran	10.23	42	29641	0.90	ppb		89
34) 1,2-dichloroethane	10.62	62	63539	0.98	ppb		98
36) 1,1,1-trichloroethane	10.95	97	99692	1.14	ppb		95
37) Cyclohexane	11.87	56	44460	1.01	ppb		96
38) Carbon tetrachloride	11.71	117	100429	1.09	ppb		97
39) Benzene	11.52	78	99793	1.09	ppb		90
40) Methyl methacrylate	13.02	41	41807	0.98	ppb		96
41) 1,4-dioxane	12.82	58	18454	0.98	ppb	#	62
42) 2,2,4-trimethylpentane	12.83	57	151031	1.10	ppb		88
43) Heptane	13.14	43	52704	1.11	ppb		96
44) Trichloroethene	12.79	130	49825	1.12	ppb		93
45) 1,2-dichloropropane	12.50	63	38777	1.15	ppb		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040702.D
Acq On : 7 Apr 2017 11:20 am
Sample : A1UG_1.0
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 07 12:17:46 2017

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

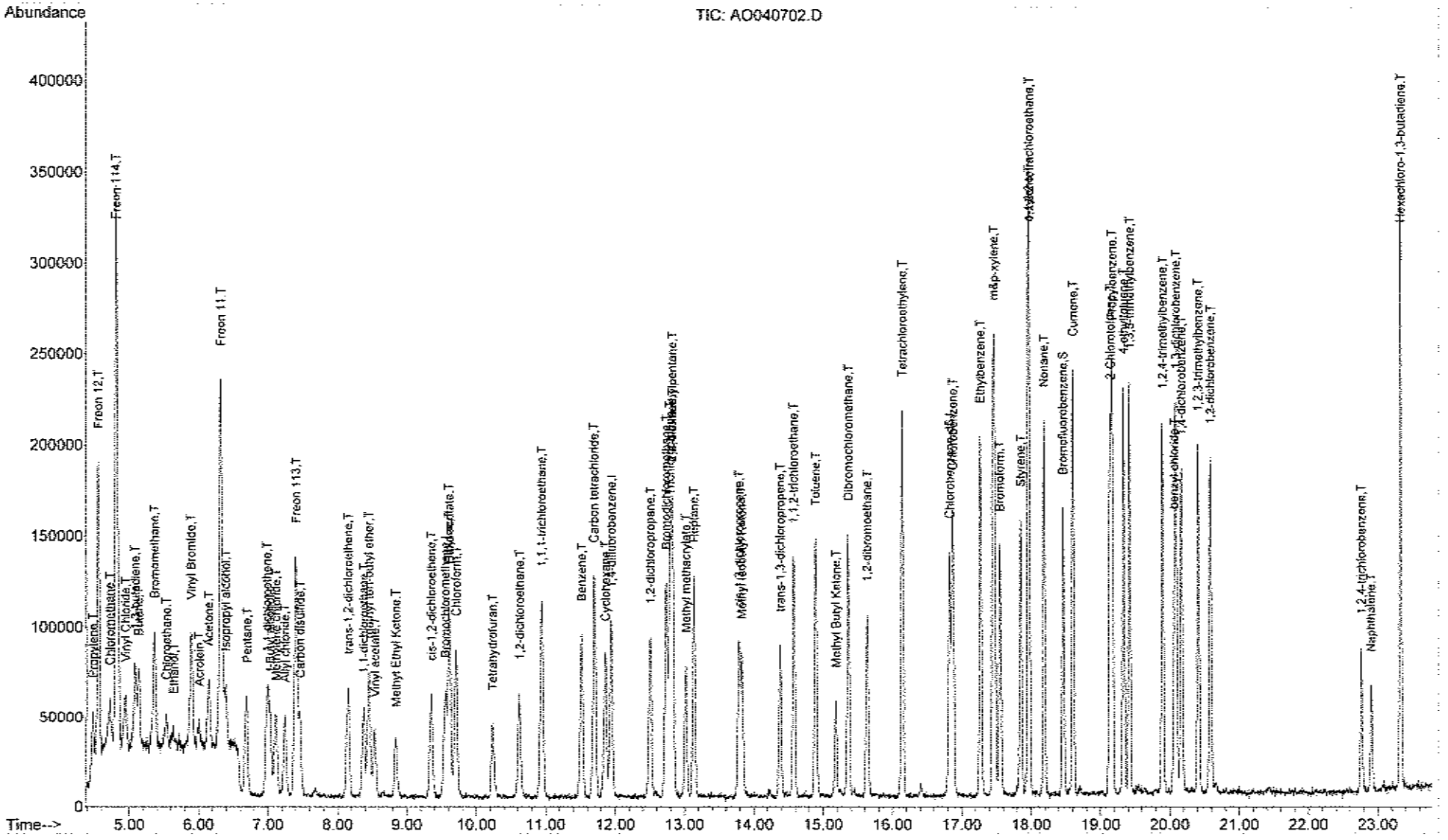
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.74	83	96927	1.12	ppb		97
47)	cis-1,3-dichloropropene	13.79	75	60416	1.09	ppb		96
48)	trans-1,3-dichloropropene	14.38	75	57284	1.09	ppb		93
49)	1,1,2-trichloroethane	14.58	97	45788	1.13	ppb		96
51)	Toluene	14.90	92	69963	1.05	ppb	#	79
52)	Methyl Isobutyl Ketone	13.82	43	64328	0.93	ppb		90
53)	Dibromochloromethane	15.36	129	89092	1.09	ppb		90
54)	Methyl Butyl Ketone	15.18	43	44289	0.71	ppb		91
55)	1,2-dibromoethane	15.64	107	73621	1.09	ppb		92
56)	Tetrachloroethylene	16.14	164	50632	1.08	ppb		98
57)	Chlorobenzene	16.87	112	103742	1.12	ppb		98
58)	Ethylbenzene	17.27	91	166527	1.07	ppb		100
59)	m&p-xylene	17.47	91	279261	2.13	ppb		100
60)	Nonane	18.19	43	76907	1.06	ppb		95
61)	Styrene	17.85	104	86100	1.05	ppb		92
62)	Bromoform	17.56	173	75313	1.11	ppb		100
63)	o-xylene	17.97	91	136347	1.08	ppb		92
64)	Cumene	18.60	105	172917	1.05	ppb		100
66)	1,1,2,2-tetrachloroethane	17.96	83	101634	1.18	ppb		97
67)	Propylbenzene	19.17	120	46509	1.10	ppb	#	1
68)	2-Chlorotoluene	19.14	126	42111	1.08	ppb	#	1
69)	4-ethyltoluene	19.33	105	166042	1.08	ppb		99
70)	1,3,5-trimethylbenzene	19.42	105	139523	1.02	ppb		97
71)	1,2,4-trimethylbenzene	19.90	105	130111	1.02	ppb		95
72)	1,3-dichlorobenzene	20.09	146	94874	1.18	ppb		97
73)	benzyl chloride	20.06	91	71400	1.06	ppb		93
74)	1,4-dichlorobenzene	20.17	146	83841	1.13	ppb		98
75)	1,2,3-trimethylbenzene	20.41	105	129500	1.01	ppb		96
76)	1,2-dichlorobenzene	20.59	146	86684	1.12	ppb		98
77)	1,2,4-trichlorobenzene	22.76	180	24245	1.06	ppb		95
78)	Naphthalene	22.90	128	49826	0.85	ppb		92
79)	Hexachloro-1,3-butadiene	23.32	225	61181	1.07	ppb		96

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040702.D Vial: 2
Acq On : 7 Apr 2017 11:20 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 7 12:18 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



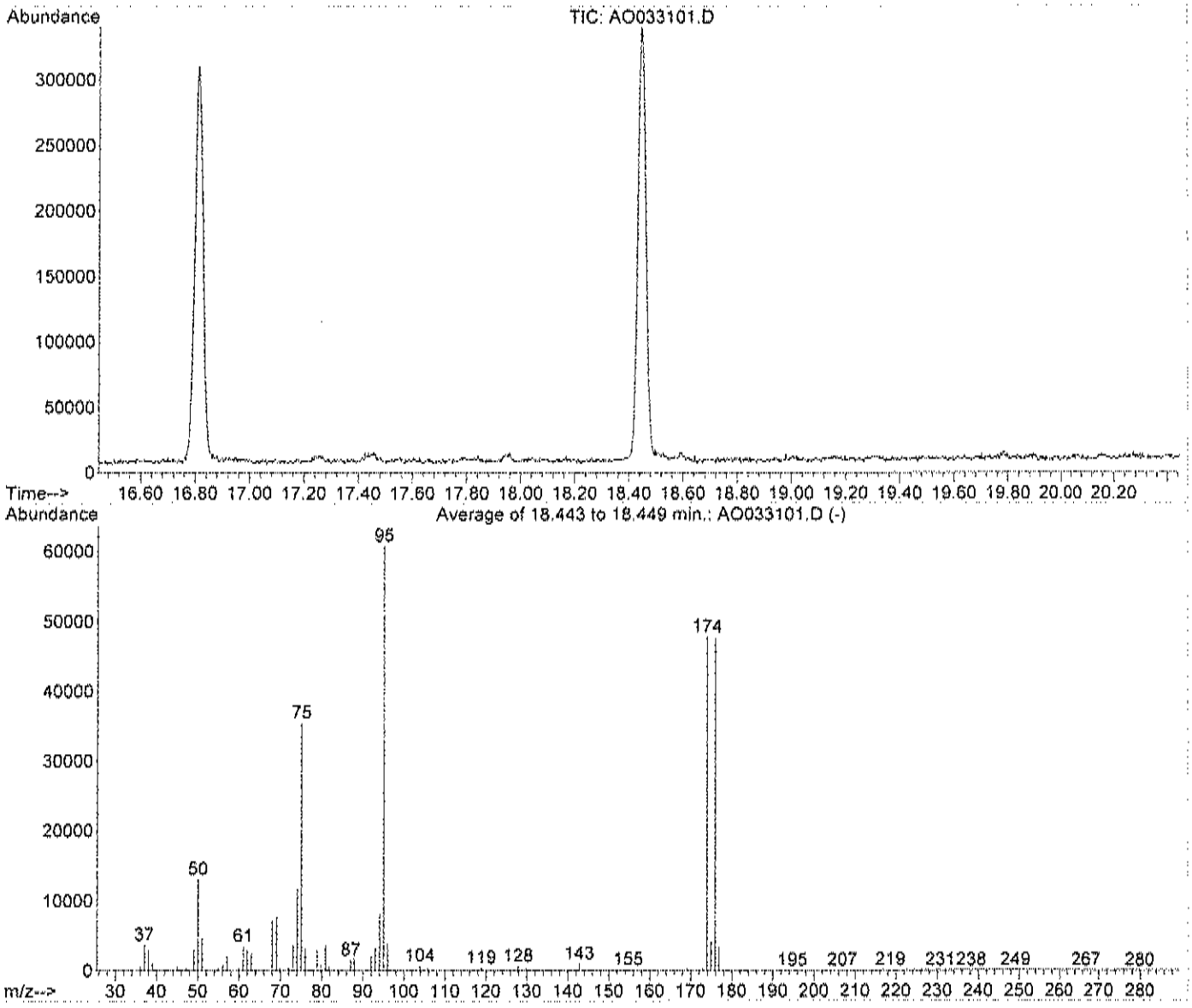
GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW DATA

BFB

Data File : C:\HPCHEM\1\DATA\AO033101.D Vial: 1
Acq On : 31 Mar 2017 1:54 pm Operator: RJP
Sample : BFB1UG Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration



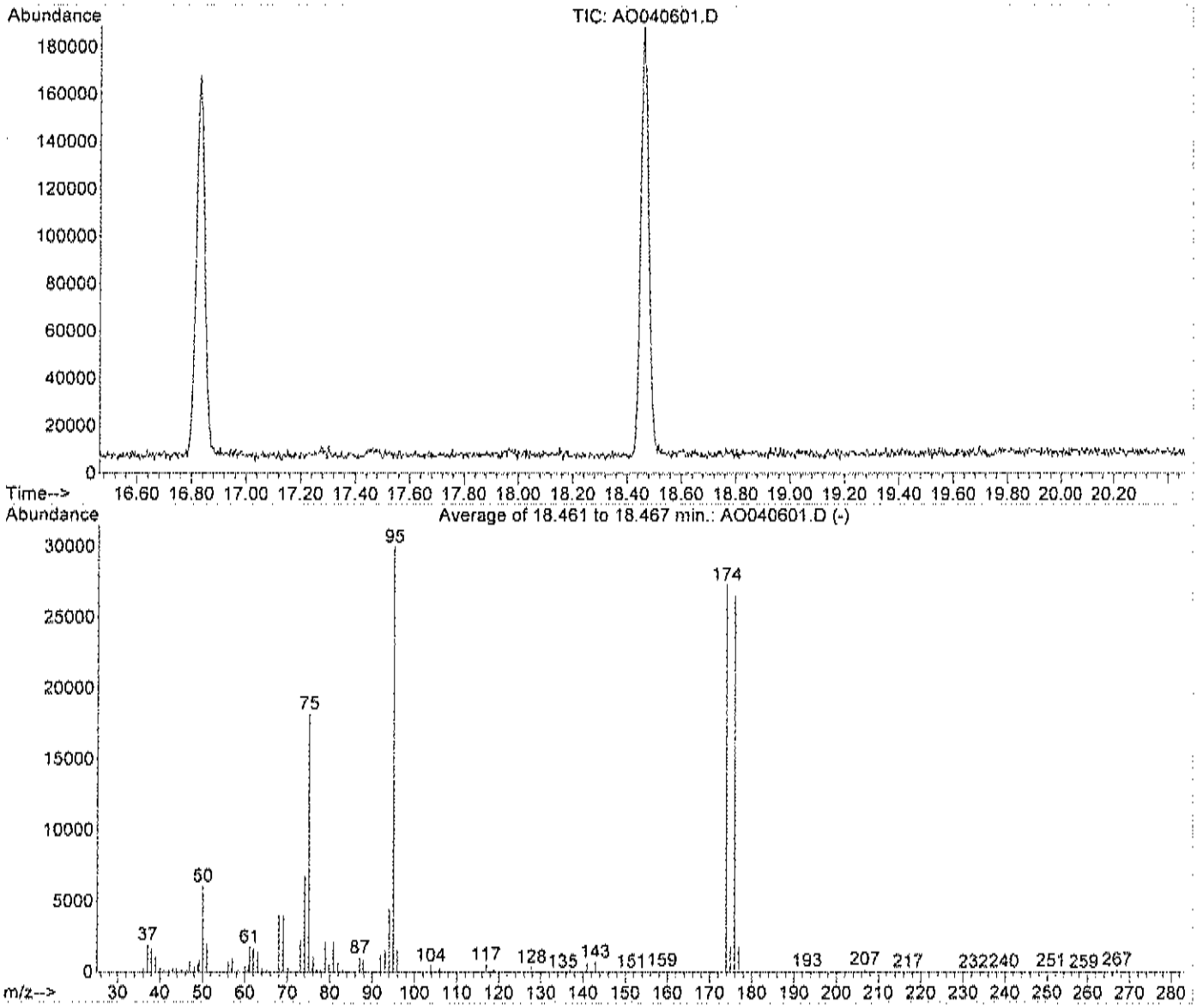
Spectrum Information: Average of 18.443 to 18.449 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.6	13135	PASS
75	95	30	66	58.4	35541	PASS
95	95	100	100	100.0	60837	PASS
96	95	5	9	6.3	3857	PASS
173	174	0.00	2	0.7	324	PASS
174	95	50	120	78.6	47805	PASS
175	174	4	9	8.5	4060	PASS
176	174	95	101	99.4	47501	PASS
177	176	5	9	7.0	3306	PASS

AO033101.D A331_1UG.M Thu May 04 11:14:07 2017 MSD1

Data File : C:\HPCHEM\1\DATA\AO040601.D
Acq On : 6 Apr 2017 8:51 am
Sample : BFB1UG
Misc : A331_1UG
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

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



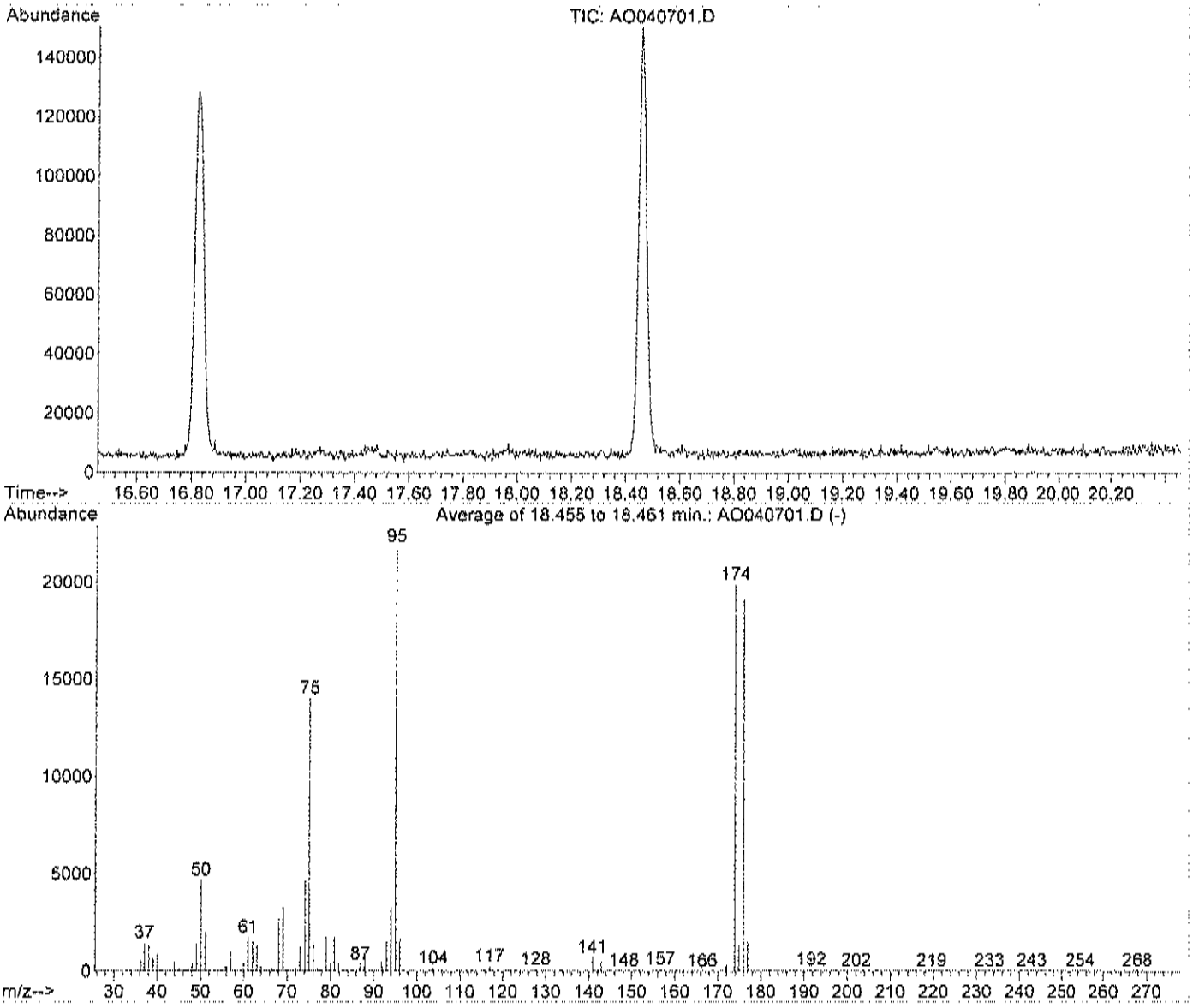
Spectrum Information: Average of 18.461 to 18.467 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.2	6069	PASS
75	95	30	66	60.7	18221	PASS
95	95	100	100	100.0	30010	PASS
96	95	5	9	5.3	1590	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.1	27352	PASS
175	174	4	9	6.7	1838	PASS
176	174	95	101	97.5	26658	PASS
177	176	5	9	6.6	1750	PASS

AO040601.D A331_1UG.M Thu May 04 11:59:40 2017 MSD1

BFB

Data File : C:\HPCHEM\1\DATA\AO040701.D Vial: 1
Acq On : 7 Apr 2017 10:27 am Operator: RJP
Sample : BFB1UG Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration



Spectrum Information: Average of 18.455 to 18.461 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.5	4711	PASS
75	95	30	66	64.2	14056	PASS
95	95	100	100	100.0	21885	PASS
96	95	5	9	7.7	1679	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.1	19946	PASS
175	174	4	9	7.2	1427	PASS
176	174	95	101	96.0	19150	PASS
177	176	5	9	8.1	1550	PASS

AO040701.D A331_1UG.M Thu May 04 12:01:33 2017 MSD1

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW QC DATA

CENTEK LABORATORIES, LLC

Date: *04-May-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID	AMB1UG-040617	SampType:	MBLK	TestCode:	0.25CT-TCE-	Units:	ppbV	Prep Date:		RunNo:	12114
Client ID:	ZZZZZ	Batch ID:	R12114	TestNo:	TO-15			Analysis Date:	4/6/2017	SeqNo:	141659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Sample ID	AMB1UG-040717	SampType:	MBLK	TestCode:	0.25CT-TCE-	Units:	ppbV	Prep Date:		RunNo:	12118
Client ID:	ZZZZZ	Batch ID:	R12118	TestNo:	TO-15			Analysis Date:	4/7/2017	SeqNo:	141730

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040604.D Vial: 4
Acq On : 6 Apr 2017 10:47 am Operator: RJP
Sample : AMB1UG-040617 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:18:44 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

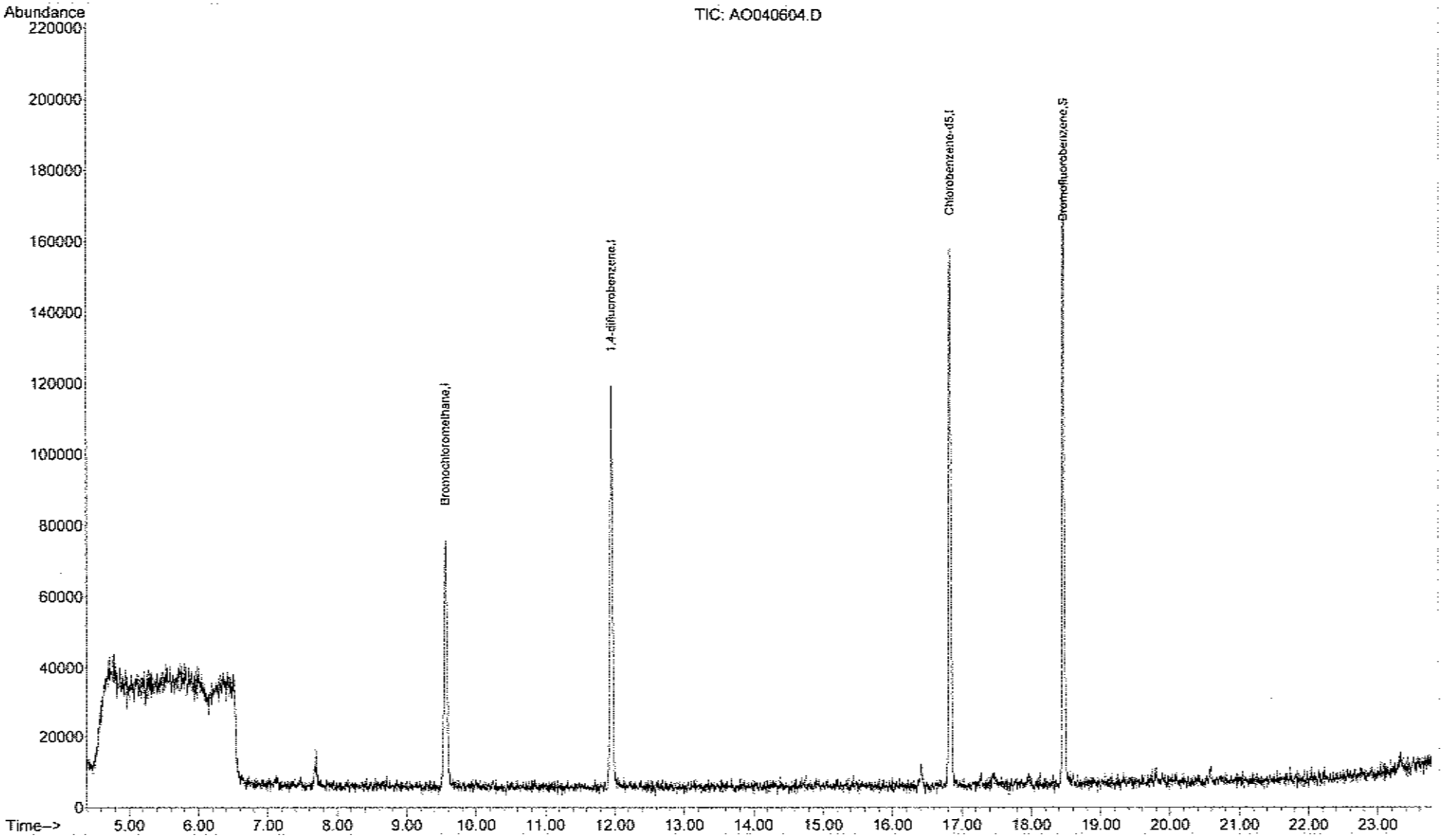
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	26038	1.00	ppb	0.02
35) 1,4-difluorobenzene	11.95	114	118374	1.00	ppb	0.01
50) Chlorobenzene-d5	16.83	117	102379	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	63192	0.90	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 90.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA\AO040604.D
Acq On : 6 Apr 2017 10:47 am
Sample : AMB1UG-040617
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 10 13:53 2017

Vial: 4
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040704.D
Acq On : 7 Apr 2017 12:36 pm
Sample : AMB1UG-040717
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 12 08:33:52 2017

Vial: 4
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.55	128	21100	1.00	ppb	0.01
35) 1,4-difluorobenzene	11.95	114	92197	1.00	ppb	0.01
50) Chlorobenzene-d5	16.82	117	83384	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.46	95	48987	0.86	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 86.00%			
Target Compounds						Qvalue

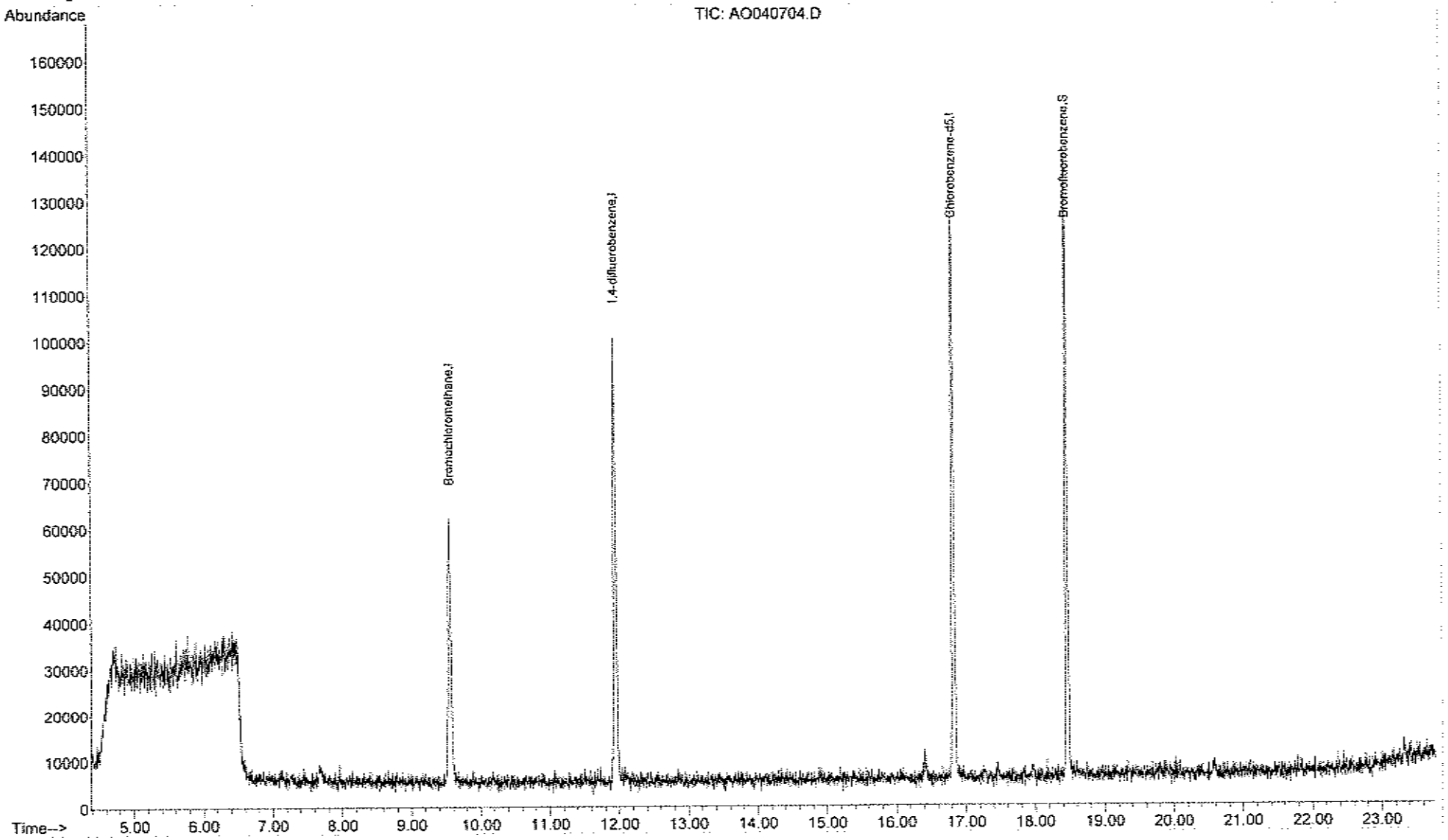
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040704.D
Acq On : 7 Apr 2017 12:36 pm
Sample : AMB1UG-040717
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 12 8:33 2017

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

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



CENTEK LABORATORIES, LLC

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID **C1704014-001A MS** SampType: **MS** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12114**
Client ID: **691-B19-IAQ-1** Batch ID: **R12114** TestNo: **TO-15** Analysis Date: **4/6/2017** SeqNo: **141726**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9100	0.15	1	0	91.0	70	130				
Chloroethane	1.040	0.15	1	0	104	70	130				
cis-1,2-Dichloroethene	1.230	0.15	1	0.33	90.0	70	130				
trans-1,2-Dichloroethene	0.9500	0.15	1	0	95.0	70	130				
Trichloroethene	1.390	0.040	1	0.4	99.0	70	130				
Vinyl chloride	1.030	0.040	1	0	103	70	130				

Sample ID **C1704014-001A MS** SampType: **MSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12114**
Client ID: **691-B19-IAQ-1** Batch ID: **R12114** TestNo: **TO-15** Analysis Date: **4/6/2017** SeqNo: **141727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.000	0.15	1	0	100	70	130	0.91	9.42	30	
Chloroethane	1.040	0.15	1	0	104	70	130	1.04	0	30	
cis-1,2-Dichloroethene	1.320	0.15	1	0.33	99.0	70	130	1.23	7.06	30	
trans-1,2-Dichloroethene	0.9700	0.15	1	0	97.0	70	130	0.95	2.08	30	
Trichloroethene	1.370	0.040	1	0.4	97.0	70	130	1.39	1.45	30	
Vinyl chloride	1.030	0.040	1	0	103	70	130	1.03	0	30	

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040622.D Vial: 22
Acq On : 6 Apr 2017 10:40 pm Operator: RJP
Sample : C1704014-001A MS Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:02 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

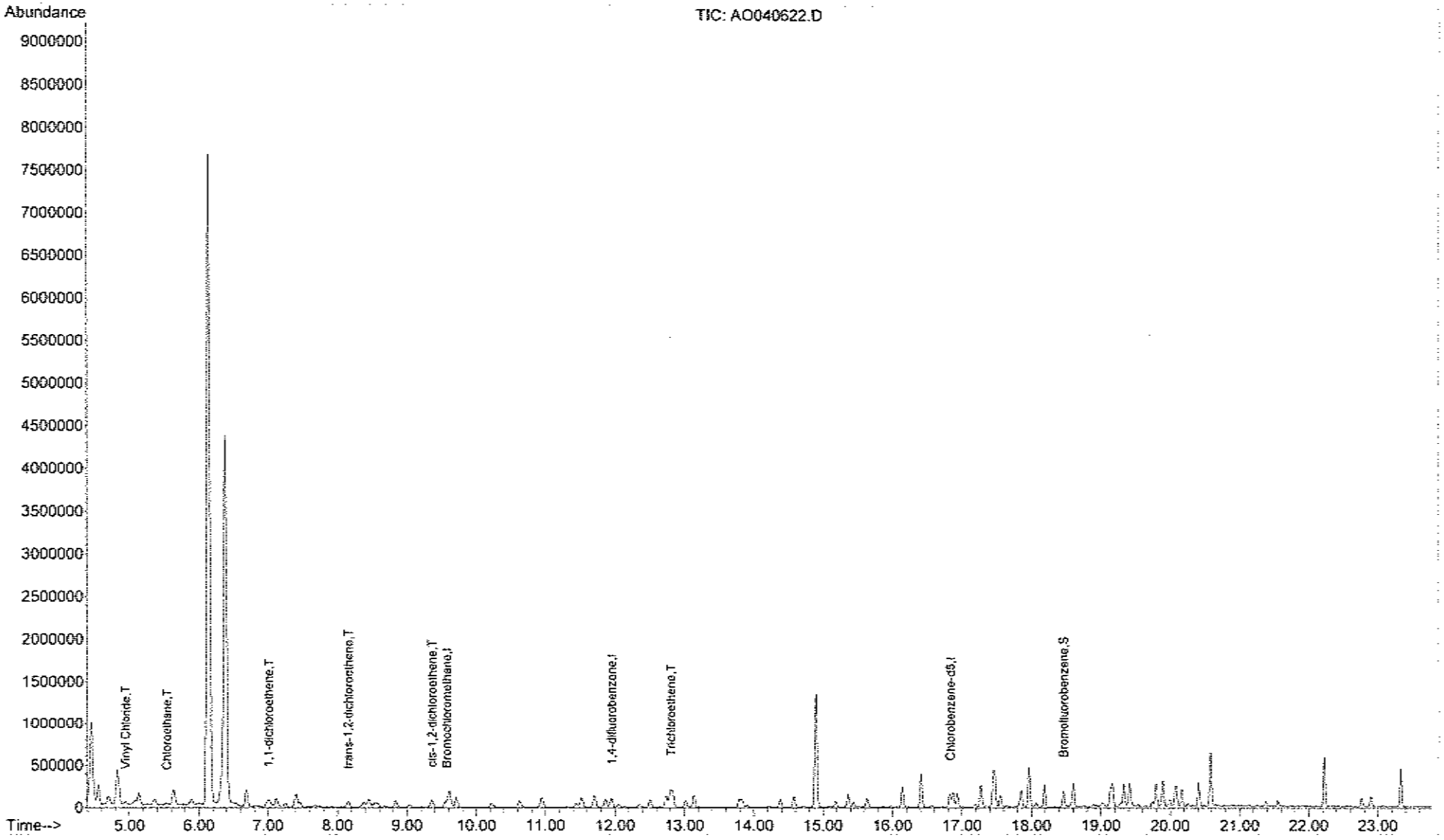
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.56	128	26903	1.00	ppb		0.02
35) 1,4-difluorobenzene	11.95	114	116940	1.00	ppb		0.01
50) Chlorobenzene-d5	16.83	117	105999	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.47	95	69782	0.97	ppb		0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
6) Vinyl Chloride	4.94	62	48685	1.03	ppb		88
10) Chloroethane	5.54	64	20446	1.04	ppb	#	73
18) 1,1-dichloroethene	6.99	96	31823	0.91	ppb	#	87
24) trans-1,2-dichloroethene	8.16	61	55866	0.95	ppb		93
29) cis-1,2-dichloroethene	9.36	61	68956	1.23	ppb		95
44) Trichloroethene	12.79	130	73147	1.39	ppb		91

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

Data File : C:\HPCHEM\1\DATA\AO040622.D
Acq On : 6 Apr 2017 10:40 pm
Sample : C1704014-001A MS
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:05 2017

Vial: 22
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040623.D Vial: 23
Acq On : 6 Apr 2017 11:26 pm Operator: RJP
Sample : C1704014-001A MSD Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:03 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

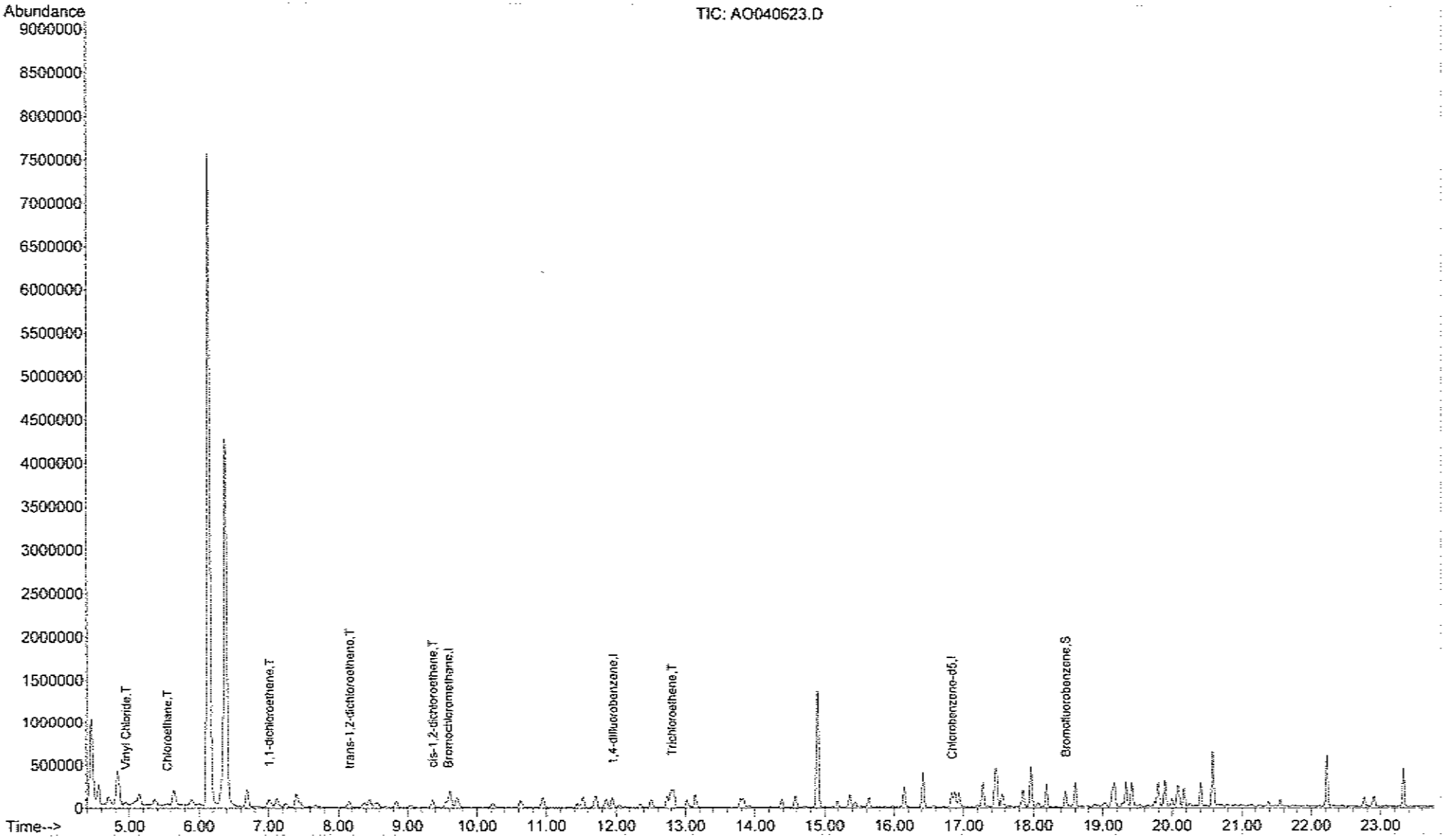
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.57	128	26299	1.00	ppb		0.03
35) 1,4-difluorobenzene	11.95	114	120898	1.00	ppb		0.01
50) Chlorobenzene-d5	16.83	117	106126	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	71496	0.99	ppb		0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 99.00%				
Target Compounds							Qvalue
6) Vinyl Chloride	4.94	62	47809	1.03	ppb		87
10) Chloroethane	5.54	64	20007	1.04	ppb	#	79
18) 1,1-dichloroethene	7.00	96	34130	1.00	ppb		94
24) trans-1,2-dichloroethene	8.16	61	55898	0.97	ppb		97
29) cis-1,2-dichloroethene	9.36	61	71906	1.32	ppb		95
44) Trichloroethene	12.79	130	74624	1.37	ppb		92

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

Data File : C:\HPCHEM\1\DATA\AO040623.D
Acq On : 6 Apr 2017 11:26 pm
Sample : C1704014-001A MSD
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 11 14:06 2017

Vial: 23
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



CENTEK LABORATORIES, LLC

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1704014
Project: 691 St Paul Street

TestCode: 0.25CT-TCE-VC

Sample ID **ALCS1UG-040617** SampType: **LCS** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12114**
Client ID: **ZZZZZ** Batch ID: **R12114** TestNo: **TO-15** Analysis Date: **4/6/2017** SeqNo: **141660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9700	0.15	1	0	97.0	70	130				
Chloroethane	1.090	0.15	1	0	109	70	130				
cis-1,2-Dichloroethene	0.9700	0.15	1	0	97.0	70	130				
trans-1,2-Dichloroethene	0.9500	0.15	1	0	95.0	70	130				
Trichloroethene	0.9700	0.040	1	0	97.0	70	130				
Vinyl chloride	0.9700	0.040	1	0	97.0	70	130				

Sample ID **ALCS1UG-040717** SampType: **LCS** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12118**
Client ID: **ZZZZZ** Batch ID: **R12118** TestNo: **TO-15** Analysis Date: **4/7/2017** SeqNo: **141731**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9900	0.15	1	0	99.0	70	130				
Chloroethane	1.180	0.15	1	0	118	70	130				
cis-1,2-Dichloroethene	1.000	0.15	1	0	100	70	130				
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130				
Trichloroethene	1.060	0.040	1	0	106	70	130				
Vinyl chloride	1.150	0.040	1	0	115	70	130				

Sample ID **ALCS1UGD-040617** SampType: **LCSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12114**
Client ID: **ZZZZZ** Batch ID: **R12114** TestNo: **TO-15** Analysis Date: **4/6/2017** SeqNo: **141661**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.9900	0.15	1	0	99.0	70	130	0.97	2.04	30	
Chloroethane	1.000	0.15	1	0	100	70	130	1.09	8.61	30	

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

Sample ID ALCS1UGD-040617	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12114
Client ID: ZZZZZ	Batch ID: R12114	TestNo: TO-15		Analysis Date: 4/6/2017	SeqNo: 141661

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	0.9600	0.15	1	0	96.0	70	130	0.97	1.04	30	
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130	0.95	3.11	30	
Trichloroethene	1.000	0.040	1	0	100	70	130	0.97	3.05	30	
Vinyl chloride	1.060	0.040	1	0	106	70	130	0.97	8.87	30	

Sample ID ALCS1UGD-040717	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12118
Client ID: ZZZZZ	Batch ID: R12118	TestNo: TO-15		Analysis Date: 4/8/2017	SeqNo: 141732

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.080	0.15	1	0	108	70	130	0.99	8.70	30	
Chloroethane	1.180	0.15	1	0	118	70	130	1.18	0	30	
cis-1,2-Dichloroethene	1.120	0.15	1	0	112	70	130	1	11.3	30	
trans-1,2-Dichloroethene	1.070	0.15	1	0	107	70	130	0.98	8.78	30	
Trichloroethene	1.100	0.040	1	0	110	70	130	1.06	3.70	30	
Vinyl chloride	1.240	0.040	1	0	124	70	130	1.15	7.53	30	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040603.D Vial: 3
Acq On : 6 Apr 2017 10:10 am Operator: RJP
Sample : ALCS1UG-040617 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:18:43 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.56	128	26450	1.00	ppb		0.02
35) 1,4-difluorobenzene	11.95	114	123600	1.00	ppb		0.02
50) Chlorobenzene-d5	16.83	117	109377	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	71003	0.95	ppb		0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 95.00%				
Target Compounds							Qvalue
2) Propylene	4.49	41	40888	1.08	ppb		97
3) Freon 12	4.56	85	251398	1.15	ppb		97
4) Chloromethane	4.72	50	35411m	1.15	ppb		
5) Freon 114	4.83	85	166226	0.98	ppb		85
6) Vinyl Chloride	4.95	62	45262	0.97	ppb		93
7) Butane	5.15	43	46850	0.99	ppb		88
8) 1,3-butadiene	5.10	39	33934m	1.10	ppb		
9) Bromomethane	5.37	94	68097	1.08	ppb		90
10) Chloroethane	5.55	64	21194	1.09	ppb		93
11) Ethanol	5.66	45	13609	0.89	ppb		83
12) Acrolein	6.01	56	13709	0.86	ppb		95
13) Vinyl Bromide	5.90	106	68500	1.09	ppb		94
14) Freon 11	6.33	101	216910	1.00	ppb		98
15) Acetone	6.15	58	18471	1.08	ppb	#	71
16) Pentane	6.70	42	32579	0.98	ppb	#	39
17) Isopropyl alcohol	6.39	45	59472	1.05	ppb	#	100
18) 1,1-dichloroethene	6.99	96	33335	0.97	ppb		93
19) Freon 113	7.41	101	81489	0.99	ppb		91
20) t-Butyl alcohol	7.03	59	81168	0.97	ppb		94
21) Methylene chloride	7.12	84	32341	0.96	ppb	#	80
22) Allyl chloride	7.24	41	39902	0.93	ppb		90
23) Carbon disulfide	7.47	76	106791	0.99	ppb		81
24) trans-1,2-dichloroethene	8.16	61	54775	0.95	ppb		95
25) methyl tert-butyl ether	8.46	73	103728	0.95	ppb		90
26) 1,1-dichloroethane	8.38	63	69940	0.98	ppb		93
27) Vinyl acetate	8.54	43	107835	1.17	ppb		94
28) Methyl Ethyl Ketone	8.84	72	16993	0.97	ppb		99
29) cis-1,2-dichloroethene	9.36	61	53336	0.97	ppb		93
30) Hexane	9.62	57	47571	0.94	ppb		88
31) Ethyl acetate	9.62	43	108734	0.97	ppb		96
32) Chloroform	9.71	83	98677	0.98	ppb		98
33) Tetrahydrofuran	10.23	42	34525	0.92	ppb		86
34) 1,2-dichloroethane	10.62	62	71589	0.96	ppb		98
36) 1,1,1-trichloroethane	10.95	97	108201	0.99	ppb		95
37) Cyclohexane	11.86	56	52233	0.95	ppb		98
38) Carbon tetrachloride	11.71	117	112797	0.98	ppb		99
39) Benzene	11.52	78	111117	0.98	ppb		92
40) Methyl methacrylate	13.02	41	48236	0.91	ppb		94
41) 1,4-dioxane	12.82	58	22028	0.94	ppb	#	57
42) 2,2,4-trimethylpentane	12.84	57	167978	0.98	ppb		90
43) Heptane	13.14	43	56488	0.95	ppb		95
44) Trichloroethene	12.79	130	53930	0.97	ppb		89
45) 1,2-dichloropropane	12.51	63	42172	1.01	ppb		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040603.D Vial: 3
Acq On : 6 Apr 2017 10:10 am Operator: RJP
Sample : ALCS1UG-040617 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:18:43 2017 Quant Results File: A331_1UG.RES

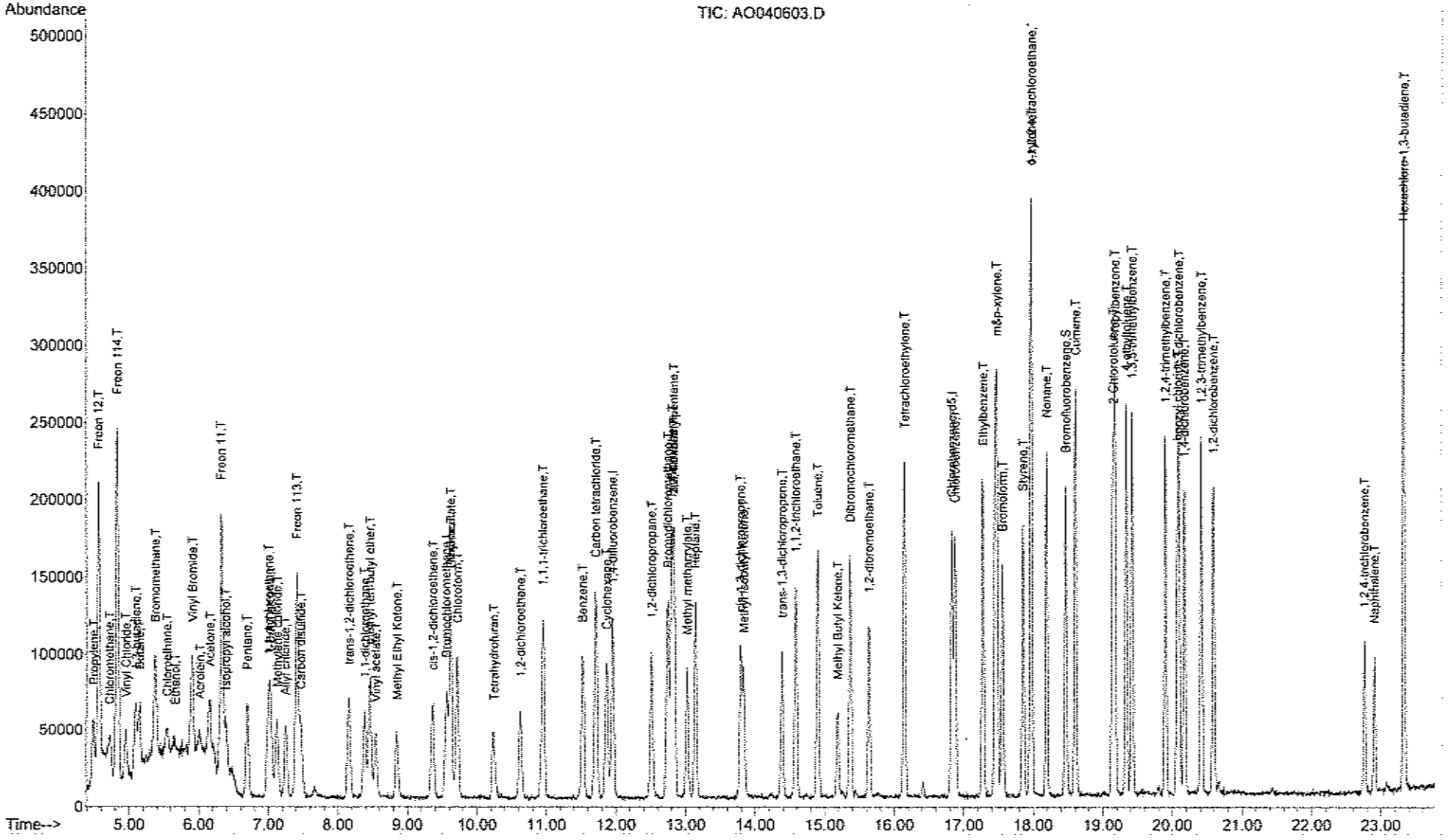
Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.74	83	108252	1.00	ppb		98
47)	cis-1,3-dichloropropene	13.79	75	69338	1.00	ppb		97
48)	trans-1,3-dichloropropene	14.38	75	64133	0.98	ppb		95
49)	1,1,2-trichloroethane	14.58	97	51263	1.02	ppb		100
51)	Toluene	14.90	92	78308	0.96	ppb	#	82
52)	Methyl Isobutyl Ketone	13.83	43	68416	0.80	ppb		95
53)	Dibromochloromethane	15.36	129	100792	1.01	ppb		93
54)	Methyl Butyl Ketone	15.19	43	53361m	0.70	ppb		
55)	1,2-dibromoethane	15.64	107	84703	1.02	ppb		98
56)	Tetrachloroethylene	16.15	164	55443	0.96	ppb		96
57)	Chlorobenzene	16.88	112	113693	1.00	ppb		98
58)	Ethylbenzene	17.27	91	183764	0.96	ppb		100
59)	m&p-xylene	17.47	91	314573	1.95	ppb		99
60)	Nonane	18.19	43	85662	0.96	ppb		94
61)	Styrene	17.85	104	95512	0.95	ppb		99
62)	Bromoform	17.56	173	82565	0.99	ppb		99
63)	o-xylene	17.97	91	148340	0.95	ppb		97
64)	Cumene	18.60	105	199558	0.99	ppb		99
66)	1,1,2,2-tetrachloroethane	17.96	83	112277	1.06	ppb		96
67)	Propylbenzene	19.17	120	53242	1.02	ppb	#	1
68)	2-Chlorotoluene	19.14	126	47557	0.99	ppb	#	1
69)	4-ethyltoluene	19.33	105	186873	0.99	ppb		100
70)	1,3,5-trimethylbenzene	19.42	105	161548	0.96	ppb		99
71)	1,2,4-trimethylbenzene	19.90	105	154106	0.98	ppb		95
72)	1,3-dichlorobenzene	20.09	146	106249	1.08	ppb		99
73)	benzyl chloride	20.07	91	97783	1.18	ppb		95
74)	1,4-dichlorobenzene	20.17	146	95059	1.04	ppb		98
75)	1,2,3-trimethylbenzene	20.41	105	151247	0.96	ppb		95
76)	1,2-dichlorobenzene	20.59	146	98338	1.04	ppb		97
77)	1,2,4-trichlorobenzene	22.76	180	31814	1.13	ppb		92
78)	Naphthalene	22.91	128	73959	1.02	ppb		94
79)	Hexachloro-1,3-butadiene	23.32	225	74843	1.06	ppb		95

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

Data File : C:\HPCHEM\1\DATA\AO040603.D Vial: 3
Acq On : 6 Apr 2017 10:10 am Operator: RJP
Sample : ALCS1UG-040617 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 10 13:53 2017 Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040703.D Vial: 3
Acq On : 7 Apr 2017 12:00 pm Operator: RJP
Sample : ALCS1UG-040717 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 12 08:33:43 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.55	128	22420	1.00	ppb		0.00
35) 1,4-difluorobenzene	11.95	114	98698	1.00	ppb		0.01
50) Chlorobenzene-d5	16.83	117	86489	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	57254	0.97	ppb		0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	4.48	41	33409	1.05	ppb		76
3) Freon 12	4.56	85	219946	1.19	ppb		99
4) Chloromethane	4.73	50	30609m	1.17	ppb		
5) Freon 114	4.82	85	179639m	1.25	ppb		
6) Vinyl Chloride	4.95	62	45445	1.15	ppb		94
7) Butane	5.15	43	44744	1.11	ppb	#	89
8) 1,3-butadiene	5.09	39	30908m	1.18	ppb		
9) Bromomethane	5.37	94	62521	1.17	ppb		89
10) Chloroethane	5.54	64	19371	1.18	ppb	#	83
11) Ethanol	5.65	45	14756	1.14	ppb		88
12) Acrolein	6.01	56	12973	0.96	ppb		92
13) Vinyl Bromide	5.89	106	63758	1.19	ppb		96
14) Freon 11	6.32	101	238213m	1.29	ppb		
15) Acetone	6.15	58	16292	1.13	ppb	#	64
16) Pentane	6.69	42	27585	0.98	ppb	#	38
17) Isopropyl alcohol	6.40	45	55115	1.15	ppb	#	100
18) 1,1-dichloroethene	6.99	96	28995	0.99	ppb		94
19) Freon 113	7.40	101	71887	1.03	ppb		90
20) t-Butyl alcohol	7.04	59	64341	0.91	ppb		92
21) Methylene chloride	7.12	84	28008	0.99	ppb	#	75
22) Allyl chloride	7.24	41	33731	0.93	ppb		91
23) Carbon disulfide	7.46	76	91473	1.01	ppb		84
24) trans-1,2-dichloroethene	8.15	61	47949	0.98	ppb		93
25) methyl tert-butyl ether	8.45	73	88153	0.95	ppb		87
26) 1,1-dichloroethane	8.37	63	62741	1.03	ppb		96
27) Vinyl acetate	8.54	43	92002	1.17	ppb		92
28) Methyl Ethyl Ketone	8.85	72	15128	1.01	ppb		98
29) cis-1,2-dichloroethene	9.36	61	46370	1.00	ppb		92
30) Hexane	9.60	57	40518	0.95	ppb		87
31) Ethyl acetate	9.62	43	94395	0.99	ppb		97
32) Chloroform	9.71	83	87650	1.03	ppb		96
33) Tetrahydrofuran	10.23	42	30292	0.95	ppb		84
34) 1,2-dichloroethane	10.62	62	59420	0.94	ppb		94
36) 1,1,1-trichloroethane	10.94	97	93614	1.08	ppb		98
37) Cyclohexane	11.86	56	45664	1.04	ppb		95
38) Carbon tetrachloride	11.70	117	97837	1.06	ppb		100
39) Benzene	11.52	78	98582	1.09	ppb		92
40) Methyl methacrylate	13.02	41	43154	1.01	ppb		95
41) 1,4-dioxane	12.81	58	17665	0.94	ppb	#	55
42) 2,2,4-trimethylpentane	12.83	57	144457	1.06	ppb		88
43) Heptane	13.14	43	48601	1.03	ppb		98
44) Trichloroethene	12.79	130	47004	1.06	ppb		91
45) 1,2-dichloropropane	12.50	63	36145	1.08	ppb		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040703.D Vial: 3
Acq On : 7 Apr 2017 12:00 pm Operator: RJP
Sample : ALCS1UG-040717 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 12 08:33:43 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

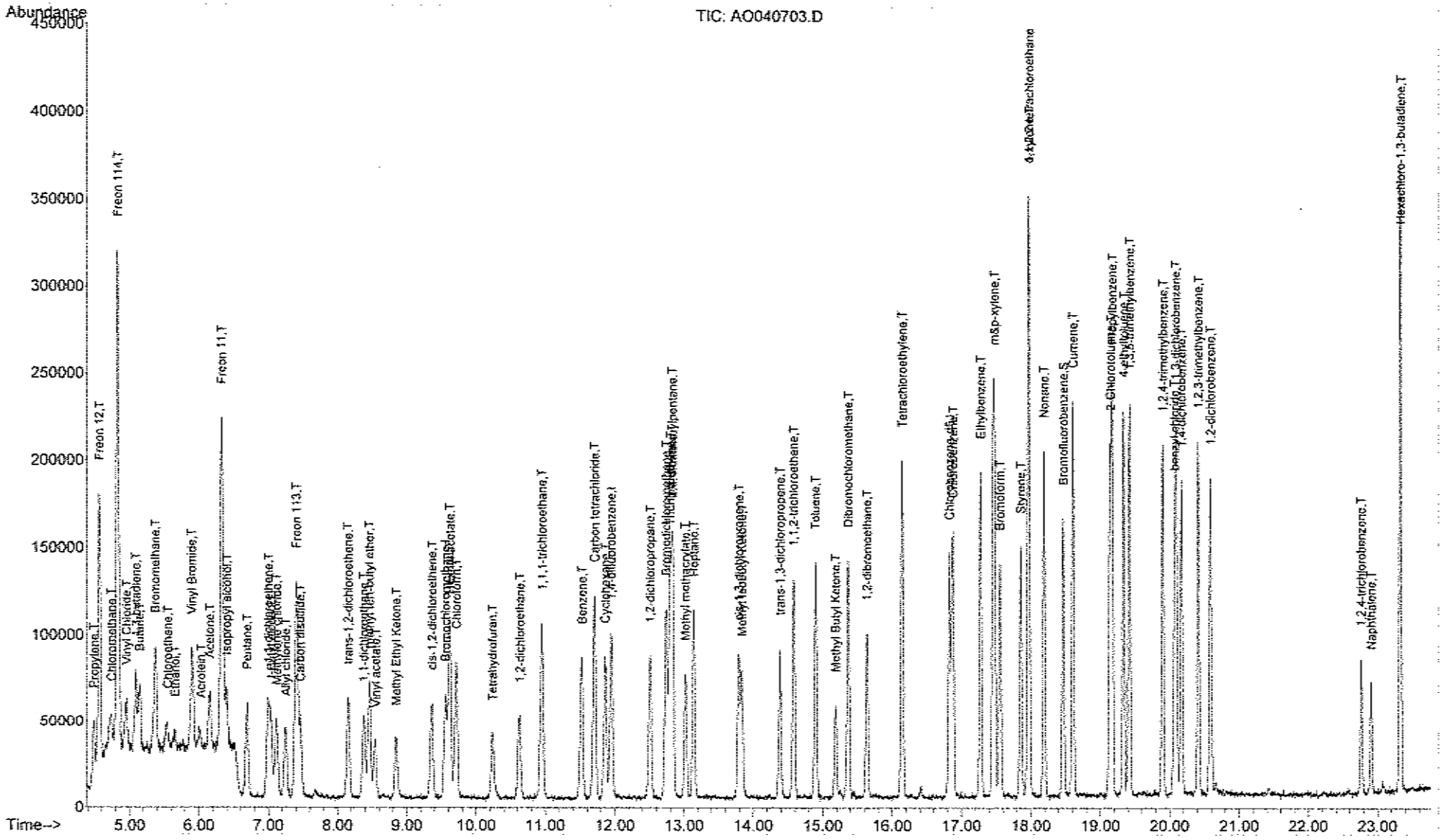
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.74	83	91783	1.06	ppb		96
47)	cis-1,3-dichloropropene	13.79	75	58172	1.06	ppb		95
48)	trans-1,3-dichloropropene	14.38	75	54481	1.04	ppb		90
49)	1,1,2-trichloroethane	14.58	97	46598	1.16	ppb		94
51)	Toluene	14.89	92	63954	0.99	ppb	#	78
52)	Methyl Isobutyl Ketone	13.83	43	60946	0.90	ppb		95
53)	Dibromochloromethane	15.36	129	84657	1.07	ppb		90
54)	Methyl Butyl Ketone	15.18	43	46099	0.76	ppb		93
55)	1,2-dibromoethane	15.63	107	72687	1.10	ppb		96
56)	Tetrachloroethylene	16.14	164	49756	1.09	ppb		99
57)	Chlorobenzene	16.87	112	96040	1.06	ppb		95
58)	Ethylbenzene	17.27	91	157903	1.04	ppb		100
59)	m&p-xylene	17.46	91	265326	2.08	ppb		100
60)	Nonane	18.18	43	76447	1.08	ppb		93
61)	Styrene	17.85	104	81583	1.03	ppb		95
62)	Bromoform	17.55	173	71209	1.08	ppb		99
63)	o-xylene	17.96	91	127835	1.04	ppb		96
64)	Cumene	18.60	105	168618	1.05	ppb		100
66)	1,1,2,2-tetrachloroethane	17.96	83	98561	1.17	ppb		96
67)	Propylbenzene	19.17	120	44751	1.09	ppb	#	1
68)	2-Chlorotoluene	19.14	126	40730	1.07	ppb	#	1
69)	4-ethyltoluene	19.33	105	163130	1.09	ppb		97
70)	1,3,5-trimethylbenzene	19.42	105	138712	1.04	ppb		96
71)	1,2,4-trimethylbenzene	19.90	105	126848	1.02	ppb		93
72)	1,3-dichlorobenzene	20.09	146	91327	1.17	ppb		99
73)	benzyl chloride	20.06	91	82451	1.26	ppb		94
74)	1,4-dichlorobenzene	20.17	146	83163	1.15	ppb		97
75)	1,2,3-trimethylbenzene	20.41	105	132486	1.06	ppb		95
76)	1,2-dichlorobenzene	20.59	146	88758	1.18	ppb		96
77)	1,2,4-trichlorobenzene	22.76	180	25921	1.17	ppb		95
78)	Naphthalene	22.91	128	56238	0.98	ppb		94
79)	Hexachloro-1,3-butadiene	23.32	225	68219	1.22	ppb		96

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

Data File : C:\HPCHEM\1\DATA\AO040703.D
Acq On : 7 Apr 2017 12:00 pm
Sample : ALCS1UG-040717
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 12 8:34 2017

Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040620.D Vial: 49
Acq On : 6 Apr 2017 9:15 pm Operator: RJP
Sample : ALCS1UGD-040617 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:00 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.56	128	24809	1.00	ppb		0.02
35) 1,4-difluorobenzene	11.95	114	117535	1.00	ppb		0.02
50) Chlorobenzene-d5	16.83	117	100863	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.47	95	67679	0.98	ppb		0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 98.00%				
Target Compounds							Qvalue
2) Propylene	4.50	41	35590	1.01	ppb		76
3) Freon 12	4.56	85	236111	1.16	ppb		97
4) Chloromethane	4.73	50	33866m	1.17	ppb		
5) Freon 114	4.83	85	190689	1.20	ppb		98
6) Vinyl Chloride	4.95	62	46545	1.06	ppb		92
7) Butane	5.15	43	47237	1.06	ppb		90
8) 1,3-butadiene	5.09	39	31406m	1.09	ppb		
9) Bromomethane	5.37	94	66887	1.14	ppb		88
10) Chloroethane	5.54	64	18161	1.00	ppb	#	73
11) Ethanol	5.65	45	14827	1.04	ppb		84
12) Acrolein	6.01	56	13354	0.89	ppb		98
13) Vinyl Bromide	5.91	106	67026	1.13	ppb		95
14) Freon 11	6.34	101	250288m	1.22	ppb		
15) Acetone	6.16	58	18291	1.14	ppb	#	69
16) Pentane	6.69	42	30218	0.97	ppb	#	44
17) Isopropyl alcohol	6.39	45	57181	1.08	ppb	#	100
18) 1,1-dichloroethene	7.00	96	32066	0.99	ppb		93
19) Freon 113	7.41	101	77004	1.00	ppb		93
20) t-Butyl alcohol	7.04	59	68096	0.87	ppb		96
21) Methylene chloride	7.13	84	31329	1.00	ppb	#	80
22) Allyl chloride	7.25	41	37083	0.93	ppb		90
23) Carbon disulfide	7.47	76	100769	1.00	ppb		83
24) trans-1,2-dichloroethene	8.15	61	53306	0.98	ppb		93
25) methyl tert-butyl ether	8.47	73	94567	0.92	ppb		91
26) 1,1-dichloroethane	8.39	63	68087	1.01	ppb		98
27) Vinyl acetate	8.55	43	100265	1.16	ppb		93
28) Methyl Ethyl Ketone	8.85	72	16009	0.97	ppb		96
29) cis-1,2-dichloroethene	9.36	61	49482	0.96	ppb		95
30) Hexane	9.62	57	43032	0.91	ppb		87
31) Ethyl acetate	9.62	43	99523	0.94	ppb		97
32) Chloroform	9.71	83	94443	1.00	ppb		99
33) Tetrahydrofuran	10.24	42	34468	0.98	ppb		95
34) 1,2-dichloroethane	10.62	62	68052	0.98	ppb		95
36) 1,1,1-trichloroethane	10.95	97	103974	1.00	ppb		96
37) Cyclohexane	11.86	56	49591	0.95	ppb		98
38) Carbon tetrachloride	11.71	117	105869	0.97	ppb		99
39) Benzene	11.52	78	105761	0.98	ppb		91
40) Methyl methacrylate	13.02	41	45439	0.90	ppb		97
41) 1,4-dioxane	12.83	58	18999	0.85	ppb	#	55
42) 2,2,4-trimethylpentane	12.84	57	163528	1.01	ppb		89
43) Heptane	13.14	43	52158	0.92	ppb		95
44) Trichloroethene	12.80	130	52813	1.00	ppb		94
45) 1,2-dichloropropane	12.51	63	40874	1.03	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040620.D
Acq On : 6 Apr 2017 9:15 pm
Sample : ALCS1UGD-040617
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 07 07:19:00 2017

Vial: 49
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.74	83	102280	1.00	ppb		98
47)	cis-1,3-dichloropropene	13.79	75	64051	0.98	ppb		98
48)	trans-1,3-dichloropropene	14.38	75	60406	0.97	ppb		94
49)	1,1,2-trichloroethane	14.58	97	48605	1.02	ppb		100
51)	Toluene	14.90	92	74483	0.99	ppb		85
52)	Methyl Isobutyl Ketone	13.84	43	56491m	0.72	ppb		
53)	Dibromochloromethane	15.37	129	94470	1.02	ppb		92
54)	Methyl Butyl Ketone	15.19	43	39316m	0.56	ppb		
55)	1,2-dibromoethane	15.64	107	78477	1.02	ppb		95
56)	Tetrachloroethylene	16.15	164	54001	1.01	ppb		98
57)	Chlorobenzene	16.87	112	107457	1.02	ppb		94
58)	Ethylbenzene	17.27	91	170983	0.97	ppb		100
59)	m&p-xylene	17.47	91	296006	1.99	ppb		99
60)	Nonane	18.19	43	81677	0.99	ppb		91
61)	Styrene	17.86	104	89618	0.97	ppb		96
62)	Bromoform	17.56	173	75354	0.98	ppb		97
63)	o-xylene	17.97	91	140353	0.98	ppb		94
64)	Cumene	18.60	105	181432	0.97	ppb		99
66)	1,1,2,2-tetrachloroethane	17.96	83	101557	1.04	ppb		94
67)	Propylbenzene	19.17	120	46499	0.97	ppb	#	1
68)	2-Chlorotoluene	19.14	126	43318	0.98	ppb	#	1
69)	4-ethyltoluene	19.34	105	172594	0.99	ppb		100
70)	1,3,5-trimethylbenzene	19.42	105	150070	0.97	ppb		100
71)	1,2,4-trimethylbenzene	19.90	105	139431	0.96	ppb		94
72)	1,3-dichlorobenzene	20.09	146	96756	1.06	ppb		96
73)	benzyl chloride	20.07	91	78332	1.03	ppb		95
74)	1,4-dichlorobenzene	20.17	146	86547	1.03	ppb		96
75)	1,2,3-trimethylbenzene	20.41	105	138686	0.95	ppb		94
76)	1,2-dichlorobenzene	20.59	146	91284	1.04	ppb		98
77)	1,2,4-trichlorobenzene	22.77	180	26664	1.03	ppb		98
78)	Naphthalene	22.91	128	58584	0.88	ppb		94
79)	Hexachloro-1,3-butadiene	23.33	225	68422	1.05	ppb		94

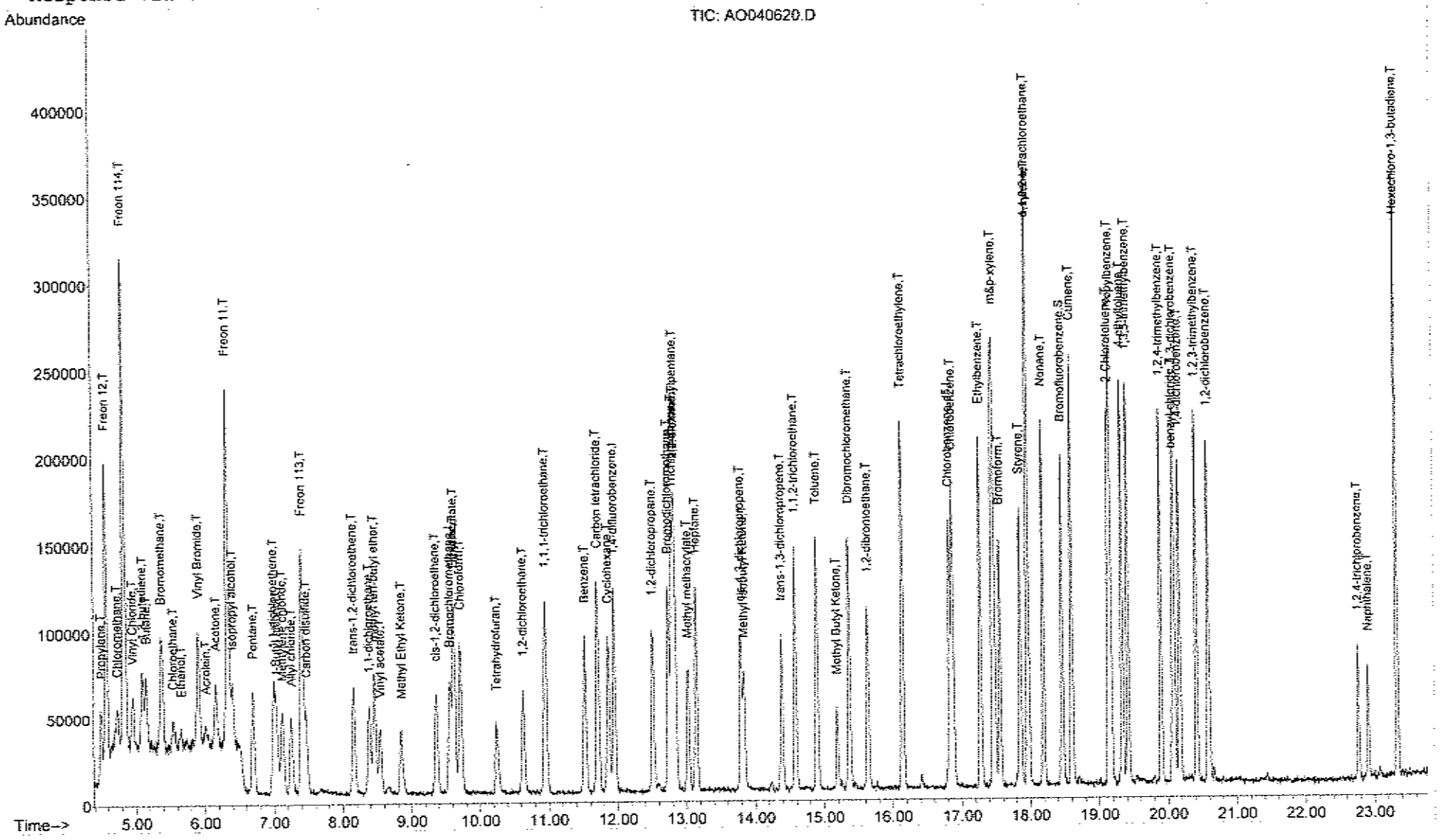
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040620.D
Acq On : 6 Apr 2017 9:15 pm
Sample : ALCS1UGD-040617
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 10 13:55 2017

Vial: 49
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040725.D
Acq On : 8 Apr 2017 2:53 am
Sample : ALCS1UGD-040717
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 08 09:00:00 2017

Vial: 25
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.56	128	19313	1.00	ppb		0.02
35) 1,4-difluorobenzene	11.95	114	89890	1.00	ppb		0.01
50) Chlorobenzene-d5	16.83	117	78098	1.00	ppb		0.01
System Monitoring Compounds							
65) Bromofluorobenzene	18.46	95	51653	0.97	ppb		0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	4.48	41	31618	1.15	ppb		72
3) Freon 12	4.56	85	204448m	1.29	ppb		
4) Chloromethane	4.72	50	27304m	1.22	ppb		
5) Freon 114	4.82	85	166285m	1.34	ppb		
6) Vinyl Chloride	4.95	62	42200	1.24	ppb		88
7) Butane	5.14	43	45335	1.31	ppb		93
8) 1,3-butadiene	5.08	39	27014m	1.20	ppb		
9) Bromomethane	5.37	94	57912m	1.26	ppb		
10) Chloroethane	5.54	64	16720m	1.18	ppb		
11) Ethanol	5.65	45	14338	1.29	ppb		84
12) Acrolein	6.02	56	12507	1.07	ppb		96
13) Vinyl Bromide	5.90	106	58047m	1.26	ppb		
14) Freon 11	6.32	101	252102	1.58	ppb		99
15) Acetone	6.15	58	12985m	1.04	ppb		
16) Pentane	6.69	42	26726	1.10	ppb	#	43
17) Isopropyl alcohol	6.39	45	51366	1.24	ppb	#	100
18) 1,1-dichloroethene	7.00	96	27027	1.08	ppb		91
19) Freon 113	7.40	101	68890	1.15	ppb		89
20) t-Butyl alcohol	7.03	59	53096	0.87	ppb	#	92
21) Methylene chloride	7.12	84	26922	1.10	ppb	#	78
22) Allyl chloride	7.25	41	32876	1.05	ppb		91
23) Carbon disulfide	7.46	76	86481	1.10	ppb		84
24) trans-1,2-dichloroethene	8.15	61	45121	1.07	ppb		96
25) methyl tert-butyl ether	8.46	73	81727	1.02	ppb		96
26) 1,1-dichloroethane	8.38	63	59764	1.14	ppb		94
27) Vinyl acetate	8.54	43	84681	1.25	ppb		92
28) Methyl Ethyl Ketone	8.84	72	12658	0.99	ppb		99
29) cis-1,2-dichloroethene	9.36	61	45009	1.12	ppb		94
30) Hexane	9.61	57	38800	1.05	ppb		89
31) Ethyl acetate	9.62	43	86633	1.05	ppb		95
32) Chloroform	9.71	83	83163	1.14	ppb		96
33) Tetrahydrofuran	10.23	42	27309	1.00	ppb		87
34) 1,2-dichloroethane	10.62	62	59562	1.10	ppb		96
36) 1,1,1-trichloroethane	10.95	97	86730	1.10	ppb		99
37) Cyclohexane	11.86	56	42448	1.06	ppb		99
38) Carbon tetrachloride	11.71	117	92728	1.11	ppb		100
39) Benzene	11.52	78	90008	1.09	ppb		92
40) Methyl methacrylate	13.02	41	35136	0.91	ppb		90
41) 1,4-dioxane	12.83	58	14989m	0.88	ppb		
42) 2,2,4-trimethylpentane	12.83	57	134803	1.08	ppb		88
43) Heptane	13.14	43	45450	1.05	ppb		95
44) Trichloroethene	12.79	130	44637	1.10	ppb		92
45) 1,2-dichloropropane	12.51	63	34787	1.14	ppb		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO040725.D Vial: 25
Acq On : 8 Apr 2017 2:53 am Operator: RJP
Sample : ALCS1UGD-040717 Inst : MSD #1
Misc : A331_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 08 09:00:00 2017 Quant Results File: A331_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Apr 03 10:15:59 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.73	83	86612	1.10	ppb		95
47)	cis-1,3-dichloropropene	13.79	75	56238	1.12	ppb		98
48)	trans-1,3-dichloropropene	14.38	75	52555	1.10	ppb		97
49)	1,1,2-trichloroethane	14.58	97	42686	1.17	ppb		98
51)	Toluene	14.90	92	62097	1.06	ppb	#	81
52)	Methyl Isobutyl Ketone	13.83	43	44573	0.73	ppb		92
53)	Dibromochloromethane	15.37	129	80598	1.13	ppb		88
54)	Methyl Butyl Ketone	15.19	43	38670m	0.71	ppb		
55)	1,2-dibromoethane	15.64	107	68997	1.16	ppb		95
56)	Tetrachloroethylene	16.14	164	45478	1.10	ppb		95
57)	Chlorobenzene	16.88	112	93752	1.15	ppb		97
58)	Ethylbenzene	17.27	91	149543	1.09	ppb		98
59)	m&p-xylene	17.46	91	261402	2.27	ppb		99
60)	Nonane	18.19	43	70846	1.11	ppb		93
61)	Styrene	17.86	104	79302	1.10	ppb		91
62)	Bromoform	17.55	173	64959	1.09	ppb		97
63)	o-xylene	17.97	91	123539	1.11	ppb		96
64)	Cumene	18.60	105	158840	1.10	ppb		100
66)	1,1,2,2-tetrachloroethane	17.96	83	91941	1.21	ppb		94
67)	Propylbenzene	19.17	120	41612	1.12	ppb	#	1
68)	2-Chlorotoluene	19.14	126	39508	1.15	ppb	#	1
69)	4-ethyltoluene	19.34	105	146026	1.08	ppb		99
70)	1,3,5-trimethylbenzene	19.42	105	131377	1.09	ppb		99
71)	1,2,4-trimethylbenzene	19.90	105	118807	1.06	ppb		96
72)	1,3-dichlorobenzene	20.09	146	82665	1.17	ppb		99
73)	benzyl chloride	20.07	91	58401	0.99	ppb		90
74)	1,4-dichlorobenzene	20.17	146	75820	1.16	ppb		93
75)	1,2,3-trimethylbenzene	20.41	105	116294	1.03	ppb		95
76)	1,2-dichlorobenzene	20.59	146	81959	1.21	ppb		96
77)	1,2,4-trichlorobenzene	22.76	180	21679	1.08	ppb		92
78)	Naphthalene	22.91	128	42909	0.83	ppb		94
79)	Hexachloro-1,3-butadiene	23.33	225	54811	1.09	ppb		99

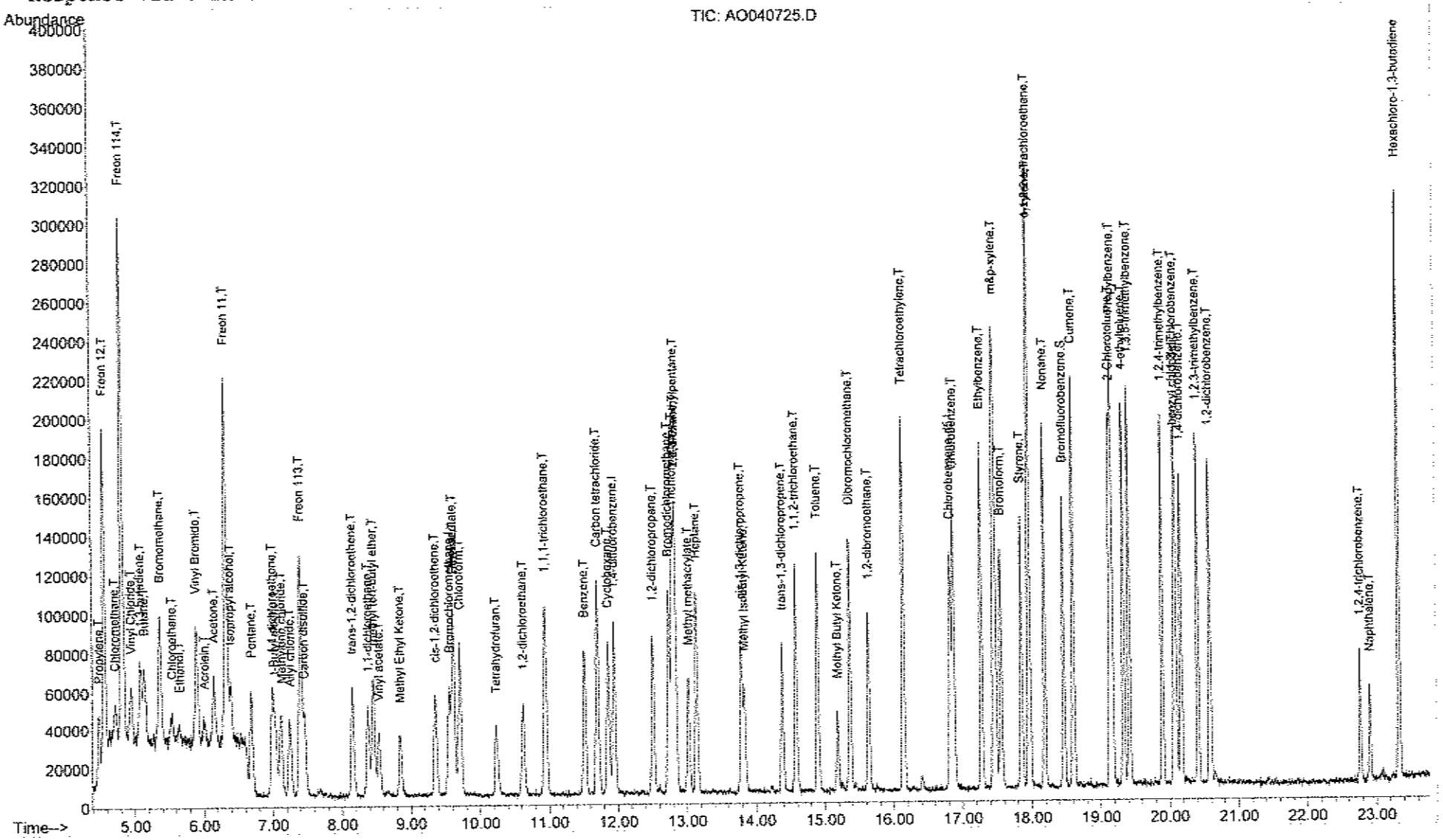
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\HPCHEM\1\DATA\AO040725.D
Acq On : 8 Apr 2017 2:53 am
Sample : ALCS1UGD-040717
Misc : A331_1UG
MS Integration Params: RTEINT.P
Quant Time: Apr 12 8:36 2017

Vial: 25
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A331_1UG.RES

Method : C:\HPCHEM\1\METHODS\A331_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 11:27:28 2017
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INJECTION LOG

Injection Log

Directory: C:\HPChem\1\DATA2

Instrument # 1
Internal Standard Stock # A1937
Standard Stock # 1938
LCS Stock # 1939
Method Ref: EPA TO-15 / Injected99

ıe	Vial	FileName	Multiplier	SampleName	Misc Info		Injected
1	4	Ao032904.d	1.	ALCS1UG-032917	A312_1UG		29 Mar 2017 11:59
2	5	Ao032905.d	1.	AMB1UG-032917	A312_1UG		29 Mar 2017 12:35
3	6	Ao032906.d	1.	C1703058-002A	A312_1UG		29 Mar 2017 13:15
4	7	Ao032907.d	1.	C1703058-004A	A312_1UG		29 Mar 2017 13:55
5	8	Ao032908.d	1.	C1703058-005A	A312_1UG		29 Mar 2017 14:35
6	9	Ao032909.d	1.	C1703058-002A 20X	A312_1UG		29 Mar 2017 15:19
7	10	Ao032910.d	1.	C1703058-004A 20X	A312_1UG		29 Mar 2017 15:56
8	11	Ao032911.d	1.	C1703058	A312_1UG		29 Mar 2017 16:33
9	12	Ao032912.d	1.	C1703078-001A 4X	A312_1UG		29 Mar 2017 17:11
0	13	Ao032913.d	1.	C1703078-002A 4X	A312_1UG		29 Mar 2017 17:49
1	14	Ao032914.d	1.	C1703078-003A 4X	A312_1UG		29 Mar 2017 18:27
2	15	Ao032915.d	1.	C1703079-001A 4X	A312_1UG		29 Mar 2017 19:04
3	16	Ao032916.d	1.	C1703079-002A 4X	A312_1UG		29 Mar 2017 19:42
4	17	Ao032917.d	1.	C1703079-003A 4X	A312_1UG		29 Mar 2017 20:20
5	18	Ao032918.d	1.	C1703080-001A 4X	A312_1UG		29 Mar 2017 20:57
6	19	Ao032919.d	1.	C1703080-002A 4X	A312_1UG		29 Mar 2017 21:35
7	20	Ao032920.d	1.	C1703080-003A 4X	A312_1UG		29 Mar 2017 22:13
8	21	Ao032921.d	1.	C1703058	A312_1UG		29 Mar 2017 22:50
9	21	Ao032922.d	1.	ALCS1UGD-032917	A312_1UG		29 Mar 2017 23:29
0	30	Ao032923.d	1.	C1703058-005A 5X	A312_1UG		30 Mar 2017 09:49
1	31	Ao032924.d	1.		A312_1UG		30 Mar 2017 15:15
2	32	Ao032925.d	1.		A312_1UG		30 Mar 2017 15:55
3	1	Ao033101.d	1.	BFB1UG	A331_1UG		31 Mar 2017 13:54
4	1	Ao033102.d	1.	A1UG	A331_1UG		31 Mar 2017 14:52
5	2	Ao033103.d	1.	A1UG_2.0	A331_1UG		31 Mar 2017 15:35
6	3	Ao033104.d	1.	A1UG_1.5	A331_1UG		31 Mar 2017 16:16
7	4	Ao033105.d	1.	A1UG_1.25	A331_1UG		31 Mar 2017 16:57
8	5	Ao033106.d	1.	A1UG_1.0	A331_1UG		31 Mar 2017 17:36
9	6	Ao033107.d	1.	A1UG_0.75	A331_1UG		31 Mar 2017 18:15
0	7	Ao033108.d	1.	A1UG_0.50	A331_1UG		31 Mar 2017 18:53
1	8	Ao033109.d	1.	A1UG_0.30	A331_1UG		31 Mar 2017 19:30
2	9	Ao033110.d	1.	A1UG_0.15	A331_1UG		31 Mar 2017 20:07
3	10	Ao033111.d	1.	A1UG_0.10	A331_1UG		31 Mar 2017 20:44
4	11	Ao033112.d	1.	A1UG_0.04	A331_1UG		31 Mar 2017 21:20
5	1	Ao033113.d	1.	IDL1UG	A331_1UG	0.50PPB	31 Mar 2017 22:32
6	2	Ao033114.d	1.	IDL1UG	A331_1UG	0.50PPB	31 Mar 2017 23:10
7	3	Ao033115.d	1.	IDL1UG	A331_1UG	0.50PPB	31 Mar 2017 23:48
8	4	Ao033116.d	1.	IDL1UG	A331_1UG	0.50PPB	1 Apr 2017 00:26
9	5	Ao033117.d	1.	IDL1UG	A331_1UG	0.50PPB	1 Apr 2017 01:04
0	6	Ao033118.d	1.	IDL1UG	A331_1UG	0.50PPB	1 Apr 2017 01:42
1	7	Ao033119.d	1.	IDL1UG	A331_1UG	0.50PPB	1 Apr 2017 02:20
2	8	Ao033120.d	1.	IDL1UG	A331_1UG	0.50PPB	1 Apr 2017 02:58
3	1	Ao033121.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 03:35
4	2	Ao033122.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 04:11
5	3	Ao033123.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 04:48
6	4	Ao033124.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 05:25
7	5	Ao033125.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 06:01
8	6	Ao033126.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 06:38
9	7	Ao033127.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 07:14
0	8	Ao033128.d	1.	IDL1UG	A331_1UG	0.10PPB	1 Apr 2017 07:51
	1	Ao033129.d	1.	IDL1UG	A331_1UG	0.30PPB	1 Apr 2017 08:28
2	2	Ao033130.d	1.	IDL1UG	A331_1UG	0.30PPB	1 Apr 2017 09:06
3	3	Ao033131.d	1.	IDL1UG	A331_1UG	0.30PPB	1 Apr 2017 09:43
4	4	Ao033132.d	1.	IDL1UG	A331_1UG	0.30PPB	1 Apr 2017 10:20
5	5	Ao033133.d	1.	IDL1UG	A331_1UG	0.30PPB	1 Apr 2017 10:58

Injection Log

Directory: C:\HPCHEM\1\DATA2

Instrument # 1
Internal Standard Stock # A1949
Standard Stock # A1950
LCS Stock # A1951
Method Ref: EPA TO-15 / Injected

ne	Vial	FileName	Multiplier	SampleName	MiscInfo	Injected
5	22	Ao040422.d	1.	ALCS1UGD-040417	A331_1UG	5 Apr 2017 00:07
7	23	Ao040423.d	1.	C1704004-005A 10X	A331_1UG	5 Apr 2017 00:46
8	24	Ao040424.d	1.	C1704004-001A 10X	A331_1UG	5 Apr 2017 01:26
9	25	Ao040425.d	1.	C1704004-001A 40X	A331_1UG	5 Apr 2017 02:05
0		Ao040426.d	1.	No MS or GC data present		
1	1	Ao040501.d	1.	BFB1UG	A331_1UG	5 Apr 2017 09:11
2	2	Ao040502.d	1.	A1UG_1.0	A331_1UG	5 Apr 2017 10:02
3	3	Ao040503.d	1.	ALCS1UG-040517	A331_1UG	5 Apr 2017 10:42
4	4	Ao040504.d	1.	AMB1UG-040517	A331_1UG	5 Apr 2017 11:18
5	5	Ao040505.d	1.	C1704004-002A 10X	A331_1UG	5 Apr 2017 11:58
6	6	Ao040506.d	1.	C1704004-002A 40X	A331_1UG	5 Apr 2017 12:34
7	7	Ao040507.d	1.	C1704005-001A	A331_1UG	5 Apr 2017 13:14
8	8	Ao040508.d	1.	C1704005-001A 20X	A331_1UG	5 Apr 2017 14:14
9	9	Ao040509.d	1.	WAC040517A	A331_1UG	5 Apr 2017 14:52
0	10	Ao040510.d	1.	WAC040517B N	A331_1UG	5 Apr 2017 15:45
	11	Ao040511.d	1.	WAC040517C N	A331_1UG	5 Apr 2017 16:27
2	12	Ao040512.d	1.	WAC040517D	A331_1UG	5 Apr 2017 17:04
3	13	Ao040513.d	1.	WAC040517E	A331_1UG	5 Apr 2017 17:42
4	14	Ao040514.d	1.	WAC040517F	A331_1UG	5 Apr 2017 18:20
5	15	Ao040515.d	1.	WAC040517G	A331_1UG	5 Apr 2017 18:57
1	1	Ao040516.d	1.	C1704006-002A	A331_1UG	5 Apr 2017 19:37
2	2	Ao040517.d	1.	C1704006-003A	A331_1UG	5 Apr 2017 20:17
3	3	Ao040518.d	1.	C1704007-002A	A331_1UG	5 Apr 2017 20:57
4	4	Ao040519.d	1.	C1704007-004A	A331_1UG	5 Apr 2017 21:37
5	5	Ao040520.d	1.	C1704007-005A	A331_1UG	5 Apr 2017 22:17
	6	Ao040521.d	1.	C1704008-002A	A331_1UG	5 Apr 2017 22:58
	7	Ao040522.d	1.	C1704008-004A	A331_1UG	5 Apr 2017 23:39
	8	Ao040523.d	1.	C1704008-005A	A331_1UG	6 Apr 2017 00:19
	9	Ao040524.d	1.	C1704006-001A	A331_1UG	6 Apr 2017 01:00
	10	Ao040525.d	1.	C1704007-001A	A331_1UG	6 Apr 2017 01:40
	11	Ao040526.d	1.	C1704007-003A	A331_1UG	6 Apr 2017 02:20
	12	Ao040527.d	1.	C1704008-001A	A331_1UG	6 Apr 2017 03:00
	13	Ao040528.d	1.	C1704008-003A	A331_1UG	6 Apr 2017 03:42
	14	Ao040529.d	1.	ALCS1UGD-040517	A331_1UG	6 Apr 2017 04:21
	15	Ao040530.d	1.	C1704006-002A 10X	A331_1UG	6 Apr 2017 04:58
	16	Ao040531.d	1.	C1704006-003A 10X	A331_1UG	6 Apr 2017 05:35
	17	Ao040532.d	1.	C1704007-002A 10X	A331_1UG	6 Apr 2017 06:12
	18	Ao040533.d	1.	C1704007-004A 10X	A331_1UG	6 Apr 2017 06:49
	19	Ao040534.d	1.	C1704007-005A 10X	A331_1UG	6 Apr 2017 07:25
		Ao040535.d	1.	No MS or GC data present		
	1	Ao040601.d	1.	BFB1UG	A331_1UG	6 Apr 2017 08:51
	2	Ao040602.d	1.	A1UG_1.0	A331_1UG	6 Apr 2017 09:31
	3	Ao040603.d	1.	ALCS1UG-040617	A331_1UG	6 Apr 2017 10:10
	4	Ao040604.d	1.	AMB1UG-040617	A331_1UG	6 Apr 2017 10:47
0	5	Ao040605.d	1.	C1704008-002A 10X	A331_1UG	6 Apr 2017 11:24
1	6	Ao040606.d	1.	C1704008-004A 10X	A331_1UG	6 Apr 2017 12:01
2	7	Ao040607.d	1.	C1704008-005A 10X	A331_1UG	6 Apr 2017 12:38
3	8	Ao040608.d	1.	C1704006-001A 10X	A331_1UG	6 Apr 2017 13:15
4	9	Ao040609.d	1.	C1704007-001A 10X	A331_1UG	6 Apr 2017 13:59
5	10	Ao040610.d	1.	C1704007-003A 10X	A331_1UG	6 Apr 2017 14:36
6	11	Ao040611.d	1.	C1704008-001A 10X	A331_1UG	6 Apr 2017 15:13
7	12	Ao040612.d	1.	C1704008-003A 10X	A331_1UG	6 Apr 2017 15:50
8	42	Ao040613.d	1.	C1704013-001A	A331_1UG	6 Apr 2017 16:32
9	43	Ao040614.d	1.	C1704013-002A	A331_1UG	6 Apr 2017 17:12
0	44	Ao040615.d	1.	C1704013-003A	A331_1UG	6 Apr 2017 17:54

Injection Log

Directory: C:\HPCHEM\1\DATA2

Instrument # 1
Internal Standard Stock # A1949
Standard Stock # A1550
LCS Stock # A1551
Method Ref: EPA TO-15 / Jan. 1999

ne	Vial	FileName	Multiplier	SampleName	Misc Info		Injected
1	45	Ao040616.d	1.	C1704013-004A	A331_1UG		6 Apr 2017 18:33
2	46	Ao040617.d	1.	C1704013-005A	A331_1UG		6 Apr 2017 19:14
3	47	Ao040618.d	1.	C1704013-007A	A331_1UG		6 Apr 2017 19:55
4	48	Ao040619.d	1.	C1704013-008A	A331_1UG		6 Apr 2017 20:35
5	49	Ao040620.d	1.	ALCS1UGD-040617	A331_1UG		6 Apr 2017 21:15
6	21	Ao040621.d	1.	C1704014-001A	A331_1UG		6 Apr 2017 21:55
7	22	Ao040622.d	1.	C1704014-001A MS	A331_1UG		6 Apr 2017 22:40
8	23	Ao040623.d	1.	C1704014-001A MSD	A331_1UG		6 Apr 2017 23:26
9	22	Ao040624.d	1.	C1704014-002A	A331_1UG		7 Apr 2017 00:09
0	23	Ao040625.d	1.	C1704014-004A	A331_1UG		7 Apr 2017 00:50
1	24	Ao040626.d	1.	C1704014-006A	A331_1UG		7 Apr 2017 01:31
2	25	Ao040627.d	1.	C1704014-007A	A331_1UG		7 Apr 2017 02:12
3	26	Ao040628.d	1.	C1704014-008A	A331_1UG		7 Apr 2017 02:52
4	27	Ao040629.d	1.	C1704014-010A	A331_1UG		7 Apr 2017 03:33
5	28	Ao040630.d	1.	C1704014-012A	A331_1UG		7 Apr 2017 04:13
6	29	Ao040631.d	1.	C1704014-013A	A331_1UG		7 Apr 2017 04:53
7	30	Ao040632.d	1.	C1704013-001A 10X	A331_1UG		7 Apr 2017 05:30
8	31	Ao040633.d	1.	C1704013-002A 10X	A331_1UG		7 Apr 2017 06:07
9	32	Ao040634.d	1.	C1704013-003A 10X	A331_1UG		7 Apr 2017 06:44
0	33	Ao040635.d	1.	C1704013-004A 10X	A331_1UG		7 Apr 2017 07:21
1	34	Ao040636.d	1.	C1704013-005A 10X	A331_1UG		7 Apr 2017 07:58
2	35	Ao040637.d	1.	C1704013-007A 10X	A331_1UG		7 Apr 2017 08:35
3	36	Ao040638.d	1.	C1704013-008A 10X	A331_1UG		7 Apr 2017 09:12
4		Ao040639.d	1.	No MS or GC data present			
5	1	Ao040701.d	1.	BFB1UG	A331_1UG		7 Apr 2017 10:27
6	2	Ao040702.d	1.	A1UG_1.0	A331_1UG		7 Apr 2017 11:20
7	3	Ao040703.d	1.	ALCS1UG-040717	A331_1UG		7 Apr 2017 12:00
8	4	Ao040704.d	1.	AMB1UG-040717	A331_1UG		7 Apr 2017 12:36
9	5	Ao040705.d	1.	C1704013-001A 90X	A331_1UG		7 Apr 2017 13:13
0	6	Ao040706.d	1.	C1704014-012A 10X	A331_1UG		7 Apr 2017 13:50
1	7	Ao040707.d	1.	C1704014-013A 10X	A331_1UG		7 Apr 2017 14:27
2	8	Ao040708.d	1.	C1704014-003A	A331_1UG		7 Apr 2017 15:23
3	9	Ao040709.d	1.	C1704014-005A	A331_1UG		7 Apr 2017 16:03
4	10	Ao040710.d	1.	C1704014-009A	A331_1UG		7 Apr 2017 17:28
5	11	Ao040711.d	1.	C1704014-011A	A331_1UG		7 Apr 2017 18:09
6	12	Ao040712.d	1.	C1704014-014A	A331_1UG		7 Apr 2017 18:50
7	13	Ao040713.d	1.	C1704014-015A	A331_1UG		7 Apr 2017 19:30
8	14	Ao040714.d	1.	C1704014-003A 10x	A331_1UG		7 Apr 2017 20:07
9	15	Ao040715.d	1.	C1704014	A331_1UG	-005A 9x	7 Apr 2017 20:44
0	16	Ao040716.d	1.	C1704014-005A 90x	A331_1UG		7 Apr 2017 21:20
1	17	Ao040717.d	1.	C1704014	A331_1UG	-009A 10x	7 Apr 2017 21:57
2	18	Ao040718.d	1.	C1704014	A331_1UG	-009A 10x	7 Apr 2017 22:33
3	19	Ao040719.d	1.	C1704014-011A 10x	A331_1UG		7 Apr 2017 23:10
4	20	Ao040720.d	1.	C1704014	A331_1UG	-011A 40x	7 Apr 2017 23:47
5	21	Ao040721.d	1.	C1704014-014A 9x	A331_1UG		8 Apr 2017 00:23
6	22	Ao040722.d	1.	C1704014-014A 90x	A331_1UG		8 Apr 2017 01:00
7	23	Ao040723.d	1.	C1704014-015A 10x	A331_1UG		8 Apr 2017 01:37
8	24	Ao040724.d	1.	C1704014	A331_1UG	-015A 40x	8 Apr 2017 02:13
9	25	Ao040725.d	1.	ALCS1UGD-040717	A331_1UG		8 Apr 2017 02:53
0		Ao040726.d	1.	No MS or GC data present			
1	1	Ao041001.d	1.	BFB1UG	A331_1UG		10 Apr 2017 11:01
2	2	Ao041002.d	1.	A1UG_1.0	A331_1UG		10 Apr 2017 11:44
3	3	Ao041003.d	1.	ALCS1UG-041017	A331_1UG		10 Apr 2017 12:39
4	4	Ao041004.d	1.	AMB1UG-041017	A331_1UG		10 Apr 2017 13:19
5	5	Ao041005.d	1.	WAC041017A	A331_1UG		10 Apr 2017 14:09

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS LOG

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Finial Vol (psia)	Final Conc (ppb)	Prep by	Chkd b
A-A1788	12/22/16	12/29/16	TO15 STLX	~~A1088~~ A1089	500ppb	3.0	30	50	LL	
A-1789	↓	↓	↓ SULF	A0270	1ppm	1.5	30	50		
A-1790			↓ H2S	A0269	10ppm	1.5	30	500		
A-1791			TO15 IUG IS	A1782	50ppb	0.9	45	1		
A-1792			↓ STD	A1783	↓	↓	↓	↓	↓	
A-1793	↓	↓	↓ LCS	A1784						
A-1794	12/29/16	1/5/17	TO15 IS	A1289	1ppm	1.5	30	50	WD	
A-~~1795~~	↓	↓	↓ STD	A1203	↓	↓	↓	↓	↓	
A-1796			↓ LCS	A1204						
A-1797			↓ 4PCH	9519	↓	↓	↓	↓		
A-1798			↓ 4PCHS	A1797	50ppb	3.0	30	5		
A-1799			↓ FORM	A0974	11.5ppm	0.20	45	50		
A-1800			↓ SILOX	~~A1088~~ A1089	500ppb	3.0	30	50		
A-1801			↓ SULF	A0270	1ppm	1.5	30	50		
A-1802			↓ H2S	A0269	10ppm	1.5	30	500		
A-1803			TO15 IUG IS	A1794	50ppb	0.9	45	1		
A-1804			↓ STD	A1795	↓	↓	↓	↓	↓	
A-1805	↓	↓	↓ LCS	A1796						
A-1806	1/5/17	1/5/18	TO15 IS	FF-47206	LINDE		2000psig	1ppm	WD	
A-1807	1/5/17	1/5/18	STOCK TO15 STD	FF-45347	LINDE		2200psig	1ppm	WD	
A-1808	11/6/17	11/6/18	TO15 ~~IS~~ LCS	~~A1806~~ A1203	1ppm	~~1.5~~	~~30~~	~~50ppb~~	M	

A1203 STD IS NOW LCS

Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Finial Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A- 1934	3/28/17	4/4/17	TO15 SILOX	A1055 / A1089	500ppb	3.0	30	50	WD	
A- 1935	↓	↓	↓ SULF	A0270	1ppm	1.5	30	50	↓	
A- 1936			↓ H2S	A0269	10ppm	1.5	30	500		
A- 1937			TO15 IUG IS	A1928	50ppb	0.9	45	1		
A- 1938			↓ STD	A1929	↓	↓	↓	↓		
A- 1939	↓	↓	↓ LCS	A1930	↓	↓	↓	↓	↓	
A- 1940	4/5/17	4/15/17	TO15 IS	A1806	1ppm	1.5	30.0psia	50	↓	
A- 1941	↓	↓	↓ STD	A1807	↓	↓	↓	↓		
A- 1942			↓ LCS	A1808						
A- 1943			↓ 4PCH	9519	↓	↓	↓	↓		
A- 1944			↓ 4PCHS	A1943	50	3.0	↓	5		
A- 1945			↓ FORM	A0974	11.5ppm	0.2	45	50		
A- 1946			↓ SILOX	A1055/1089	500ppb	3.0	30	50		
A- 1947			↓ SULF	A0270	1ppm	1.5	↓	↓		
A- 1948			↓ H2S	A0269	10ppm	↓	↓	500		
A- 1949			TO15 IUG IS	A1940	50ppb	0.9	45	1		
A- 1950			↓ STD	A1941	↓	↓	↓	↓		
A- 1951	↓	↓	↓ LCS	A1942	↓	↓	↓	↓	↓	
A- 1952										
A- 1953										
A- 1954										

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GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CANISTER CLEANING LOG

Centek Laboratories, LLC

Instrument: Entech 3100

QC Canister Cleaning Logbook

Canister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date	
163	1L	94	20	3/18/17	WAC03317A	1µg ±0.25	+ 30	+ 3/20/17 30
550		↓	↓	↓	↓	↓	+ 30	+ ↓
248							+ 30	+
240							+ 30	+
94		↓					+ 30	+
162		327			B		+ 30	+
362		↓					+ 30	+
170							+ 30	+
95							+ 30	+
327		↓					+ 30	+
1318		1193			C		+ 30	+
569		↓					+ 30	+
552							+ 30	+
317							+ 30	+
1193		↓					+ 30	+
193		1190			D		+ 30	+
556		↓					+ 30	+
229							+ 30	+
131							+ 30	+
1190		↓					+ 30	+
1191		1184			E		+ 30	+
93		↓					+ 30	+
599							+ 30	+
562			↓				+ 30	+
1184		↓		↓	↓	↓	+ 30	+ ↓

Form C151

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QC Canister Cleaning Logbook

entek Laboratories, LLC

strument: Entech 3100

anister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date	
1178	1L	554	20	3/12/17	WAC031317F	1µg +0.25	+ 30	+ 30 3/20/17
290	↓	↓	↓	↓	↓	↓	+ 30	+ ↓
542	↓	↓	↓	↓	↓	↓	+ 30	+ ↓
237	↓	↓	↓	↓	↓	↓	+ 30	+ ↓
554	↓	↓	↓	↓	↓	↓	+ 30	+ ↓
							+ 30	+
							+ 30	+
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Centek Laboratories, LLC QC Canister Cleaning Logbook

nstrument: Entech 3100

Canister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date	
359	1L	89	20		WAC032017A	1ug/m³+0.25	30	+ 30 RJP 03/20/17
222							+ 30	+
546							+ 30	+
363							+ 30	+
89							+ 30	+
96		136			WAC032017B		+ 30	+
1177							+ 30	+
245							+ 30	+
1195							+ 30	+
136							+ 30	+
83		137			WAC032017C		+ 30	+
171							+ 30	+
242							+ 30	+
233							+ 30	+
137							+ 30	+
106		285			WAC032017D		+ 30	+
467							+ 30	+
1188							+ 30	+
130							+ 30	+
285							+ 30	+
367		1186			WAC032017E		+ 30	+
328							+ 30	+
139							+ 30	+
286							+ 30	+
1186							+ 30	+

Form C151

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Centek Laboratories, LLC

QC Canister Cleaning Logbook

Instrument: Entech 3100

Canister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date
475	1L	203	20		WAC032017F	1ug/m3+0.25	+ 30 + 30 RJP 03/20/17
324	↓	↓	↓		↓	↓	+ +
101							+ +
87							+ +
203					↓		+ +
483	1.4L	1322			WAC032017G		+ +
1202	↓	↓			↓		+ +
216							+ +
1206							+ +
1322		↓			↓		+ +
210		1321			WAC032017H		+ +
485		↓			↓		+ +
1203							+ +
1319							+ +
1321	↓	↓	↓		↓	↓	+ +
							+ +
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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031310.D Vial: 26
Acq On : 13 Mar 2017 1:56 pm Operator: RJP
Sample : WAC031317A Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02:15 2017 Quant Results File: A312_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sun Mar 12 22:26:37 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

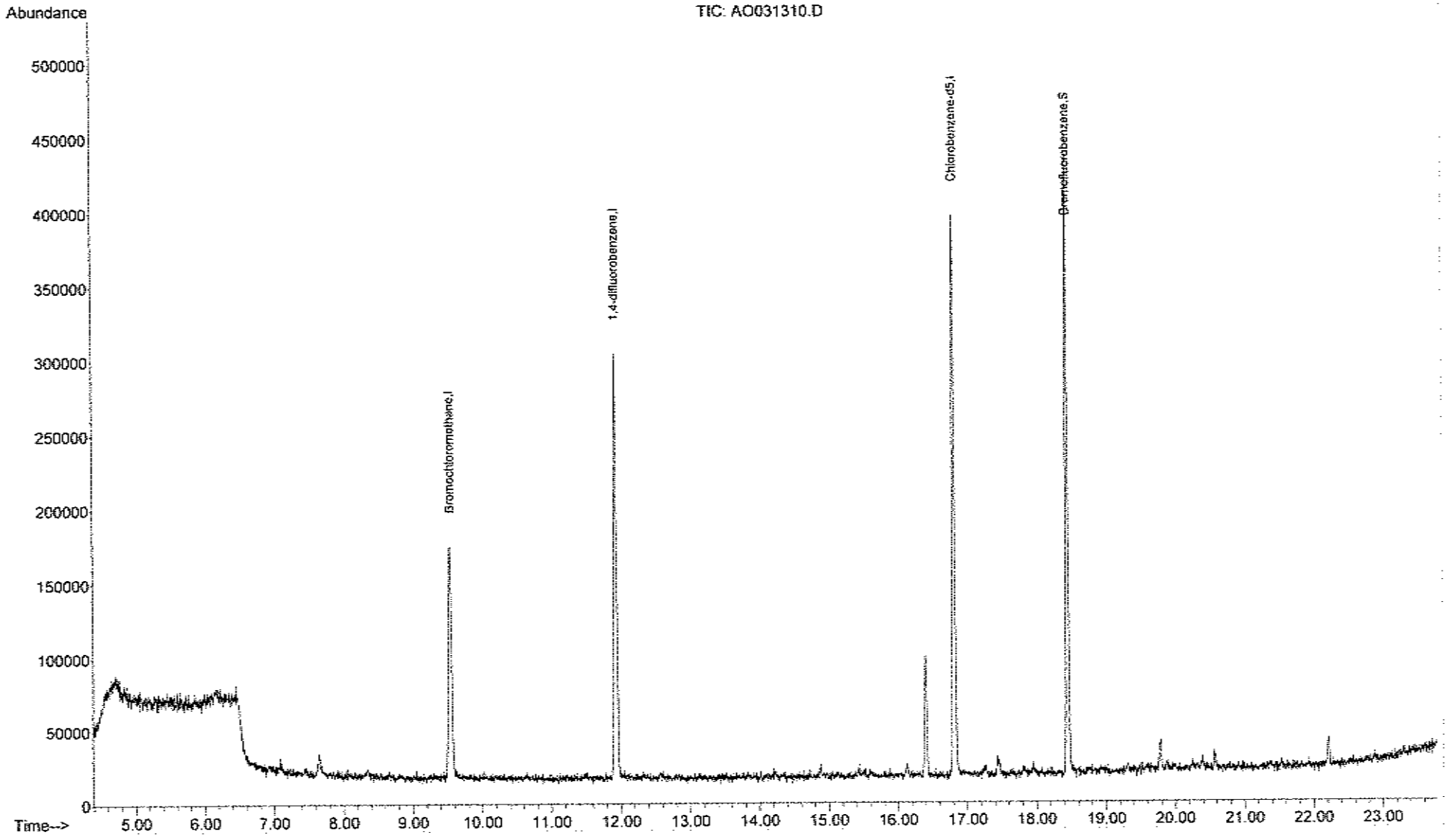
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	60201	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.92	114	294080	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.81	117	241427	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	175772	0.97	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031310.D Vial: 26
Acq On : 13 Mar 2017 1:56 pm Operator: RJP
Sample : WAC031317A Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:18 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



AO031310.D A426_1UG.M Mon May 08 10:44:01 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031311.D Vial: 27
Acq On : 13 Mar 2017 2:34 pm Operator: RJP
Sample : WAC031317B Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02:16 2017 Quant Results File: A312_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sun Mar 12 22:26:37 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	62194	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.93	114	285996	1.00	ppb	0.00
50) Chlorobenzene-d5	16.81	117	238418	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	171452	0.96	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 96.00%			
Target Compounds						Qvalue

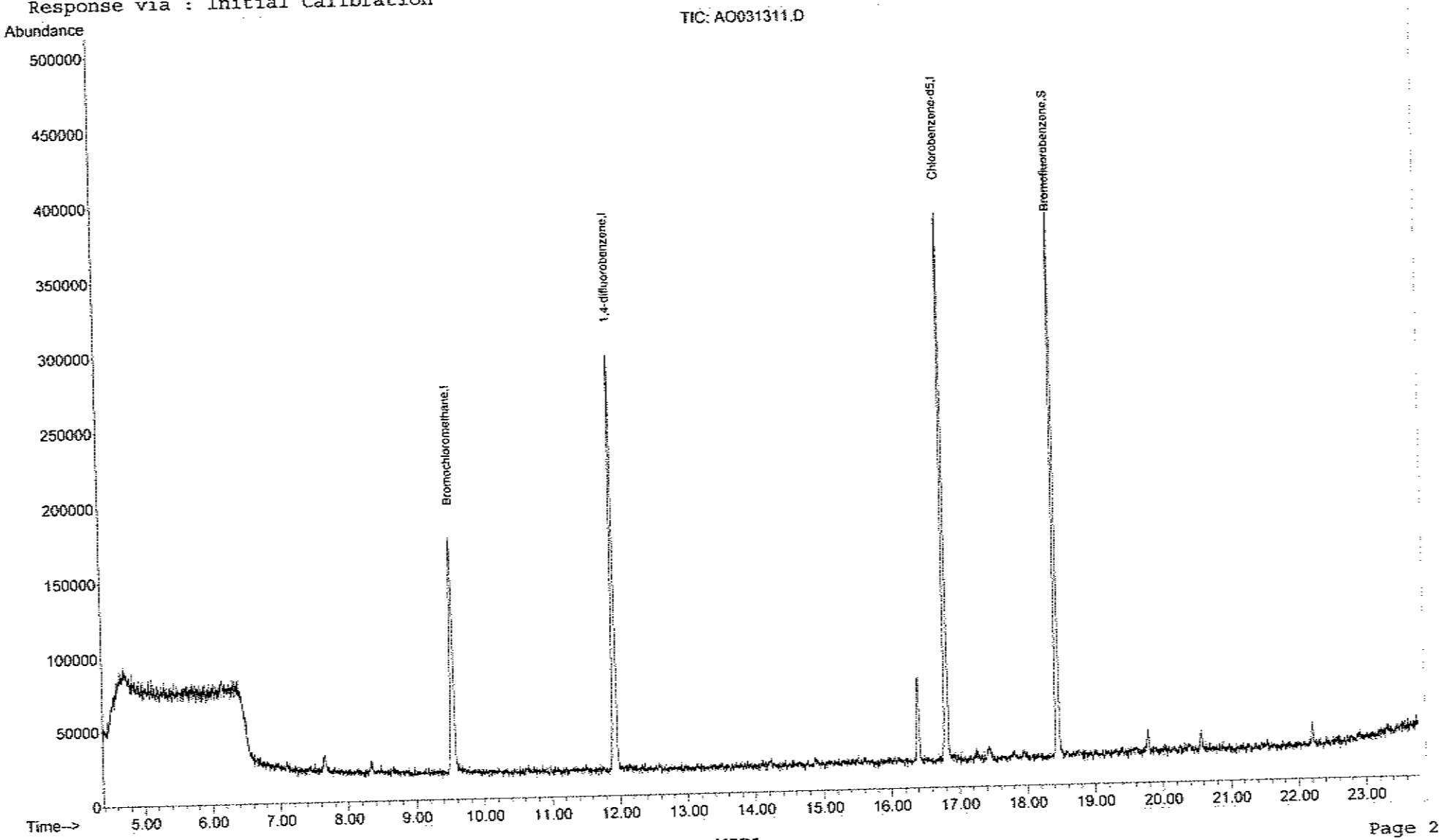
(#) = qualifier out of range (m) = manual integration (+) = signals summed
AO031311.D A426_1UG.M Mon May 08 10:44:03 2017 MSD1 Page 1

Data File : C:\HPCHEM\1\DATA2\AO031311.D
Acq On : 13 Mar 2017 2:34 pm
Sample : WAC031317B
Misc : A312_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:18 2017

Vial: 27
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



AO031311.D A426_1UG.M Mon May 08 10:44:04 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031312.D Vial: 28
Acq On : 13 Mar 2017 3:12 pm Operator: RJP
Sample : WAC031317C Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02:17 2017 Quant Results File: A312_1UG.RES

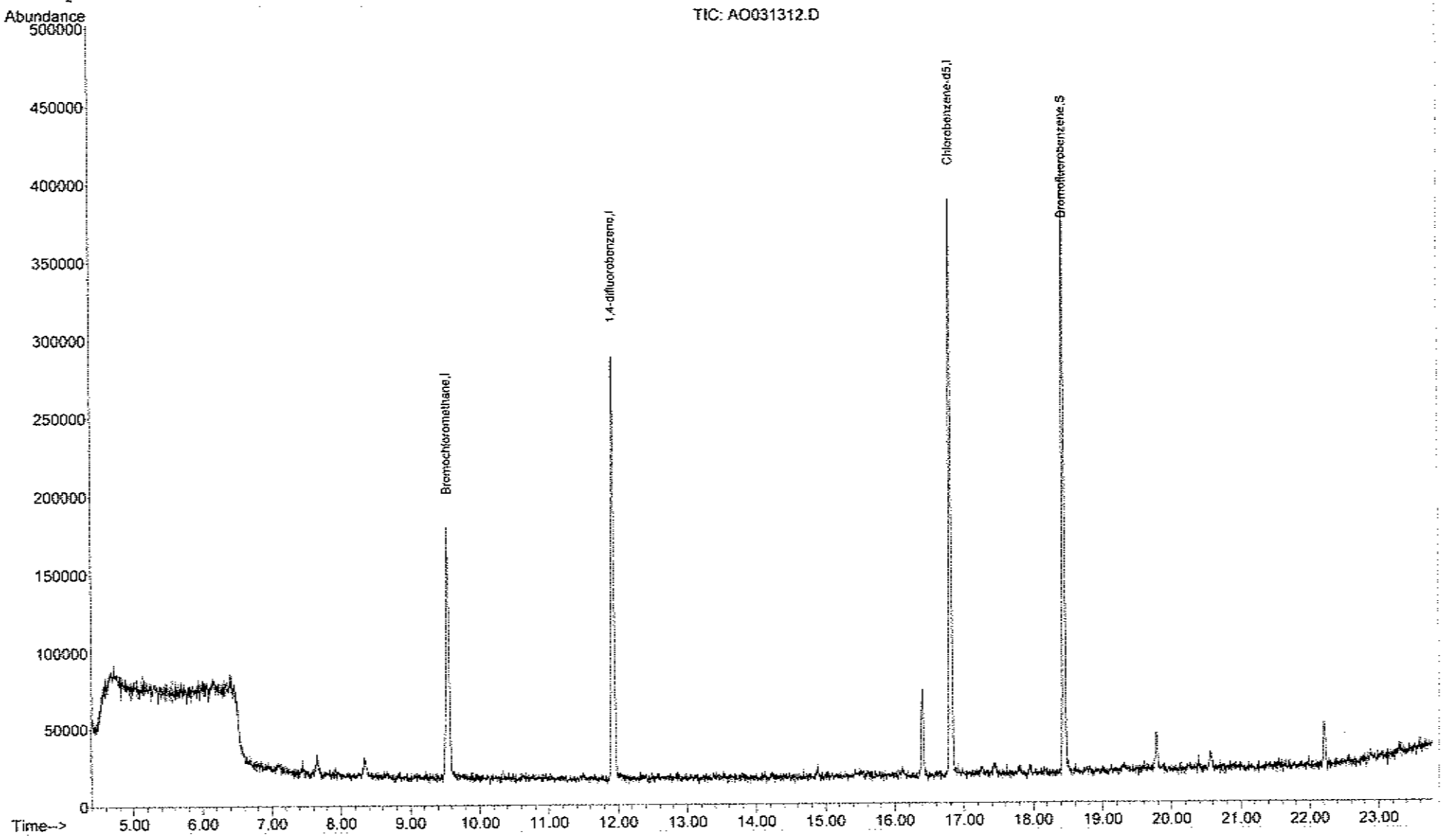
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sun Mar 12 22:26:37 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	58213	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.93	114	283013	1.00	ppb	0.00
50) Chlorobenzene-d5	16.81	117	232802	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	174331	1.00	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO031312.D Vial: 28
Acq On : 13 Mar 2017 3:12 pm Operator: RJP
Sample : WAC031317C Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\A0031313.D Vial: 29
Acq On : 13 Mar 2017 3:49 pm Operator: RJP
Sample : WAC031317D Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02:18 2017 Quant Results File: A312_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sun Mar 12 22:26:37 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

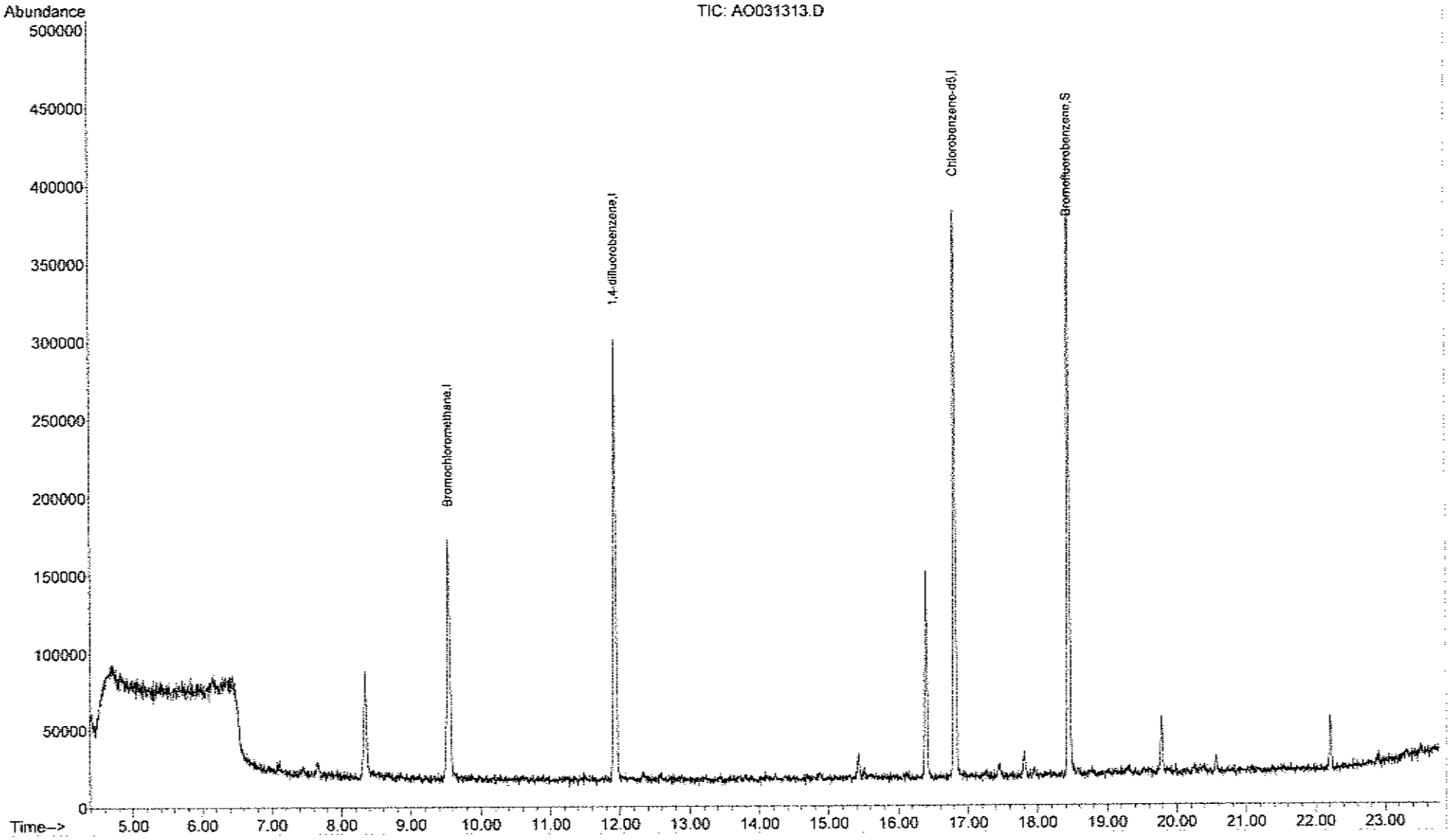
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	56611	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.93	114	277027	1.00	ppb	0.00
50) Chlorobenzene-d5	16.81	117	225435	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.44	95	169439	1.01	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 101.00%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031313.D Vial: 29
Acq On : 13 Mar 2017 3:49 pm Operator: RJP
Sample : WAC031317D Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:19 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031314.D Vial: 30
Acq On : 13 Mar 2017 4:27 pm Operator: RJP
Sample : WAC031317E Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02:19 2017 Quant Results File: A312_1UG.RES

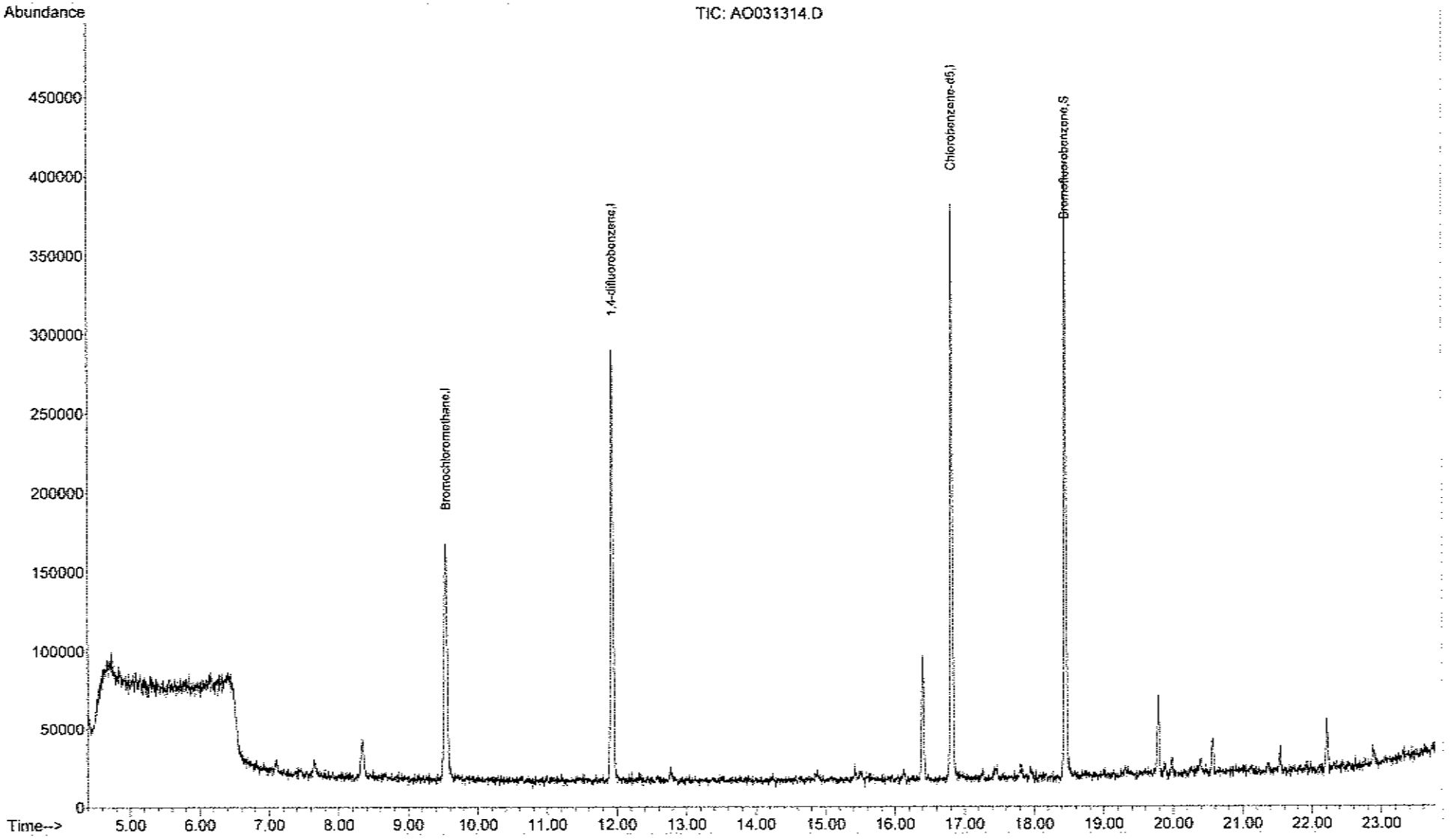
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sun Mar 12 22:26:37 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	56965	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.92	114	274359	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.81	117	226756	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	169835	1.00	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO031314.D Vial: 30
Acq On : 13 Mar 2017 4:27 pm Operator: RJP
Sample : WAC031317E Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:19 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO031315.D Vial: 31
Acq On : 13 Mar 2017 5:05 pm Operator: RJP
Sample : WAC031317F Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02:20 2017 Quant Results File: A312_1UG.RES

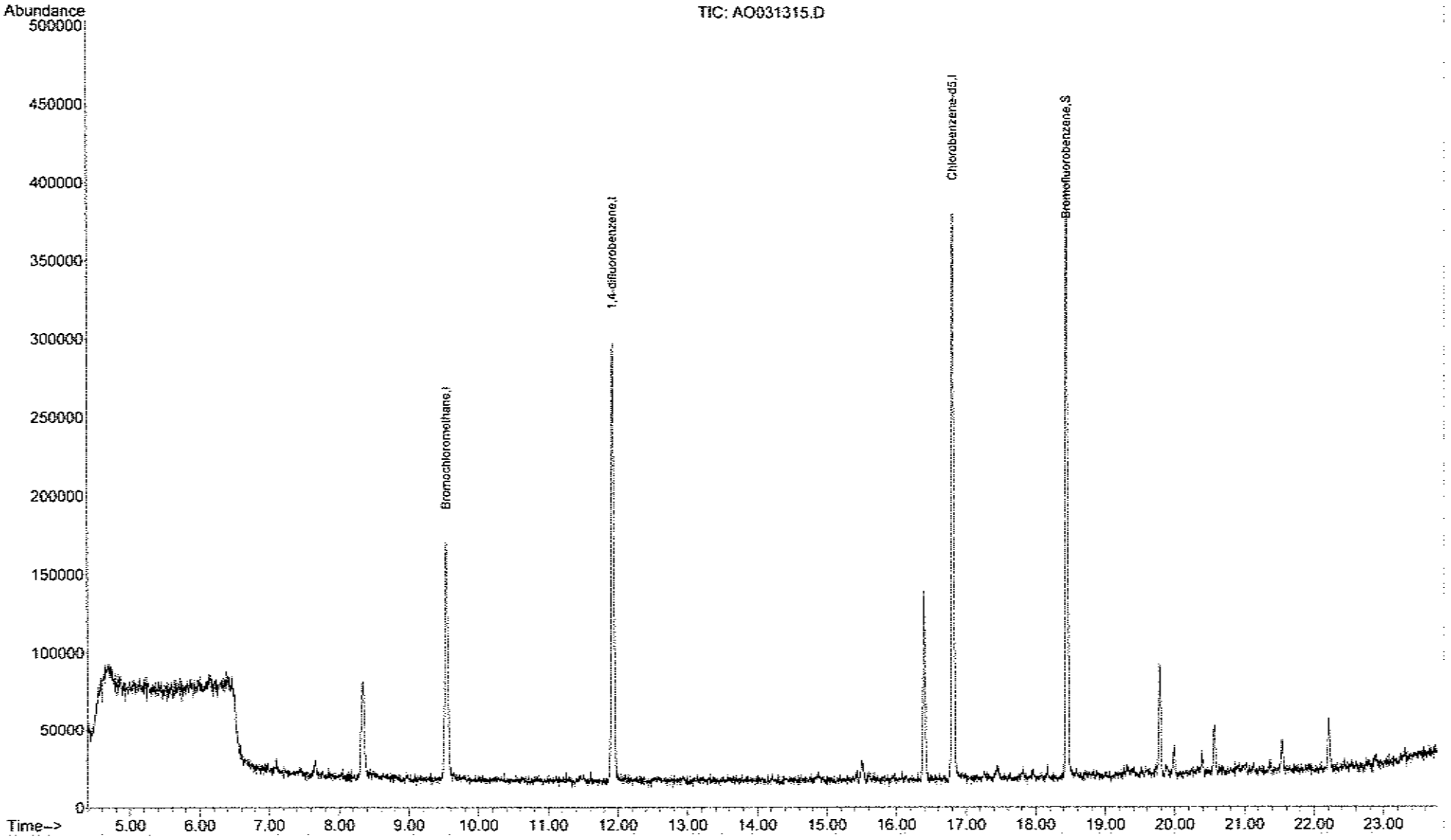
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sun Mar 12 22:26:37 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.53	128	55487	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.93	114	273365	1.00	ppb	0.00
50) Chlorobenzene-d5	16.81	117	226312	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	163837	0.97	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO031315.D Vial: 31
Acq On : 13 Mar 2017 5:05 pm Operator: RJP
Sample : WAC031317F Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 10:02 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032006.D Vial: 1
Acq On : 20 Mar 2017 2:43 pm Operator: RJP
Sample : WAC032017A Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:02 2017 Quant Results File: A312_1UG.RES

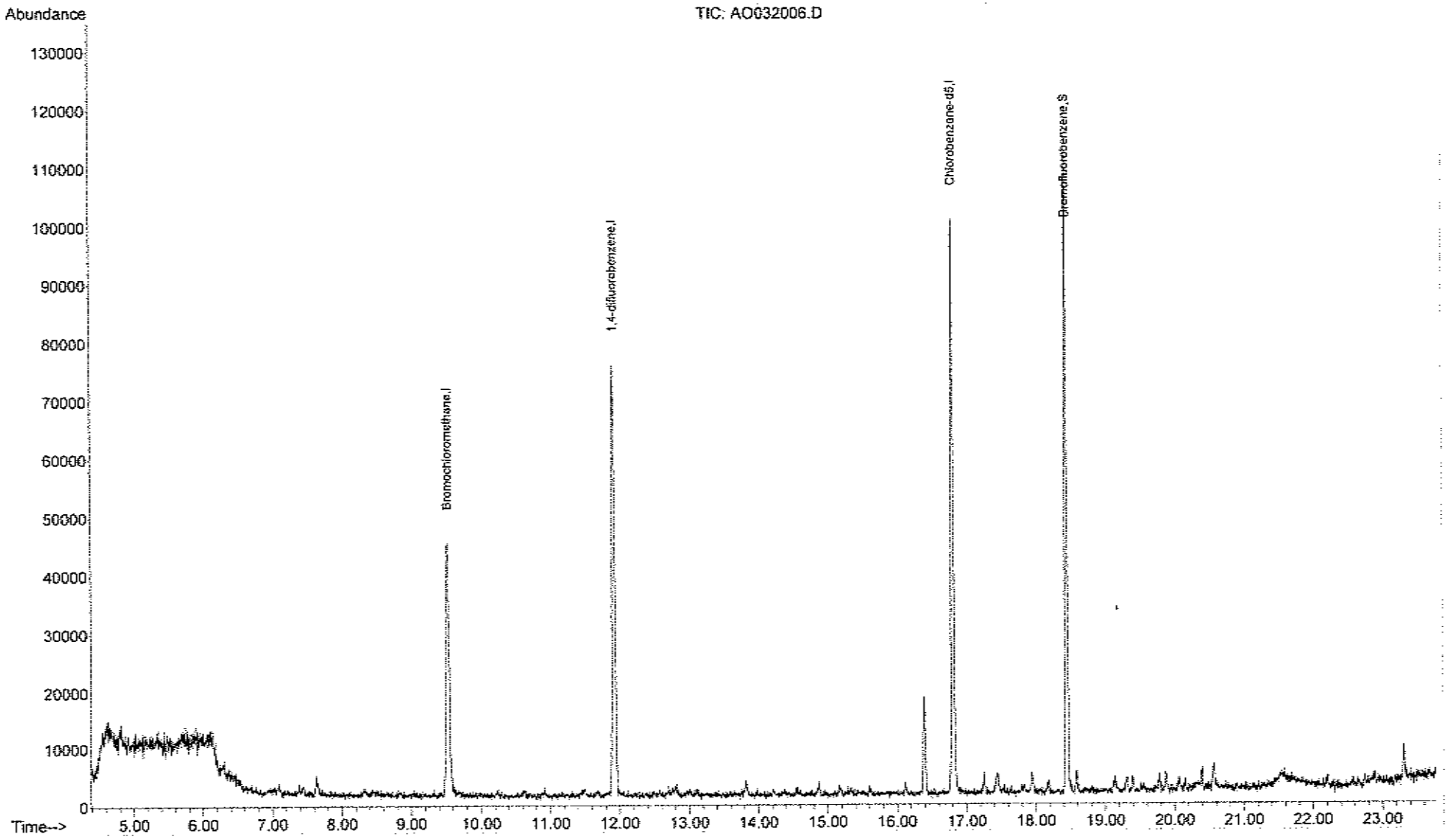
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.53	128	15562	1.00	ppb	-0.02
35) 1,4-difluorobenzene	11.93	114	73218	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.80	117	61485	1.00	ppb	-0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.44	95	42443	0.92	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032006.D Vial: 1
Acq On : 20 Mar 2017 2:43 pm Operator: RJP
Sample : WAC032017A Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 9:03 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032007.D Vial: 2
Acq On : 20 Mar 2017 3:21 pm Operator: RJP
Sample : WAC032017B Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:03 2017 Quant Results File: A312_1UG.RES

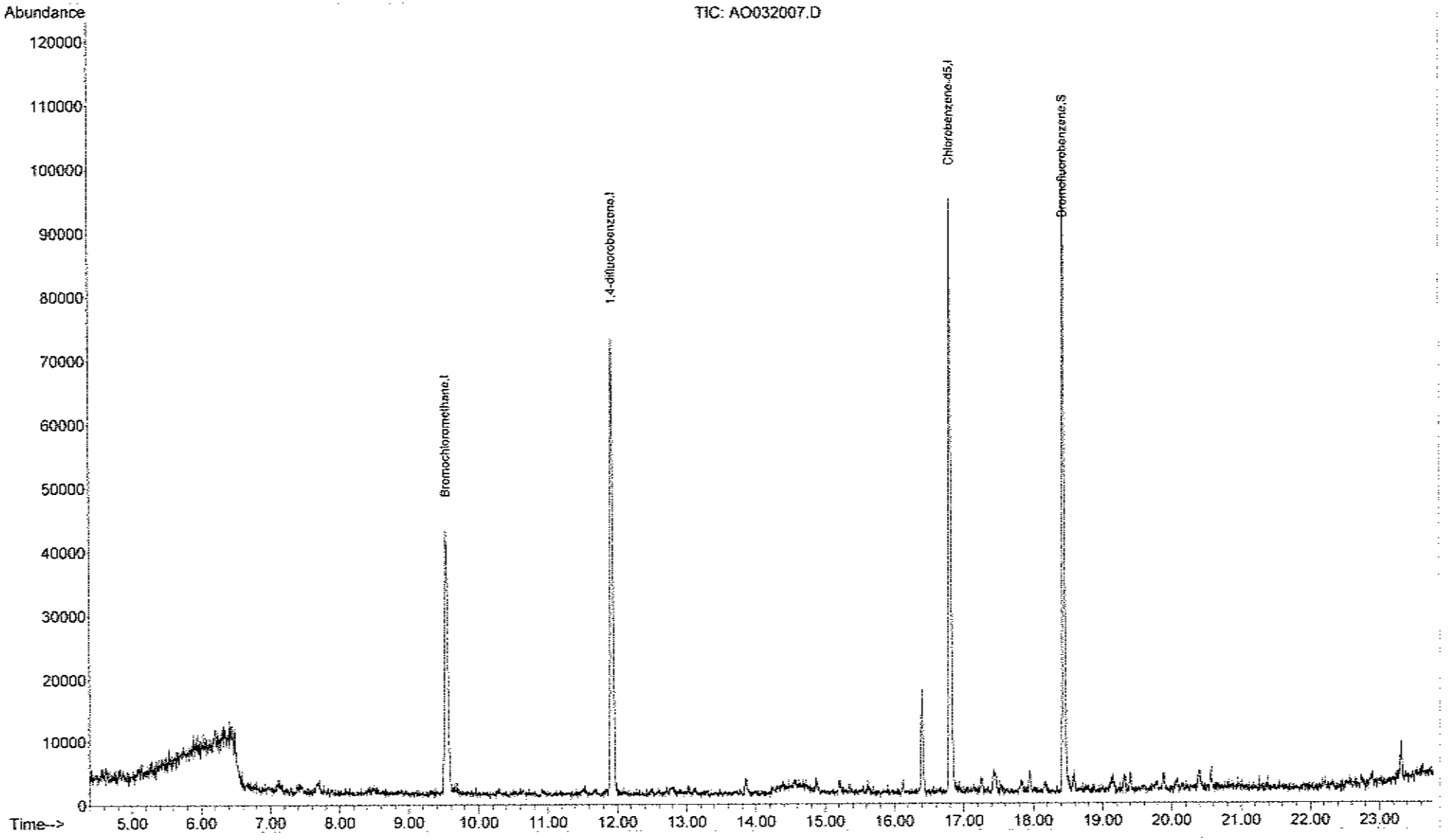
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	9.54	128	14949	1.00 ppb	0.00
35) 1,4-difluorobenzene	11.93	114	69738	1.00 ppb	0.00
50) Chlorobenzene-d5	16.81	117	57843	1.00 ppb	0.00
System Monitoring Compounds					
65) Bromofluorobenzene	18.44	95	39683	0.92 ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%		
Target Compounds					Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032007.D Vial: 2
Acq On : 20 Mar 2017 3:21 pm Operator: RJP
Sample : WAC032017B Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 9:03 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032008.D Vial: 3
Acq On : 20 Mar 2017 4:02 pm Operator: RJP
Sample : WAC032017C Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:04 2017 Quant Results File: A312_1UG.RES

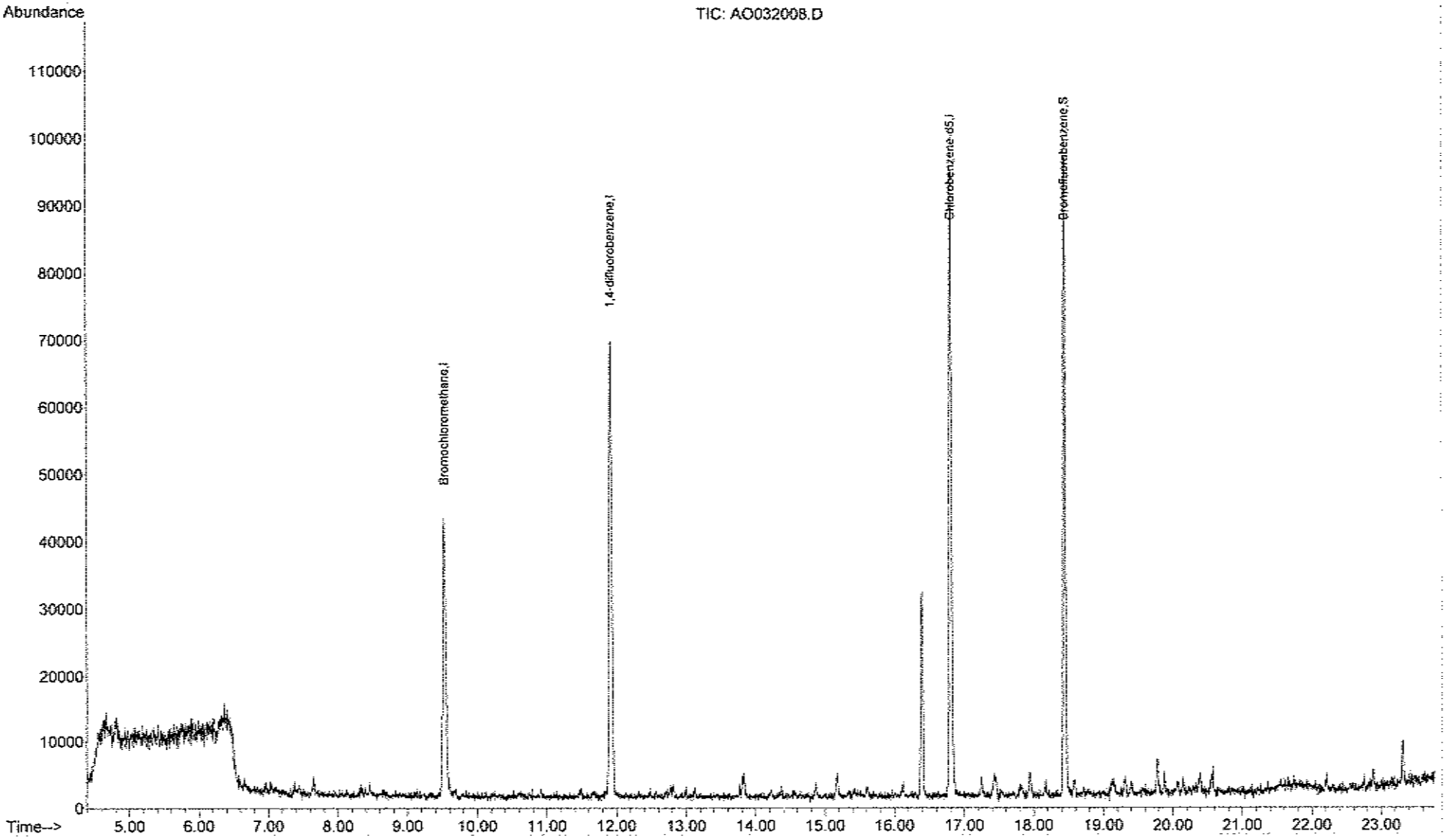
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.52	128	14291	1.00	ppb	-0.02
35) 1,4-difluorobenzene	11.92	114	66450	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.80	117	55920	1.00	ppb	-0.02
System Monitoring Compounds						
65) Bromofluorobenzene	18.44	95	38009	0.91	ppb	-0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 91.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032008.D Vial: 3
Acq On : 20 Mar 2017 4:02 pm Operator: RJP
Sample : WAC032017C Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 12:11 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032009.D Vial: 4
Acq On : 20 Mar 2017 4:40 pm Operator: RJP
Sample : WAC032017D Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:05 2017 Quant Results File: A312_1UG.RES

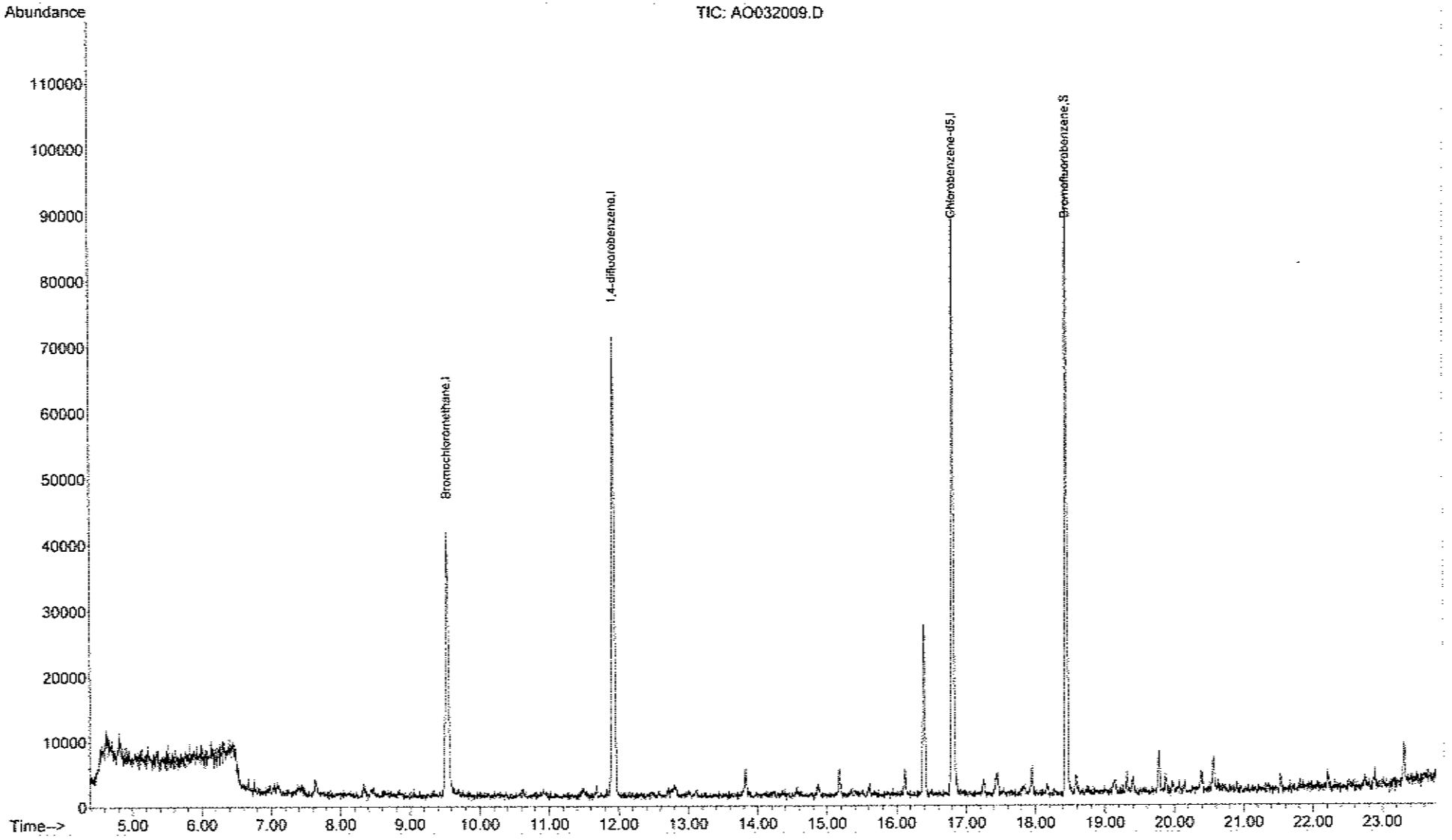
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	14630	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.92	114	66585	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.81	117	54294	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.44	95	37248	0.92	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032009.D Vial: 4
Acq On : 20 Mar 2017 4:40 pm Operator: RJP
Sample : WAC032017D Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 9:03 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032010.D Vial: 5
Acq On : 20 Mar 2017 5:17 pm Operator: RJP
Sample : WAC032017E Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:06 2017 Quant Results File: A312_1UG.RES

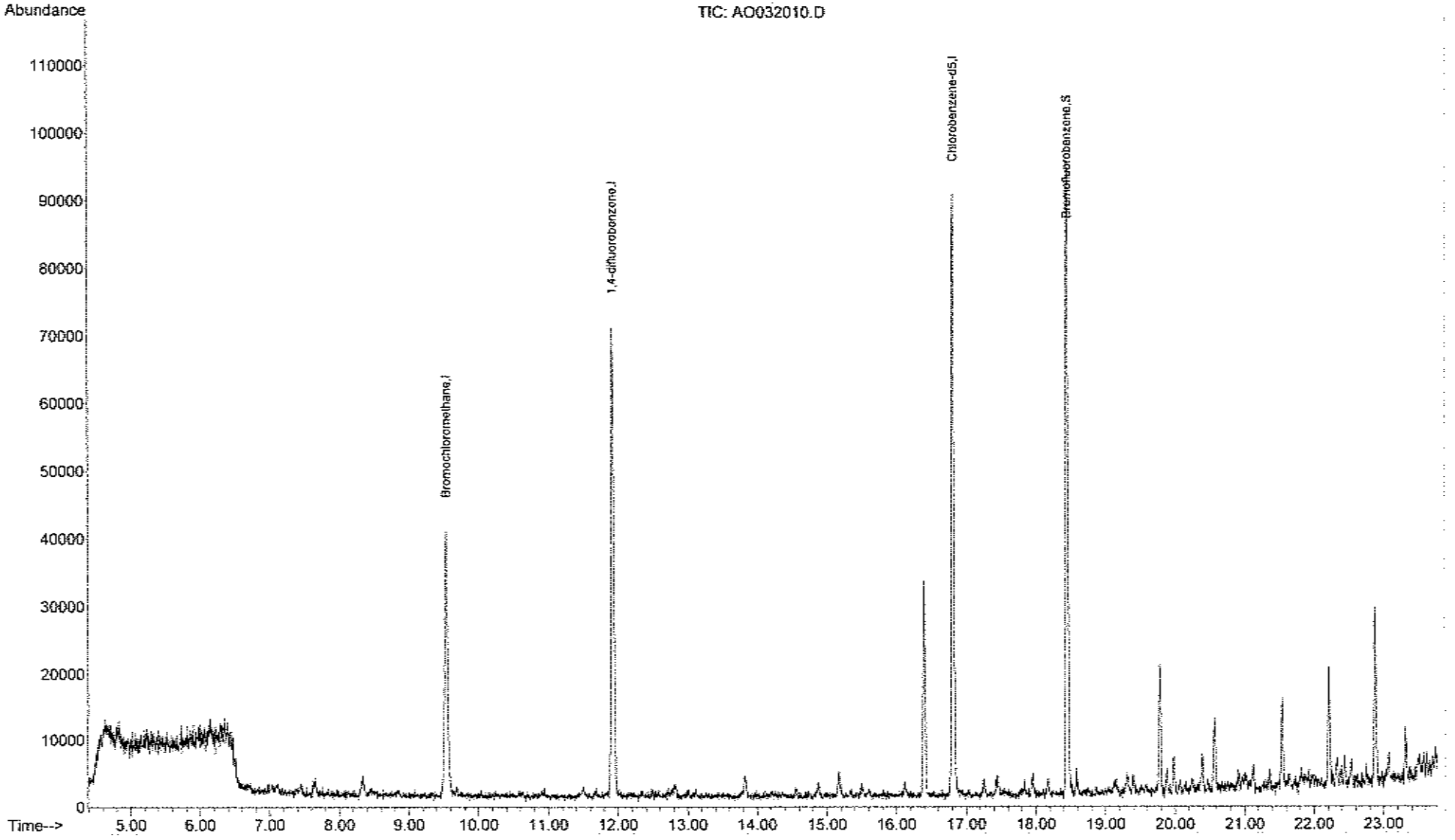
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	13448	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.92	114	65306	1.00	ppb	-0.02
50) Chlorobenzene-d5	16.81	117	53539	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.44	95	36660	0.92	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032010.D Vial: 5
Acq On : 20 Mar 2017 5:17 pm Operator: RJP
Sample : WAC032017E Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 12:11 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\A0032011.D Vial: 6
Acq On : 20 Mar 2017 5:55 pm Operator: RJP
Sample : WAC032017F Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:07 2017 Quant Results File: A312_1UG.RES

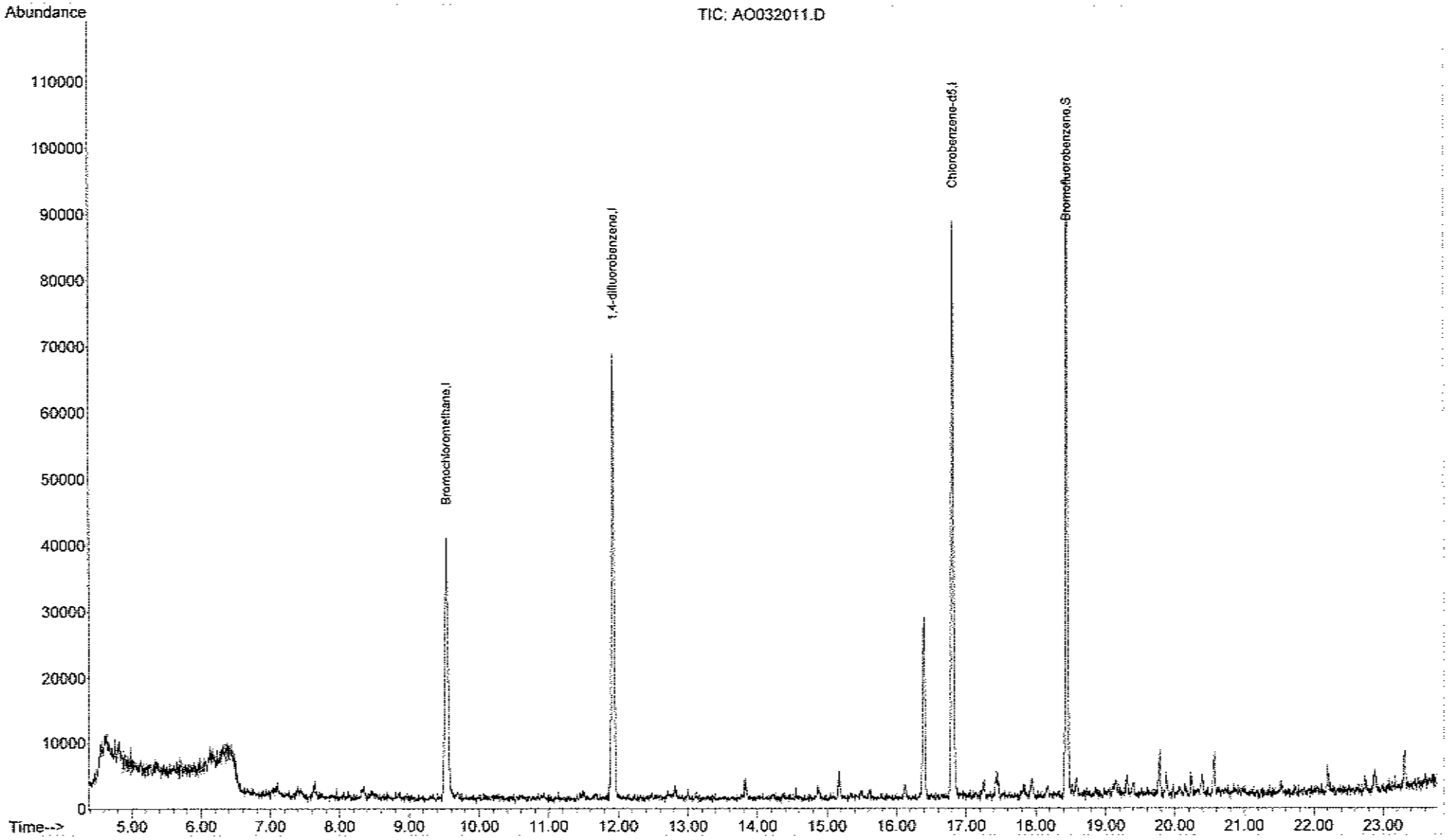
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.53	128	14055	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.92	114	62760	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.81	117	51932	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.44	95	35901	0.92	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032011.D Vial: 6
Acq On : 20 Mar 2017 5:55 pm Operator: RJP
Sample : WAC032017F Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 12:11 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032012.D Vial: 7
Acq On : 20 Mar 2017 6:32 pm Operator: RJP
Sample : WAC032017G Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:08 2017 Quant Results File: A312_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

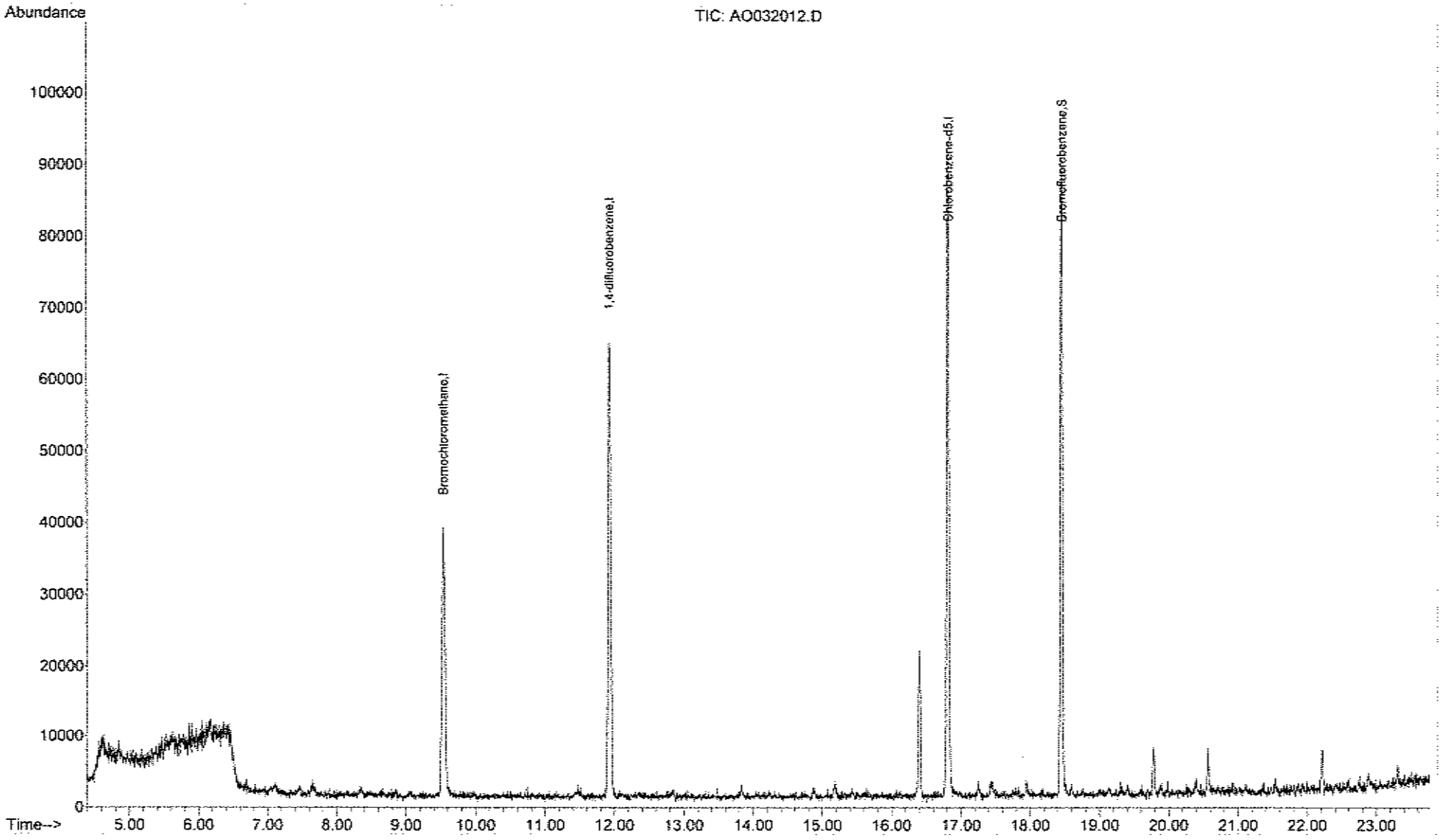
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.54	128	13214	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.93	114	61386	1.00	ppb	0.00
50) Chlorobenzene-d5	16.81	117	51318	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	34657	0.90	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 90.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032012.D
Acq On : 20 Mar 2017 6:32 pm
Sample : WAC032017G
Misc : A312_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 21 9:03 2017

Vial: 7
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO032013.D Vial: 8
Acq On : 20 Mar 2017 7:10 pm Operator: RJP
Sample : WAC032017H Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 09:03:09 2017 Quant Results File: A312_1UG.RES

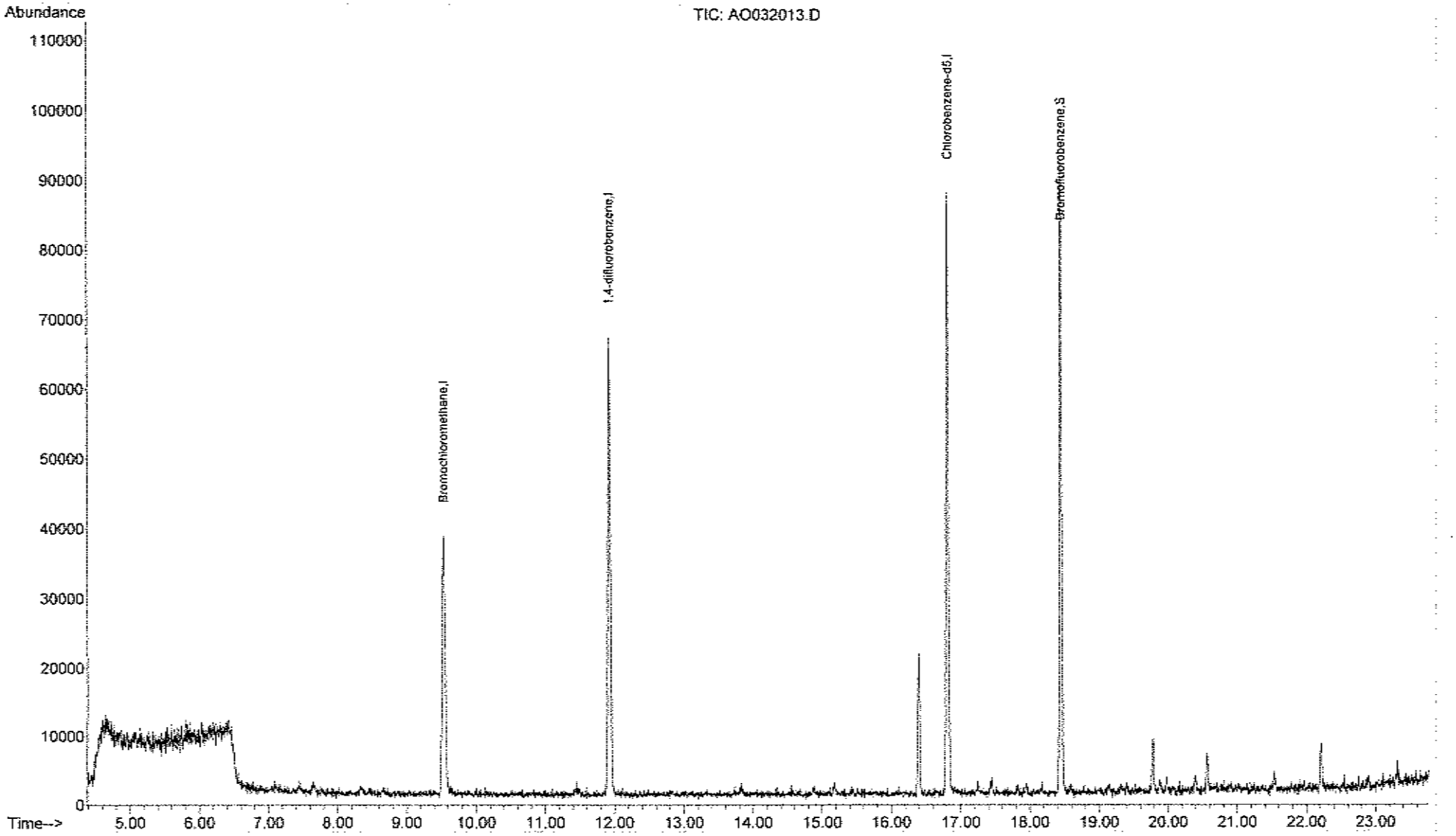
Quant Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.53	128	13439	1.00	ppb	-0.01
35) 1,4-difluorobenzene	11.92	114	62774	1.00	ppb	-0.01
50) Chlorobenzene-d5	16.80	117	50944	1.00	ppb	-0.01
System Monitoring Compounds						
65) Bromofluorobenzene	18.45	95	35665	0.94	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 94.00%			
Target Compounds						Qvalue

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

Data File : C:\HPCHEM\1\DATA2\AO032013.D Vial: 8
Acq On : 20 Mar 2017 7:10 pm Operator: RJP
Sample : WAC032017H Inst : MSD #1
Misc : A312_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 9:03 2017 Quant Results File: A312_1UG.RES

Method : C:\HPCHEM\1\METHODS\A426_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu May 04 14:17:03 2017
Response via : Initial Calibration



TO-15 Package Review Checklist

Client: LaBella Project: 691-705 St. Paul SDG: C170305

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

Comments:

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

Comments: *SEE CASE NARRATIVE

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

Comments:

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

Comments:

TO-15 Package Review Checklist

Client: LaBella Project: 691-705 St. Paul SDG: C1703015

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

Comments:

		YES	NO	NA
Raw Quality Control Data				
Tune Criteria Report	Present and Complete	\		
Method Blank Data	MB Results <PQL	\		
	Associated results flagged "B"			\
LCS sample data	Present and Complete	\		
LCSD sample data	Present and Complete	\		
MS/MSD sample data	Present and Complete	\		

Comments:

		YES	NO	NA
Logbooks				
Injection Log	Present and Complete	\		
Standards Log	Present and Complete	\		
Can Cleaning Log	Present and Complete	\		
	Raw Data Present	\		
Calculation sheet	Present and Complete	\		
IDL's	Present and Complete	\		
Bottle Order Form	Present and Complete	\		
Sample Tracking Form	Present and Complete	\		

Additional Comments:

Section Supervisor: Will Dobb Date: 3/29/17

QC Supervisor: [signature] Date: 3/29/17

CENTEK LABORATORIES, LLC
143 Midler Park Drive * Syracuse, NY 13206
Phone (315) 431-9730 * Emergency 24/7 (315) 416-2752
NYSDOH ELAP Certificate No. 11830

Analytical Report

Michael Pelychaty
LaBella Associates, P.C.
300 State Street, Suite 201
Rochester, NY 14614

TEL: (585) 454-6110
FAX (585) 454-3066

Friday, March 10, 2017
Order No.: C1703015

RE: 691 and 705 St Paul St

Dear Michael Pelychaty:

Centek Laboratories, LLC received 6 sample(s) on 3/7/2017 for the analyses presented in the following report.

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

Centek Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

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

Centek Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory. We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

Sincerely,

William Dobbin
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, tetrahydrofuran, 4-PCH, sulfur derived and silcon series compounds.

Centek Laboratories, LLC Terms and Conditions

Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.CentekLabs.com. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in an canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any dameges of equipment.

Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit application on file to extend credit. Purchase orders or checks information must be submitted for us to release results

Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:
Same day TAT = 200%
Next business day TAT by Noon = 150%
Next business day TAT by 6:00pm = 100%
Second business day TAT by 6:00pm = 75%
Third business day TAT by 6:00pm = 50%
Fourth business day TAT by 6:00pm = 35%
Fifth business day = Standard

Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of

liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

ASP CAT B DELIVERABLE PACKAGE
Table of Contents

CENTEK LABORATORIES, LLC

Date: *29-Mar-17*

CLIENT: LaBella Associates, P.C.

Project: 691 and 705 St Paul St

Lab Order: C1703015

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80
Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

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

NYSDEC ASP samples:
Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (±2", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (±1", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,±1". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.

See Corrective Action: [3488] The 3rd IS & Surrogate did not meet criteria.

Centek Laboratories, LLC

Corrective Action Report

Date Initiated: 08-Mar-17 **Corrective Action Report ID:** 3488

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

Corrective Action Description

CAR Summary: The 3rd IS & Surrogate did not meet criteria.

Description of Nonconformance Root/Cause(s): The 3rd IS & Surrogate were high and did not meet criteria for samples C1703015-001A - 005A & 003A MS/MSD. Based on the chromatographic evidence, it appears that the contamination is from the presence of very high petroleum pattern. All Compounds of concern fall under the first 2 Internal standards which did meet criteria

Description of Corrective Action w/Proposed C.A.: Samples C1703015-003A - 005A were analyzed further as dilutions with criteria being met. Due to matrix being in a canister it is difficult to see any signs of problems. All sets of data submitted.

Performed By: Russell Pellegrino **Completion Date:** 09-Mar-17

Client Notification

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

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: Since the compounds of concern fall under the first 2 internal standards and they did meet criteria and all other QC meets requirements report the 1x results. Submit all sets of data.

Approval and Closure

Technical Director / Deputy Tech. Dir.: William Dobbin **Close Date:** 10-Mar-17

QA Officer Approval: Nick Scala **QA Date:** 10-Mar-17

Last Updated BY russ Updated: 29-Mar-2017 9:25 AM Reported: 29-Mar-2017 9:25 AM

Centek Labs - Chain of Custody

Centek Laboratories

143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com
Vapor Intrusion & IAQ

Site Name: 691 and 705 St. Paul St.
Project: Soil Gas Sampling
PO#: 2170436
Quote # Q-SP/B06352
Canister Order #:

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

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☑	0%	
4 Business Days	☐	25%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
*Next Day by 5pm	☐	100%	
*Next Day by Noon	☐	150%	
*Same Day	☐	200%	

*For Same and Next Day TAT Please Notify Lab

Company: LaBella - Rochester

Report to:
Address: 300 State Street
City, State, Zip Rochester NY 14614
Email: ABrett@LaBellaPC.com, mpolychaty@LaBellapc.com
Phone:

Company: *Check Here If Same:* ☒

Invoice to:
Address: 300 State Street
City, State, Zip Rochester NY 14614
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** Rec'd/Analysis	Comments
SV-1	3/3/17	542	256	TO-15*	-30 / -5	-1 / -2	*Target List Compounds
SV-2	3/3/17	237	402	TO-15*	-30 / -5	-1 / -1	* See attached
SV-3	3/3/17	1206	248	TO-15*	-30 / -5	-1 / -1	list
SV-4	3/3/17	290	299	TO-15*	-28 / -5	-3 / -3	
Duplicate	3/3/17	1184	299	TO-15*	-28 / -5	-3 / -3	
Ambient Air	3/3/17	556	267	TO-15*	-30 / -5	-1 / -1	

Targeted VOCs	Laboratory Detection Limit (µg/m³)
TCE	0.25
cis-1,2-dichloroethene	1.0
trans-1,2-dichloroethene	1.0
vinyl chloride	0.25
1,1-Dichloroethene	1.0
chloroethane	1.0

µg/m³ denotes micrograms per cubic meter

Chain of Custody	Print Name	Signature	Date/Time
Sampled by:	Alex Brett		3-3-17 / 2000
Relinquished by:	Alex Brett		3-4-17 / 1000
Received at Lab by:	NICK MANDRELLO		3-7-17

Courier: CIRCLE ONE
FedEx UPS Pickup/Dropoff

**For LAB USE ONLY
Work Order # C1703015

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

CENTEK LABORATORIES, LLC

Date: *29-Mar-17*

CLIENT: LaBella Associates, P.C.
Project: 691 and 705 St Paul St
Lab Order: C1703015

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1703015-001A	SV-1	542.256	3/3/2017	3/7/2017
C1703015-002A	SV-2	237.402	3/3/2017	3/7/2017
C1703015-003A	SV-3	1206.249	3/3/2017	3/7/2017
C1703015-004A	SV-4	290.299	3/3/2017	3/7/2017
C1703015-005A	Duplicate	1184.299	3/3/2017	3/7/2017
C1703015-006A	Ambient Air	556.267	3/3/2017	3/7/2017

CENTEK LABORATORIES, LLC

Sample Receipt Checklist

Client Name LABELLA - ROCHESTER | Date and Time Receive 3/7/2017

Work Order Numbe C1703015 | Received by NM

Checklist completed by _____ 3-7-17 (Signature / Date) | Reviewed by _____ 3/7/17 (Initials / Date)

Matrix: | Carrier name: FedEx Ground

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

Adjusted? _____ Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Centek Laboratories, LLC

29-Mar-17

Lab Order: C1703015
Client: LaBella Associates, P.C.
Project: 691 and 705 St Paul St

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C1703015-001A	SV-1	3/3/2017	Air	1ug/M3 by Method TO15			3/8/2017
C1703015-002A	SV-2			1ug/M3 by Method TO15			3/8/2017
C1703015-003A	SV-3			1ug/M3 by Method TO15			3/8/2017
				1ug/M3 by Method TO15			3/8/2017
C1703015-004A	SV-4			1ug/M3 by Method TO15			3/9/2017
				1ug/M3 by Method TO15			3/8/2017
C1703015-005A	Duplicate			1ug/M3 by Method TO15			3/9/2017
				1ug/M3 by Method TO15			3/8/2017
C1703015-006A	Ambient Air			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			3/8/2017

Centek Laboratories, LLC

CENTEK LABORATORIES, LLC
Air Quality Testing...It's a Gas
143 Midler Park Drive * Syracuse, NY 13206
TEL: 315-431-9730 * FAX: 315-431-9731

CANISTER ORDER

6352

29-Mar-17

SHIPPED TO:

Company: LaBella Associates, P.C.
Contact: Michael Pelychaty
Address: 300 State Street, Suite 201
Rochester, NY 14614
Phone: (585) 454-6110
Quote ID: 0
Project:
PO:

Submitted By:
MadeBy: NM

Ship Date: 2/28/2017
VIA: FedEx Ground
Due Date: 3/1/2017

Bottle Code	Bottle Type	TEST(s)	QTY
MC1400CC	1.4L Mini-Can	1ug/M3 by Method TO15	1
MC1000CC	1L Mini-Can	1ug/M3 by Method TO15	6

Can / Reg ID	Description
237	1L Mini-Can - 1168 VI
249	Time-Set Reg - 687 VI
256	Time-Set Reg - 694 VI
267	Time-Set Reg - 705 VI
290	1L Mini-Can - 1266 VI
339	Time-Set Reg - 736 VI
340	Time-Set Reg - 737 VI
402	Time-Set Reg - 781 VI
459	1L Mini-Can - 1362 VI
556	1L Mini-Can - 124 VI
1184	1L Mini-Can - 1248 VI
1206	1.4L Mini-Can - 1376 VI

Comments: (6) 1L @ 8hrs + (1) 1.4L @ 8hrs + dupe W/ He shroud & Meter, tubing WAC 110316 A-B, 021717A-C

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-1
Lab Order:	C1703015	**Tag Number:**	542.256
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Chloroethane	0.13	0.15	J	ppbV	1	3/8/2017 1:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Surr: Bromofluorobenzene	239	70-130	S	%REC	1	3/8/2017 1:28:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-1
Lab Order:	C1703015	**Tag Number:**	542.256
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
Chloroethane	0.34	0.40	J	ug/m3	1	3/8/2017 1:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/8/2017 1:28:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 1:28:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-2
Lab Order:	C1703015	**Tag Number:**	237.402
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Surr: Bromofluorobenzene	235	70-130	S	%REC	1	3/8/2017 2:09:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-2
Lab Order:	C1703015	**Tag Number:**	237402
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 2:09:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/8/2017 2:09:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 2:09:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-3
Lab Order:	C1703015	**Tag Number:**	1206.249
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:48:00 PM
Chloroethane	0.11	0.15	J	ppbV	1	3/8/2017 2:48:00 PM
cis-1,2-Dichloroethene	0.18	0.15		ppbV	1	3/8/2017 2:48:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:48:00 PM
Trichloroethene	7.4	1.5		ppbV	10	3/8/2017 11:34:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 2:48:00 PM
Surr: Bromofluorobenzene	97.0	70-130		%REC	10	3/8/2017 11:34:00 PM
Surr: Bromofluorobenzene	166	70-130	S	%REC	1	3/8/2017 2:48:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-3
Lab Order:	C1703015	**Tag Number:**	1206.249
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:48:00 PM
Chloroethane	0.29	0.40	J	ug/m3	1	3/8/2017 2:48:00 PM
cis-1,2-Dichloroethene	0.71	0.59		ug/m3	1	3/8/2017 2:48:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:48:00 PM
Trichloroethene	40	8.1		ug/m3	10	3/8/2017 11:34:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 2:48:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-4
Lab Order:	C1703015	**Tag Number:**	290.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
cis-1,2-Dichloroethene	1.0	0.15		ppbV	1	3/8/2017 4:59:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
Trichloroethene	8.9	1.5		ppbV	10	3/9/2017 12:47:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
Surr: Bromofluorobenzene	100	70-130		%REC	10	3/9/2017 12:47:00 AM
Surr: Bromofluorobenzene	190	70-130	S	%REC	1	3/8/2017 4:59:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-4
Lab Order:	C1703015	**Tag Number:**	290.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 4:59:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 4:59:00 PM
cis-1,2-Dichloroethene	4.1	0.59		ug/m3	1	3/8/2017 4:59:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 4:59:00 PM
Trichloroethene	48	8.1		ug/m3	10	3/9/2017 12:47:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 4:59:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Duplicate
Lab Order:	C1703015	**Tag Number:**	1184.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
cis-1,2-Dichloroethene	0.99	0.15		ppbV	1	3/8/2017 5:39:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
Trichloroethene	8.8	1.5		ppbV	10	3/9/2017 2:01:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
Surr: Bromofluorobenzene	98.0	70-130		%REC	10	3/9/2017 2:01:00 AM
Surr: Bromofluorobenzene	187	70-130	S	%REC	1	3/8/2017 5:39:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Duplicate
Lab Order:	C1703015	**Tag Number:**	1184.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 5:39:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 5:39:00 PM
cis-1,2-Dichloroethene	3.9	0.59		ug/m3	1	3/8/2017 5:39:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 5:39:00 PM
Trichloroethene	47	8.1		ug/m3	10	3/9/2017 2:01:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 5:39:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Ambient Air
Lab Order:	C1703015	**Tag Number:**	556.267
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	3/8/2017 12:48:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	3/8/2017 12:48:00 PM
Surr: Bromofluorobenzene	87.0	70-130		%REC	1	3/8/2017 12:48:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Ambient Air
Lab Order:	C1703015	**Tag Number:**	556.267
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 12:48:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	3/8/2017 12:48:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	3/8/2017 12:48:00 PM

Qualifiers:

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

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

QUALITY CONTROL SUMMARY

Date: 27-Mar-17

CENTEK LABORATORIES, LLC

QC SUMMARY REPORT
SURROGATE RECOVERIES

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St
Test No: TO-15 **Matrix:** A

Sample ID	BR4FBZ
ALCS1UG-030817	105
ALCS1UGD-030817	104
AMB1UG-030817	85.0
C1703015-001A	239 *
C1703015-002A	235 *
C1703015-003A	97.0
C1703015-003A MS	170 *
C1703015-003A MSD	173 *
C1703015-004A	100
C1703015-005A	98.0
C1703015-006A	87.0

Acronym		Surrogate	QC Limits
BR4FBZ	=	Bromofluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

GC/MS QA-QC Check Report

June File : C:\HPCHEM\1\DATA\AO030803.D
June Time : 8 Mar 2017 10:33 am

Daily Calibration File : C:\HPCHEM\1\DATA\AO030803.D

			(BFB)	(IS1)	(IS2)	(IS3)
				51607	232876	196939
File	Sample	DL	Surrogate Recovery %	Internal Standard Responses		
AO030804.D	ALCS1UG-030817		105	54344	232438	196865
AO030805.D	AMB1UG-030817		85	51456	199472	169731
AO030806.D	C1703015-006A		87	47960	186316	173836
AO030807.D	C1703015-001A		239*	59338	270574	278336
AO030808.D	C1703015-002A		235*	72867	317032	316562*
AO030809.D	C1703015-003A		166*	80896	366728	336237*
AO030810.D	C1703015-003A	MS	170*	80202	356830	344072*
AO030811.D	C1703015-003A	MSD	173*	79391	370639	337498*
AO030812.D	C1703015-004A		190*	76299	343779	323940*
AO030813.D	C1703015-005A		187*	77699	348681	330439*
AO030822.D	C1703015-003A	10X	97	53827	227536	201273
AO030824.D	C1703015-004A	10X	100	46536	210199	197259
AO030826.D	C1703015-005A	10X	98	46525	198463	190799
AO030828.D	ALCS1UGD-030817		104	45106	199550	175594

t - fails 24hr time check * - fails criteria

Created: Mon Mar 27 11:04:40 2017 MSD #1/

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 0.25CT-TCE-VC

Sample ID ALCS1UG-030817	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12014
Client ID: ZZZZZ	Batch ID: R12014	TestNo: TO-15		Analysis Date: 3/8/2017	SeqNo: 140535

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.060	0.15	1	0	106	70	130				
Chloroethane	0.9000	0.15	1	0	90.0	70	130				
cis-1,2-Dichloroethene	1.100	0.15	1	0	110	70	130				
trans-1,2-Dichloroethene	1.070	0.15	1	0	107	70	130				
Trichloroethene	1.060	0.040	1	0	106	70	130				
Vinyl chloride	0.8700	0.040	1	0	87.0	70	130				

Sample ID ALCS1UGD-030817	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 12014
Client ID: ZZZZZ	Batch ID: R12014	TestNo: TO-15		Analysis Date: 3/9/2017	SeqNo: 140536

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.100	0.15	1	0	110	70	130	1.06	3.70	30	
Chloroethane	1.000	0.15	1	0	100	70	130	0.9	10.5	30	
cis-1,2-Dichloroethene	1.130	0.15	1	0	113	70	130	1.1	2.69	30	
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	70	130	1.07	2.76	30	
Trichloroethene	1.100	0.040	1	0	110	70	130	1.06	3.70	30	
Vinyl chloride	0.9100	0.040	1	0	91.0	70	130	0.87	4.49	30	

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 0.25CT-TCE-VC

Sample ID	AMB1UG-030817	SampType:	MBLK	TestCode:	0.25CT-TCE-	Units:	ppbV	Prep Date:		RunNo:	12014
Client ID:	ZZZZZ	Batch ID:	R12014	TestNo:	TO-15			Analysis Date:	3/8/2017	SeqNo:	140534

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Qualifiers:

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

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 1ugM3_TO15

Sample ID **C1703015-003A MS** SampType: **MS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **SV-3** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/8/2017** SeqNo: **140546**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.090	0.15	1	0	109	70	130				
Chloroethane	0.8100	0.15	1	0.11	70.0	70	130				
cis-1,2-Dichloroethene	1.400	0.15	1	0.18	122	70	130				
trans-1,2-Dichloroethene	1.140	0.15	1	0	114	70	130				
Trichloroethene	9.890	0.15	1	8.34	155	70	130				S
Vinyl chloride	0.7200	0.15	1	0	72.0	70	130				

Sample ID **C1703015-003A MS** SampType: **MSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **SV-3** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/8/2017** SeqNo: **140547**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.160	0.15	1	0	116	70	130	1.09	6.22	30	
Chloroethane	0.8600	0.15	1	0.11	75.0	70	130	0.81	5.99	30	
cis-1,2-Dichloroethene	1.440	0.15	1	0.18	126	70	130	1.4	2.82	30	
trans-1,2-Dichloroethene	1.180	0.15	1	0	118	70	130	1.14	3.45	30	
Trichloroethene	9.550	0.15	1	8.34	121	70	130	9.89	3.50	30	
Vinyl chloride	0.7500	0.15	1	0	75.0	70	130	0.72	4.08	30	

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

Centek Laboratories
IDL Study

1ug/M3 Detection Limit
January 2016

Method TO-15A
Units=ppb

Name	Amount	IDL#1	IDL#2	IDL#3	IDL#4	IDL#5	IDL#6	IDL#7	Average	StdDev	%Rec	IDL
Propylene	0.15	0.16	0.15	0.16	0.14	0.16	0.14	0.16	0.153	0.010	98.1	0.030
Freon 12	0.15	0.18	0.17	0.17	0.17	0.18	0.17	0.17	0.173	0.005	86.8	0.015
Chloromethane	0.15	0.19	0.18	0.16	0.18	0.18	0.2	0.17	0.180	0.013	83.3	0.041
Freon 114	0.15	0.18	0.17	0.17	0.17	0.18	0.17	0.18	0.174	0.005	86.1	0.017
Vinyl Chloride	0.15	0.17	0.16	0.16	0.15	0.16	0.15	0.15	0.157	0.008	95.5	0.024
Butane	0.15	0.18	0.16	0.17	0.18	0.18	0.19	0.19	0.179	0.011	84.0	0.034
1,3-butadiene	0.15	0.21	0.2	0.2	0.22	0.17	0.18	0.23	0.201	0.021	74.5	0.066
Bromomethane	0.15	0.18	0.2	0.21	0.18	0.22	0.16	0.21	0.194	0.021	77.2	0.068
Chloroethane	0.15	0.19	0.19	0.16	0.19	0.19	0.18	0.19	0.184	0.011	81.4	0.036
Ethanol	0.15	0.16	0.16	0.18	0.17	0.19	0.18	0.19	0.176	0.013	85.4	0.040
Acrolein	0.15	0.22	0.17	0.19	0.16	0.18	0.21	0.17	0.186	0.022	80.8	0.070
Vinyl Bromide	0.15	0.17	0.15	0.16	0.16	0.17	0.17	0.17	0.164	0.008	91.3	0.025
Freon 11	0.15	0.18	0.17	0.17	0.18	0.19	0.17	0.18	0.177	0.008	84.7	0.024
Acetone	0.15	0.2	0.17	0.18	0.15	0.15	0.18	0.14	0.167	0.021	89.7	0.067
Pentane	0.15	0.18	0.17	0.18	0.16	0.17	0.2	0.16	0.174	0.014	86.1	0.044
Isopropyl alcohol	0.15	0.22	0.2	0.19	0.2	0.19	0.21	0.19	0.200	0.012	75.0	0.036
1,1-dichloroethene	0.15	0.2	0.17	0.19	0.19	0.19	0.18	0.18	0.186	0.010	80.8	0.031
Freon 113	0.15	0.17	0.16	0.18	0.18	0.18	0.17	0.17	0.173	0.008	86.8	0.024
t-Butyl alcohol	0.15	0.21	0.2	0.2	0.21	0.2	0.2	0.18	0.200	0.010	75.0	0.031
Methylene chloride	0.15	0.2	0.18	0.19	0.18	0.2	0.19	0.17	0.187	0.011	80.2	0.035
Allyl chloride	0.15	0.18	0.17	0.16	0.18	0.18	0.2	0.18	0.179	0.012	84.0	0.038
Carbon disulfide	0.15	0.2	0.17	0.19	0.19	0.2	0.18	0.19	0.189	0.011	79.5	0.034
trans-1,2-dichloroethene	0.15	0.15	0.14	0.14	0.14	0.16	0.14	0.15	0.146	0.008	102.9	0.025
methyl tert-butyl ether	0.15	0.14	0.14	0.14	0.13	0.15	0.14	0.13	0.139	0.007	108.2	0.022
1,1-dichloroethane	0.15	0.17	0.15	0.16	0.15	0.17	0.16	0.16	0.160	0.008	93.8	0.026
Vinyl acetate	0.15	0.14	0.13	0.14	0.13	0.13	0.13	0.12	0.131	0.007	114.1	0.022
Methyl Ethyl Ketone	0.15	0.17	0.17	0.16	0.16	0.15	0.13	0.12	0.151	0.020	99.1	0.061
cis-1,2-dichloroethene	0.15	0.15	0.14	0.16	0.15	0.16	0.15	0.14	0.150	0.008	100.0	0.026
Hexane	0.15	0.12	0.14	0.13	0.13	0.13	0.12	0.12	0.127	0.008	118.0	0.024
Ethyl acetate	0.15	0.16	0.17	0.14	0.15	0.14	0.16	0.13	0.150	0.014	100.0	0.044
Chloroform	0.15	0.16	0.16	0.16	0.16	0.17	0.16	0.17	0.163	0.005	92.1	0.015
Tetrahydrofuran	0.15	0.15	0.13	0.15	0.15	0.15	0.15	0.14	0.146	0.008	102.9	0.025
1,2-dichloroethane	0.15	0.16	0.15	0.16	0.16	0.17	0.16	0.17	0.161	0.007	92.9	0.022
1,1,1-trichloroethane	0.15	0.17	0.16	0.17	0.17	0.16	0.17	0.17	0.167	0.005	89.7	0.015
Cyclohexane	0.15	0.14	0.14	0.14	0.15	0.15	0.14	0.14	0.143	0.005	105.0	0.015
Carbon tetrachloride	0.15	0.13	0.15	0.15	0.15	0.15	0.15	0.16	0.149	0.009	101.0	0.028
Benzene	0.15	0.15	0.16	0.16	0.15	0.16	0.16	0.16	0.157	0.005	95.5	0.015
Methyl methacrylate	0.15	0.15	0.15	0.14	0.14	0.14	0.15	0.11	0.140	0.014	107.1	0.044
1,4-dioxane	0.15	0.18	0.18	0.19	0.18	0.15	0.17	0.12	0.167	0.024	89.7	0.076

Centek Laboratories
IDL Study

1ug/M3 Detection Limit
January 2016

Method TO-15A
Units=ppb

Name	Amount	IDL#1	IDL#2	IDL#3	IDL#4	IDL#5	IDL#6	IDL#7	Average	StdDev	%Rec	IDL
2,2,4-trimethylpentane	0.15	0.15	0.15	0.15	0.16	0.14	0.16	0.15	0.151	0.007	99.1	0.022
Heptane	0.15	0.12	0.13	0.13	0.12	0.13	0.13	0.13	0.127	0.005	118.0	0.015
Trichloroethene	0.15	0.14	0.15	0.14	0.15	0.15	0.14	0.15	0.146	0.005	102.9	0.017
1,2-dichloropropane	0.15	0.16	0.17	0.17	0.16	0.17	0.16	0.16	0.164	0.005	91.3	0.017
Bromodichloromethane	0.15	0.16	0.16	0.16	0.15	0.16	0.17	0.16	0.160	0.006	93.8	0.018
cis-1,3-dichloropropene	0.15	0.13	0.13	0.14	0.14	0.13	0.13	0.13	0.133	0.005	112.9	0.015
trans-1,3-dichloropropene	0.15	0.16	0.13	0.13	0.14	0.14	0.14	0.16	0.143	0.013	105.0	0.039
1,1,2-trichloroethane	0.15	0.16	0.15	0.16	0.15	0.16	0.18	0.17	0.161	0.011	92.9	0.034
Toluene	0.15	0.14	0.14	0.14	0.13	0.16	0.14	0.15	0.143	0.010	105.0	0.030
Methyl Isobutyl Ketone	0.15	0.18	0.18	0.18	0.18	0.16	0.18	0.15	0.173	0.013	86.8	0.039
Dibromochloromethane	0.15	0.16	0.16	0.17	0.18	0.16	0.17	0.18	0.169	0.009	89.0	0.028
Methyl Butyl Ketone	0.15	0.17	0.16	0.18	0.17	0.16	0.17	0.14	0.164	0.013	91.3	0.040
1,2-dibromoethane	0.15	0.16	0.17	0.16	0.16	0.16	0.16	0.17	0.163	0.005	92.1	0.015
Tetrachloroethylene	0.15	0.16	0.17	0.16	0.16	0.16	0.17	0.17	0.164	0.005	91.3	0.017
Chlorobenzene	0.15	0.16	0.16	0.16	0.17	0.15	0.17	0.17	0.163	0.008	92.1	0.024
1,1,1,2-tetrachloroethane	0.15	0.17	0.17	0.17	0.18	0.16	0.18	0.17	0.171	0.007	87.5	0.022
Ethylbenzene	0.15	0.13	0.14	0.14	0.14	0.12	0.14	0.13	0.134	0.008	111.7	0.025
m&p-xylene	0.3	0.25	0.25	0.25	0.23	0.25	0.25	0.25	0.247	0.008	121.4	0.024
Nonane	0.15	0.11	0.11	0.11	0.11	0.1	0.1	0.11	0.107	0.005	140.0	0.015
Styrene	0.15	0.12	0.13	0.13	0.11	0.12	0.13	0.12	0.123	0.008	122.1	0.024
Bromoform	0.15	0.15	0.15	0.16	0.15	0.15	0.17	0.16	0.156	0.008	96.3	0.025
o-xylene	0.15	0.11	0.12	0.12	0.14	0.14	0.12	0.11	0.123	0.013	122.1	0.039
Cumene	0.15	0.12	0.13	0.13	0.12	0.13	0.13	0.13	0.127	0.005	118.0	0.015
Bromofluorobenzene	1	0.88	0.9	0.9	0.87	0.89	0.89	0.9	0.890	0.012	112.4	0.036
1,1,2,2-tetrachloroethane	0.15	0.16	0.16	0.17	0.16	0.17	0.17	0.16	0.164	0.005	91.3	0.017
Propylbenzene	0.15	0.13	0.12	0.13	0.13	0.11	0.13	0.11	0.123	0.010	122.1	0.030
2-Chlorotoluene	0.15	0.13	0.13	0.13	0.14	0.13	0.12	0.13	0.130	0.006	115.4	0.018
4-ethyltoluene	0.15	0.11	0.12	0.12	0.12	0.13	0.13	0.11	0.120	0.008	125.0	0.026
1,3,5-trimethylbenzene	0.15	0.12	0.13	0.14	0.12	0.13	0.13	0.13	0.129	0.007	116.7	0.022
1,2,4-trimethylbenzene	0.15	0.12	0.13	0.12	0.12	0.13	0.12	0.12	0.123	0.005	122.1	0.015
1,3-dichlorobenzene	0.15	0.14	0.14	0.14	0.13	0.14	0.13	0.14	0.137	0.005	109.4	0.015
benzyl chloride	0.15	0.13	0.16	0.13	0.15	0.13	0.15	0.16	0.144	0.014	104.0	0.044
1,4-dichlorobenzene	0.15	0.13	0.11	0.12	0.12	0.12	0.12	0.13	0.121	0.007	123.5	0.022
1,2,3-trimethylbenzene	0.15	0.12	0.11	0.12	0.12	0.12	0.11	0.11	0.116	0.005	129.6	0.017
1,2-dichlorobenzene	0.15	0.13	0.14	0.14	0.14	0.14	0.14	0.13	0.137	0.005	109.4	0.015
1,2,4-trichlorobenzene	0.15	0.1	0.11	0.1	0.11	0.11	0.12	0.1	0.107	0.008	140.0	0.024
Naphthalene	0.15	0.13	0.13	0.14	0.11	0.12	0.14	0.12	0.127	0.011	118.0	0.035
Hexachloro-1,3-butadiene	0.15	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.164	0.005	91.3	0.017

Centek Laboratories
IDL Study

0.25ug/M3 Detection Limit
January 2016

Method TO-15A
Units=ppb

Name	Amount	IDL#1	IDL#2	IDL#3	IDL#4	IDL#5	IDL#6	IDL#7	Average	StdDev	%Rec	IDL
Vinyl Chloride	0.1	0.11	0.11	0.09	0.09	0.1	0.09	0.1	0.099	0.009	101.4	0.028
Carbon tetrachloride	0.1	0.1	0.11	0.08	0.09	0.09	0.09	0.09	0.093	0.010	107.7	0.030
Trichloroethene	0.1	0.1	0.1	0.07	0.08	0.08	0.08	0.08	0.084	0.011	118.6	0.036
Tetrachloroethylene	0.1	0.11	0.12	0.09	0.09	0.1	0.09	0.09	0.099	0.012	101.4	0.038
Naphthalene	0.1	0.09	0.08	0.07	0.06	0.06	0.07	0.06	0.070	0.012	142.9	0.036

GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

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

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

Percent Relative Standard Deviation (%RSD)

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

Percent Difference (%D)

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

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

Sample Calculations

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

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

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

SAMPLE DATA

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-1
Lab Order:	C1703015	**Tag Number:**	542.256
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Chloroethane	0.13	0.15	J	ppbV	1	3/8/2017 1:28:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 1:28:00 PM
Surr: Bromofluorobenzene	239	70-130	S	%REC	1	3/8/2017 1:28:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-1
Lab Order:	C1703015	**Tag Number:**	542.256
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
Chloroethane	0.34	0.40	J	ug/m3	1	3/8/2017 1:28:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 1:28:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/8/2017 1:28:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 1:28:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030807.D Vial: 22
Acq On : 8 Mar 2017 1:28 pm Operator: RJP
Sample : C1703015-001A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:17 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

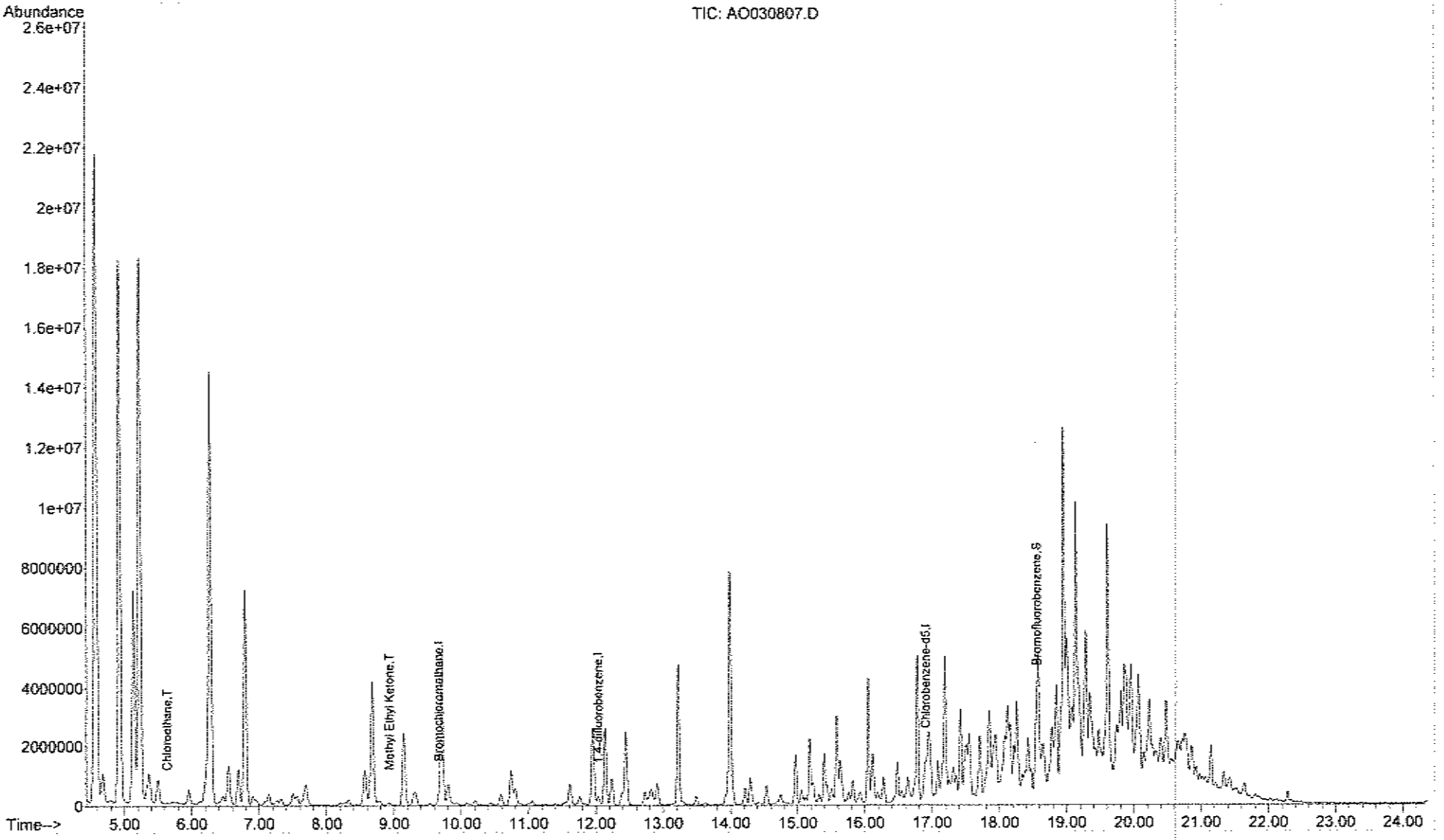
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	59338	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.04	114	270574	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	278336	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	416764m	2.39	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 239.00%#			
Target Compounds						Qvalue
10) Chloroethane	5.63	64	7718	0.13	ppb	# 64
28) Methyl Ethyl Ketone	8.93	72	32252	0.96	ppb	# 1

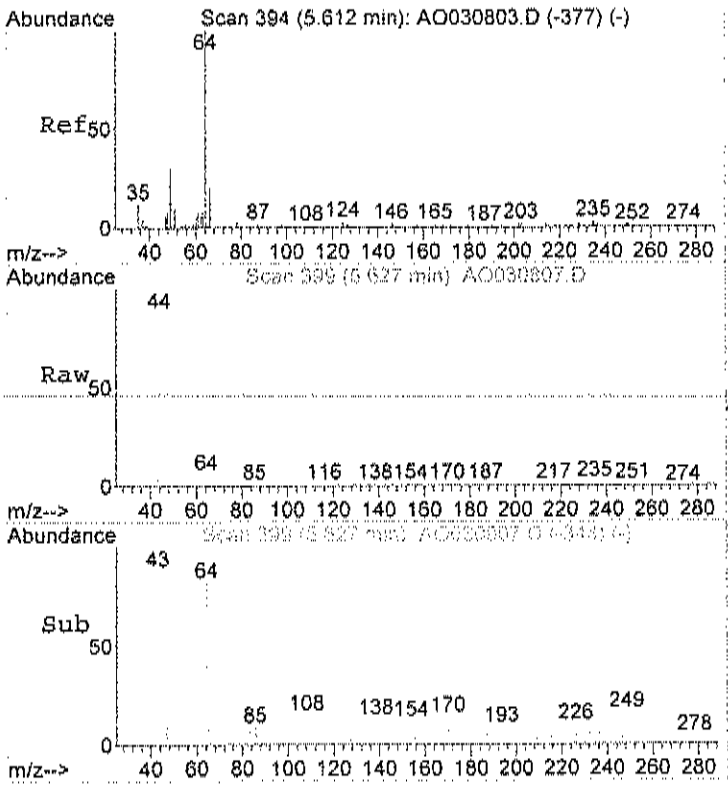
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030807.D Vial: 22
Acq On : 8 Mar 2017 1:28 pm Operator: RJP
Sample : C1703015-001A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:13 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

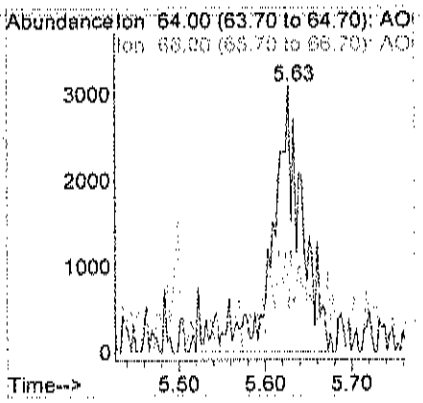


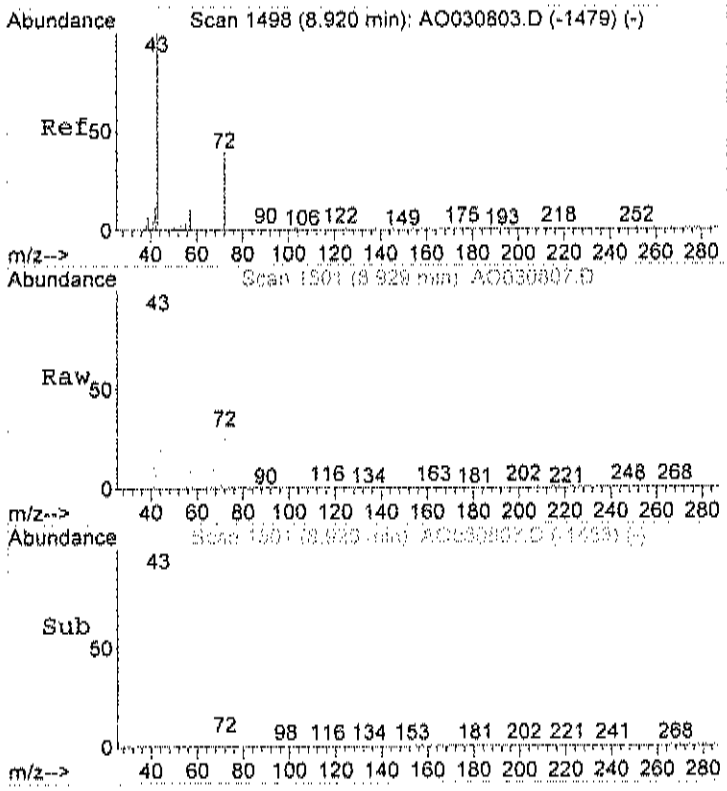


#10
Chloroethane
Concen: 0.13 ppb
RT: 5.63 min Scan# 399
Delta R.T. 0.02 min
Lab File: AO030807.D
Acq: 8 Mar 2017 1:28 pm

Tgt Ion: 64 Resp: 7718

Ion	Ratio	Lower	Upper
64	100		
66	47.5	22.7	34.1#

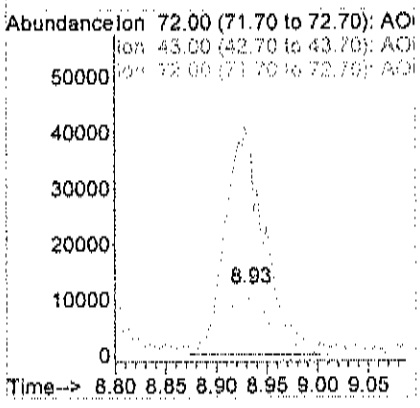




#28
Methyl Ethyl Ketone
Concen: 0.96 ppb
RT: 8.93 min Scan# 1501
Delta R.T. -0.01 min
Lab File: AO030807.D
Acq: 8 Mar 2017 1:28 pm

Tgt Ion: 72 Resp: 32252

Ion	Ratio	Lower	Upper
72	100		
43	0.0	383.1	423.1#
72	100.0	80.0	120.0



Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-2
Lab Order:	C1703015	**Tag Number:**	237.402
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Trichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 2:09:00 PM
Surr: Bromofluorobenzene	235	70-130	S	%REC	1	3/8/2017 2:09:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-2
Lab Order:	C1703015	**Tag Number:**	237.402
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 2:09:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:09:00 PM
Trichloroethene	< 0.81	0.81		ug/m3	1	3/8/2017 2:09:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 2:09:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030808.D Vial: 23
Acq On : 8 Mar 2017 2:09 pm Operator: RJP
Sample : C1703015-002A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:18 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	72867	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	317032	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	316562	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.55	95	466729m	2.35	ppb	0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 235.00%#			
Target Compounds						Qvalue

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

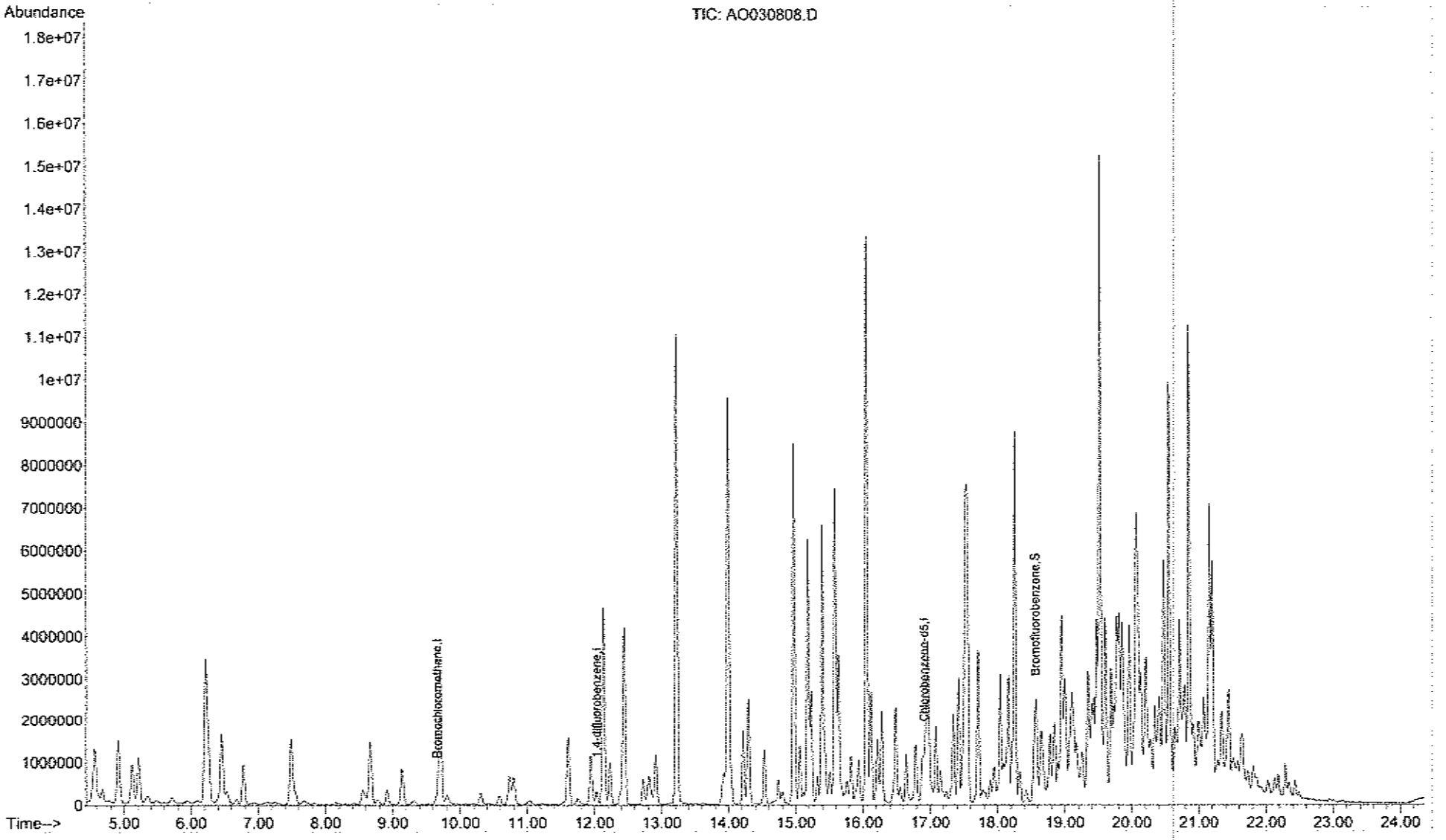
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030808.D
Acq On : 8 Mar 2017 2:09 pm
Sample : C1703015-002A
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:14 2017

Vial: 23
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-3
Lab Order:	C1703015	**Tag Number:**	1206.249
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:48:00 PM
Chloroethane	0.11	0.15	J	ppbV	1	3/8/2017 2:48:00 PM
cis-1,2-Dichloroethene	0.18	0.15		ppbV	1	3/8/2017 2:48:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 2:48:00 PM
Trichloroethene	7.4	1.5		ppbV	10	3/8/2017 11:34:00 PM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 2:48:00 PM
Surr: Bromofluorobenzene	97.0	70-130		%REC	10	3/8/2017 11:34:00 PM
Surr: Bromofluorobenzene	166	70-130	S	%REC	1	3/8/2017 2:48:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-3
Lab Order:	C1703015	**Tag Number:**	1206.249
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:48:00 PM
Chloroethane	0.29	0.40	J	ug/m3	1	3/8/2017 2:48:00 PM
cis-1,2-Dichloroethene	0.71	0.59		ug/m3	1	3/8/2017 2:48:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 2:48:00 PM
Trichloroethene	40	8.1		ug/m3	10	3/8/2017 11:34:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 2:48:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030809.D Vial: 24
Acq On : 8 Mar 2017 2:48 pm Operator: RJP
Sample : C1703015-003A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:19 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	80896	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	366728	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	336237	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.55	95	350228m N	1.66	ppb	0.01
Spiked Amount 1.000	Range 70 - 130		Recovery = 166.00%#			
Target Compounds						Qvalue
10) Chloroethane	5.62	64	9389	0.11	ppb	# 80
29) cis-1,2-dichloroethene	9.44	61	22541	0.18	ppb	92
44) Trichloroethene	12.88	130	1738106	8.34	ppb	95

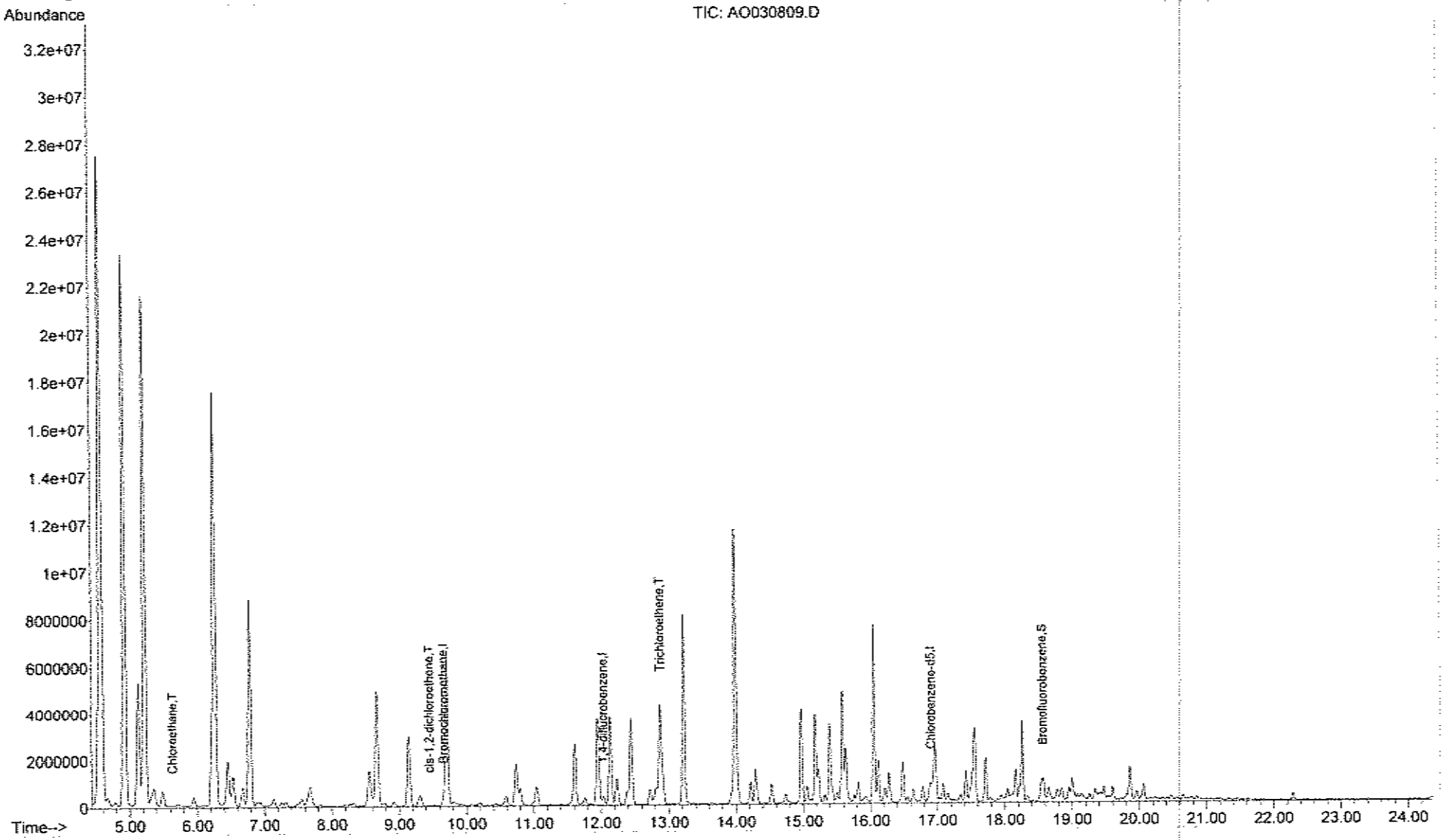
(#) = qualifier out of range (m) = manual integration (+) = signals summed
AO030809.D A227_1UG.M Mon Mar 27 11:01:26 2017 MSD1 Page 1

Quantitation Report (QT Reviewed)

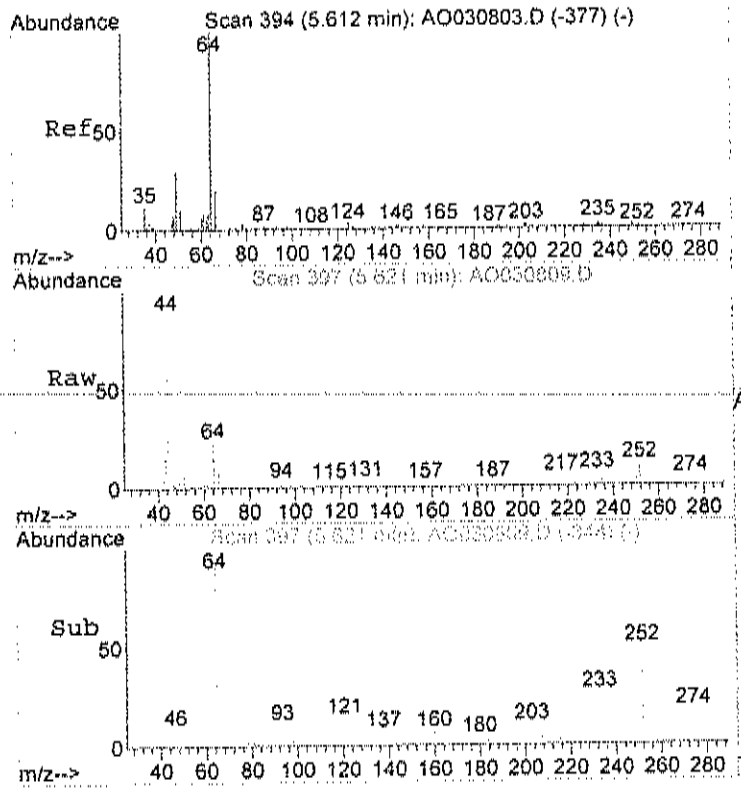
Data File : C:\HPCHEM\1\DATA\AO030809.D
Acq On : 8 Mar 2017 2:48 pm
Sample : C1703015-003A
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:15 2017

Vial: 24
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



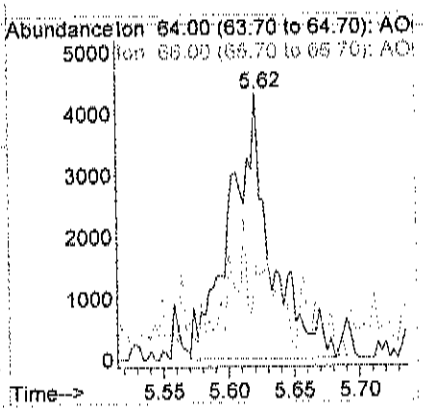
AO030809.D A227_1UG.M Mon Mar 27 11:01:27 2017 MSD1

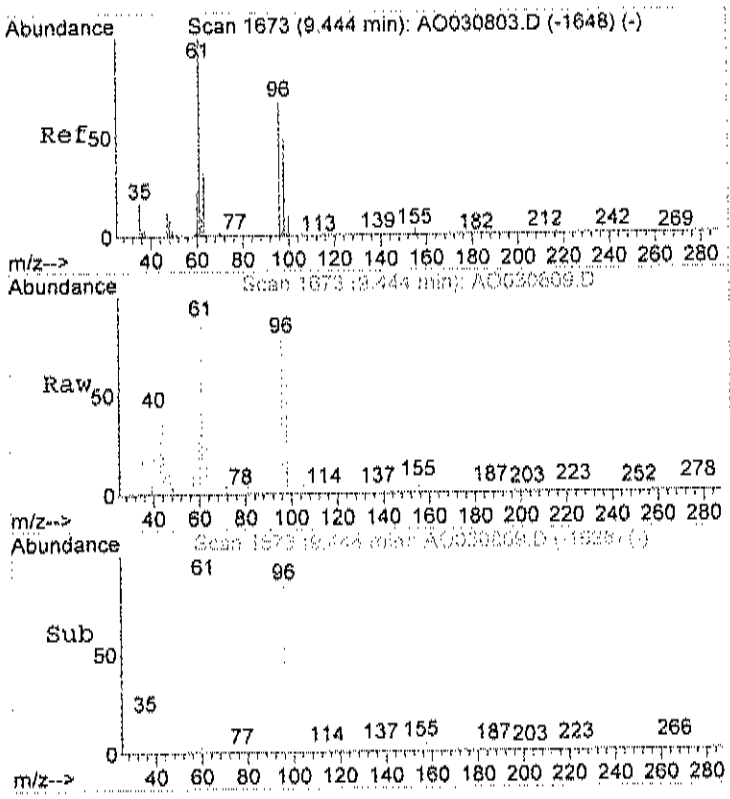


#10
Chloroethane
Concen: 0.11 ppb
RT: 5.62 min Scan# 397
Delta R.T. 0.01 min
Lab File: AO030809.D
Acq: 8 Mar 2017 2:48 pm

Tgt Ion: 64 Resp: 9389

Ion	Ratio	Lower	Upper
64	100		
66	38.9	22.7	34.1#

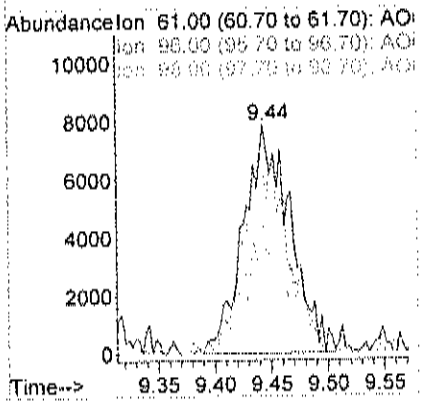


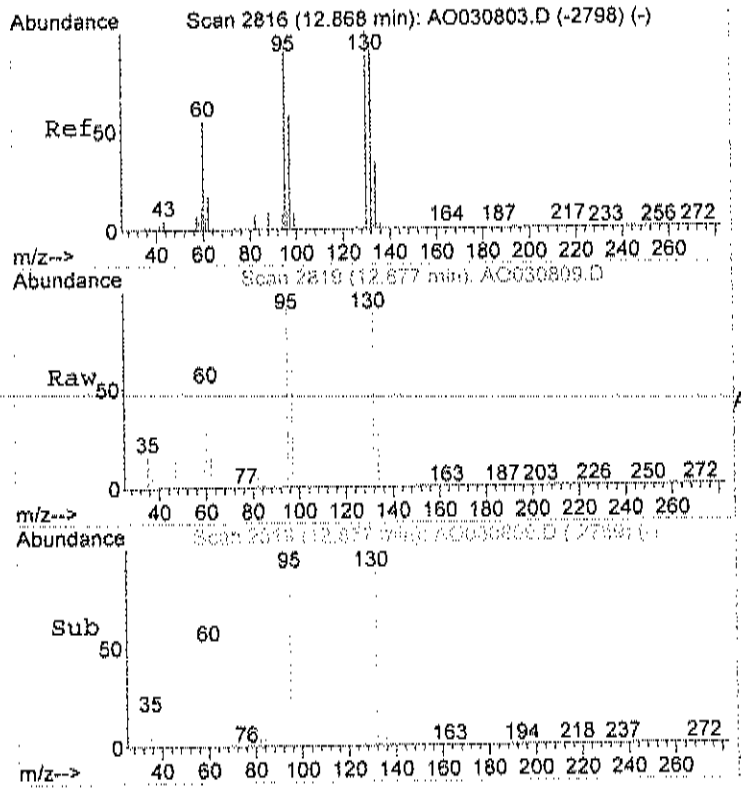


#29
cis-1,2-dichloroethene
Concen: 0.18 ppb
RT: 9.44 min Scan# 1673
Delta R.T. -0.02 min
Lab File: AO030809.D
Acq: 8 Mar 2017 2:48 pm

Tgt Ion: 61 Resp: 22541

Ion	Ratio	Lower	Upper
61	100		
96	84.9	58.1	98.1
98	54.4	29.3	69.3

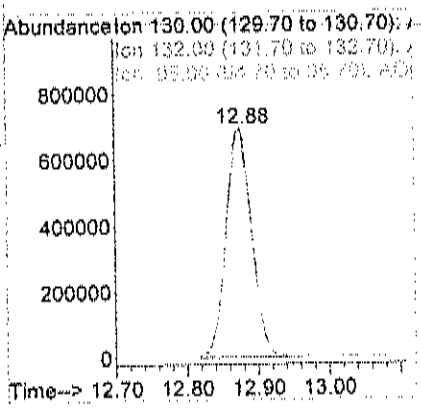




#44
Trichloroethene
Concen: 8.34 ppb
RT: 12.88 min Scan# 2819
Delta R.T. -0.00 min
Lab File: AO030809.D
Acq: 8 Mar 2017 2:48 pm

Tgt Ion:130 Resp: 1738106

Ion	Ratio	Lower	Upper
130	100		
132	98.1	69.9	109.9
95	97.0	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030822.D Vial: 36
Acq On : 8 Mar 2017 11:34 pm Operator: RJP
Sample : C1703015-003A 10X Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:32 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

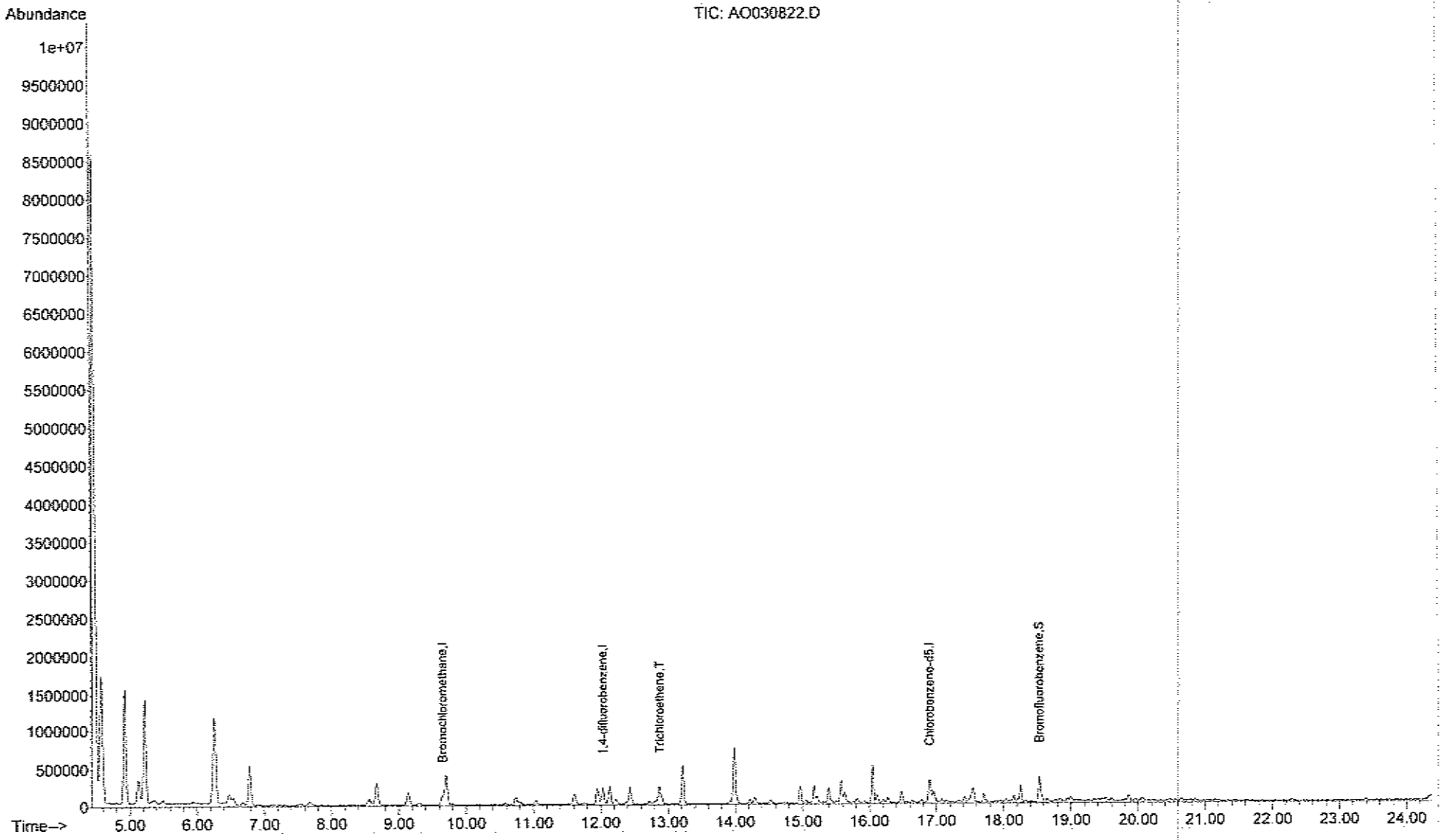
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	53827	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.04	114	227536	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	201273	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	122944	0.97	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%			
Target Compounds						Qvalue
44) Trichloroethene	12.87	130	95085	0.74	ppb	95

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

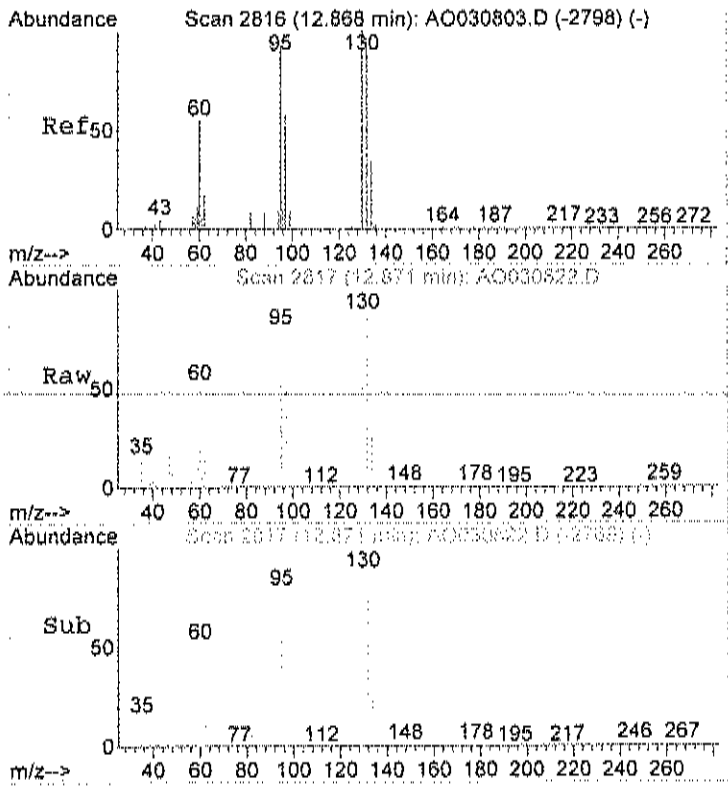
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030822.D Vial: 36
Acq On : 8 Mar 2017 11:34 pm Operator: RJP
Sample : C1703015-003A 10X Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:51 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



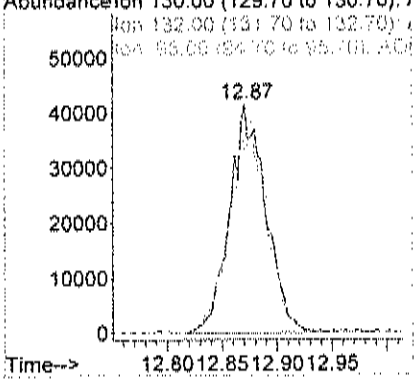
AO030822.D A227_1UG.M Mon Mar 27 11:01:42 2017 MSD1



#44
Trichloroethene
Concen: 0.74 ppb
RT: 12.87 min Scan# 2817
Delta R.T. -0.01 min
Lab File: AO030822.D
Acq: 8 Mar 2017 11:34 pm

Tgt Ion:130 Resp: 95085

Ion	Ratio	Lower	Upper
130	100		
132	96.9	69.9	109.9
95	94.6	76.3	116.3



Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-4
Lab Order:	C1703015	**Tag Number:**	290.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
cis-1,2-Dichloroethene	1.0	0.15		ppbV	1	3/8/2017 4:59:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
Trichloroethene	8.9	1.5		ppbV	10	3/9/2017 12:47:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 4:59:00 PM
Surr: Bromofluorobenzene	100	70-130		%REC	10	3/9/2017 12:47:00 AM
Surr: Bromofluorobenzene	190	70-130	S	%REC	1	3/8/2017 4:59:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	SV-4
Lab Order:	C1703015	**Tag Number:**	290.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 4:59:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 4:59:00 PM
cis-1,2-Dichloroethene	4.1	0.59		ug/m3	1	3/8/2017 4:59:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 4:59:00 PM
Trichloroethene	48	8.1		ug/m3	10	3/9/2017 12:47:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 4:59:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030812.D Vial: 27
Acq On : 8 Mar 2017 4:59 pm Operator: RJP
Sample : C1703015-004A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:22 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	76299	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.03	114	343779	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	323940	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	386106	1.90	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 190.00%#			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.44	61	126069	1.04	ppb	95
44) Trichloroethene	12.88	130	2043606	10.47	ppb	96

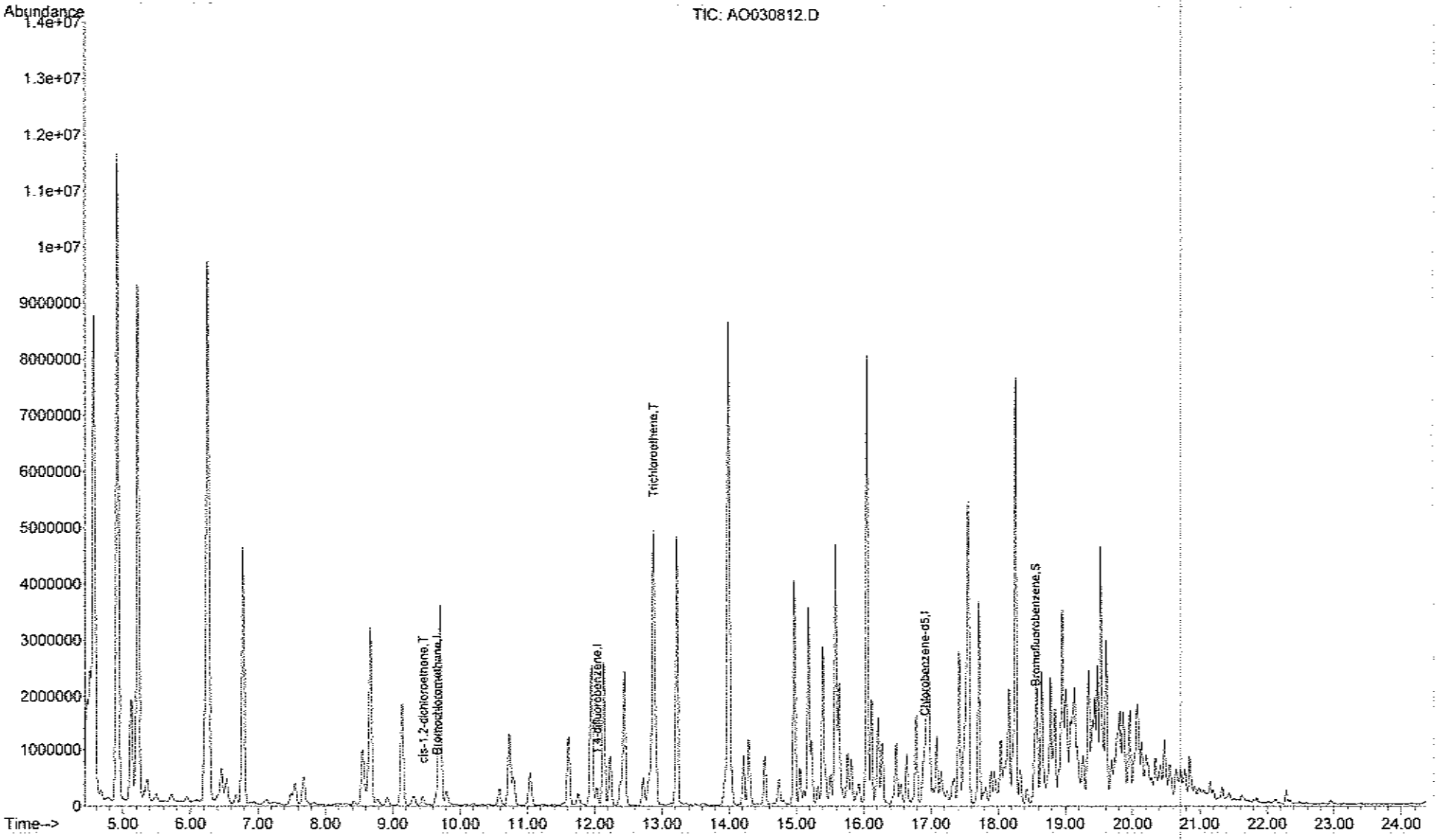
(#) = qualifier out of range (m) = manual integration (+) = signals summed
AO030812.D A227_1UG.M Mon Mar 27 11:01:31 2017 MSD1 Page 1

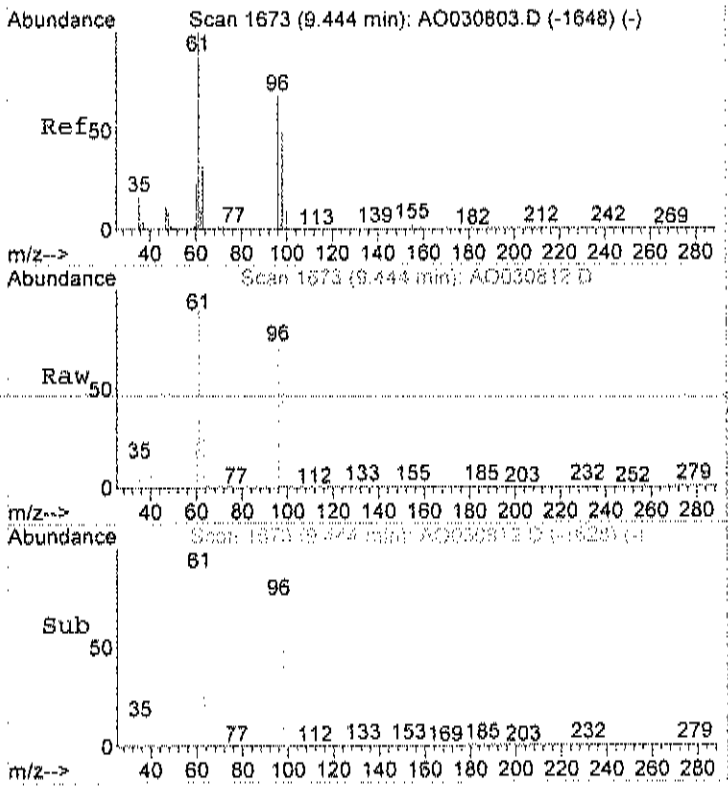
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030812.D
Acq On : 8 Mar 2017 4:59 pm
Sample : C1703015-004A
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:37 2017

Vial: 27
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

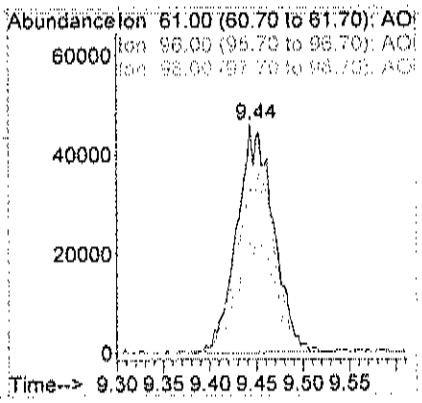


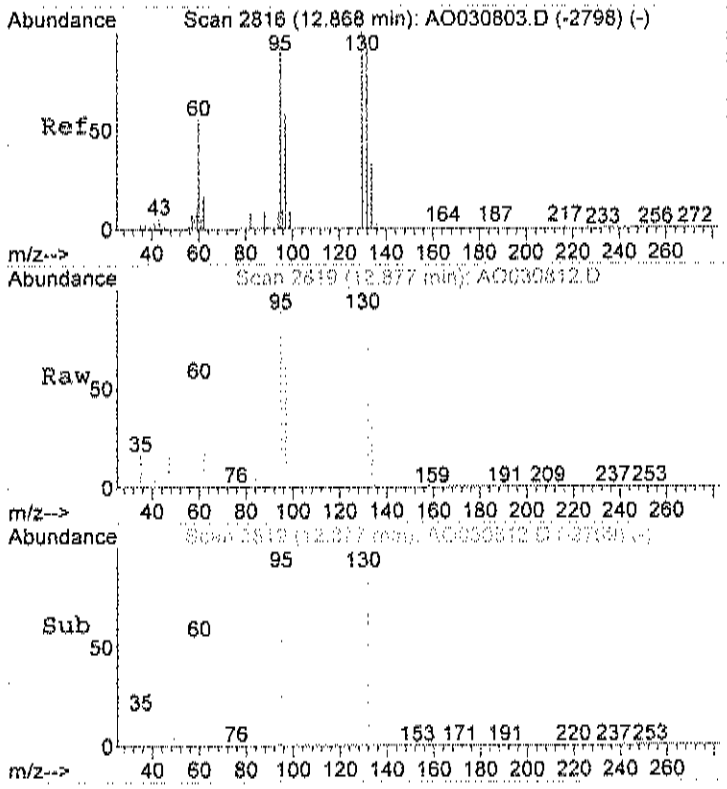


#29
cis-1,2-dichloroethene
Concen: 1.04 ppb
RT: 9.44 min Scan# 1673
Delta R.T. -0.02 min
Lab File: AO030812.D
Acq: 8 Mar 2017 4:59 pm

Tgt Ion: 61 Resp: 126069

Ion	Ratio	Lower	Upper
61	100		
96	82.1	58.1	98.1
98	52.9	29.3	69.3

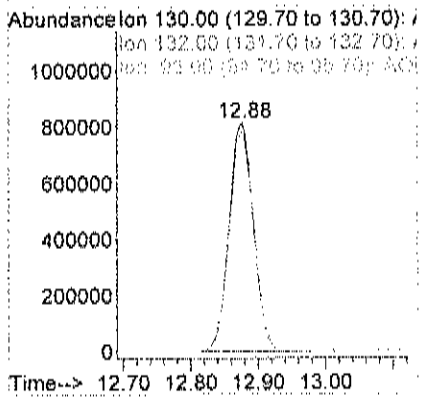




#44
Trichloroethene
Concen: 10.47 ppb
RT: 12.88 min Scan# 2819
Delta R.T. -0.00 min
Lab File: AO030812.D
Acq: 8 Mar 2017 4:59 pm

Tgt Ion:130 Resp: 2043606

Ion	Ratio	Lower	Upper
130	100		
132	96.4	69.9	109.9
95	95.1	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030824.D Vial: 38
Acq On : 9 Mar 2017 12:47 am Operator: RJP
Sample : C1703015-004A 10X Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:34 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	46536	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	210199	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	197259	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	123688	1.00	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%			
Target Compounds						Qvalue
44) Trichloroethene	12.88	130	106647	0.89	ppb	96

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

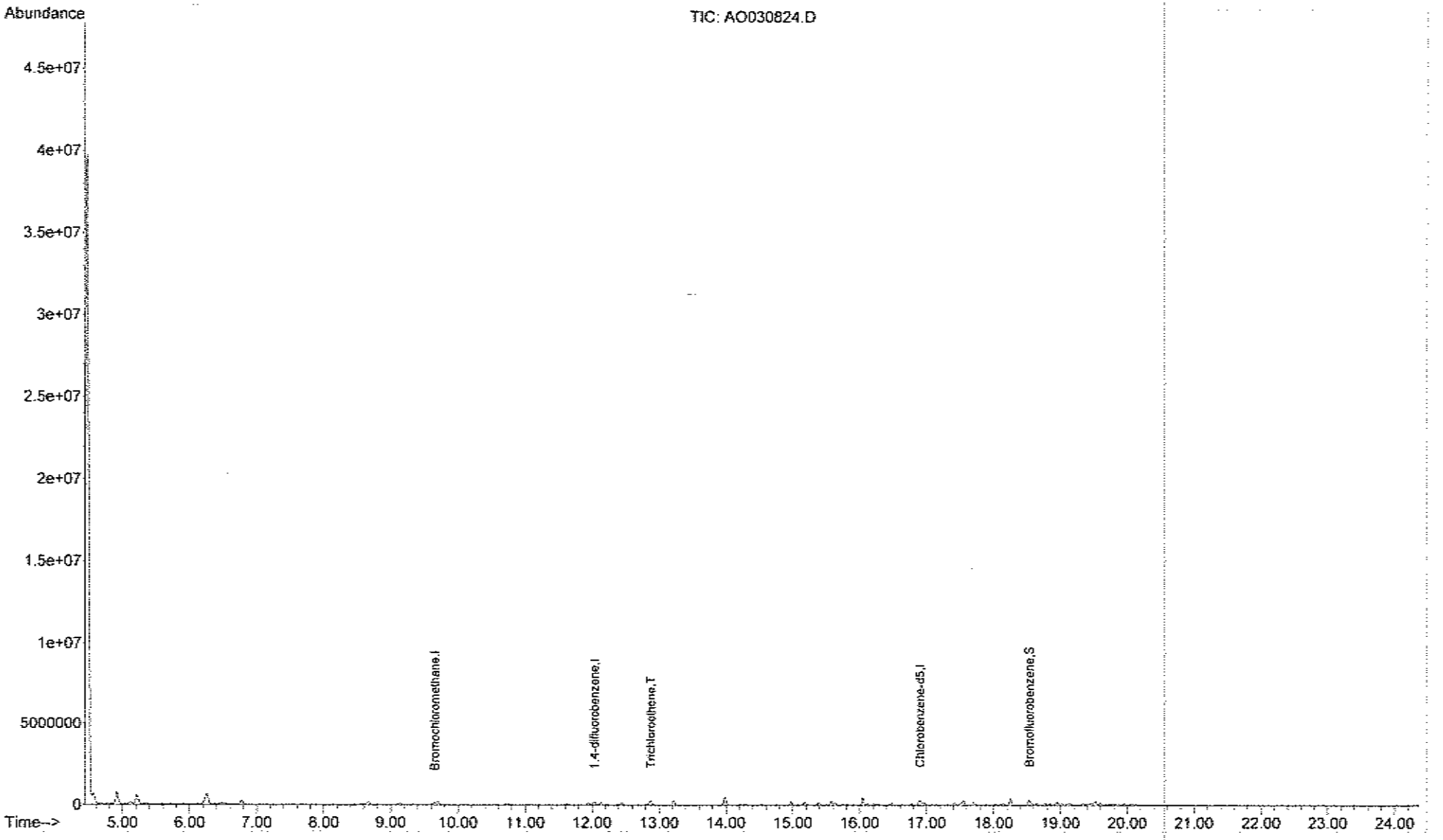
Quantitation Report (QT Reviewed)

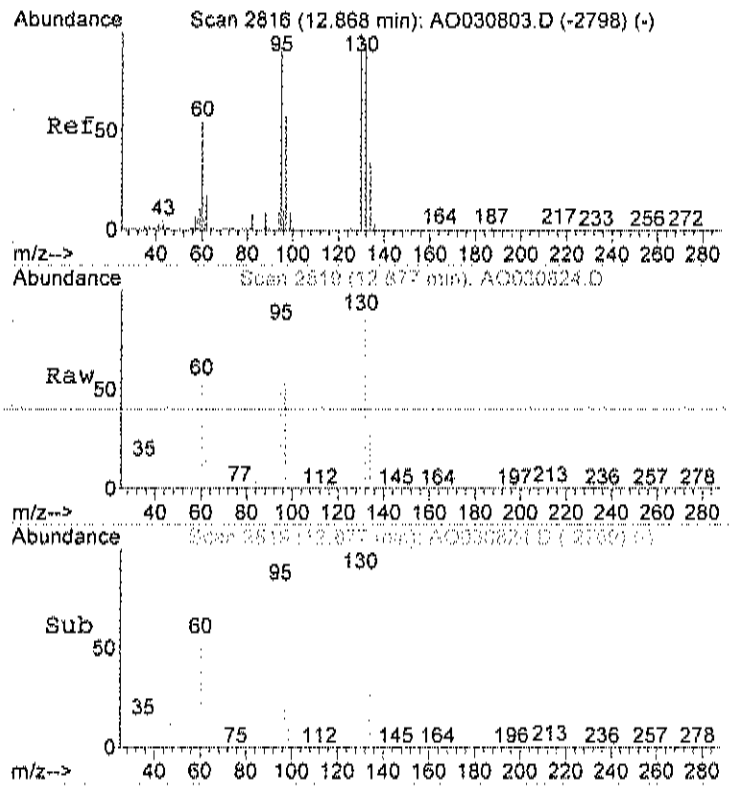
Data File : C:\HPCHEM\1\DATA\AO030824.D
Acq On : 9 Mar 2017 12:47 am
Sample : C1703015-004A 10X
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:52 2017

Vial: 38
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

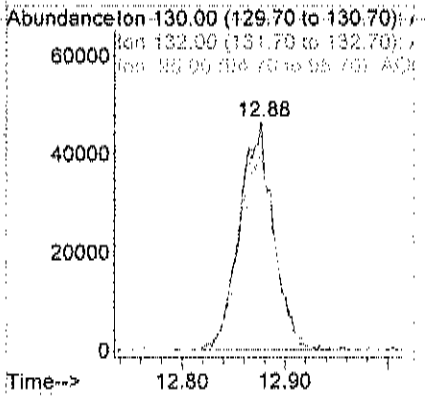




#44
Trichloroethene
Concen: 0.89 ppb
RT: 12.88 min Scan# 2819
Delta R.T. 0.00 min
Lab File: AO030824.D
Acq: 9 Mar 2017 12:47 am

Tgt Ion:130 Resp: 106647

Ion	Ratio	Lower	Upper
130	100		
132	93.9	69.9	109.9
95	92.8	76.3	116.3



Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Duplicate
Lab Order:	C1703015	**Tag Number:**	1184.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	-3			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
cis-1,2-Dichloroethene	0.99	0.15		ppbV	1	3/8/2017 5:39:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
Trichloroethene	8.8	1.5		ppbV	10	3/9/2017 2:01:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	3/8/2017 5:39:00 PM
Surr: Bromofluorobenzene	98.0	70-130		%REC	10	3/9/2017 2:01:00 AM
Surr: Bromofluorobenzene	187	70-130	S	%REC	1	3/8/2017 5:39:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Duplicate
Lab Order:	C1703015	**Tag Number:**	1184.299
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: RJP
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 5:39:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 5:39:00 PM
cis-1,2-Dichloroethene	3.9	0.59		ug/m3	1	3/8/2017 5:39:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 5:39:00 PM
Trichloroethene	47	8.1		ug/m3	10	3/9/2017 2:01:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/8/2017 5:39:00 PM

NOTES:
Surrogate did not meet criteria due to severe matrix interference.

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030813.D Vial: 28
Acq On : 8 Mar 2017 5:39 pm Operator: RJP
Sample : C1703015-005A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:23 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

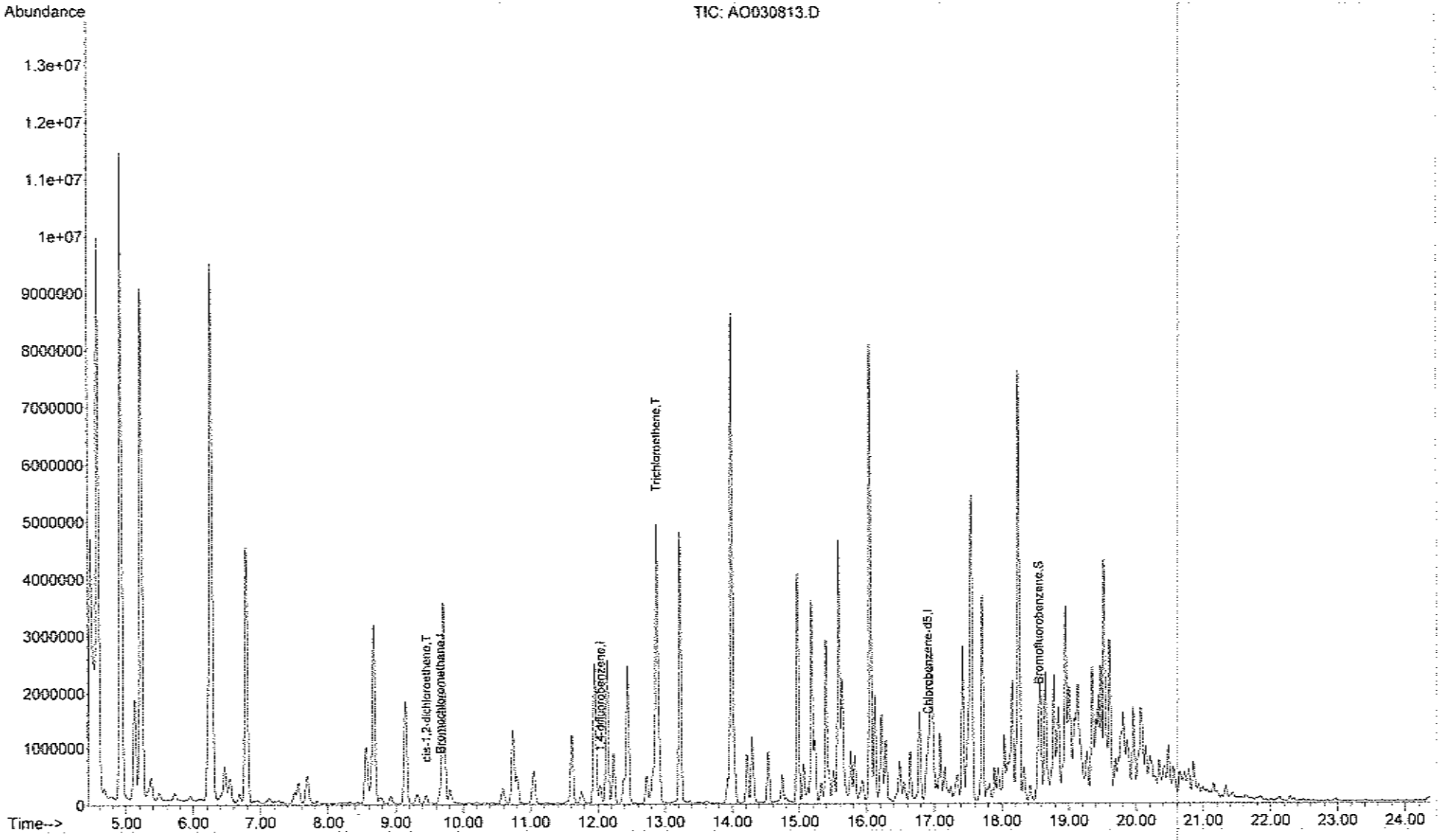
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	77699	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.03	114	348681	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	330439	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	387056	1.87	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 187.00%#			
Target Compounds						Qvalue
29) cis-1,2-dichloroethene	9.46	61	122307	0.99	ppb	96
44) Trichloroethene	12.88	130	2033182	10.27	ppb	96

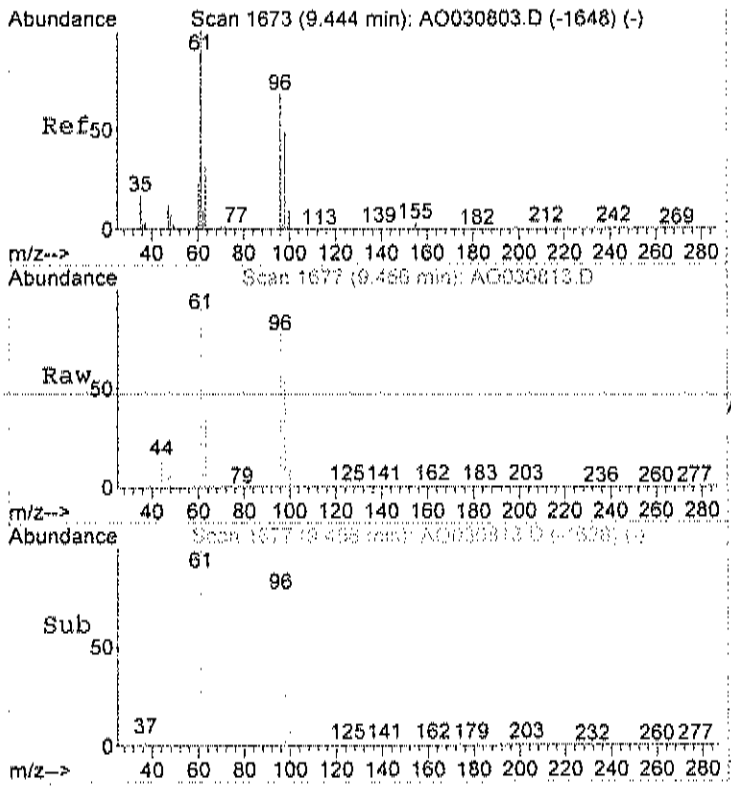
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030813.D Vial: 28
Acq On : 8 Mar 2017 5:39 pm Operator: RJP
Sample : C1703015-005A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:38 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

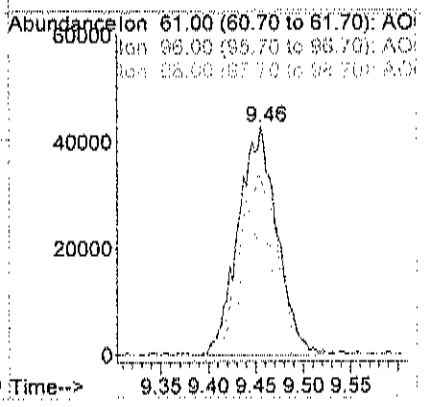


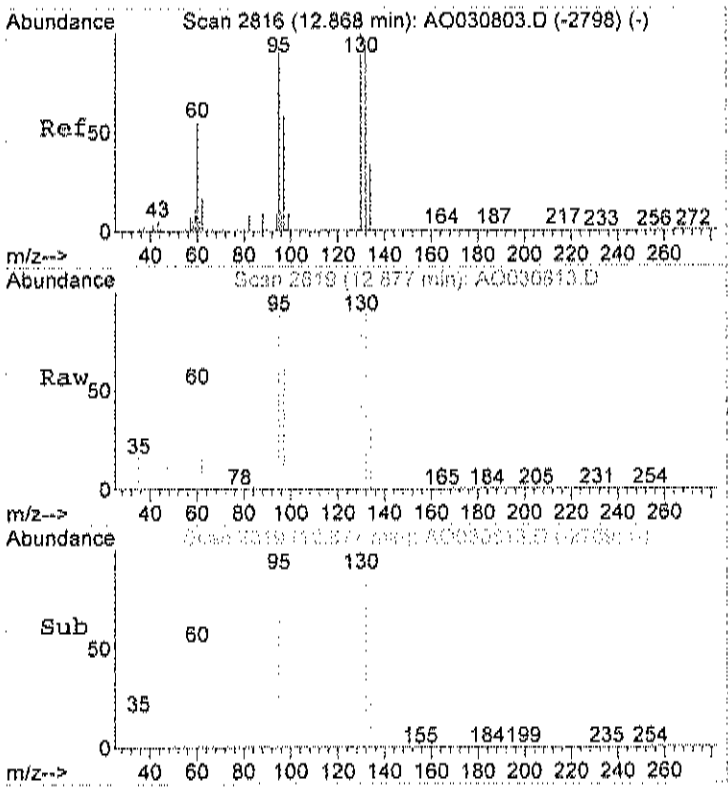


#29
cis-1,2-dichloroethene
Concen: 0.99 ppb
RT: 9.46 min Scan# 1677
Delta R.T. -0.00 min
Lab File: AO030813.D
Acq: 8 Mar 2017 5:39 pm

Tgt Ion: 61 Resp: 122307

Ion	Ratio	Lower	Upper
61	100		
96	79.5	58.1	98.1
98	53.8	29.3	69.3

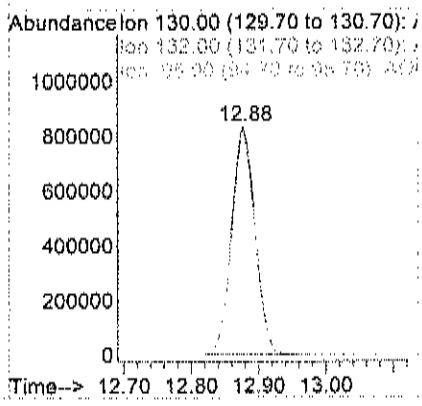




#44
Trichloroethene
Concen: 10.27 ppb
RT: 12.88 min Scan# 2819
Delta R.T. -0.00 min
Lab File: AO030813.D
Acq: 8 Mar 2017 5:39 pm

Tgt Ion:130 Resp: 2033182

Ion	Ratio	Lower	Upper
130	100		
132	97.0	69.9	109.9
95	95.0	76.3	116.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030826.D Vial: 40
Acq On : 9 Mar 2017 2:01 am Operator: RJP
Sample : C1703015-005A 10X Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:36 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

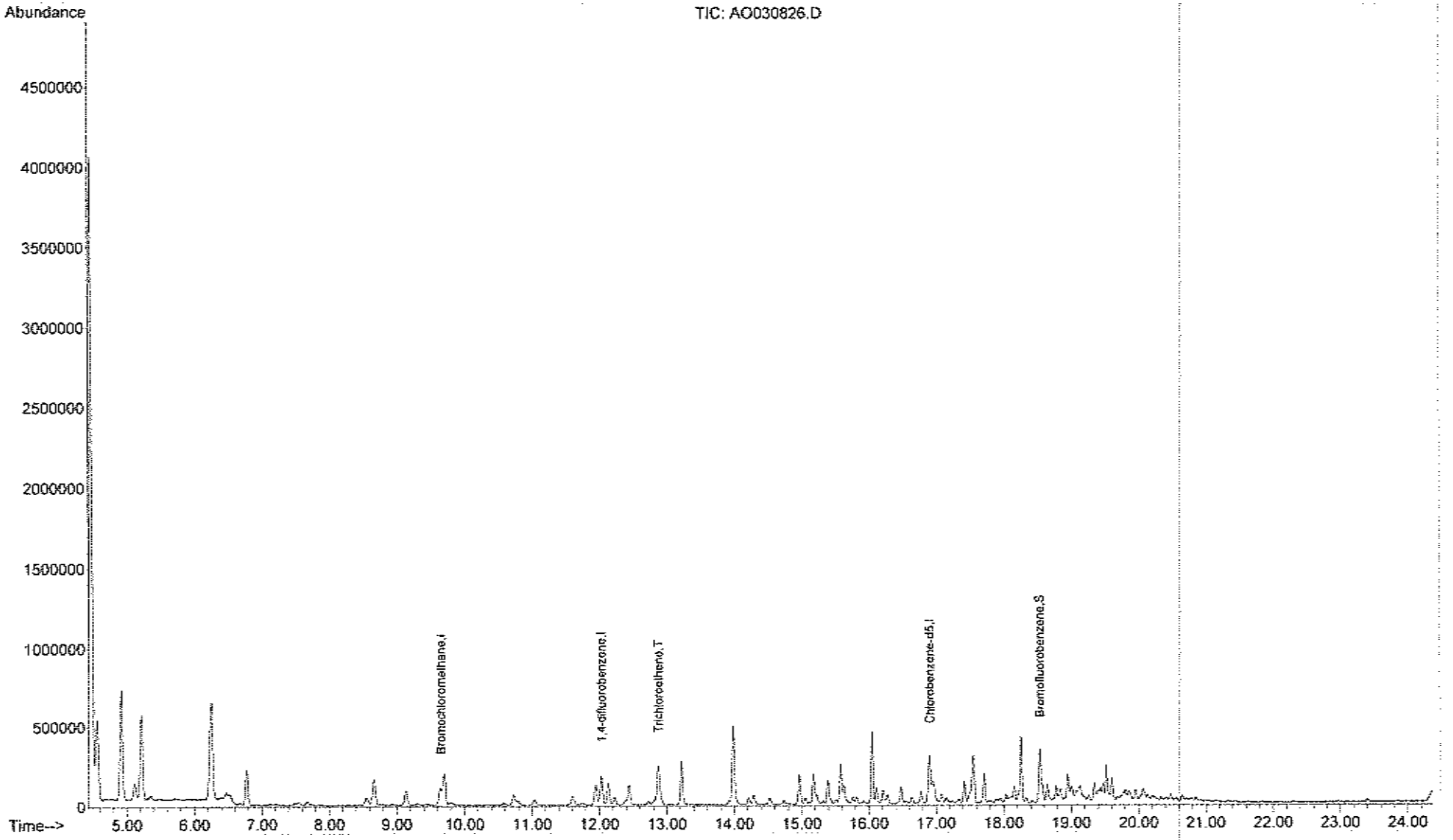
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	46525	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	198463	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	190799	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	117295	0.98	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 98.00%			
Target Compounds						Qvalue
44) Trichloroethene	12.87	130	99086	0.88	ppb	96

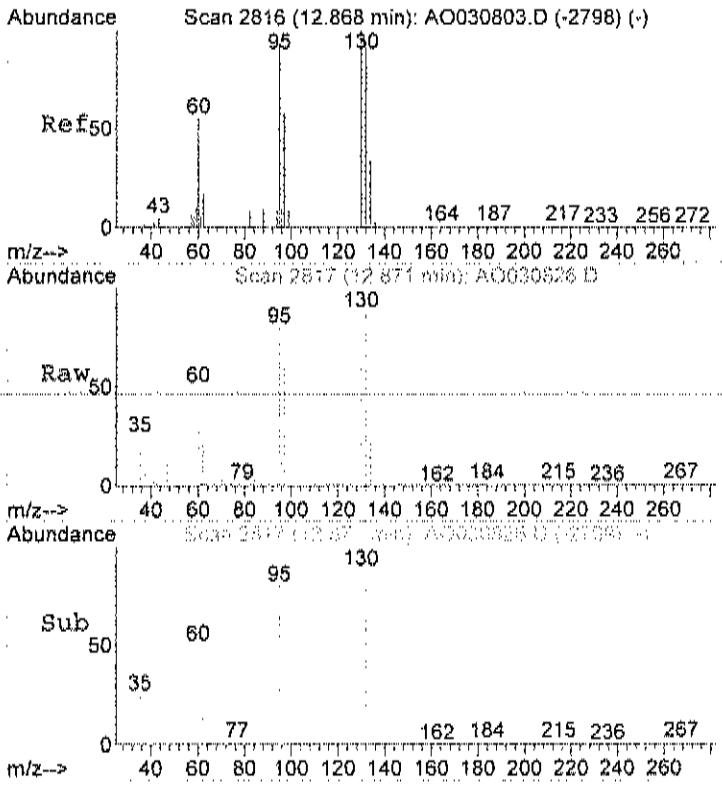
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030826.D Vial: 40
Acq On : 9 Mar 2017 2:01 am Operator: RJP
Sample : C1703015-005A 10X Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:53 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

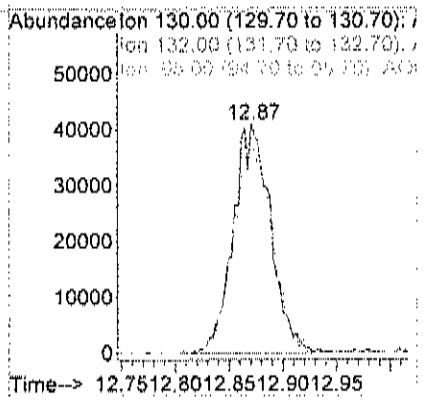




#44
Trichloroethene
Concen: 0.88 ppb
RT: 12.87 min Scan# 2817
Delta R.T. -0.01 min
Lab File: AO030826.D
Acq: 9 Mar 2017 2:01 am

Tgt Ion:130 Resp: 99086

Ion	Ratio	Lower	Upper
130	100		
132	97.2	69.9	109.9
95	95.5	76.3	116.3



Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Ambient Air
Lab Order:	C1703015	**Tag Number:**	556.267
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab Vacuum In	1			"Hg		3/7/2017
Lab Vacuum Out	-30			"Hg		3/7/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	3/8/2017 12:48:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	3/8/2017 12:48:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	3/8/2017 12:48:00 PM
Surr: Bromofluorobenzene	87.0	70-130		%REC	1	3/8/2017 12:48:00 PM

Qualifiers:

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

Centek Laboratories, LLC

Date: *27-Mar-17*

CLIENT:	LaBella Associates, P.C.	**Client Sample ID:**	Ambient Air
Lab Order:	C1703015	**Tag Number:**	556.267
Project:	691 and 705 St Paul St	**Collection Date:**	3/3/2017
Lab ID:	C1703015-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	3/8/2017 12:48:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/8/2017 12:48:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	3/8/2017 12:48:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	3/8/2017 12:48:00 PM

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030806.D Vial: 21
Acq On : 8 Mar 2017 12:48 pm Operator: RJP
Sample : C1703015-006A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:16 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

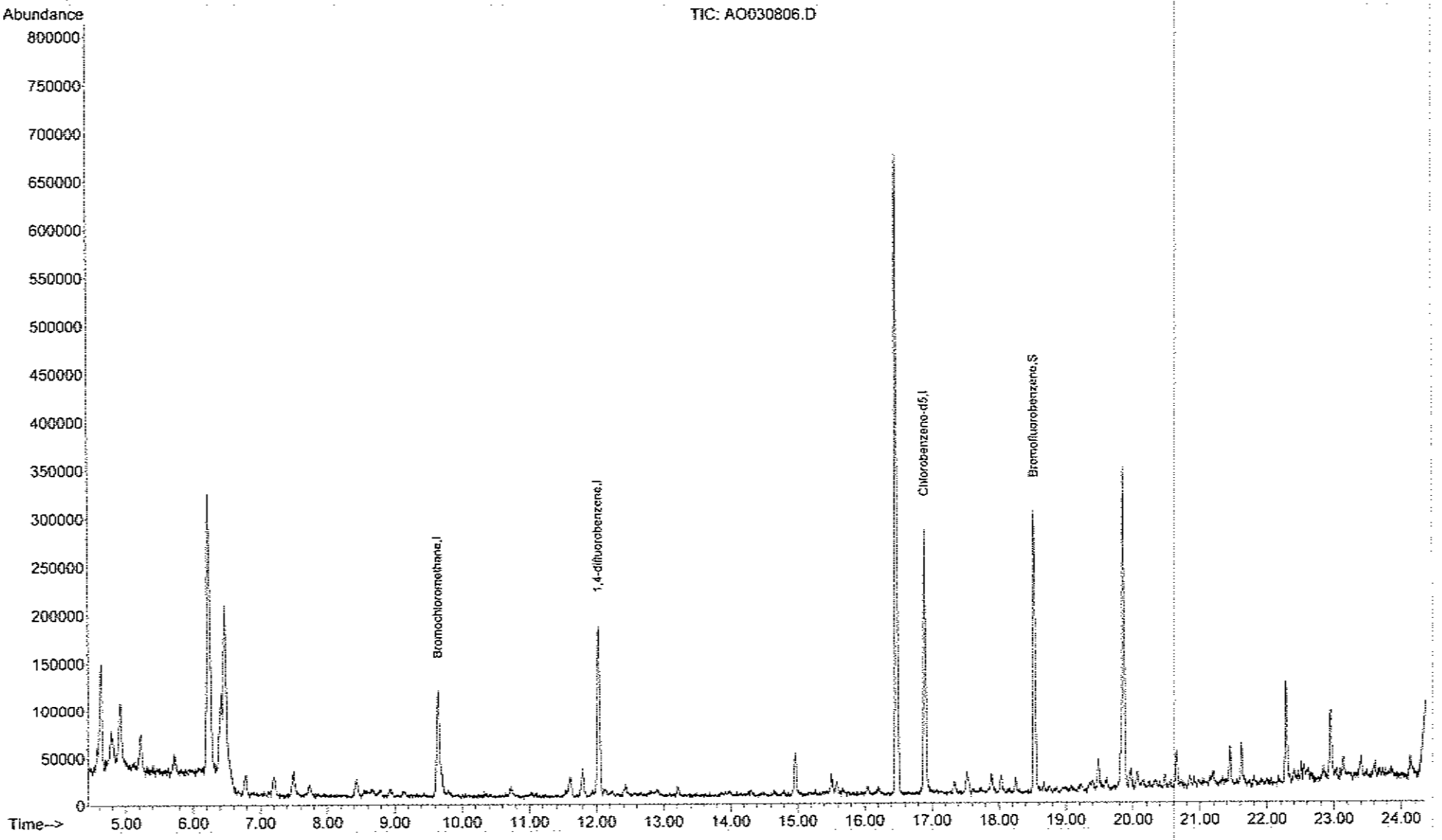
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	47960	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	186316	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	173836	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	94823	0.87	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 87.00%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030806.D Vial: 21
Acq On : 8 Mar 2017 12:48 pm Operator: RJP
Sample : C1703015-006A Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:13 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS DATA

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INITIAL CALIBRATION

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Initial Calibration

Calibration Files
0.04 =AO022712.D 0.10 =AO022711.D 0.15 =AO022710.D
0.30 =AO022709.D 0.50 =AO022707.D 0.75 =AO022706.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg		%RSD
1)	I	Bromochloromethane	----------			ISTD			----------		
2)	T	Propylene			1.077	1.105	1.080	0.984	1.042		5.29
3)	T	Freon 12			9.752	9.472	9.687	8.524	9.266		6.10
4)	T	Chloromethane			1.751	1.749	1.818	1.443	1.659		8.01
5)	T	Freon 114			8.517	7.919	8.532	6.688	7.921		8.76
6)	T	Vinyl Chloride	3.341	2.514	2.380	2.148	2.278	1.786	2.301		18.51
7)	T	Butane			2.756	2.539	2.580	1.994	2.394		10.89
8)	T	1,3-butadiene			1.629	1.592	1.691	1.273	1.535		8.91
9)	T	Bromomethane			3.134	2.822	3.057	2.237	2.831		10.14
10)	T	Chloroethane			1.080	1.119	1.066	0.854	1.014		8.78
11)	T	Ethanol			0.839	0.898	0.844	0.579	0.748		14.21
12)	T	Acrolein			0.771	0.819	0.880	0.592	0.765		11.09
13)	T	Vinyl Bromide			2.936	2.908	3.017	2.090	2.844		11.03
14)	T	Freon 11			1.189	1.141	1.175	0.910	1.109	E1	7.97
15)	T	Acetone			0.963	0.913	0.914	0.735	0.882		7.72
16)	T	Pentane			1.085	1.027	1.052	0.989	1.010		4.57
17)	T	Isopropyl alcoh			3.908	3.987	3.323	2.514	3.221		15.59
18)	T	1,1-dichloroeth			1.301	1.299	1.276	1.251	1.282		2.86
19)	T	Freon 113			3.735	3.519	3.538	3.425	3.515		3.18
20)	t	t-Butyl alcohol			2.463	2.764	2.516	2.361	2.527		6.16
21)	T	Methylene chlor			1.543	1.399	1.386	1.274	1.335		7.91
22)	T	Allyl chloride			1.127	1.004	1.070	1.093	1.090		4.30
23)	T	Carbon disulfid			4.409	4.088	4.065	3.870	3.995		5.01
24)	T	trans-1,2-dichl			1.946	1.773	1.849	1.747	1.805		4.67
25)	T	methyl tert-but			2.987	2.995	3.154	3.000	3.166		5.59
26)	T	1,1-dichloroeth			2.191	2.383	2.517	2.330	2.386		4.14
27)	T	Vinyl acetate			2.646	1.955	2.250	2.245	2.361		9.31
28)	T	Methyl Ethyl Ke			0.522	0.585	0.559	0.561	0.565		4.43
29)	T	cis-1,2-dichlor			1.554	1.596	1.504	1.534	1.586		3.91
30)	T	Hexane			1.116	1.103	1.282	1.291	1.306		10.63
31)	T	Ethyl acetate			2.660	2.650	2.881	2.946	2.971		7.92
32)	T	Chloroform			4.123	3.930	4.220	4.052	4.078		2.95
33)	T	Tetrahydrofuran			0.820	0.841	0.811	0.830	0.865		6.76
34)	T	1,2-dichloroeth			2.785	2.589	2.684	2.703	2.716		3.35
35)	I	1,4-difluorobenzene	----------			ISTD			----------		
36)	T	1,1,1-trichloro			1.256	1.165	1.160	1.101	1.135		5.19
37)	T	Cyclohexane			0.315	0.350	0.352	0.343	0.341		3.81
38)	T	Carbon tetrachl	2.731	1.619	1.596	1.468	1.467	1.428	1.580		26.26
39)	T	Benzene			0.955	0.876	0.891	0.875	0.891		3.00
40)	T	Methyl methacry			0.247	0.283	0.298	0.315	0.312		11.04
41)	T	1,4-dioxane			0.163	0.185	0.163	0.165	0.172		4.56
42)	T	2,2,4-trimethyl			1.039	1.054	1.153	1.208	1.185		7.86
43)	T	Heptane			0.320	0.302	0.349	0.377	0.360		9.29
44)	T	Trichloroethene	0.901	0.552	0.530	0.522	0.507	0.534	0.568		20.69
45)	T	1,2-dichloropro			0.334	0.299	0.303	0.300	0.306		4.13
46)	T	Bromodichlorome			1.167	1.117	1.098	1.099	1.088		3.91
47)	T	cis-1,3-dichlor			0.508	0.522	0.500	0.520	0.524		2.94
48)	T	trans-1,3-dichl			0.508	0.480	0.491	0.510	0.513		4.14
49)	T	1,1,2-trichloro			0.508	0.512	0.480	0.495	0.488		3.78
50)	I	Chlorobenzene-d5	----------			ISTD			----------		
51)	T	Toluene			0.731	0.696	0.720	0.748	0.760		6.06

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

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Initial Calibration

Calibration Files
0.04 =AO022712.D 0.10 =AO022711.D 0.15 =AO022710.D
0.30 =AO022709.D 0.50 =AO022707.D 0.75 =AO022706.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
52)	T	Methyl Isobutyl				0.639	0.577	0.650	0.683	10.53
53)	T	Dibromochlorome			1.456	1.426	1.381	1.463	1.439	2.27
54)	T	Methyl Butyl Ke				0.598	0.530	0.565	0.629	12.85
55)	T	1,2-dibromoetha			0.876	0.906	0.897	0.935	0.930	3.67
56)	T	Tetrachloroethy			0.733	0.649	0.664	0.673	0.691	4.07
57)	T	Chlorobenzene			1.201	1.163	1.191	1.257	1.238	3.85
58)	T	Ethylbenzene			1.575	1.533	1.604	1.709	1.745	10.00
59)	T	m&p-xylene			1.361	1.437	1.526	1.555	1.665	13.45
60)	T	Nonane			0.575	0.525	0.631	0.714	0.695	15.40
61)	T	Styrene			0.878	0.830	0.888	0.934	0.969	11.14
62)	T	Bromoform			1.185	1.256	1.267	1.324	1.307	5.05
63)	T	o-xylene			1.302	1.343	1.444	1.649	1.612	13.78
64)	T	Cumene			1.936	2.017	2.046	2.238	2.227	9.55
65)	S	Bromofluorobenz	0.556	0.553	0.594	0.606	0.637	0.653	0.627	7.46
66)	T	1,1,2,2-tetrach			1.230	1.222	1.208	1.298	1.256	2.60
67)	T	Propylbenzene			0.530	0.540	0.567	0.628	0.625	11.41
68)	T	2-Chlorotoluene			0.495	0.495	0.479	0.533	0.528	7.48
69)	T	4-ethyltoluene			1.639	1.780	1.938	2.081	2.062	12.97
70)	T	1,3,5-trimethyl			1.480	1.671	1.758	2.015	1.940	14.05
71)	T	1,2,4-trimethyl			1.461	1.454	1.406	1.613	1.642	12.06
72)	T	1,3-dichloroben			1.145	1.298	1.207	1.305	1.293	6.57
73)	T	benzyl chloride			1.018	1.045	1.035	1.114	1.119	7.00
74)	T	1,4-dichloroben			0.933	1.095	1.055	1.169	1.136	9.07
75)	T	1,2,3-trimethyl			1.465	1.505	1.526	1.664	1.713	12.48
76)	T	1,2-dichloroben			1.277	1.263	1.249	1.325	1.297	2.62
77)	T	1,2,4-trichloro			0.465	0.433	0.402	0.434	0.468	10.49
78)	T	Naphthalene			1.130	1.213	1.033	1.141	1.258	15.12
79)	T	Hexachloro-1,3-			1.692	1.457	1.256	1.278	1.359	10.97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022703.D Vial: 1
Acq On : 27 Feb 2017 12:01 pm Operator: RJP
Sample : A1UG_2.0 Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 13:34:31 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	34488	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	147413	1.00	ppb		0.00
50) Chlorobenzene-d5	16.91	117	118307	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	80069	1.01	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 101.00%				
Target Compounds							Qvalue
2) Propylene	4.56	41	67283m	2.01	ppb		
3) Freon 12	4.63	85	637506	1.94	ppb		98
4) Chloromethane	4.80	50	113936m	1.90	ppb		
5) Freon 114	4.90	85	558550	1.90	ppb		98
6) Vinyl Chloride	5.03	62	151882	2.04	ppb		91
7) Butane	5.23	43	159751	1.86	ppb		89
8) 1,3-butadiene	5.17	39	107879m	1.87	ppb		
9) Bromomethane	5.45	94	194464	1.83	ppb		95
10) Chloroethane	5.63	64	67257	1.91	ppb		89
11) Ethanol	5.73	45	47585m	2.00	ppb		
12) Acrolein	6.09	56	52048	1.83	ppb		91
13) Vinyl Bromide	5.98	106	202045	1.91	ppb		96
14) Freon 11	6.42	101	776050	1.88	ppb		98
15) Acetone	6.23	58	61266	1.98	ppb	#	76
16) Pentane	6.79	42	68027	1.94	ppb	#	41
17) Isopropyl alcohol	6.47	45	204229	1.87	ppb	#	100
18) 1,1-dichloroethene	7.10	96	89203	1.96	ppb		99
19) Freon 113	7.50	101	238988	1.99	ppb		96
20) t-Butyl alcohol	7.12	59	182177	2.01	ppb	#	91
21) Methylene chloride	7.21	84	87576	1.93	ppb		93
22) Allyl chloride	7.34	41	78216	2.02	ppb		94
23) Carbon disulfide	7.56	76	261881	1.90	ppb		82
24) trans-1,2-dichloroethene	8.25	61	123974	2.01	ppb		93
25) methyl tert-butyl ether	8.55	73	236087	2.07	ppb		91
26) 1,1-dichloroethane	8.48	63	167678	1.96	ppb		96
27) Vinyl acetate	8.63	43	178454m	2.19	ppb		
28) Methyl Ethyl Ketone	8.93	72	40336	2.07	ppb	#	1
29) cis-1,2-dichloroethene	9.46	61	115901	2.07	ppb		93
30) Hexane	9.71	57	102300	2.08	ppb		88
31) Ethyl acetate	9.72	43	225431	2.06	ppb		98
32) Chloroform	9.81	83	284156	1.92	ppb		96
33) Tetrahydrofuran	10.32	42	65779	2.13	ppb	#	70
34) 1,2-dichloroethane	10.73	62	190579	1.99	ppb		96
36) 1,1,1-trichloroethane	11.05	97	326280	1.94	ppb		97
37) Cyclohexane	11.96	56	104270	2.12	ppb		88
38) Carbon tetrachloride	11.80	117	402678	1.93	ppb		98
39) Benzene	11.62	78	260440	1.99	ppb		94
40) Methyl methacrylate	13.10	41	103894m	2.12	ppb		
41) 1,4-dioxane	12.89	58	51011	2.11	ppb	#	33
42) 2,2,4-trimethylpentane	12.92	57	374982	2.06	ppb		88
43) Heptane	13.23	43	117429	2.17	ppb		85
44) Trichloroethene	12.88	130	157508	2.00	ppb		92
45) 1,2-dichloropropane	12.60	63	89213	2.05	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022703.D Vial: 1
Acq On : 27 Feb 2017 12:01 pm Operator: RJP
Sample : A1UG_2.0 Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 13:34:31 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	313826	1.95	ppb		98
47)	cis-1,3-dichloropropene	13.88	75	161710	2.10	ppb		95
48)	trans-1,3-dichloropropene	14.47	75	160601	2.11	ppb		95
49)	1,1,2-trichloroethane	14.66	97	140491	1.98	ppb		97
51)	Toluene	14.98	92	198866	2.09	ppb		87
52)	Methyl Isobutyl Ketone	13.91	43	185015	1.95	ppb		96
53)	Dibromochloromethane	15.44	129	352272	2.00	ppb		93
54)	Methyl Butyl Ketone	15.26	43	176699	1.90	ppb		98
55)	1,2-dibromoethane	15.72	107	231834	1.96	ppb		97
56)	Tetrachloroethylene	16.22	164	170159	2.04	ppb		97
57)	Chlorobenzene	16.95	112	307845	1.98	ppb		97
58)	Ethylbenzene	17.35	91	482120	2.21	ppb		98
59)	m&p-xylene	17.54	91	936602	4.26	ppb		99
60)	Nonane	18.26	43	197031	2.13	ppb		95
61)	Styrene	17.93	104	269222	2.27	ppb		92
62)	Bromoform	17.63	173	327396	1.96	ppb		99
63)	o-xylene	18.05	91	452697	2.16	ppb		95
64)	Cumene	18.68	105	604876	2.15	ppb		99
66)	1,1,2,2-tetrachloroethane	18.04	83	304924	1.95	ppb		95
67)	Propylbenzene	19.25	120	170201	2.12	ppb	#	1
68)	2-Chlorotoluene	19.22	126	142423	2.22	ppb	#	1
69)	4-ethyltoluene	19.41	105	576004	2.16	ppb		98
70)	1,3,5-trimethylbenzene	19.49	105	536902	2.07	ppb		98
71)	1,2,4-trimethylbenzene	19.97	105	464766	2.20	ppb		93
72)	1,3-dichlorobenzene	20.16	146	336426	2.04	ppb		98
73)	benzyl chloride	20.14	91	289019	1.97	ppb		89
74)	1,4-dichlorobenzene	20.25	146	295119	2.02	ppb		96
75)	1,2,3-trimethylbenzene	20.49	105	489968	2.13	ppb		95
76)	1,2-dichlorobenzene	20.66	146	318561	1.95	ppb		98
77)	1,2,4-trichlorobenzene	22.83	180	129235	1.98	ppb		95
78)	Naphthalene	22.97	128	376207	2.05	ppb		94
79)	Hexachloro-1,3-butadiene	23.41	225	314561	1.80	ppb		98

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

Data File : C:\HPCHEM\1\DATA\AO022703.D
Acq On : 27 Feb 2017 12:01 pm
Sample : A1UG_2.0
Misc : A120_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:25 2017

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

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D

TIC: AO022703.D

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022704.D Vial: 2
Acq On : 27 Feb 2017 12:42 pm Operator: RJP
Sample : A1UG_1.5 Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 13:37:02 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.65	128	36100	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	151427	1.00	ppb		0.00
50) Chlorobenzene-d5	16.91	117	120601	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	81420	1.00	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%				
Target Compounds							Qvalue
2) Propylene	4.55	41	55806	1.59	ppb		89
3) Freon 12	4.63	85	447890	1.30	ppb		98
4) Chloromethane	4.80	50	80196m	1.27	ppb		
5) Freon 114	4.90	85	382883	1.24	ppb		94
6) Vinyl Chloride	5.02	62	101642	1.30	ppb		89
7) Butane	5.22	43	113187	1.26	ppb		90
8) 1,3-butadiene	5.17	39	78428m	1.30	ppb		
9) Bromomethane	5.45	94	143623	1.29	ppb		94
10) Chloroethane	5.62	64	50578	1.37	ppb	#	84
11) Ethanol	5.73	45	36233	1.45	ppb	#	84
12) Acrolein	6.10	56	40470	1.36	ppb		86
13) Vinyl Bromide	5.99	106	155521	1.41	ppb		94
14) Freon 11	6.42	101	578839	1.34	ppb		100
15) Acetone	6.23	58	45684	1.41	ppb	#	62
16) Pentane	6.78	42	52005	1.42	ppb	#	36
17) Isopropyl alcohol	6.48	45	159740	1.40	ppb	#	100
18) 1,1-dichloroethene	7.09	96	68749	1.44	ppb		96
19) Freon 113	7.50	101	181865	1.44	ppb		97
20) t-Butyl alcohol	7.12	59	129743	1.37	ppb	#	87
21) Methylene chloride	7.22	84	65431	1.38	ppb		92
22) Allyl chloride	7.34	41	59816	1.48	ppb		92
23) Carbon disulfide	7.56	76	206115	1.43	ppb		83
24) trans-1,2-dichloroethene	8.26	61	94649	1.47	ppb		94
25) methyl tert-butyl ether	8.55	73	175245	1.47	ppb		90
26) 1,1-dichloroethane	8.48	63	127822	1.43	ppb		95
27) Vinyl acetate	8.64	43	130963m	1.54	ppb		
28) Methyl Ethyl Ketone	8.93	72	30056	1.48	ppb	#	83
29) cis-1,2-dichloroethene	9.46	61	84779	1.45	ppb		92
30) Hexane	9.72	57	76403	1.48	ppb		87
31) Ethyl acetate	9.71	43	167003	1.46	ppb		98
32) Chloroform	9.81	83	211706	1.36	ppb		98
33) Tetrahydrofuran	10.33	42	48492	1.50	ppb	#	70
34) 1,2-dichloroethane	10.72	62	145890	1.46	ppb		98
36) 1,1,1-trichloroethane	11.05	97	242355	1.40	ppb		96
37) Cyclohexane	11.96	56	77508	1.53	ppb		88
38) Carbon tetrachloride	11.80	117	304694	1.42	ppb		100
39) Benzene	11.62	78	198866	1.48	ppb		94
40) Methyl methacrylate	13.10	41	74232	1.47	ppb	#	82
41) 1,4-dioxane	12.90	58	39753	1.60	ppb	#	30
42) 2,2,4-trimethylpentane	12.92	57	281936	1.51	ppb		88
43) Heptane	13.23	43	86145	1.55	ppb		86
44) Trichloroethene	12.88	130	119387	1.48	ppb		97
45) 1,2-dichloropropane	12.60	63	66632	1.49	ppb		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022704.D Vial: 2
Acq On : 27 Feb 2017 12:42 pm Operator: RJP
Sample : A1UG_1.5 Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 13:37:02 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

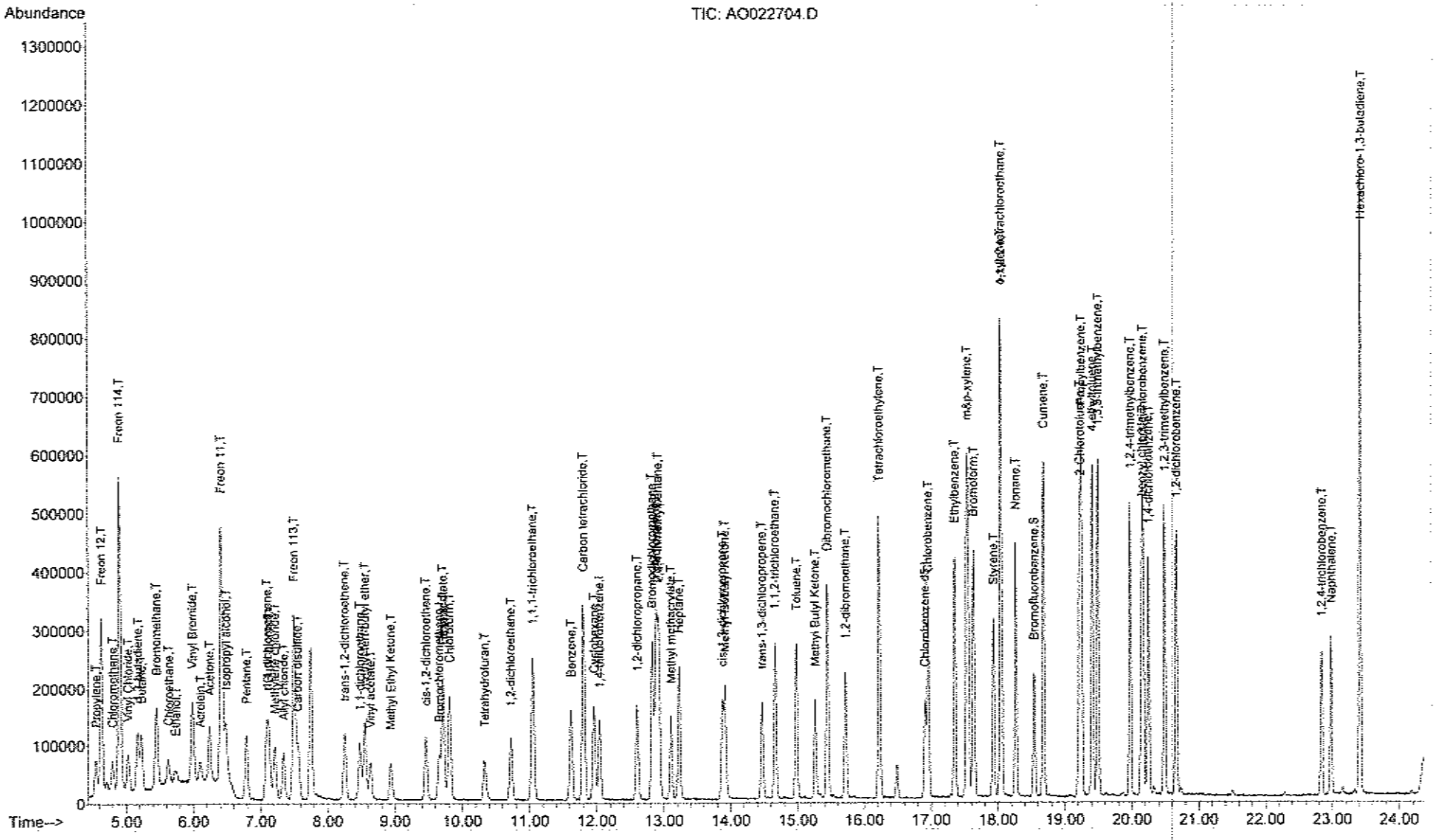
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	233846	1.41	ppb		96
47)	cis-1,3-dichloropropene	13.87	75	119377	1.51	ppb		96
48)	trans-1,3-dichloropropene	14.47	75	116355	1.49	ppb		96
49)	1,1,2-trichloroethane	14.67	97	104823	1.44	ppb		100
51)	Toluene	14.98	92	143255	1.48	ppb		86
52)	Methyl Isobutyl Ketone	13.91	43	136808	1.41	ppb		96
53)	Dibromochloromethane	15.45	129	260970	1.46	ppb		93
54)	Methyl Butyl Ketone	15.26	43	127927	1.35	ppb		98
55)	1,2-dibromoethane	15.72	107	171510	1.42	ppb		96
56)	Tetrachloroethylene	16.22	164	126330	1.49	ppb		97
57)	Chlorobenzene	16.95	112	230234	1.46	ppb		96
58)	Ethylbenzene	17.35	91	344400	1.55	ppb		98
59)	m&p-xylene	17.54	91	674977	3.01	ppb		100
60)	Nonane	18.26	43	139459	1.48	ppb		96
61)	Styrene	17.93	104	197650	1.63	ppb		88
62)	Bromoform	17.63	173	244288	1.43	ppb		98
63)	o-xylene	18.05	91	319499	1.49	ppb		96
64)	Cumene	18.68	105	436193	1.52	ppb		99
66)	1,1,2,2-tetrachloroethane	18.04	83	230628	1.44	ppb		97
67)	Propylbenzene	19.24	120	124849	1.52	ppb	#	1
68)	2-Chlorotoluene	19.22	126	98971	1.52	ppb	#	1
69)	4-ethyltoluene	19.41	105	417512	1.54	ppb		99
70)	1,3,5-trimethylbenzene	19.49	105	388020	1.47	ppb		97
71)	1,2,4-trimethylbenzene	19.97	105	329611	1.53	ppb		94
72)	1,3-dichlorobenzene	20.16	146	244983m	1.46	ppb		
73)	benzyl chloride	20.14	91	215675	1.44	ppb		92
74)	1,4-dichlorobenzene	20.25	146	218869m	1.47	ppb		
75)	1,2,3-trimethylbenzene	20.49	105	346422	1.48	ppb		94
76)	1,2-dichlorobenzene	20.66	146	240399	1.44	ppb		97
77)	1,2,4-trichlorobenzene	22.83	180	95449	1.44	ppb		96
78)	Naphthalene	22.97	128	259809	1.39	ppb		95
79)	Hexachloro-1,3-butadiene	23.41	225	234742	1.32	ppb		100

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022704.D Vial: 2
Acq On : 27 Feb 2017 12:42 pm Operator: RJP
Sample : A1UG_1.5 Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:26 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022705.D Vial: 3
Acq On : 27 Feb 2017 1:22 pm Operator: RJP
Sample : A1UG_1.25 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:21:04 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	33434	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	145107	1.00	ppb		0.00
50) Chlorobenzene-d5	16.90	117	118466	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	77962	0.98	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 98.00%				
Target Compounds							Qvalue
2) Propylene	4.55	41	45886	1.42	ppb		82
3) Freon 12	4.63	85	405753	1.27	ppb		97
4) Chloromethane	4.79	50	71614m	1.23	ppb		
5) Freon 114	4.89	85	355820	1.25	ppb		98
6) Vinyl Chloride	5.02	62	96809	1.34	ppb		90
7) Butane	5.22	43	106701	1.28	ppb		93
8) 1,3-butadiene	5.17	39	68251m	1.22	ppb		
9) Bromomethane	5.44	94	127291	1.24	ppb		94
10) Chloroethane	5.63	64	45045	1.32	ppb		89
11) Ethanol	5.74	45	30805	1.33	ppb		82
12) Acrolein	6.09	56	34273	1.25	ppb		88
13) Vinyl Bromide	5.99	106	129727	1.27	ppb		96
14) Freon 11	6.42	101	478226	1.19	ppb		99
15) Acetone	6.23	58	38074	1.27	ppb	#	67
16) Pentane	6.78	42	43027	1.26	ppb	#	40
17) Isopropyl alcohol	6.47	45	129586	1.22	ppb	#	100
18) 1,1-dichloroethene	7.10	96	56144	1.27	ppb		97
19) Freon 113	7.50	101	149371	1.28	ppb		97
20) t-Butyl alcohol	7.11	59	112735	1.28	ppb	#	90
21) Methylene chloride	7.21	84	55538	1.26	ppb		94
22) Allyl chloride	7.33	41	47631	1.27	ppb		93
23) Carbon disulfide	7.56	76	166949	1.25	ppb		83
24) trans-1,2-dichloroethene	8.25	61	78916	1.32	ppb		94
25) methyl tert-butyl ether	8.55	73	142379	1.29	ppb		88
26) 1,1-dichloroethane	8.48	63	103193	1.25	ppb		93
27) Vinyl acetate	8.64	43	102981m	1.31	ppb		
28) Methyl Ethyl Ketone	8.94	72	25140	1.33	ppb	#	1
29) cis-1,2-dichloroethene	9.45	61	69788	1.29	ppb		94
30) Hexane	9.72	57	59417	1.24	ppb		90
31) Ethyl acetate	9.72	43	135614	1.28	ppb		99
32) Chloroform	9.81	83	176976	1.23	ppb		100
33) Tetrahydrofuran	10.33	42	39561	1.32	ppb		76
34) 1,2-dichloroethane	10.72	62	120237	1.30	ppb		97
36) 1,1,1-trichloroethane	11.05	97	199154	1.20	ppb		98
37) Cyclohexane	11.95	56	62283	1.28	ppb		88
38) Carbon tetrachloride	11.80	117	247922	1.21	ppb		97
39) Benzene	11.61	78	160434	1.24	ppb		94
40) Methyl methacrylate	13.10	41	61746	1.28	ppb	#	84
41) 1,4-dioxane	12.91	58	32323	1.36	ppb	#	29
42) 2,2,4-trimethylpentane	12.92	57	228477	1.28	ppb		88
43) Heptane	13.22	43	69030	1.29	ppb		81
44) Trichloroethene	12.88	130	98431	1.27	ppb		96
45) 1,2-dichloropropane	12.59	63	54586	1.28	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022705.D
Acq On : 27 Feb 2017 1:22 pm
Sample : A1UG_1.25
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:21:04 2017

Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	191263	1.21	ppb		96
47)	cis-1,3-dichloropropene	13.87	75	96035	1.27	ppb		95
48)	trans-1,3-dichloropropene	14.46	75	96628	1.29	ppb		99
49)	1,1,2-trichloroethane	14.66	97	85391	1.23	ppb		99
51)	Toluene	14.97	92	115953	1.22	ppb		87
52)	Methyl Isobutyl Ketone	13.91	43	105820	1.11	ppb		96
53)	Dibromochloromethane	15.44	129	209627	1.19	ppb		92
54)	Methyl Butyl Ketone	15.26	43	99894	1.07	ppb		96
55)	1,2-dibromoethane	15.72	107	140106	1.18	ppb		98
56)	Tetrachloroethylene	16.23	164	101954	1.22	ppb		98
57)	Chlorobenzene	16.95	112	188047	1.21	ppb		97
58)	Ethylbenzene	17.35	91	270529	1.24	ppb		97
59)	m&p-xylene	17.54	91	539522	2.45	ppb		100
60)	Nonane	18.26	43	113508	1.23	ppb		97
61)	Styrene	17.93	104	150564	1.27	ppb		89
62)	Bromoform	17.63	173	197222	1.18	ppb		98
63)	o-xylene	18.04	91	258358	1.23	ppb		95
64)	Cumene	18.68	105	344068	1.22	ppb		98
66)	1,1,2,2-tetrachloroethane	18.04	83	186037	1.19	ppb		94
67)	Propylbenzene	19.24	120	98861	1.23	ppb	#	1
68)	2-Chlorotoluene	19.21	126	81240	1.27	ppb	#	1
69)	4-ethyltoluene	19.41	105	329649	1.24	ppb		99
70)	1,3,5-trimethylbenzene	19.49	105	313638	1.21	ppb		99
71)	1,2,4-trimethylbenzene	19.97	105	260242	1.23	ppb		94
72)	1,3-dichlorobenzene	20.16	146	192000m	1.16	ppb		
73)	benzyl chloride	20.14	91	174719	1.19	ppb		91
74)	1,4-dichlorobenzene	20.24	146	178085m	1.22	ppb		
75)	1,2,3-trimethylbenzene	20.49	105	265866	1.15	ppb		92
76)	1,2-dichlorobenzene	20.66	146	191377	1.17	ppb		98
77)	1,2,4-trichlorobenzene	22.83	180	71785	1.10	ppb		93
78)	Naphthalene	22.97	128	204556m	1.11	ppb		
79)	Hexachloro-1,3-butadiene	23.41	225	191140	1.09	ppb		99

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

Data File : C:\HPCHEM\1\DATA\AO022705.D
Acq On : 27 Feb 2017 1:22 pm
Sample : A1UG_1.25
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:27 2017
Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A227_1UG.RES
Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
TIC: AO022705.D
Abundance
Time-->
Propylene,T
Freon 12,T
Chloromethane,T
Freon 114,T
Vinyl Chloride,T
1,3-Butadiene,T
Bromomethane,T
Chloroethane,T
Ethanol,T
Vinyl Bromide,T
Acrolein,T
Acetone,T
Isopropyl alcohol,T
Freon 11,T
Pentane,T
Methylene Chloride,T
Allyl chloride,T
Carbon disulfide,T
Freon 113,T
trans-1,2-dichloroethene,T
1,1-dichloroethane,T
Vinyl acetate,T
Methyl Ethyl Ketone,T
cis-1,2-dichloroethene,T
Chloroform,T
Tetrahydrofuran,T
1,2-dichloroethane,T
1,1,1-trichloroethane,T
Benzene,T
Carbon tetrachloride,T
1,2-dichloropropane,T
Methyl methacrylate,T
Heptane,T
trans-1,3-dichloropropene,T
1,1,2-trichloroethane,T
Toluene,T
Methyl Butyl Ketone,T
Dibromochloromethane,T
1,2-dibromoethane,T
Tetrachloroethylene,T
Chlorobenzene,T
Ethylbenzene,T
Bromoform,T
m&p-xylene,T
Styrene,T
Nonane,T
Bromofluorobenzene,S
Cumene,T
1,2,4-trimethylbenzene,T
1,3-dichlorobenzene,T
1,4-dichlorobenzene,T
1,2,3-trimethylbenzene,T
1,2-dichlorobenzene,T
1,2,4-trichlorobenzene,T
Naphthalene,T
Hexachloro-1,3-butadiene,T
AO022705.D A227_1UG.M Mon Mar 06 09:23:02 2017 MSD1
Page 3

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022706.D Vial: 4
Acq On : 27 Feb 2017 2:01 pm Operator: RJP
Sample : A1UG_0.75 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:27:59 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	34548	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	139180	1.00	ppb		0.00
50) Chlorobenzene-d5	16.90	117	114597	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	74856	0.97	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	4.56	41	25499	0.76	ppb		77
3) Freon 12	4.64	85	220863	0.67	ppb		98
4) Chloromethane	4.81	50	37377m	0.62	ppb		
5) Freon 114	4.90	85	173292	0.59	ppb		93
6) Vinyl Chloride	5.03	62	46269	0.62	ppb		93
7) Butane	5.23	43	51654	0.60	ppb		91
8) 1,3-butadiene	5.18	39	32992m	0.57	ppb		
9) Bromomethane	5.45	94	57960	0.54	ppb		94
10) Chloroethane	5.63	64	22140	0.63	ppb		90
11) Ethanol	5.74	45	14995	0.63	ppb		82
12) Acrolein	6.11	56	15338	0.54	ppb		89
13) Vinyl Bromide	5.99	106	54158	0.51	ppb		91
14) Freon 11	6.42	101	235743	0.57	ppb		99
15) Acetone	6.25	58	19048	0.61	ppb	#	64
16) Pentane	6.80	42	25624	0.73	ppb	#	51
17) Isopropyl alcohol	6.49	45	65135	0.60	ppb	#	100
18) 1,1-dichloroethene	7.10	96	32415	0.71	ppb		99
19) Freon 113	7.50	101	88734	0.74	ppb		96
20) t-Butyl alcohol	7.14	59	61182	0.67	ppb	#	86
21) Methylene chloride	7.21	84	33001	0.72	ppb		93
22) Allyl chloride	7.34	41	28333	0.73	ppb		93
23) Carbon disulfide	7.56	76	100285	0.73	ppb		81
24) trans-1,2-dichloroethene	8.26	61	45269	0.73	ppb		92
25) methyl tert-butyl ether	8.55	73	77736	0.68	ppb		91
26) 1,1-dichloroethane	8.48	63	60381	0.71	ppb		94
27) Vinyl acetate	8.64	43	58164m	0.71	ppb		
28) Methyl Ethyl Ketone	8.95	72	14528	0.75	ppb	#	76
29) cis-1,2-dichloroethene	9.45	61	39739	0.71	ppb		90
30) Hexane	9.72	57	33440	0.68	ppb	#	86
31) Ethyl acetate	9.72	43	76325	0.70	ppb		98
32) Chloroform	9.82	83	104984	0.71	ppb		100
33) Tetrahydrofuran	10.35	42	21496	0.69	ppb	#	71
34) 1,2-dichloroethane	10.73	62	70040	0.73	ppb		94
36) 1,1,1-trichloroethane	11.05	97	114950	0.72	ppb		98
37) Cyclohexane	11.96	56	35814	0.77	ppb		88
38) Carbon tetrachloride	11.80	117	149024	0.76	ppb		99
39) Benzene	11.62	78	91372	0.74	ppb		94
40) Methyl methacrylate	13.11	41	32920	0.71	ppb	#	80
41) 1,4-dioxane	12.92	58	17273	0.76	ppb	#	17
42) 2,2,4-trimethylpentane	12.92	57	126105	0.73	ppb		87
43) Heptane	13.23	43	39307	0.77	ppb		84
44) Trichloroethene	12.88	130	55754	0.75	ppb		97
45) 1,2-dichloropropane	12.61	63	31317	0.76	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022706.D Vial: 4
Acq On : 27 Feb 2017 2:01 pm Operator: RJP
Sample : A1UG_0.75 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:27:59 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	114702	0.75	ppb		99
47)	cis-1,3-dichloropropene	13.88	75	54268	0.75	ppb		96
48)	trans-1,3-dichloropropene	14.46	75	53258	0.74	ppb		94
49)	1,1,2-trichloroethane	14.66	97	51718	0.77	ppb		100
51)	Toluene	14.98	92	64300	0.70	ppb		87
52)	Methyl Isobutyl Ketone	13.92	43	55839	0.61	ppb		98
53)	Dibromochloromethane	15.44	129	125722	0.74	ppb		94
54)	Methyl Butyl Ketone	15.26	43	48541	0.54	ppb		99
55)	1,2-dibromoethane	15.72	107	80352	0.70	ppb		96
56)	Tetrachloroethylene	16.23	164	57805	0.72	ppb		94
57)	Chlorobenzene	16.95	112	108029	0.72	ppb		96
58)	Ethylbenzene	17.35	91	146857	0.70	ppb		96
59)	m&p-xylene	17.55	91	267284m	1.25	ppb		
60)	Nonane	18.26	43	61387	0.69	ppb		97
61)	Styrene	17.92	104	80315	0.70	ppb		87
62)	Bromoform	17.63	173	113759	0.70	ppb		97
63)	o-xylene	18.05	91	141768	0.70	ppb		93
64)	Cumene	18.68	105	192362	0.70	ppb		97
66)	1,1,2,2-tetrachloroethane	18.04	83	111551	0.74	ppb		98
67)	Propylbenzene	19.25	120	54005	0.69	ppb	#	1
68)	2-Chlorotoluene	19.22	126	45788	0.74	ppb	#	1
69)	4-ethyltoluene	19.41	105	178881	0.69	ppb		100
70)	1,3,5-trimethylbenzene	19.49	105	173200	0.69	ppb		99
71)	1,2,4-trimethylbenzene	19.97	105	138646	0.68	ppb		94
72)	1,3-dichlorobenzene	20.16	146	112138m	0.70	ppb		
73)	benzyl chloride	20.14	91	95731	0.67	ppb		91
74)	1,4-dichlorobenzene	20.24	146	100495m	0.71	ppb		
75)	1,2,3-trimethylbenzene	20.48	105	143014	0.64	ppb		93
76)	1,2-dichlorobenzene	20.66	146	113886	0.72	ppb		97
77)	1,2,4-trichlorobenzene	22.83	180	37319	0.59	ppb		94
78)	Naphthalene	22.98	128	98076	0.55	ppb		96
79)	Hexachloro-1,3-butadiene	23.41	225	109840	0.65	ppb		99

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

Data File : C:\HPCHEM\1\DATA\AO022706.D
Acq On : 27 Feb 2017 2:01 pm
Sample : A1UG_0.75
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 14:29 2017

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

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D

TIC: AO022706.D

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022707.D Vial: 5
Acq On : 27 Feb 2017 2:38 pm Operator: RJP
Sample : A1UG_0.50 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:23:11 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	32086	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	132674	1.00	ppb		0.00
50) Chlorobenzene-d5	16.91	117	112670	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	71762	0.95	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 95.00%				
Target Compounds							Qvalue
2) Propylene	4.56	41	17331	0.56	ppb		79
3) Freon 12	4.64	85	155415	0.51	ppb		97
4) Chloromethane	4.80	50	29173m	0.52	ppb		
5) Freon 114	4.90	85	136873	0.50	ppb		96
6) Vinyl Chloride	5.04	62	36547	0.53	ppb		87
7) Butane	5.23	43	41383	0.52	ppb		91
8) 1,3-butadiene	5.17	39	27126m	0.51	ppb		
9) Bromomethane	5.46	94	49045	0.50	ppb		91
10) Chloroethane	5.62	64	17099	0.52	ppb	#	74
11) Ethanol	5.74	45	13536	0.61	ppb	#	75
12) Acrolein	6.10	56	14121	0.53	ppb		84
13) Vinyl Bromide	5.99	106	48399	0.49	ppb		91
14) Freon 11	6.42	101	188460	0.49	ppb		99
15) Acetone	6.24	58	14669	0.51	ppb	#	64
16) Pentane	6.79	42	16870	0.52	ppb	#	47
17) Isopropyl alcohol	6.48	45	53316	0.52	ppb	#	100
18) 1,1-dichloroethene	7.10	96	20467	0.48	ppb		98
19) Freon 113	7.50	101	56765	0.51	ppb		97
20) t-Butyl alcohol	7.14	59	40359	0.48	ppb	#	87
21) Methylene chloride	7.21	84	22237	0.53	ppb		89
22) Allyl chloride	7.34	41	17163	0.48	ppb		89
23) Carbon disulfide	7.56	76	65215	0.51	ppb		81
24) trans-1,2-dichloroethene	8.26	61	29663	0.52	ppb		95
25) methyl tert-butyl ether	8.56	73	50598	0.48	ppb		92
26) 1,1-dichloroethane	8.48	63	40382	0.51	ppb		94
27) Vinyl acetate	8.63	43	36091m	0.48	ppb		
28) Methyl Ethyl Ketone	8.94	72	8973	0.50	ppb	#	1
29) cis-1,2-dichloroethene	9.47	61	24130	0.46	ppb		89
30) Hexane	9.71	57	20572	0.45	ppb		88
31) Ethyl acetate	9.72	43	46227	0.45	ppb		98
32) Chloroform	9.81	83	67700	0.49	ppb		98
33) Tetrahydrofuran	10.34	42	13012	0.45	ppb	#	71
34) 1,2-dichloroethane	10.73	62	43067	0.48	ppb		93
36) 1,1,1-trichloroethane	11.05	97	76976	0.51	ppb		98
37) Cyclohexane	11.96	56	23337	0.53	ppb		90
38) Carbon tetrachloride	11.80	117	97284	0.52	ppb		99
39) Benzene	11.62	78	59123	0.50	ppb		95
40) Methyl methacrylate	13.10	41	19757	0.45	ppb	#	83
41) 1,4-dioxane	12.90	58	10792	0.50	ppb	#	22
42) 2,2,4-trimethylpentane	12.92	57	76483	0.47	ppb		87
43) Heptane	13.22	43	23168	0.47	ppb		88
44) Trichloroethene	12.88	130	33635	0.47	ppb		91
45) 1,2-dichloropropane	12.60	63	20090	0.51	ppb		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022707.D Vial: 5
Acq On : 27 Feb 2017 2:38 pm Operator: RJP
Sample : A1UG_0.50 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:23:11 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	72852	0.50	ppb		96
47)	cis-1,3-dichloropropene	13.87	75	33191	0.48	ppb		94
48)	trans-1,3-dichloropropene	14.46	75	32559	0.47	ppb		94
49)	1,1,2-trichloroethane	14.66	97	31820	0.50	ppb		93
51)	Toluene	14.98	92	40547	0.45	ppb		89
52)	Methyl Isobutyl Ketone	13.91	43	32500	0.36	ppb		97
53)	Dibromochloromethane	15.45	129	77782	0.46	ppb		92
54)	Methyl Butyl Ketone	15.26	43	29867	0.34	ppb		98
55)	1,2-dibromoethane	15.71	107	50516	0.45	ppb		94
56)	Tetrachloroethylene	16.23	164	37382	0.47	ppb		93
57)	Chlorobenzene	16.95	112	67067	0.45	ppb		97
58)	Ethylbenzene	17.35	91	90343	0.44	ppb		96
59)	m&p-xylene	17.54	91	171931	0.82	ppb		98
60)	Nonane	18.26	43	35556	0.40	ppb		98
61)	Styrene	17.92	104	50031	0.44	ppb		87
62)	Bromoform	17.63	173	71380	0.45	ppb		98
63)	o-xylene	18.05	91	81347	0.41	ppb		96
64)	Cumene	18.68	105	115251	0.43	ppb		98
66)	1,1,2,2-tetrachloroethane	18.04	83	68065	0.46	ppb		94
67)	Propylbenzene	19.25	120	31968	0.42	ppb	#	1
68)	2-Chlorotoluene	19.22	126	26957	0.44	ppb	#	1
69)	4-ethyltoluene	19.41	105	109155	0.43	ppb		100
70)	1,3,5-trimethylbenzene	19.49	105	99045	0.40	ppb		94
71)	1,2,4-trimethylbenzene	19.97	105	79227	0.39	ppb		88
72)	1,3-dichlorobenzene	20.16	146	67990	0.43	ppb		98
73)	benzyl chloride	20.13	91	58313	0.42	ppb		88
74)	1,4-dichlorobenzene	20.24	146	59437	0.43	ppb		95
75)	1,2,3-trimethylbenzene	20.49	105	85990	0.39	ppb		91
76)	1,2-dichlorobenzene	20.66	146	70376	0.45	ppb		95
77)	1,2,4-trichlorobenzene	22.83	180	22620	0.36	ppb		92
78)	Naphthalene	22.97	128	58170	0.33	ppb		95
79)	Hexachloro-1,3-butadiene	23.41	225	70735	0.42	ppb		99

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

Data File : C:\HPCHEM\1\DATA\AO022707.D
Acq On : 27 Feb 2017 2:38 pm
Sample : A1UG_0.50
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:23 2017

Vial: 5
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D

TIC: AO022707.D

AO022707.D A227_1UG.M Mon Mar 06 09:23:10 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022708.D Vial: 6
Acq On : 27 Feb 2017 3:18 pm Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:08:49 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	33193	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.05	114	135563	1.00	ppb		0.01
50) Chlorobenzene-d5	16.91	117	112581	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	74287	0.98	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 98.00%				
Target Compounds							Qvalue
2) Propylene	4.57	41	32616	1.01	ppb		82
3) Freon 12	4.63	85	314355	0.99	ppb		97
4) Chloromethane	4.80	50	55242m	0.95	ppb		
5) Freon 114	4.91	85	266565	0.94	ppb		98
6) Vinyl Chloride	5.03	62	71834	1.00	ppb		88
7) Butane	5.23	43	77054	0.93	ppb		87
8) 1,3-butadiene	5.17	39	47992m	0.87	ppb		
9) Bromomethane	5.45	94	95659	0.94	ppb		92
10) Chloroethane	5.63	64	33347	0.99	ppb		93
11) Ethanol	5.73	45	24047	1.05	ppb		87
12) Acrolein	6.09	56	24461	0.90	ppb		97
13) Vinyl Bromide	5.99	106	96108	0.95	ppb		95
14) Freon 11	6.42	101	371968	0.93	ppb		98
15) Acetone	6.24	58	29555	0.99	ppb	#	67
16) Pentane	6.79	42	31576	0.93	ppb	#	39
17) Isopropyl alcohol	6.47	45	100359	0.95	ppb	#	100
18) 1,1-dichloroethene	7.10	96	40530	0.93	ppb		98
19) Freon 113	7.50	101	116271	1.00	ppb		97
20) t-Butyl alcohol	7.12	59	78945	0.91	ppb	#	88
21) Methylene chloride	7.21	84	42167	0.96	ppb		95
22) Allyl chloride	7.35	41	34889	0.94	ppb		94
23) Carbon disulfide	7.57	76	130323	0.98	ppb		81
24) trans-1,2-dichloroethene	8.26	61	56081	0.95	ppb		92
25) methyl tert-butyl ether	8.55	73	103821	0.95	ppb		90
26) 1,1-dichloroethane	8.48	63	79911	0.97	ppb		98
27) Vinyl acetate	8.63	43	77184m	0.99	ppb		
28) Methyl Ethyl Ketone	8.94	72	18231	0.97	ppb	#	1
29) cis-1,2-dichloroethene	9.46	61	52575	0.98	ppb		93
30) Hexane	9.71	57	44374	0.94	ppb		87
31) Ethyl acetate	9.72	43	100553	0.96	ppb		98
32) Chloroform	9.81	83	133894	0.94	ppb		97
33) Tetrahydrofuran	10.34	42	27337	0.92	ppb	#	65
34) 1,2-dichloroethane	10.73	62	87348	0.95	ppb		95
36) 1,1,1-trichloroethane	11.05	97	152512	0.98	ppb		97
37) Cyclohexane	11.96	56	44782	0.99	ppb		88
38) Carbon tetrachloride	11.80	117	192671	1.00	ppb		99
39) Benzene	11.62	78	119767	0.99	ppb		95
40) Methyl methacrylate	13.10	41	44765	0.99	ppb	#	83
41) 1,4-dioxane	12.91	58	23899	1.08	ppb	#	34
42) 2,2,4-trimethylpentane	12.92	57	169708	1.01	ppb		89
43) Heptane	13.23	43	50744	1.02	ppb		84
44) Trichloroethene	12.88	130	72013	1.00	ppb		96
45) 1,2-dichloropropane	12.60	63	42501	1.06	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022708.D Vial: 6
Acq On : 27 Feb 2017 3:18 pm Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:08:49 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.82	83	145355	0.98	ppb		97
47)	cis-1,3-dichloropropene	13.87	75	72816	1.03	ppb		97
48)	trans-1,3-dichloropropene	14.47	75	71040	1.01	ppb		98
49)	1,1,2-trichloroethane	14.67	97	67705	1.04	ppb		95
51)	Toluene	14.97	92	86837	0.96	ppb		88
52)	Methyl Isobutyl Ketone	13.92	43	74181	0.82	ppb		97
53)	Dibromochloromethane	15.45	129	162151	0.97	ppb		92
54)	Methyl Butyl Ketone	15.26	43	65439	0.74	ppb		99
55)	1,2-dibromoethane	15.72	107	107224	0.95	ppb		97
56)	Tetrachloroethylene	16.22	164	78753	0.99	ppb		100
57)	Chlorobenzene	16.95	112	140548	0.95	ppb		98
58)	Ethylbenzene	17.35	91	199134	0.96	ppb		98
59)	m&p-xylene	17.54	91	399403	1.91	ppb		100
60)	Nonane	18.26	43	84171	0.96	ppb		98
61)	Styrene	17.92	104	109876	0.97	ppb		87
62)	Bromoform	17.63	173	153180	0.96	ppb		98
63)	o-xylene	18.04	91	195397	0.98	ppb		94
64)	Cumene	18.68	105	257295	0.96	ppb		99
66)	1,1,2,2-tetrachloroethane	18.03	83	142956	0.96	ppb		96
67)	Propylbenzene	19.24	120	73966	0.97	ppb	#	1
68)	2-Chlorotoluene	19.21	126	59127	0.97	ppb	#	1
69)	4-ethyltoluene	19.41	105	234955	0.93	ppb		94
70)	1,3,5-trimethylbenzene	19.49	105	232316	0.94	ppb		98
71)	1,2,4-trimethylbenzene	19.98	105	186326	0.93	ppb		91
72)	1,3-dichlorobenzene	20.16	146	148198	0.94	ppb	#	35
73)	benzyl chloride	20.14	91	129063	0.92	ppb		88
74)	1,4-dichlorobenzene	20.24	146	132228	0.95	ppb	#	25
75)	1,2,3-trimethylbenzene	20.49	105	198131	0.91	ppb		93
76)	1,2-dichlorobenzene	20.66	146	145697	0.94	ppb		96
77)	1,2,4-trichlorobenzene	22.83	180	51354	0.83	ppb		96
78)	Naphthalene	22.97	128	128684	0.74	ppb		94
79)	Hexachloro-1,3-butadiene	23.41	225	142832	0.86	ppb		98

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

Data File : C:\HPCHEM\1\DATA\AO022708.D
Acq On : 27 Feb 2017 3:18 pm
Sample : A1UG_1.0
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:11 2017

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

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D

TIC: AO022708.D

AO022708.D A227_1UG.M Mon Mar 06 09:23:15 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022709.D Vial: 7
Acq On : 27 Feb 2017 3:55 pm Operator: RJP
Sample : A1UG_0,30 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:09:15 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	31550	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	124545	1.00	ppb		0.00
50) Chlorobenzene-d5	16.91	117	107408	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	65066	0.90	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 90.00%				
Target Compounds							Qvalue
2) Propylene	4.56	41	10462	0.34	ppb		80
3) Freon 12	4.64	85	89651	0.30	ppb		99
4) Chloromethane	4.80	50	16559	0.30	ppb		68
5) Freon 114	4.90	85	74954	0.28	ppb		97
6) Vinyl Chloride	5.03	62	20335	0.30	ppb		96
7) Butane	5.23	43	24032	0.31	ppb		94
8) 1,3-butadiene	5.18	39	15070m	0.29	ppb		
9) Bromomethane	5.45	94	26711	0.27	ppb		94
10) Chloroethane	5.63	64	10587m	0.33	ppb		
11) Ethanol	5.73	45	8502	0.39	ppb	#	77
12) Acrolein	6.11	56	7749	0.30	ppb		89
13) Vinyl Bromide	5.99	106	27527	0.28	ppb		96
14) Freon 11	6.42	101	107968	0.29	ppb		99
15) Acetone	6.25	58	8644	0.30	ppb	#	52
16) Pentane	6.79	42	9719	0.30	ppb	#	45
17) Isopropyl alcohol	6.49	45	37741	0.38	ppb	#	100
18) 1,1-dichloroethene	7.10	96	12295	0.30	ppb		95
19) Freon 113	7.51	101	33311	0.30	ppb		98
20) t-Butyl alcohol	7.14	59	26163	0.32	ppb	#	87
21) Methylene chloride	7.21	84	13237m	0.32	ppb		
22) Allyl chloride	7.33	41	9501	0.27	ppb		86
23) Carbon disulfide	7.57	76	38692	0.31	ppb		79
24) trans-1,2-dichloroethene	8.25	61	16783	0.30	ppb		92
25) methyl tert-butyl ether	8.56	73	28349	0.27	ppb		94
26) 1,1-dichloroethane	8.48	63	22556	0.29	ppb		92
27) Vinyl acetate	8.65	43	18505m	0.25	ppb		
28) Methyl Ethyl Ketone	8.94	72	5537	0.31	ppb	#	1
29) cis-1,2-dichloroethene	9.46	61	15110	0.30	ppb		96
30) Hexane	9.72	57	10444	0.23	ppb	#	85
31) Ethyl acetate	9.72	43	25081	0.25	ppb		98
32) Chloroform	9.81	83	37202	0.27	ppb		95
33) Tetrahydrofuran	10.34	42	7963	0.28	ppb	#	61
34) 1,2-dichloroethane	10.73	62	24501	0.28	ppb		88
36) 1,1,1-trichloroethane	11.05	97	43540	0.31	ppb		98
37) Cyclohexane	11.95	56	13093	0.31	ppb		89
38) Carbon tetrachloride	11.80	117	54833	0.31	ppb		99
39) Benzene	11.62	78	32717	0.30	ppb		95
40) Methyl methacrylate	13.11	41	10561	0.25	ppb	#	75
41) 1,4-dioxane	12.92	58	6900	0.34	ppb	#	23
42) 2,2,4-trimethylpentane	12.92	57	39374	0.26	ppb		78
43) Heptane	13.23	43	11286	0.25	ppb	#	76
44) Trichloroethene	12.89	130	19504	0.29	ppb		94
45) 1,2-dichloropropane	12.60	63	11186	0.30	ppb		94

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022709.D Vial: 7
Acq On : 27 Feb 2017 3:55 pm Operator: RJP
Sample : A1UG_0.30 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:09:15 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	41743	0.31	ppb		93
47)	cis-1,3-dichloropropene	13.88	75	19493	0.30	ppb		93
48)	trans-1,3-dichloropropene	14.46	75	17923	0.28	ppb		91
49)	1,1,2-trichloroethane	14.66	97	19136	0.32	ppb		99
51)	Toluene	14.98	92	22427	0.26	ppb		87
52)	Methyl Isobutyl Ketone	13.92	43	20602	0.24	ppb		96
53)	Dibromochloromethane	15.44	129	45949	0.29	ppb		94
54)	Methyl Butyl Ketone	15.26	43	19265	0.23	ppb		98
55)	1,2-dibromoethane	15.71	107	29196	0.27	ppb		99
56)	Tetrachloroethylene	16.23	164	20923	0.28	ppb		91
57)	Chlorobenzene	16.95	112	37466	0.27	ppb		93
58)	Ethylbenzene	17.35	91	49406	0.25	ppb		99
59)	m&p-xylene	17.54	91	92629m	0.46	ppb		
60)	Nonane	18.26	43	16910	0.20	ppb		89
61)	Styrene	17.92	104	26733	0.25	ppb		84
62)	Bromoform	17.63	173	40478	0.27	ppb		98
63)	o-xylene	18.04	91	43261	0.23	ppb		96
64)	Cumene	18.68	105	64995	0.25	ppb		98
66)	1,1,2,2-tetrachloroethane	18.04	83	39374	0.28	ppb		95
67)	Propylbenzene	19.25	120	17405	0.24	ppb	#	1
68)	2-Chlorotoluene	19.22	126	15954	0.27	ppb	#	1
69)	4-ethyltoluene	19.41	105	57355	0.24	ppb		99
70)	1,3,5-trimethylbenzene	19.49	105	53840	0.23	ppb		93
71)	1,2,4-trimethylbenzene	19.97	105	46850	0.24	ppb		88
72)	1,3-dichlorobenzene	20.16	146	41823	0.28	ppb	#	60
73)	benzyl chloride	20.14	91	33683	0.25	ppb		92
74)	1,4-dichlorobenzene	20.25	146	35292m	0.27	ppb		
75)	1,2,3-trimethylbenzene	20.49	105	48489	0.23	ppb		90
76)	1,2-dichlorobenzene	20.66	146	40713	0.27	ppb		100
77)	1,2,4-trichlorobenzene	22.83	180	13945	0.24	ppb		87
78)	Naphthalene	22.97	128	39073	0.23	ppb		97
79)	Hexachloro-1,3-butadiene	23.41	225	46959	0.30	ppb		99

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

Data File : C:\HPCHEM\1\DATA\AO022709.D
Acq On : 27 Feb 2017 3:55 pm
Sample : A1UG_0,30
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:13 2017

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

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D

TIC: AO022709.D

AO022709.D A227_1UG.M Mon Mar 06 09:23:19 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022710.D Vial: 8
Acq On : 27 Feb 2017 4:31 pm Operator: RJP
Sample : A1UG_0.15 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:09:36 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.66	128	29609	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	114280	1.00	ppb		0.00
50) Chlorobenzene-d5	16.91	117	101915	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	60579	0.88	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 88.00%				
Target Compounds							Qvalue
2) Propylene	4.56	41	4783	0.17	ppb		89
3) Freon 12	4.63	85	43314	0.15	ppb		99
4) Chloromethane	4.80	50	7779m	0.15	ppb		
5) Freon 114	4.90	85	37829	0.15	ppb		96
6) Vinyl Chloride	5.03	62	10571	0.17	ppb		84
7) Butane	5.22	43	12241	0.17	ppb		92
8) 1,3-butadiene	5.17	39	7233m	0.15	ppb		
9) Bromomethane	5.45	94	13921	0.15	ppb		92
10) Chloroethane	5.62	64	4796	0.16	ppb	#	68
11) Ethanol	5.74	45	3726m	0.18	ppb		
12) Acrolein	6.10	56	3425	0.14	ppb		79
13) Vinyl Bromide	5.99	106	13042	0.14	ppb		89
14) Freon 11	6.42	101	52808	0.15	ppb		99
15) Acetone	6.25	58	4275	0.16	ppb	#	63
16) Pentane	6.78	42	4819	0.16	ppb	#	48
17) Isopropyl alcohol	6.49	45	17359	0.19	ppb	#	100
18) 1,1-dichloroethene	7.10	96	5776	0.15	ppb		92
19) Freon 113	7.50	101	16587	0.16	ppb		95
20) t-Butyl alcohol	7.15	59	10937	0.14	ppb	#	88
21) Methylene chloride	7.22	84	6851	0.18	ppb		93
22) Allyl chloride	7.34	41	5007m	0.15	ppb		
23) Carbon disulfide	7.56	76	19583	0.17	ppb		87
24) trans-1,2-dichloroethene	8.25	61	8641	0.16	ppb		90
25) methyl tert-butyl ether	8.57	73	13267	0.14	ppb		94
26) 1,1-dichloroethane	8.49	63	9732	0.13	ppb		88
27) Vinyl acetate	8.63	43	11754	0.17	ppb		83
28) Methyl Ethyl Ketone	8.93	72	2318	0.14	ppb	#	80
29) cis-1,2-dichloroethene	9.46	61	6901	0.14	ppb		86
30) Hexane	9.72	57	4955	0.12	ppb	#	83
31) Ethyl acetate	9.72	43	11816	0.13	ppb		91
32) Chloroform	9.81	83	18312	0.14	ppb		93
33) Tetrahydrofuran	10.35	42	3640m	0.14	ppb		
34) 1,2-dichloroethane	10.72	62	12370	0.15	ppb		93
36) 1,1,1-trichloroethane	11.05	97	21536	0.16	ppb		96
37) Cyclohexane	11.97	56	5394	0.14	ppb	#	76
38) Carbon tetrachloride	11.81	117	27365	0.17	ppb		98
39) Benzene	11.62	78	16374	0.16	ppb		94
40) Methyl methacrylate	13.10	41	4234	0.11	ppb	#	64
41) 1,4-dioxane	12.91	58	2799	0.15	ppb	#	14
42) 2,2,4-trimethylpentane	12.93	57	17819	0.13	ppb		84
43) Heptane	13.24	43	5482	0.13	ppb	#	73
44) Trichloroethene	12.88	130	9089	0.15	ppb		86
45) 1,2-dichloropropane	12.60	63	5722	0.17	ppb		95

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022710.D
Acq On : 27 Feb 2017 4:31 pm
Sample : A1UG_0.15
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:09:36 2017

Vial: 8
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: A227_1UG.RES

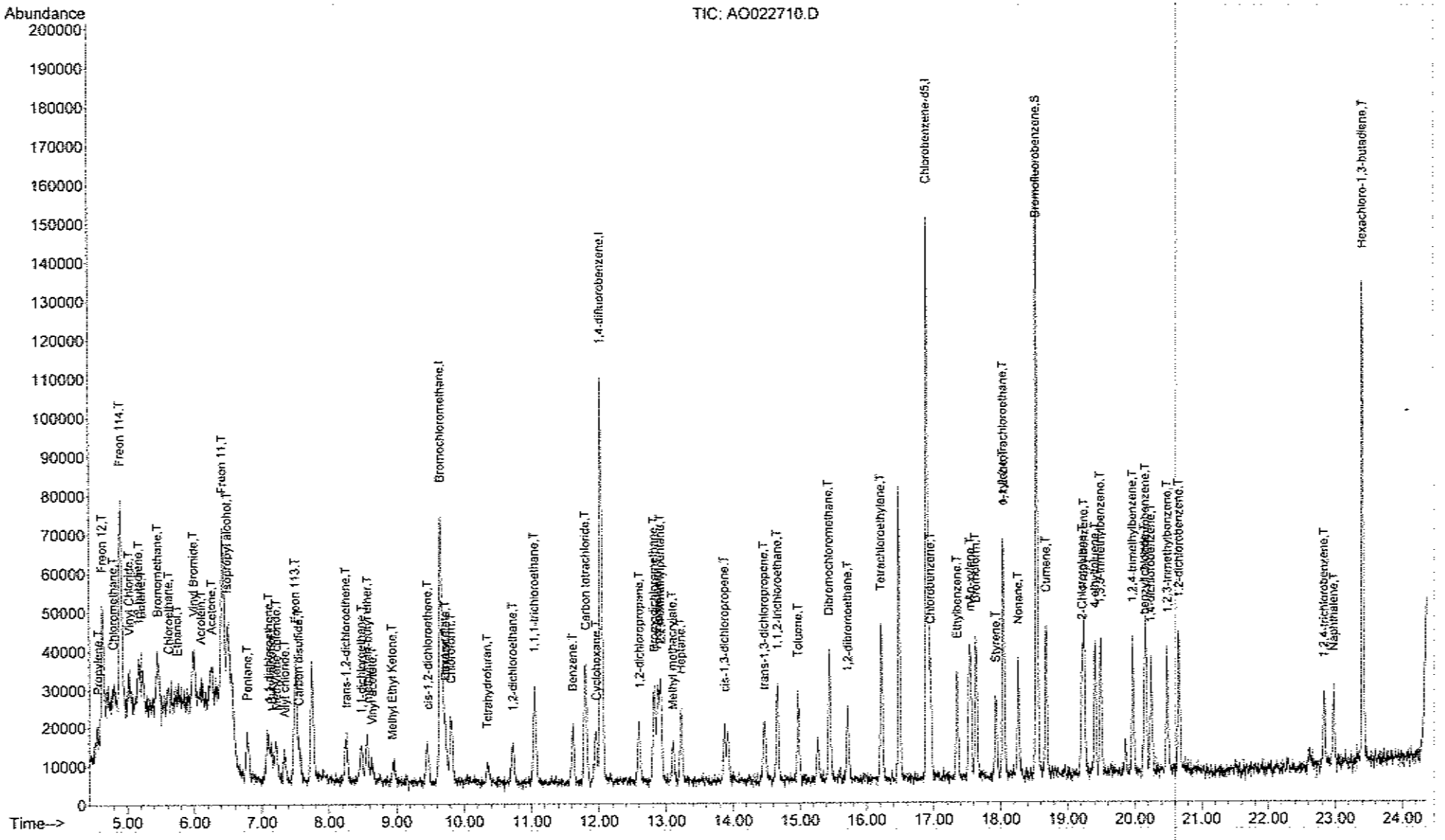
Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.83	83	20004	0.16	ppb		98
47)	cis-1,3-dichloropropene	13.87	75	8700	0.15	ppb		90
48)	trans-1,3-dichloropropene	14.46	75	8707	0.15	ppb		98
49)	1,1,2-trichloroethane	14.67	97	8712	0.16	ppb		99
51)	Toluene	14.98	92	11171	0.14	ppb		94
53)	Dibromochloromethane	15.44	129	22261	0.15	ppb		100
55)	1,2-dibromoethane	15.72	107	13395	0.13	ppb		94
56)	Tetrachloroethylene	16.23	164	11207	0.16	ppb		95
57)	Chlorobenzene	16.95	112	18365	0.14	ppb		96
58)	Ethylbenzene	17.35	91	24082	0.13	ppb		95
59)	m&p-xylene	17.55	91	41618	0.22	ppb		98
60)	Nonane	18.26	43	8797m	0.11	ppb		
61)	Styrene	17.93	104	13421	0.13	ppb		81
62)	Bromoform	17.63	173	18122	0.13	ppb		94
63)	o-xylene	18.05	91	19911	0.11	ppb		99
64)	Cumene	18.68	105	29600	0.12	ppb		95
66)	1,1,2,2-tetrachloroethane	18.04	83	18805	0.14	ppb		94
67)	Propylbenzene	19.25	120	8095	0.12	ppb	#	1
68)	2-Chlorotoluene	19.22	126	7562	0.14	ppb	#	1
69)	4-ethyltoluene	19.41	105	25058	0.11	ppb		98
70)	1,3,5-trimethylbenzene	19.49	105	22630	0.10	ppb		87
71)	1,2,4-trimethylbenzene	19.97	105	22333	0.12	ppb		81
72)	1,3-dichlorobenzene	20.17	146	17500	0.12	ppb		99
73)	benzyl chloride	20.14	91	15570	0.12	ppb		87
74)	1,4-dichlorobenzene	20.24	146	14264	0.11	ppb		97
75)	1,2,3-trimethylbenzene	20.48	105	22396	0.11	ppb	#	83
76)	1,2-dichlorobenzene	20.66	146	19520	0.14	ppb		96
77)	1,2,4-trichlorobenzene	22.83	180	7102	0.13	ppb		98
78)	Naphthalene	22.97	128	17274	0.11	ppb		91
79)	Hexachloro-1,3-butadiene	23.41	225	25872	0.17	ppb		98

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

Data File : C:\HPCHEM\1\DATA\AO022710.D Vial: 8
Acq On : 27 Feb 2017 4:31 pm Operator: RJP
Sample : A1UG_0.15 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:15 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022711.D Vial: 9
Acq On : 27 Feb 2017 5:08 pm Operator: RJP
Sample : A1UG_0.10 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:10:00 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

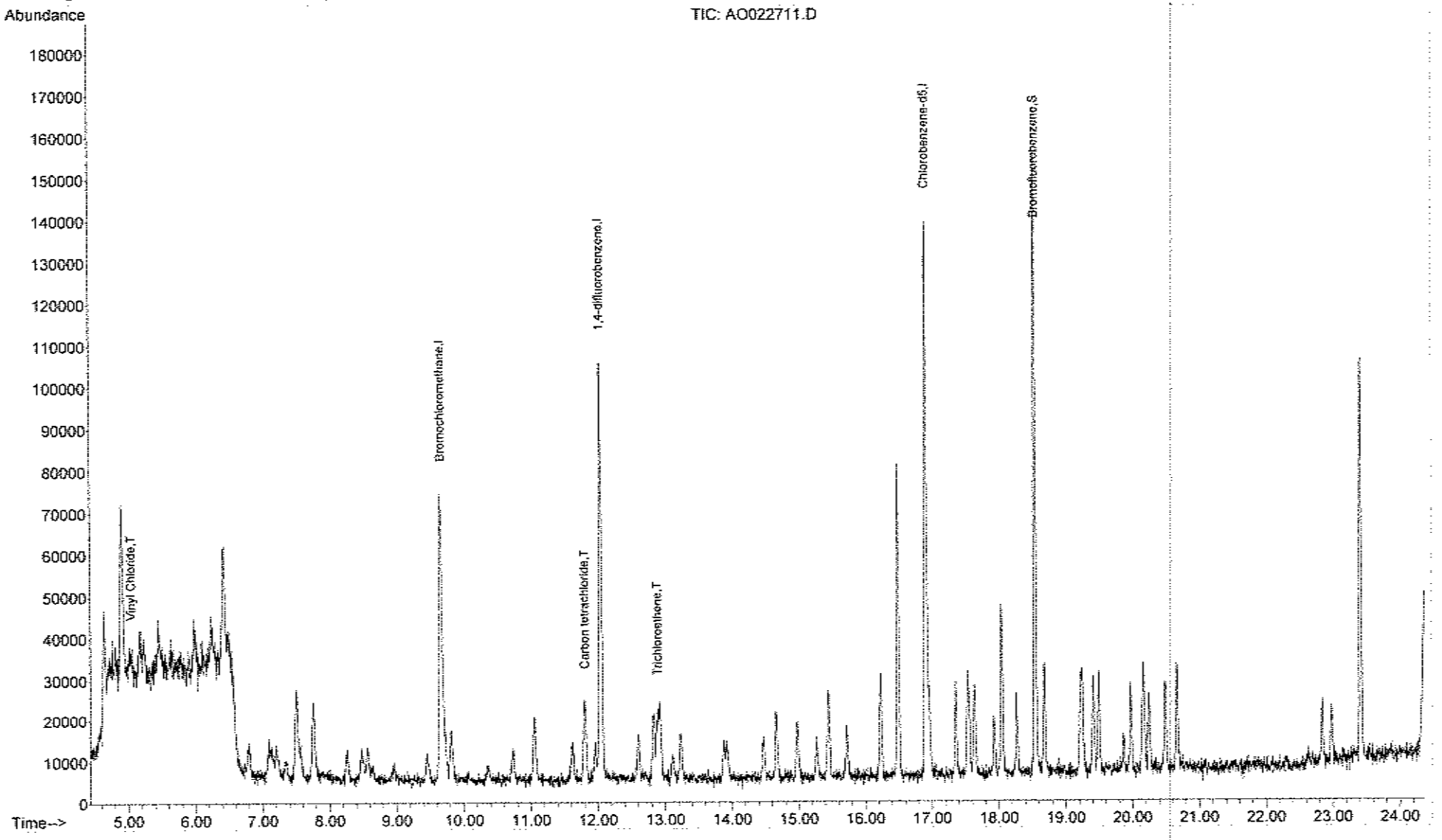
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.66	128	29938	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.04	114	109904	1.00	ppb	0.00
50) Chlorobenzene-d5	16.91	117	98325	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	54341	0.82	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 82.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	5.04	62	7526	0.12	ppb	84
38) Carbon tetrachloride	11.80	117	17794	0.11	ppb	97
44) Trichloroethene	12.89	130	6065	0.10	ppb	87

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022711.D Vial: 9
Acq On : 27 Feb 2017 5:08 pm Operator: RJP
Sample : A1UG_0.10 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:16 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D



AO022711.D A227_1UG.M Mon Mar 06 09:23:26 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022712.D Vial: 10
Acq On : 27 Feb 2017 5:45 pm Operator: RJP
Sample : A1UG_0.04 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:10:27 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 13:34:10 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D
DataAcq Meth : 1UG_RUN

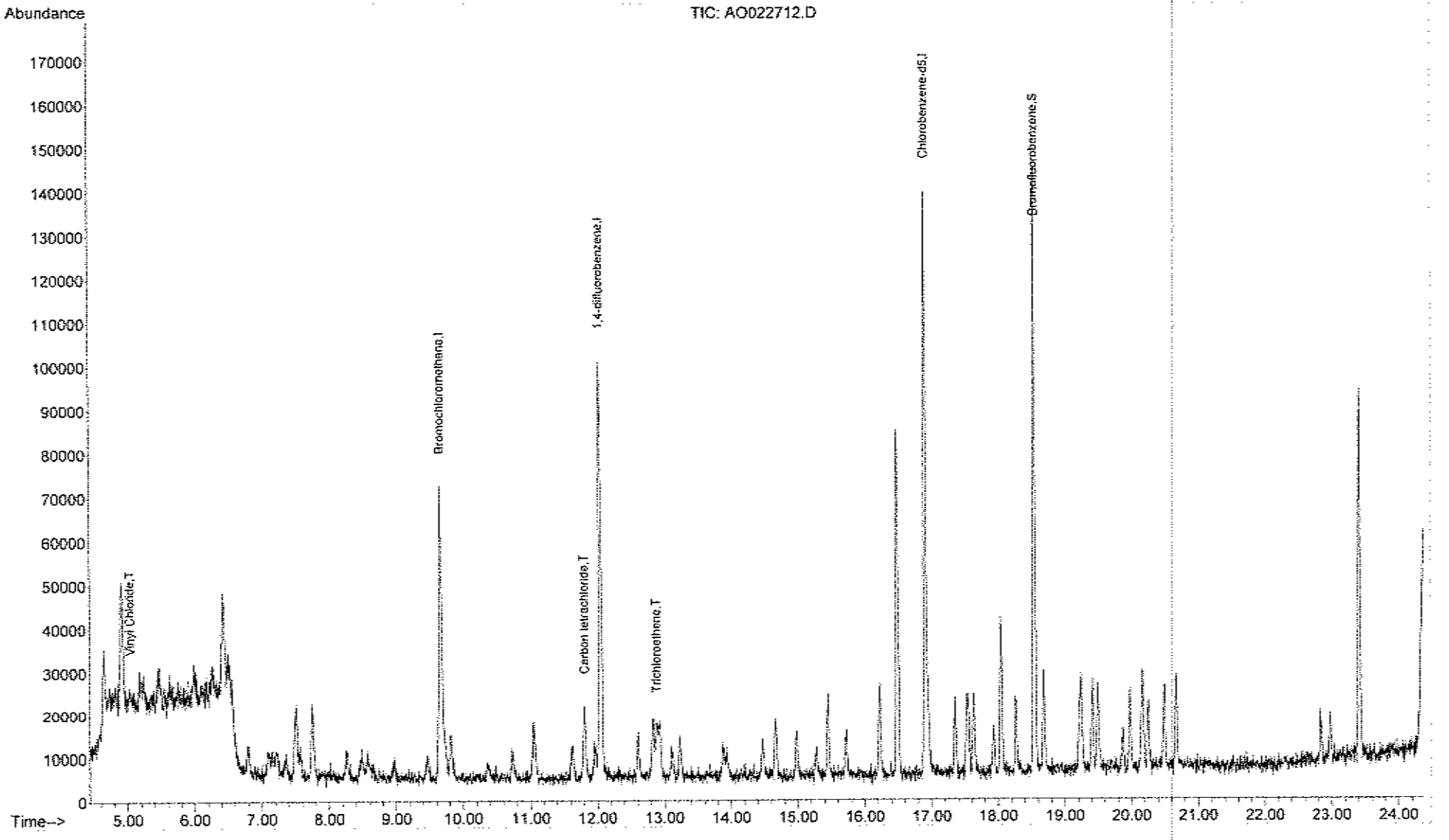
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.66	128	29129	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.05	114	103388	1.00	ppb	0.01
50) Chlorobenzene-d5	16.91	117	93432	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	51957	0.83	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 83.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	5.03	62	3893m	0.06	ppb	
38) Carbon tetrachloride	11.80	117	11296m	0.08	ppb	
44) Trichloroethene	12.88	130	3725m	0.07	ppb	

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO022712.D Vial: 10
Acq On : 27 Feb 2017 5:45 pm Operator: RJP
Sample : A1UG_0.04 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 19:25 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Feb 27 19:25:53 2017
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AO022702.D



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CALIBRATION VERIFICATION

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AO030803.D Vial: 3
Acq On : 8 Mar 2017 10:33 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	155#	0.00
2	T	Propylene	1.042	0.908	12.9	144	0.00
3	T	Freon 12	9.266	10.061	-8.6	165#	0.00
4	T	Chloromethane	1.659	1.378	16.9	129	0.00
5	T	Freon 114	7.921	7.623	3.8	148	0.00
6	T	Vinyl Chloride	2.301	1.895	17.6	136	0.00
7	T	Butane	2.394	2.055	14.2	138	0.00
8	T	1,3-butadiene	1.535	1.410	8.1	152#	0.00
9	T	Bromomethane	2.831	2.442	13.7	132	0.00
10	T	Chloroethane	1.014	0.804	20.7	124	0.00
11	T	Ethanol	0.748	0.556	25.7	119	0.00
12	T	Acrolein	0.765	0.583	23.8	123	0.00
13	T	Vinyl Bromide	2.844	2.497	12.2	134	0.00
14	T	Freon 11	11.092	11.621	-4.8	161#	0.00
15	T	Acetone	0.882	0.734	16.8	128	0.00
16	T	Pentane	1.010	0.835	17.3	137	0.00
17	T	Isopropyl alcohol	3.221	2.645	17.9	136	0.00
18	T	1,1-dichloroethene	1.282	1.389	-8.3	177#	0.00
19	T	Freon 113	3.515	3.854	-9.6	171#	0.00
20	t	t-Butyl alcohol	2.527	2.816	-11.4	184#	0.00
21	T	Methylene chloride	1.335	1.268	5.0	155#	0.00
22	T	Allyl chloride	1.090	1.109	-1.7	164#	0.00
23	T	Carbon disulfide	3.995	3.725	6.8	148	0.00
24	T	trans-1,2-dichloroethene	1.805	1.947	-7.9	179#	0.00
25	T	methyl tert-butyl ether	3.166	3.784	-19.5	188#	0.00
26	T	1,1-dichloroethane	2.386	2.480	-3.9	160#	0.00
27	T	Vinyl acetate	2.361	3.637	-54.0#	243#	0.00
28	T	Methyl Ethyl Ketone	0.565	0.600	-6.2	170#	0.00
29	T	cis-1,2-dichloroethene	1.586	1.793	-13.1	176#	0.00
30	T	Hexane	1.306	1.346	-3.1	156#	0.00
31	T	Ethyl acetate	2.971	2.955	0.5	152#	0.00
32	T	Chloroform	4.078	4.790	-17.5	185#	0.00
33	T	Tetrahydrofuran	0.865	0.815	5.8	154#	0.00
34	T	1,2-dichloroethane	2.716	3.358	-23.6	198#	0.00
35	I	1,4-difluorobenzene	1.000	1.000	0.0	172#	0.00
36	T	1,1,1-trichloroethane	1.135	1.381	-21.7	211#	0.00
37	T	Cyclohexane	0.341	0.312	8.5	162#	0.00
38	T	Carbon tetrachloride	1.580	1.763	-11.6	213#	0.00
39	T	Benzene	0.891	0.884	0.8	172#	0.00
40	T	Methyl methacrylate	0.312	0.340	-9.0	177#	0.00
41	T	1,4-dioxane	0.172	0.137	20.3	134	0.00
42	T	2,2,4-trimethylpentane	1.185	1.052	11.2	144	0.00
43	T	Heptane	0.360	0.322	10.6	148	0.00
44	T	Trichloroethene	0.568	0.593	-4.4	192#	0.00
45	T	1,2-dichloropropane	0.306	0.250	18.3	137	0.00
46	T	Bromodichloromethane	1.088	1.203	-10.6	193#	0.00
47	T	cis-1,3-dichloropropene	0.524	0.528	-0.8	169#	0.00
48	T	trans-1,3-dichloropropene	0.513	0.594	-15.8	195#	0.00
49	T	1,1,2-trichloroethane	0.488	0.457	6.4	157#	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AO030803.D Vial: 3
Acq On : 8 Mar 2017 10:33 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T	Toluene	0.760	0.831	-9.3	188#	0.00
52	T	Methyl Isobutyl Ketone	0.683	0.530	22.4	141	0.00
53	T	Dibromochloromethane	1.439	1.560	-8.4	189#	0.00
54	T	Methyl Butyl Ketone	0.629	0.478	24.0	144	0.00
55	T	1,2-dibromoethane	0.930	0.924	0.6	170#	0.00
56	T	Tetrachloroethylene	0.691	0.815	-17.9	204#	0.00
57	T	Chlorobenzene	1.238	1.346	-8.7	189#	0.00
58	T	Ethylbenzene	1.745	2.006	-15.0	198#	0.00
59	T	m&p-xylene	1.665	1.964	-18.0	194#	0.00
60	T	Nonane	0.695	0.624	10.2	146	0.00
61	T	Styrene	0.969	1.148	-18.5	206#	0.00
62	T	Bromoform	1.307	1.428	-9.3	184#	0.00
63	T	o-xylene	1.612	1.859	-15.3	187#	0.00
64	T	Cumene	2.227	2.617	-17.5	200#	0.00
65	S	Bromofluorobenzene	0.627	0.662	-5.6	175#	0.00
66	T	1,1,2,2-tetrachloroethane	1.256	1.031	17.9	142	0.00
67	T	Propylbenzene	0.625	0.728	-16.5	194#	0.00
68	T	2-Chlorotoluene	0.528	0.633	-19.9	211#	0.00
69	T	4-ethyltoluene	2.062	2.438	-18.2	204#	0.00
70	T	1,3,5-trimethylbenzene	1.940	2.323	-19.7	197#	0.00
71	T	1,2,4-trimethylbenzene	1.642	2.082	-26.8	220#	0.00
72	T	1,3-dichlorobenzene	1.293	1.536	-18.8	204#	0.00
73	T	benzyl chloride	1.119	1.365	-22.0	208#	0.00
74	T	1,4-dichlorobenzene	1.136	1.366	-20.2	203#	0.00
75	T	1,2,3-trimethylbenzene	1.713	2.104	-22.8	209#	0.00
76	T	1,2-dichlorobenzene	1.297	1.504	-16.0	203#	0.00
77	T	1,2,4-trichlorobenzene	0.468	0.562	-20.1	215#	0.00
78	T	Naphthalene	1.258	1.266	-0.6	194#	0.00
79	T	Hexachloro-1,3-butadiene	1.359	1.375	-1.2	190#	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030803.D Vial: 3
Acq On : 8 Mar 2017 10:33 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:13 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.64	128	51607	1.00	ppb		-0.02
35) 1,4-difluorobenzene	12.03	114	232876	1.00	ppb		0.00
50) Chlorobenzene-d5	16.90	117	196939	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.53	95	130288	1.06	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 106.00%				
Target Compounds							Qvalue
2) Propylene	4.54	41	46864	0.87	ppb		67
3) Freon 12	4.62	85	519234	1.09	ppb		97
4) Chloromethane	4.78	50	71090m	0.83	ppb		
5) Freon 114	4.89	85	393406	0.96	ppb		98
6) Vinyl Chloride	5.02	62	97776	0.82	ppb		96
7) Butane	5.21	43	106056	0.86	ppb	#	86
8) 1,3-butadiene	5.16	39	72754m	0.92	ppb		
9) Bromomethane	5.44	94	126042	0.86	ppb		94
10) Chloroethane	5.61	64	41479	0.79	ppb	#	81
11) Ethanol	5.72	45	28685	0.74	ppb		84
12) Acrolein	6.08	56	30071	0.76	ppb		94
13) Vinyl Bromide	5.98	106	128853	0.88	ppb		94
14) Freon 11	6.40	101	599733	1.05	ppb		99
15) Acetone	6.23	58	37904	0.83	ppb	#	32
16) Pentane	6.78	42	43107	0.83	ppb	#	18
17) Isopropyl alcohol	6.46	45	136507	0.82	ppb	#	100
18) 1,1-dichloroethene	7.08	96	71696	1.08	ppb		97
19) Freon 113	7.49	101	198900	1.10	ppb		98
20) t-Butyl alcohol	7.11	59	145313	1.11	ppb	#	93
21) Methylene chloride	7.20	84	65431	0.95	ppb		94
22) Allyl chloride	7.33	41	57216	1.02	ppb		88
23) Carbon disulfide	7.55	76	192233	0.93	ppb		78
24) trans-1,2-dichloroethene	8.24	61	100476	1.08	ppb		93
25) methyl tert-butyl ether	8.54	73	195286m	1.20	ppb		
26) 1,1-dichloroethane	8.47	63	127980	1.04	ppb		93
27) Vinyl acetate	8.62	43	187691	1.54	ppb		96
28) Methyl Ethyl Ketone	8.92	72	30974	1.06	ppb	#	1
29) cis-1,2-dichloroethene	9.44	61	92536	1.13	ppb		95
30) Hexane	9.70	57	69443	1.03	ppb	#	82
31) Ethyl acetate	9.71	43	152501	0.99	ppb		99
32) Chloroform	9.80	83	247201	1.17	ppb		99
33) Tetrahydrofuran	10.32	42	42068	0.94	ppb	#	51
34) 1,2-dichloroethane	10.71	62	173309m	1.24	ppb		
36) 1,1,1-trichloroethane	11.03	97	321582	1.22	ppb		98
37) Cyclohexane	11.95	56	72657	0.91	ppb	#	72
38) Carbon tetrachloride	11.79	117	410561	1.12	ppb		98
39) Benzene	11.61	78	205947	0.99	ppb		92
40) Methyl methacrylate	13.10	41	79152	1.09	ppb	#	88
41) 1,4-dioxane	12.90	58	31932	0.80	ppb	#	22
42) 2,2,4-trimethylpentane	12.91	57	244875	0.89	ppb	#	77
43) Heptane	13.22	43	74984	0.89	ppb	#	76
44) Trichloroethene	12.87	130	138089	1.04	ppb		95
45) 1,2-dichloropropane	12.59	63	58298	0.82	ppb		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030803.D Vial: 3
Acq On : 8 Mar 2017 10:33 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:13 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.81	83	280105	1.11	ppb		96
47)	cis-1,3-dichloropropene	13.87	75	122992	1.01	ppb		91
48)	trans-1,3-dichloropropene	14.45	75	138346	1.16	ppb		97
49)	1,1,2-trichloroethane	14.66	97	106404	0.94	ppb		98
51)	Toluene	14.97	92	163558	1.09	ppb		89
52)	Methyl Isobutyl Ketone	13.90	43	104327	0.78	ppb		94
53)	Dibromochloromethane	15.44	129	307235	1.08	ppb		93
54)	Methyl Butyl Ketone	15.26	43	94051	0.76	ppb		95
55)	1,2-dibromoethane	15.70	107	181895	0.99	ppb		97
56)	Tetrachloroethylene	16.22	164	160582	1.18	ppb		99
57)	Chlorobenzene	16.94	112	265103	1.09	ppb		94
58)	Ethylbenzene	17.34	91	395136	1.15	ppb		96
59)	m&p-xylene	17.53	91	773530	2.36	ppb		99
60)	Nonane	18.26	43	122957	0.90	ppb		93
61)	Styrene	17.92	104	226068	1.18	ppb		90
62)	Bromoform	17.62	173	281276	1.09	ppb		98
63)	o-xylene	18.04	91	366065	1.15	ppb		97
64)	Cumene	18.67	105	515313	1.18	ppb		96
66)	1,1,2,2-tetrachloroethane	18.03	83	203066	0.82	ppb		96
67)	Propylbenzene	19.24	120	143415	1.17	ppb	#	1
68)	2-Chlorotoluene	19.20	126	124731	1.20	ppb	#	1
69)	4-ethyltoluene	19.40	105	480060	1.18	ppb		96
70)	1,3,5-trimethylbenzene	19.48	105	457565	1.20	ppb		96
71)	1,2,4-trimethylbenzene	19.96	105	410061m	1.27	ppb		
72)	1,3-dichlorobenzene	20.16	146	302405	1.19	ppb	#	38
73)	benzyl chloride	20.13	91	268754	1.22	ppb		91
74)	1,4-dichlorobenzene	20.24	146	268946	1.20	ppb	#	25
75)	1,2,3-trimethylbenzene	20.48	105	414336	1.23	ppb		92
76)	1,2-dichlorobenzene	20.65	146	296198	1.16	ppb		94
77)	1,2,4-trichlorobenzene	22.82	180	110615	1.20	ppb		97
78)	Naphthalene	22.97	128	249307	1.01	ppb		94
79)	Hexachloro-1,3-butadiene	23.40	225	270885	1.01	ppb		100

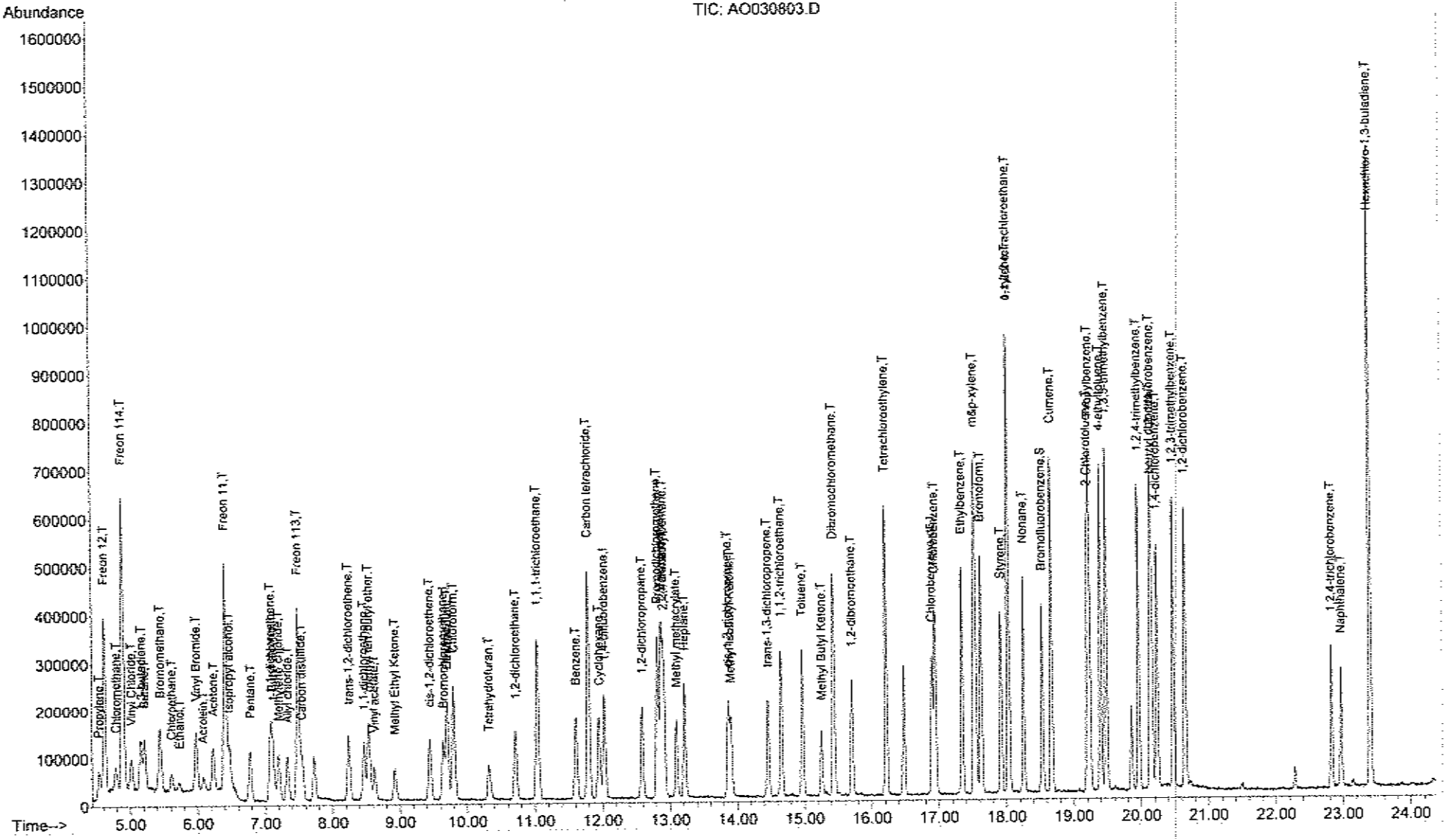
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030803.D Vial: 3
Acq On : 8 Mar 2017 10:33 am Operator: RJP
Sample : A1UG_1.0 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 9 15:45 2017 Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

TIC: AO030803.D



AO030803.D A227_1UG.M Mon Mar 27 11:03:53 2017 MSD1

GC/MS VOLATILES-WHOLE AIR

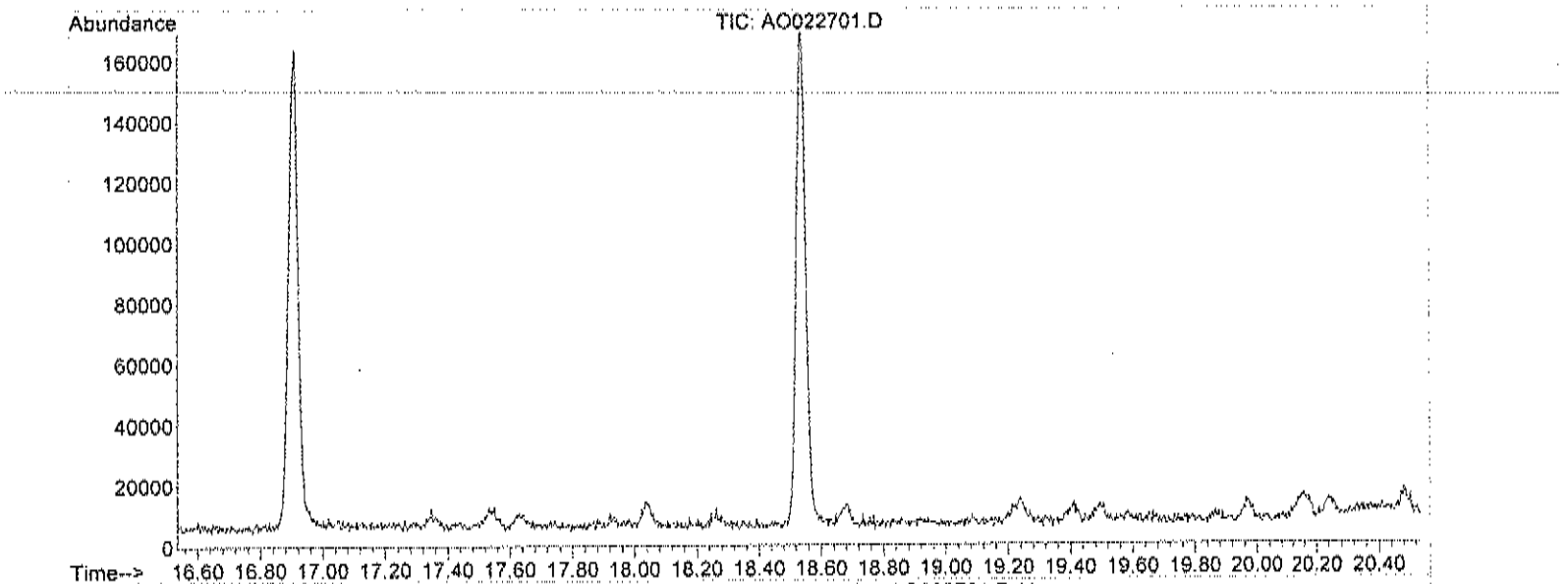
METHOD TO-15

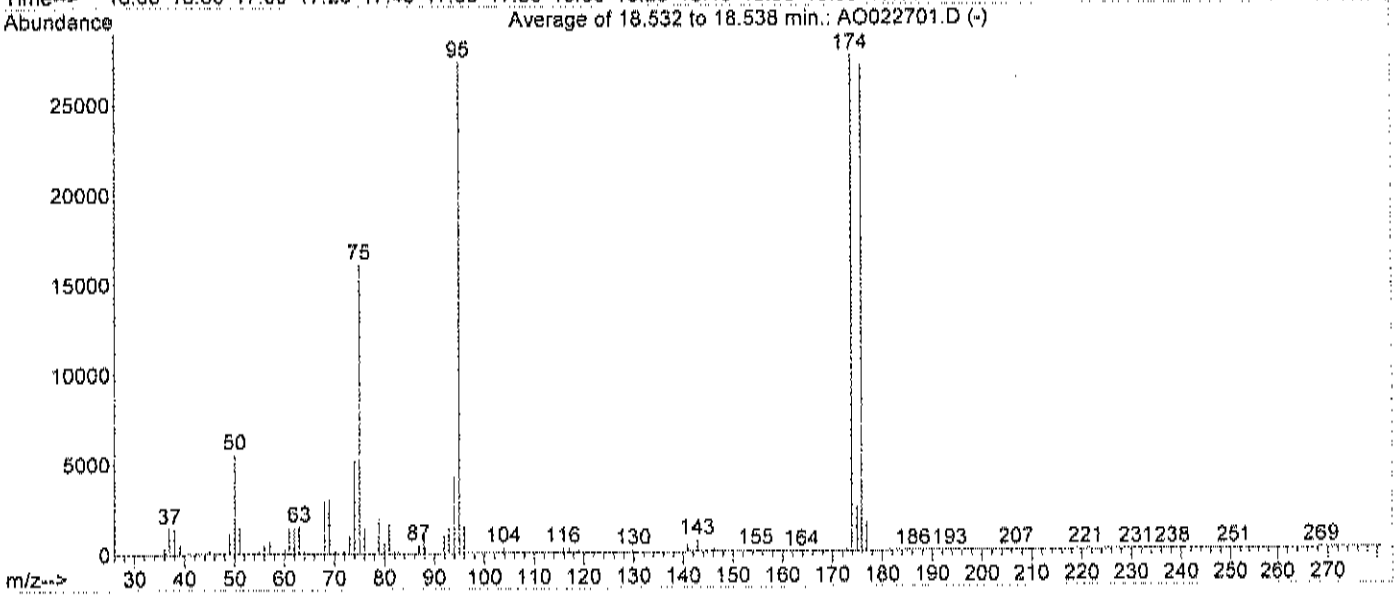
RAW DATA

BFB

Data File : C:\HPCHEM\1\DATA\AO022701.D
Acq On : 27 Feb 2017 10:36 am
Sample : BFB1UG
Misc : A120_1UG - 200cc
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

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





Spectrum Information: Average of 18.532 to 18.538 min.

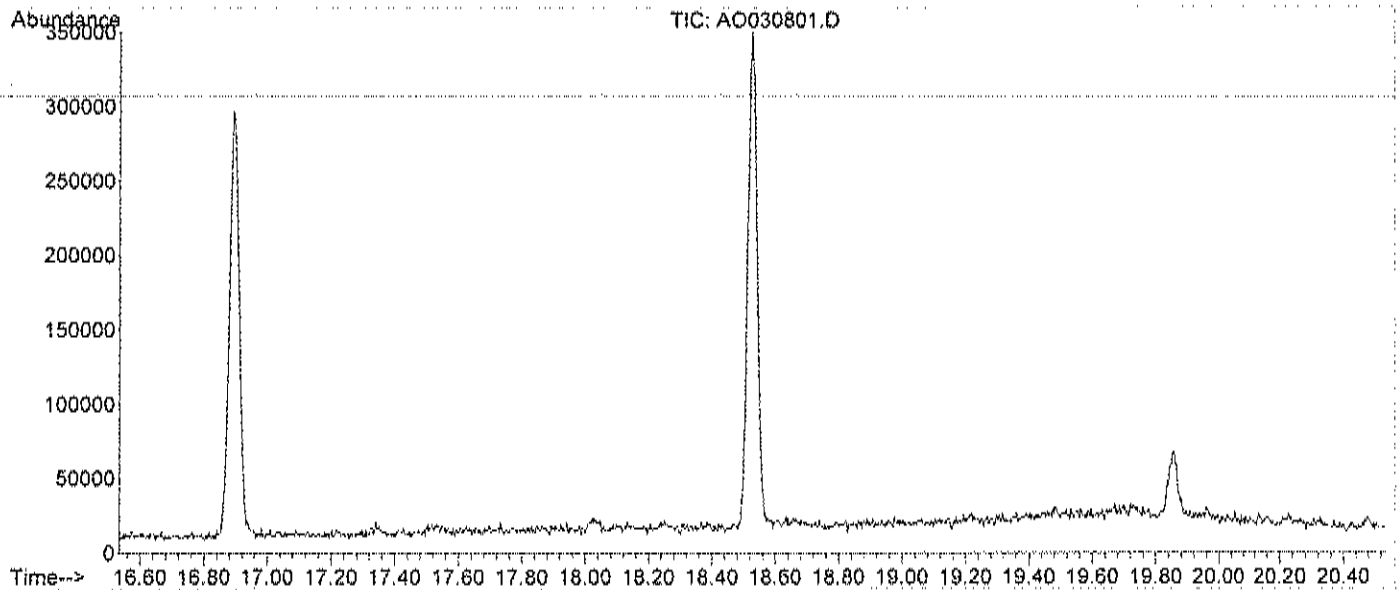
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.4	5563	PASS
75	95	30	66	58.8	16074	PASS
95	95	100	100	100.0	27336	PASS
96	95	5	9	5.4	1473	PASS
173	174	0.00	2	0.4	108	PASS
174	95	50	120	100.9	27589	PASS
175	174	4	9	8.8	2430	PASS
176	174	95	101	98.0	27042	PASS
177	176	5	9	6.1	1638	PASS

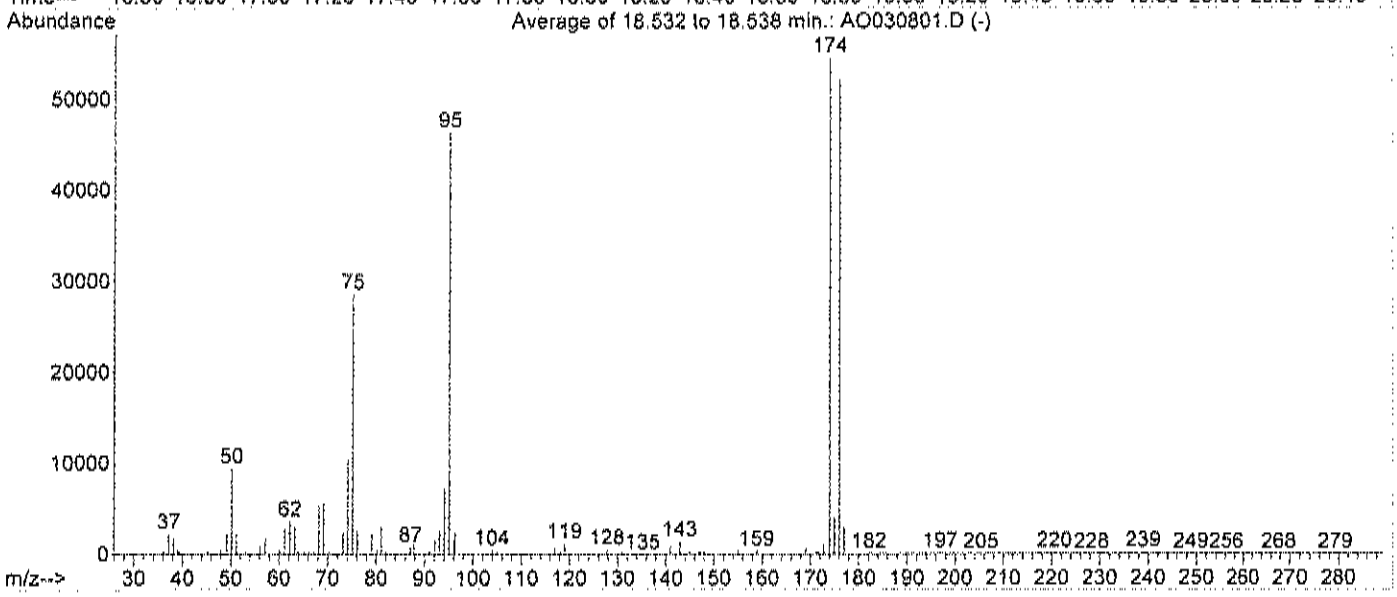
AO022701.D A227_1UG.M Mon Mar 06 09:22:04 2017 MSD1

BFB

Data File : C:\HPCHEM\1\DATA\AO030801.D
Acq On : 8 Mar 2017 9:00 am
Sample : BFB1UG
Misc : A227_1UG
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

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





Spectrum Information: Average of 18.532 to 18.538 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.4	9459	PASS
75	95	30	66	61.6	28567	PASS
95	95	100	100	100.0	46394	PASS
96	95	5	9	5.2	2408	PASS
173	174	0.00	2	2.0	1068	PASS
174	95	50	120	117.6	54570	PASS
175	174	4	9	7.5	4117	PASS
176	174	95	101	95.8	52253	PASS
177	176	5	9	5.6	2913	PASS

AO030801.D A227_1UG.M Mon Mar 27 11:03:39 2017 MSD1

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW QC DATA

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 0.25CT-TCE-VC

Sample ID **AMB1UG-030817** SampType: **MBLK** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **ZZZZZ** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/8/2017** SeqNo: **140534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									
Vinyl chloride	< 0.040	0.040									

Qualifiers:

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030805.D Vial: 5
Acq On : 8 Mar 2017 12:00 pm Operator: RJP
Sample : AMB1UG-030817 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:15 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.64	128	51456	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	199472	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	169731	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	90186	0.85	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 85.00%			
Target Compounds						Qvalue

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

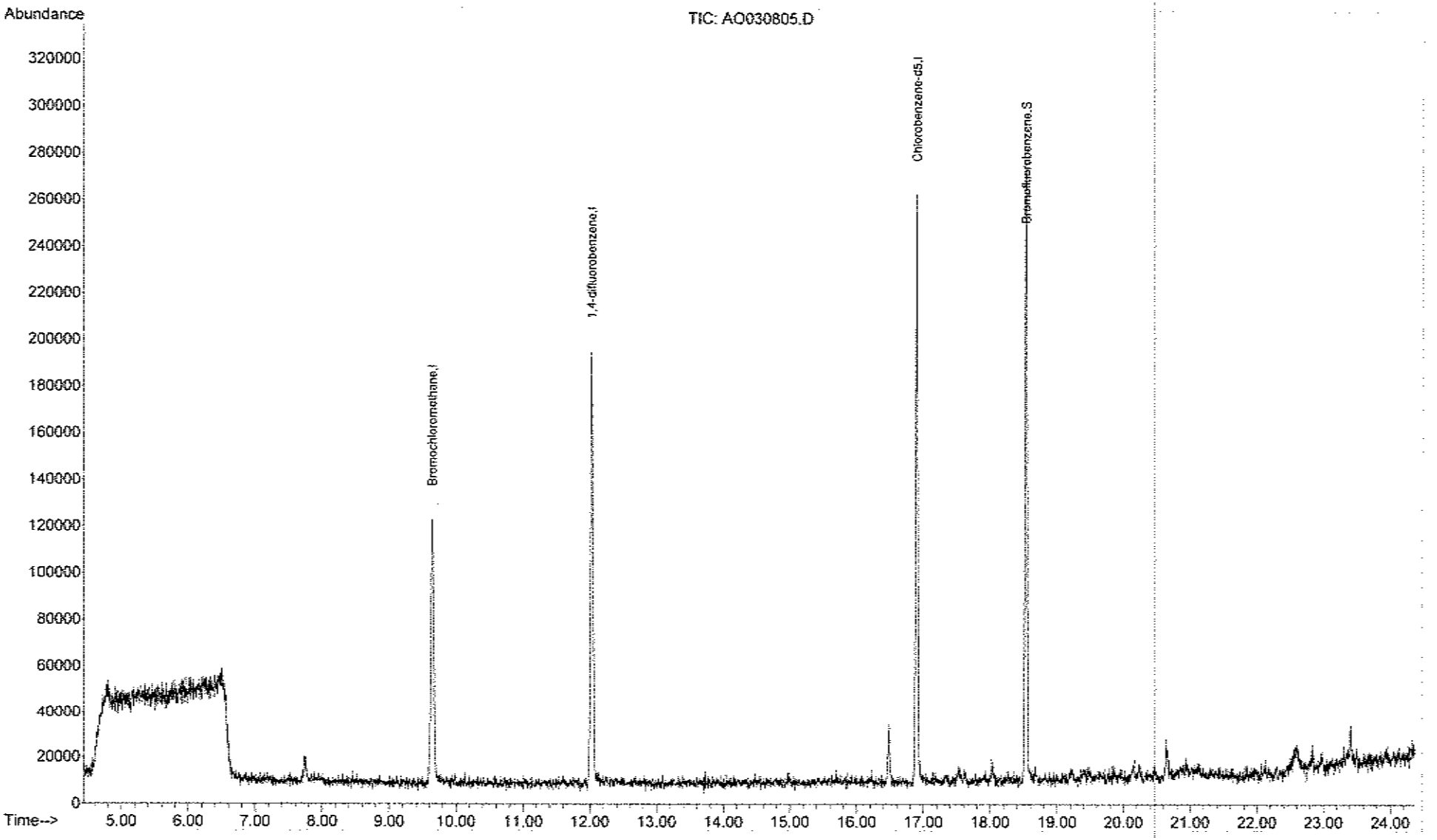
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030805.D
Acq On : 8 Mar 2017 12:00 pm
Sample : AMB1UG-030817
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 9 12:10 2017

Vial: 5
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



AO030805.D A227_1UG.M Mon Mar 27 11:03:05 2017 MSD1

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 1ugM3_TO15

Sample ID **C1703015-003A MS** SampType: **MS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **SV-3** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/8/2017** SeqNo: **140546**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.090	0.15	1	0	109	70	130				
Chloroethane	0.8100	0.15	1	0.11	70.0	70	130				
cis-1,2-Dichloroethene	1.400	0.15	1	0.18	122	70	130				
trans-1,2-Dichloroethene	1.140	0.15	1	0	114	70	130				
Trichloroethene	9.890	0.15	1	8.34	155	70	130				S
Vinyl chloride	0.7200	0.15	1	0	72.0	70	130				

Sample ID **C1703015-003A MS** SampType: **MSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **SV-3** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/8/2017** SeqNo: **140547**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.160	0.15	1	0	116	70	130	1.09	6.22	30	
Chloroethane	0.8600	0.15	1	0.11	75.0	70	130	0.81	5.99	30	
cis-1,2-Dichloroethene	1.440	0.15	1	0.18	126	70	130	1.4	2.82	30	
trans-1,2-Dichloroethene	1.180	0.15	1	0	118	70	130	1.14	3.45	30	
Trichloroethene	9.550	0.15	1	8.34	121	70	130	9.89	3.50	30	
Vinyl chloride	0.7500	0.15	1	0	75.0	70	130	0.72	4.08	30	

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030810.D Vial: 25
Acq On : 8 Mar 2017 3:32 pm Operator: RJP
Sample : C1703015-003A MS Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:20 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.65	128	80202	1.00	ppb		0.00
35) 1,4-difluorobenzene	12.04	114	356830	1.00	ppb		0.00
50) Chlorobenzene-d5	16.90	117	344072	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.54	95	367606	1.70	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 170.00%#				
Target Compounds							Qvalue
6) Vinyl Chloride	5.02	62	133363	0.72	ppb		89
10) Chloroethane	5.62	64	66208	0.81	ppb	#	84
18) 1,1-dichloroethene	7.08	96	111749	1.09	ppb	#	88
24) trans-1,2-dichloroethene	8.25	61	165630	1.14	ppb		99
29) cis-1,2-dichloroethene	9.45	61	177576	1.40	ppb		95
44) Trichloroethene	12.88	130	2005119	9.89	ppb		96

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

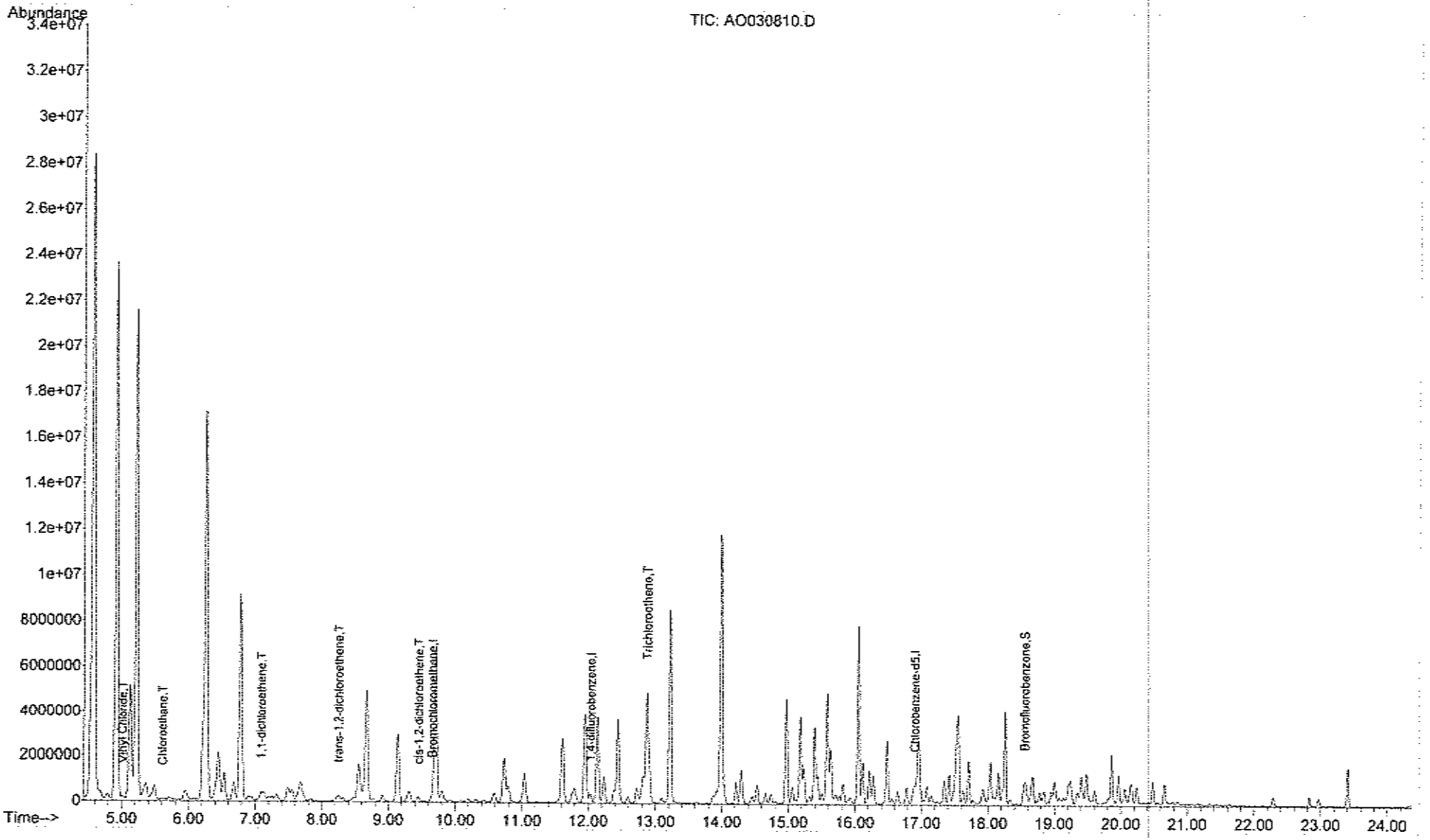
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030810.D
Acq On : 8 Mar 2017 3:32 pm
Sample : C1703015-003A MS
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:31 2017

Vial: 25
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



AO030810.D A227_1UG.M Mon Mar 27 11:03:08 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030811.D Vial: 26
Acq On : 8 Mar 2017 4:18 pm Operator: RJP
Sample : C1703015-003A MSD Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:21 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.66	128	79391	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.03	114	370639	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	337498	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	366795	1.73	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 173.00%#			
Target Compounds						Qvalue
6) Vinyl Chloride	5.03	62	137142	0.75	ppb	89
10) Chloroethane	5.63	64	69599	0.86	ppb	93
18) 1,1-dichloroethene	7.09	96	117735	1.16	ppb	92
24) trans-1,2-dichloroethene	8.25	61	169371	1.18	ppb	94
29) cis-1,2-dichloroethene	9.45	61	181684	1.44	ppb	97
44) Trichloroethene	12.87	130	2010156	9.55	ppb	96

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

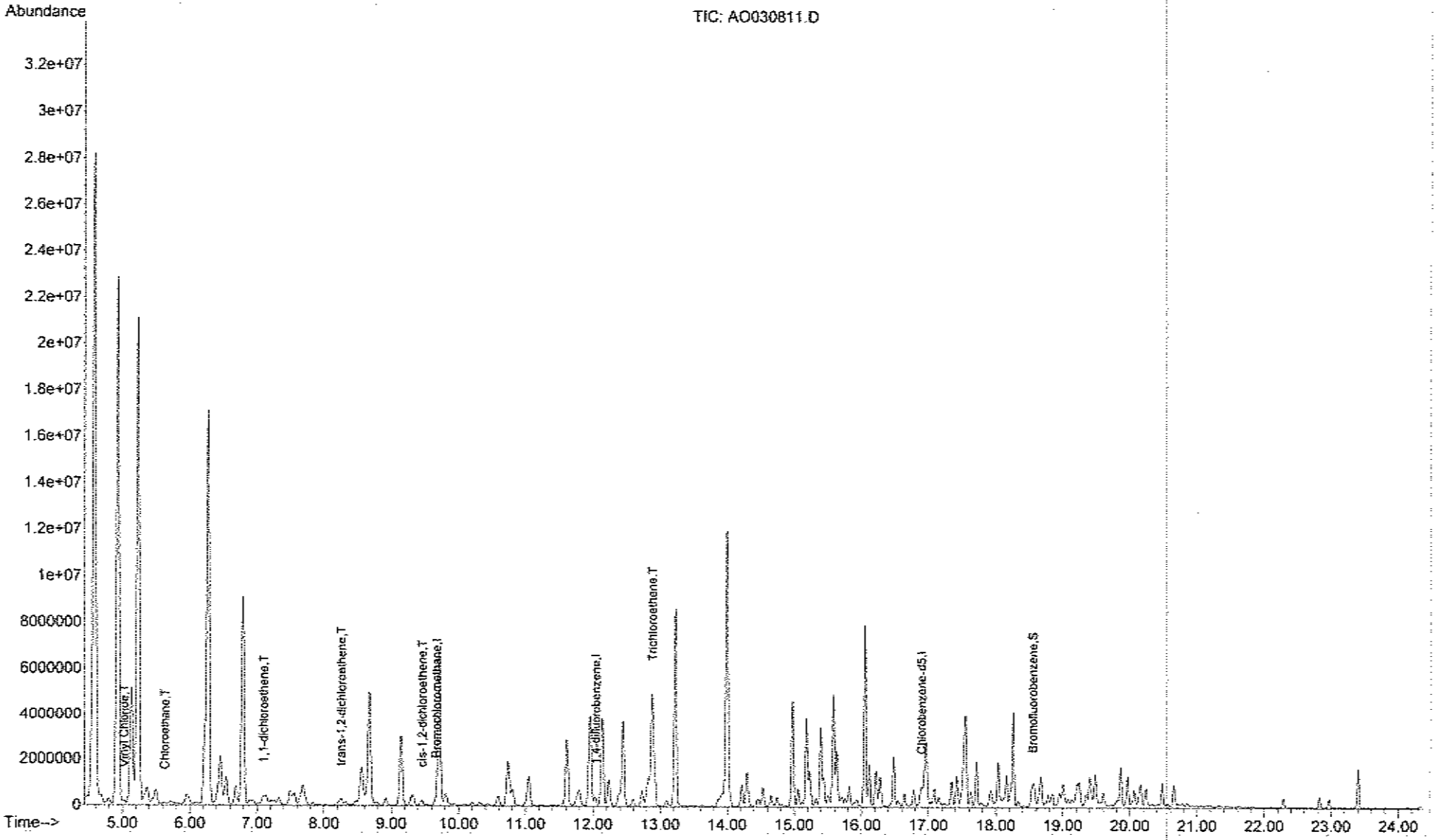
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030811.D
Acq On : 8 Mar 2017 4:18 pm
Sample : C1703015-003A MSD
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 10 12:36 2017

Vial: 26
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration



AO030811.D A227_1UG.M Mon Mar 27 11:03:11 2017 MSD1

CENTEK LABORATORIES, LLC

Date: *27-Mar-17*

ANALYTICAL QC SUMMARY REPORT

CLIENT: LaBella Associates, P.C.
Work Order: C1703015
Project: 691 and 705 St Paul St

TestCode: 0.25CT-TCE-VC

Sample ID **ALCS1UG-030817** SampType: **LCS** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **ZZZZZ** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/8/2017** SeqNo: **140535**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.060	0.15	1	0	106	70	130				
Chloroethane	0.9000	0.15	1	0	90.0	70	130				
cis-1,2-Dichloroethene	1.100	0.15	1	0	110	70	130				
trans-1,2-Dichloroethene	1.070	0.15	1	0	107	70	130				
Trichloroethene	1.060	0.040	1	0	106	70	130				
Vinyl chloride	0.8700	0.040	1	0	87.0	70	130				

Sample ID **ALCS1UGD-030817** SampType: **LCSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **12014**
Client ID: **ZZZZZ** Batch ID: **R12014** TestNo: **TO-15** Analysis Date: **3/9/2017** SeqNo: **140536**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.100	0.15	1	0	110	70	130	1.06	3.70	30	
Chloroethane	1.000	0.15	1	0	100	70	130	0.9	10.5	30	
cis-1,2-Dichloroethene	1.130	0.15	1	0	113	70	130	1.1	2.69	30	
trans-1,2-Dichloroethene	1.100	0.15	1	0	110	70	130	1.07	2.76	30	
Trichloroethene	1.100	0.040	1	0	110	70	130	1.06	3.70	30	
Vinyl chloride	0.9100	0.040	1	0	91.0	70	130	0.87	4.49	30	

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030804.D Vial: 4
Acq On : 8 Mar 2017 11:24 am Operator: RJP
Sample : ALCS1UG-030817 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:14 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.65	128	54344	1.00	ppb		-0.01
35) 1,4-difluorobenzene	12.03	114	232438	1.00	ppb		0.00
50) Chlorobenzene-d5	16.90	117	196865	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.53	95	129241	1.05	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 105.00%				
Target Compounds							Qvalue
2) Propylene	4.55	41	45237	0.80	ppb	#	60
3) Freon 12	4.62	85	538483	1.07	ppb		98
4) Chloromethane	4.79	50	79156m	0.88	ppb		
5) Freon 114	4.89	85	420501	0.98	ppb		98
6) Vinyl Chloride	5.02	62	108615	0.87	ppb		91
7) Butane	5.22	43	121082	0.93	ppb		91
8) 1,3-butadiene	5.16	39	80846m	0.97	ppb		
9) Bromomethane	5.44	94	150085	0.98	ppb		91
10) Chloroethane	5.62	64	49422	0.90	ppb	#	85
11) Ethanol	5.72	45	33607	0.83	ppb		86
12) Acrolein	6.09	56	37853	0.91	ppb		85
13) Vinyl Bromide	5.97	106	156665	1.01	ppb		97
14) Freon 11	6.41	101	622060	1.03	ppb		99
15) Acetone	6.22	58	44784	0.93	ppb	#	56
16) Pentane	6.78	42	44290	0.81	ppb	#	19
17) Isopropyl alcohol	6.47	45	151920	0.87	ppb	#	100
18) 1,1-dichloroethene	7.09	96	74055	1.06	ppb		97
19) Freon 113	7.49	101	203450	1.07	ppb		98
20) t-Butyl alcohol	7.11	59	149440	1.09	ppb	#	95
21) Methylene chloride	7.20	84	66709	0.92	ppb		89
22) Allyl chloride	7.34	41	57833	0.98	ppb		88
23) Carbon disulfide	7.55	76	194545	0.90	ppb		78
24) trans-1,2-dichloroethene	8.24	61	104717	1.07	ppb		95
25) methyl tert-butyl ether	8.54	73	221033	1.28	ppb		98
26) 1,1-dichloroethane	8.46	63	129810	1.00	ppb		94
27) Vinyl acetate	8.62	43	135796m	1.06	ppb		
28) Methyl Ethyl Ketone	8.91	72	29584	0.96	ppb	#	83
29) cis-1,2-dichloroethene	9.45	61	94397	1.10	ppb		92
30) Hexane	9.70	57	72624	1.02	ppb	#	78
31) Ethyl acetate	9.70	43	156257	0.97	ppb		97
32) Chloroform	9.81	83	247209	1.12	ppb		98
33) Tetrahydrofuran	10.32	42	44151	0.94	ppb	#	57
34) 1,2-dichloroethane	10.71	62	189436	1.28	ppb		98
36) 1,1,1-trichloroethane	11.03	97	329169	1.25	ppb		98
37) Cyclohexane	11.95	56	79057	1.00	ppb	#	82
38) Carbon tetrachloride	11.79	117	415954	1.13	ppb		99
39) Benzene	11.61	78	209409	1.01	ppb		93
40) Methyl methacrylate	13.10	41	77526	1.07	ppb	#	83
41) 1,4-dioxane	12.89	58	30085	0.75	ppb	#	16
42) 2,2,4-trimethylpentane	12.91	57	250343	0.91	ppb	#	77
43) Heptane	13.22	43	77615	0.93	ppb		81
44) Trichloroethene	12.87	130	140034	1.06	ppb		94
45) 1,2-dichloropropane	12.59	63	58386	0.82	ppb		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030804.D Vial: 4
Acq On : 8 Mar 2017 11:24 am Operator: RJP
Sample : ALCS1UG-030817 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:14 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.82	83	282463	1.12	ppb		97
47)	cis-1,3-dichloropropene	13.87	75	128833	1.06	ppb		93
48)	trans-1,3-dichloropropene	14.46	75	142832	1.20	ppb		97
49)	1,1,2-trichloroethane	14.66	97	106228	0.94	ppb		98
51)	Toluene	14.97	92	164977	1.10	ppb		87
52)	Methyl Isobutyl Ketone	13.90	43	106895	0.80	ppb		93
53)	Dibromochloromethane	15.44	129	307301	1.08	ppb		93
54)	Methyl Butyl Ketone	15.25	43	88414m	0.71	ppb		
55)	1,2-dibromoethane	15.71	107	181960	0.99	ppb		95
56)	Tetrachloroethylene	16.22	164	160622	1.18	ppb		98
57)	Chlorobenzene	16.94	112	266095	1.09	ppb		96
58)	Ethylbenzene	17.35	91	403144	1.17	ppb		97
59)	m&p-xylene	17.53	91	772113	2.36	ppb		100
60)	Nonane	18.25	43	123526	0.90	ppb		93
61)	Styrene	17.92	104	226633	1.19	ppb		92
62)	Bromoform	17.62	173	287231	1.12	ppb		99
63)	o-xylene	18.04	91	367128	1.16	ppb		95
64)	Cumene	18.67	105	509222	1.16	ppb		97
66)	1,1,2,2-tetrachloroethane	18.04	83	201677	0.82	ppb		90
67)	Propylbenzene	19.24	120	144853	1.18	ppb	#	1
68)	2-Chlorotoluene	19.21	126	120955	1.16	ppb	#	1
69)	4-ethyltoluene	19.40	105	482912	1.19	ppb		98
70)	1,3,5-trimethylbenzene	19.49	105	451264	1.18	ppb		100
71)	1,2,4-trimethylbenzene	19.96	105	407582	1.26	ppb		95
72)	1,3-dichlorobenzene	20.16	146	297360	1.17	ppb		97
73)	benzyl chloride	20.14	91	263130	1.19	ppb		87
74)	1,4-dichlorobenzene	20.24	146	263735	1.18	ppb		94
75)	1,2,3-trimethylbenzene	20.48	105	404680	1.20	ppb		95
76)	1,2-dichlorobenzene	20.66	146	284291	1.11	ppb		96
77)	1,2,4-trichlorobenzene	22.83	180	112850	1.22	ppb		95
78)	Naphthalene	22.97	128	249180	1.01	ppb		95
79)	Hexachloro-1,3-butadiene	23.41	225	273829	1.02	ppb		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030804.D
Acq On : 8 Mar 2017 11:24 am
Sample : ALCS1UG-030817
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 9 15:46 2017

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

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

TIC: AO030804.D

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030828.D Vial: 42
Acq On : 9 Mar 2017 3:17 am Operator: RJP
Sample : ALCS1UGD-030817 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:38 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	9.65	128	45106	1.00	ppb		-0.01
35) 1,4-difluorobenzene	12.03	114	199550	1.00	ppb		0.00
50) Chlorobenzene-d5	16.90	117	175594	1.00	ppb		0.00
System Monitoring Compounds							
65) Bromofluorobenzene	18.53	95	114997	1.04	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 104.00%				
Target Compounds							Qvalue
2) Propylene	4.55	41	39639	0.84	ppb		70
3) Freon 12	4.62	85	491685	1.18	ppb		98
4) Chloromethane	4.79	50	67019m	0.90	ppb		
5) Freon 114	4.89	85	377457	1.06	ppb		98
6) Vinyl Chloride	5.02	62	94793	0.91	ppb		94
7) Butane	5.22	43	105897	0.98	ppb		90
8) 1,3-butadiene	5.16	39	74542m	1.08	ppb		
9) Bromomethane	5.44	94	133551	1.05	ppb		88
10) Chloroethane	5.61	64	45895	1.00	ppb		91
11) Ethanol	5.71	45	28285	0.84	ppb	#	81
12) Acrolein	6.09	56	32467	0.94	ppb		85
13) Vinyl Bromide	5.97	106	131346	1.02	ppb		92
14) Freon 11	6.40	101	575654	1.15	ppb		98
15) Acetone	6.23	58	37110	0.93	ppb	#	38
16) Pentane	6.77	42	38902	0.85	ppb	#	22
17) Isopropyl alcohol	6.46	45	130448	0.90	ppb	#	100
18) 1,1-dichloroethene	7.08	96	63717	1.10	ppb		97
19) Freon 113	7.49	101	179775	1.13	ppb		98
20) t-Butyl alcohol	7.11	59	114628	1.01	ppb	#	93
21) Methylene chloride	7.21	84	58332	0.97	ppb		92
22) Allyl chloride	7.33	41	50490	1.03	ppb		88
23) Carbon disulfide	7.55	76	181827	1.01	ppb		82
24) trans-1,2-dichloroethene	8.25	61	89836	1.10	ppb		94
25) methyl tert-butyl ether	8.54	73	181878	1.27	ppb		97
26) 1,1-dichloroethane	8.47	63	115379	1.07	ppb		95
27) Vinyl acetate	8.63	43	110010m	1.03	ppb		
28) Methyl Ethyl Ketone	8.93	72	25499	1.00	ppb	#	1
29) cis-1,2-dichloroethene	9.45	61	80954	1.13	ppb		90
30) Hexane	9.70	57	64532	1.10	ppb	#	81
31) Ethyl acetate	9.71	43	136266	1.02	ppb		97
32) Chloroform	9.80	83	221863	1.21	ppb		96
33) Tetrahydrofuran	10.32	42	38670	0.99	ppb	#	62
34) 1,2-dichloroethane	10.71	62	167113	1.36	ppb		95
36) 1,1,1-trichloroethane	11.04	97	292539	1.29	ppb		96
37) Cyclohexane	11.95	56	68437	1.01	ppb	#	79
38) Carbon tetrachloride	11.79	117	374325	1.19	ppb		99
39) Benzene	11.61	78	185808	1.05	ppb		91
40) Methyl methacrylate	13.10	41	69019m	1.11	ppb		
41) 1,4-dioxane	12.90	58	27466	0.80	ppb	#	24
42) 2,2,4-trimethylpentane	12.92	57	222268	0.94	ppb	#	75
43) Heptane	13.22	43	70110	0.98	ppb	#	75
44) Trichloroethene	12.88	130	124500	1.10	ppb		94
45) 1,2-dichloropropane	12.59	63	54520	0.89	ppb		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AO030828.D Vial: 42
Acq On : 9 Mar 2017 3:17 am Operator: RJP
Sample : ALCS1UGD-030817 Inst : MSD #1
Misc : A227_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 09 11:10:38 2017 Quant Results File: A227_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 06 15:15:36 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Bromodichloromethane	12.81	83	252724	1.16	ppb		97
47)	cis-1,3-dichloropropene	13.87	75	111902	1.07	ppb		95
48)	trans-1,3-dichloropropene	14.46	75	122008	1.19	ppb		98
49)	1,1,2-trichloroethane	14.66	97	97565	1.00	ppb		98
51)	Toluene	14.97	92	146157	1.09	ppb		88
52)	Methyl Isobutyl Ketone	13.90	43	80273	0.67	ppb		96
53)	Dibromochloromethane	15.44	129	275186	1.09	ppb		92
54)	Methyl Butyl Ketone	15.25	43	55926	0.51	ppb		98
55)	1,2-dibromoethane	15.71	107	161381	0.99	ppb		95
56)	Tetrachloroethylene	16.22	164	144159	1.19	ppb		98
57)	Chlorobenzene	16.95	112	236772	1.09	ppb		96
58)	Ethylbenzene	17.34	91	354727	1.16	ppb		95
59)	m&p-xylene	17.54	91	688068	2.35	ppb		98
60)	Nonane	18.26	43	116714	0.96	ppb		96
61)	Styrene	17.92	104	197514	1.16	ppb		90
62)	Bromoform	17.62	173	250414	1.09	ppb		100
63)	o-xylene	18.04	91	331452	1.17	ppb		96
64)	Cumene	18.68	105	450851	1.15	ppb		97
66)	1,1,2,2-tetrachloroethane	18.03	83	187265	0.85	ppb		94
67)	Propylbenzene	19.24	120	126078	1.15	ppb	#	1
68)	2-Chlorotoluene	19.21	126	106543	1.15	ppb	#	1
69)	4-ethyltoluene	19.40	105	422495	1.17	ppb		99
70)	1,3,5-trimethylbenzene	19.49	105	404941	1.19	ppb		99
71)	1,2,4-trimethylbenzene	19.96	105	382574	1.33	ppb		93
72)	1,3-dichlorobenzene	20.16	146	263375	1.16	ppb		99
73)	benzyl chloride	20.13	91	224469	1.14	ppb		87
74)	1,4-dichlorobenzene	20.24	146	229005	1.15	ppb		96
75)	1,2,3-trimethylbenzene	20.48	105	349230	1.16	ppb		90
76)	1,2-dichlorobenzene	20.65	146	242933	1.07	ppb		95
77)	1,2,4-trichlorobenzene	22.82	180	84549	1.03	ppb		94
78)	Naphthalene	22.97	128	191434	0.87	ppb		95
79)	Hexachloro-1,3-butadiene	23.40	225	233885	0.98	ppb		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A0030828.D
Acq On : 9 Mar 2017 3:17 am
Sample : ALCS1UGD-030817
Misc : A227_1UG
MS Integration Params: RTEINT.P
Quant Time: Mar 9 15:47 2017

Vial: 42
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A227_1UG.RES

Method : C:\HPCHEM\1\METHODS\A227_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Mar 27 11:00:28 2017
Response via : Initial Calibration

TIC: A0030828.D

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INJECTION LOG

Injection Log

Instrument # 1
Internal Standard Stock # A1901
Standard Stock # A1902
LCS Stock # A1903

Directory: C:\HPCHEM\1\DATA

Method: Refined Rad EPA TO-15

ne	Vial	FileName	Multiplier	SampleName	Misc Info		Injected
	1	Ao030601.d	1.	BFB1UG	A227_1UG		6 Mar 2017 08:36
	2	Ao030602.d	1.	A1UG	A227_1UG		6 Mar 2017 09:38
	3	Ao030603.d	1.	A1UG	A227_1UG		6 Mar 2017 10:17
	4	Ao030604.d	1.	ALCS1UG-030617	A227_1UG		6 Mar 2017 10:58
	4	Ao030605.d	1.	AMB1UG-030617	A227_1UG		6 Mar 2017 11:33
	21	Ao030606.d	1.	WAC030617A	A227_1UG		6 Mar 2017 13:43
	22	Ao030607.d	1.	WAC030617B	A227_1UG		6 Mar 2017 14:20
	23	Ao030608.d	1.	WAC030617C	A227_1UG		6 Mar 2017 14:58
	24	Ao030609.d	1.	WAC030617D	A227_1UG		6 Mar 2017 15:36
)	25	Ao030610.d	1.	WAC030617E	A227_1UG		6 Mar 2017 16:13
	26	Ao030611.d	1.	WAC030617F N	A227_1UG		6 Mar 2017 16:51
2	27	Ao030612.d	1.	WAC030617G	A227_1UG		6 Mar 2017 17:28
3	28	Ao030613.d	1.	WAC030617H	A227_1UG		6 Mar 2017 18:06
4	29	Ao030614.d	1.	WAC030617I	A227_1UG		6 Mar 2017 18:43
5	1	Ao030615.d	1.	C1703007-001A	A227_1UG		6 Mar 2017 19:23
6	2	Ao030616.d	1.	C1703006-001A	A227_1UG		6 Mar 2017 20:03
7	3	Ao030617.d	1.	C1703006-002A	A227_1UG		6 Mar 2017 20:43
8	4	Ao030618.d	1.	C1703006-003A	A227_1UG		6 Mar 2017 21:23
9	5	Ao030619.d	1.	C1703006-004A	A227_1UG		6 Mar 2017 22:03
)	6	Ao030620.d	1.	C1703006-005A	A227_1UG		6 Mar 2017 22:43
	7	Ao030621.d	1.	C1703005-001A	A227_1UG		6 Mar 2017 23:24
2	8	Ao030622.d	1.	C1703005-002A	A227_1UG		7 Mar 2017 00:06
3	9	Ao030623.d	1.	ALKCS1UGD-030617	A227_1UG		7 Mar 2017 00:45
4	10	Ao030624.d	1.	ALKCS1UGD	A227_1UG		7 Mar 2017 01:25
5	10	Ao030625.d	1.	C1703007-001A 10X	A227_1UG		7 Mar 2017 02:01
6	11	Ao030626.d	1.	C1703006-001A 10X	A227_1UG		7 Mar 2017 02:38
7	12	Ao030627.d	1.	C1703006-002A 10X	A227_1UG		7 Mar 2017 03:15
8	13	Ao030628.d	1.	C1703006-003A 10X	A227_1UG		7 Mar 2017 03:52
9	14	Ao030629.d	1.	C1703006-004A 10X	A227_1UG		7 Mar 2017 04:29
)	15	Ao030630.d	1.	C1703006-005A 10X	A227_1UG		7 Mar 2017 05:06
	16	Ao030631.d	1.	C1703005-001A 10X	A227_1UG		7 Mar 2017 05:43
2	17	Ao030632.d	1.	C1703005	A227_1UG	-001A 40X	7 Mar 2017 06:19
3	18	Ao030633.d	1.	C1703005-002A 10X	A227_1UG		7 Mar 2017 06:56
4	19	Ao030634.d	1.	C1703006-003A 20X	A227_1UG		7 Mar 2017 07:33
5	20	Ao030635.d	1.	C1703006-004A 20X	A227_1UG		7 Mar 2017 08:10
6	30	Ao030636.d	1.	C1703006-004A 270X	A227_1UG		7 Mar 2017 09:15
7	31	Ao030637.d	1.	C1703006-005A 20X	A227_1UG		7 Mar 2017 09:52
8		Ao030638.d	1.	No MS or GC data present			
1	1	Ao030801.d	1.	BFB1UG	A227_1UG		8 Mar 2017 09:00
1	2	Ao030802.d	1.	A1UG	A227_1UG		8 Mar 2017 09:54
	3	Ao030803.d	1.	A1UG_1.0	A227_1UG		8 Mar 2017 10:33
3	4	Ao030804.d	1.	ALCS1UG-030817	A227_1UG		8 Mar 2017 11:24
4	5	Ao030805.d	1.	AMB1UG-030817	A227_1UG		8 Mar 2017 12:00
5	21	Ao030806.d	1.	C1703015-006A	A227_1UG		8 Mar 2017 12:48
6	22	Ao030807.d	1.	C1703015-001A	A227_1UG		8 Mar 2017 13:28
7	23	Ao030808.d	1.	C1703015-002A	A227_1UG		8 Mar 2017 14:09
8	24	Ao030809.d	1.	C1703015-003A	A227_1UG		8 Mar 2017 14:48
9	25	Ao030810.d	1.	C1703015-003A MS	A227_1UG		8 Mar 2017 15:32
0	26	Ao030811.d	1.	C1703015-003A MSD	A227_1UG		8 Mar 2017 16:18
1	27	Ao030812.d	1.	C1703015-004A	A227_1UG		8 Mar 2017 16:59
	28	Ao030813.d	1.	C1703015-005A	A227_1UG		8 Mar 2017 17:39
3	29	Ao030814.d	1.	C1703014-001A	A227_1UG		8 Mar 2017 18:20
4	30	Ao030815.d	1.	C1703014-002A	A227_1UG		8 Mar 2017 19:00
5	31	Ao030816.d	1.	C1703014-003A	A227_1UG		8 Mar 2017 19:48
6	32	Ao030817.d	1.	C1703014-001A RE	A227_1UG		8 Mar 2017 20:31

Injection Log

Instrument # 1
Internal Standard Stock # A1901
Standard Stock # A1902
LCS Stock # A1903

Directory: C:\HPCHEM\1\DATA

Method Ref: EPA TO-15 / Jan. 1999

ine	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
6	32	Ao030818.d	1.	C1703015	A227_1UG -001A 10X	8 Mar 2017 21:07
7	33	Ao030819.d	1.	C1703015	A227_1UG -001A 20X	8 Mar 2017 21:44
8	34	Ao030820.d	1.	C1703015	A227_1UG -002A 10X	8 Mar 2017 22:20
9	35	Ao030821.d	1.	C1703015	A227_1UG -002A 20X	8 Mar 2017 22:57
0	36	Ao030822.d	1.	C1703015-003A 10X	A227_1UG	8 Mar 2017 23:34
1	37	Ao030823.d	1.	C1703013	A227_1UG -003A 10X	9 Mar 2017 00:10
2	38	Ao030824.d	1.	C1703015-004A 10X	A227_1UG	9 Mar 2017 00:47
3	39	Ao030825.d	1.	C1703013	A227_1UG -004A 10X	9 Mar 2017 01:24
4	40	Ao030826.d	1.	C1703015-005A 10X	A227_1UG	9 Mar 2017 02:01
5	41	Ao030827.d	1.	C1703013	A227_1UG -005A 10X	9 Mar 2017 02:37
6	42	Ao030828.d	1.	ALCS1UGD-030817	A227_1UG	9 Mar 2017 03:17
7	43	Ao030829.d	1.	C1703014-001A 10X	A227_1UG	9 Mar 2017 03:54
8	44	Ao030830.d	1.	C1703014-002A 10X	A227_1UG	9 Mar 2017 04:30
9	45	Ao030831.d	1.	C1703014-003A 10X	A227_1UG	9 Mar 2017 05:07
0	46	Ao030832.d	1.	C1703014-002A 90X	A227_1UG	9 Mar 2017 08:55
1	47	Ao030833.d	1.	C1703014-003A 90X	A227_1UG	9 Mar 2017 09:31
2		Ao030834.d	1.	No MS or GC data present		
3	1	Ao030901.d	1.	BFB1UG	A227_1UG	9 Mar 2017 13:43
4	2	Ao030902.d	1.	A1UG_1.0	A227_1UG	9 Mar 2017 14:37
5	3	Ao030903.d	1.	ALCS1UG-030917	A227_1UG	9 Mar 2017 15:35
6	4	Ao030904.d	1.	AMB1UG-030917	A227_1UG	9 Mar 2017 16:11
7	1	Ao030905.d	1.	WAC030917A	A227_1UG	9 Mar 2017 16:48
8	2	Ao030906.d	1.	WAC030917B	A227_1UG	9 Mar 2017 17:25
9	3	Ao030907.d	1.	WAC030917C	A227_1UG	9 Mar 2017 18:03
0	4	Ao030908.d	1.	WAC030917D	A227_1UG	9 Mar 2017 18:40
1	5	Ao030909.d	1.	WAC030917E	A227_1UG	9 Mar 2017 19:17
2	1	Ao030910.d	1.	C1703026-004A	A227_1UG	9 Mar 2017 19:58
3	2	Ao030911.d	1.	C1703026-008A	A227_1UG	9 Mar 2017 20:40
4	3	Ao030912.d	1.	C1703026-001A	A227_1UG	9 Mar 2017 21:20
5	4	Ao030913.d	1.	C1703026-002A	A227_1UG	9 Mar 2017 22:01
6	5	Ao030914.d	1.	C1703026-003A	A227_1UG	9 Mar 2017 22:43
7	6	Ao030915.d	1.	C1703026-005A	A227_1UG	9 Mar 2017 23:25
8	7	Ao030916.d	1.	C1703026-006A	A227_1UG	10 Mar 2017 00:07
9	8	Ao030917.d	1.	C1703026-007A	A227_1UG	10 Mar 2017 00:48
0	9	Ao030918.d	1.	C1703026-004A 10x	A227_1UG	10 Mar 2017 01:25
1	10	Ao030919.d	1.	C1703026	A227_1UG -008A 10x	10 Mar 2017 02:02
2	11	Ao030920.d	1.	C1703026-001A 10x	A227_1UG	10 Mar 2017 02:38
3	12	Ao030921.d	1.	C1703026-002A 10x	A227_1UG	10 Mar 2017 03:15
4	13	Ao030922.d	1.	C1703026-003A 10x	A227_1UG	10 Mar 2017 03:53
5	14	Ao030923.d	1.	ALCS1UGD-030917	A227_1UG	10 Mar 2017 04:33
6	15	Ao030924.d	1.	C1703028-001A	A227_1UG	10 Mar 2017 08:03
7	16	Ao030925.d	1.	C1703028-002A	A227_1UG	10 Mar 2017 08:43
8	17	Ao030926.d	1.	C1703028-003A	A227_1UG	10 Mar 2017 09:23
9	18	Ao030927.d	1.	C1703028-004A	A227_1UG	10 Mar 2017 10:03
00	19	Ao030928.d	1.	C1703026-005A 10x	A227_1UG	10 Mar 2017 10:41
01	20	Ao030929.d	1.	C1703026-006A 10x	A227_1UG	10 Mar 2017 11:18
02	21	Ao030930.d	1.	C1703026-007A 10x	A227_1UG	10 Mar 2017 11:55
03	22	Ao030931.d	1.	C1703028-001A 9x	A227_1UG	10 Mar 2017 12:34
04	23	Ao030932.d	1.	C1703028-002A 20x	A227_1UG	10 Mar 2017 13:11
05	24	Ao030933.d	1.	C1703028-003A 10x	A227_1UG	10 Mar 2017 13:48
06	25	Ao030934.d	1.	C1703028-004A 20x	A227_1UG	10 Mar 2017 14:24
07	26	Ao030935.d	1.	C1703028-001A 90x	A227_1UG	10 Mar 2017 15:01
08		Ao030936.d	1.	No MS or GC data present		
09	1	Ao031201.d	1.	BFB1UG	A311_1UG	12 Mar 2017 12:01
10	2	Ao031202.d	1.	A1UG	A312_1UG	12 Mar 2017 12:52

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS LOG

Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Finial Vol (psia)	Final Conc (ppb)	Prep by	Chkd
A-A1788	12/22/16	12/29/16	TO15 SILX	~~A1088~~ A1089	500ppb	3.0	30	50	LL	
A-1789	↓	↓	↓ SULF	A0270	1ppm	1.5	30	50	↓	
A-1790			↓ H2S	A0269	10ppm	1.5	30	500		
A-1791			TO15 IUG IS	A1782	50ppb	0.9	45	1		
A-1792			↓ STD	A1783	↓	↓	↓	↓		
A-1793	↓	↓	↓ LCS	A1784	↓	↓	↓	↓	↓	
A-1794	12/29/16	1/5/17	TO15 IS	A1289	1ppm	1.5	30	50	WD	
A-~~1795~~			STD	A1203	↓	↓	↓	↓		
A-1796			LCS	A1204						
A-1797			4PCH	9519	↓	↓	↓	↓		
A-1798			4PCHS	A1797	50 ppb	3.0	30	5		
A-1799			FORM	A0974	11.5 ppm	0.20	45	50		
A-1800			SILOX	~~A1088~~ A1089	500ppb	3.0	30	50		
A-1801			SULF	A0270	1ppm	1.5	30	50		
A-1802			↓ H2S	A0269	10 ppm	1.5	30	500		
A-1803			TO15 IUG IS	A1794	50 ppb	0.9	45	1		
A-1804			↓ STD	A1795	↓	↓	↓	↓		
A-1805	↓	↓	↓ LCS	A1796	↓	↓	↓	↓	↓	
A-1806	1/5/17	1/5/18	TO15 IS	FF-47206	LINDE		2000psig	1 ppm	WD	
A-1807	1/5/17	1/5/18	STOCK TO15 STD	FF-45347	LINDE		2200psig	1 ppm	WD	
A-1808	1/6/17	1/6/18	TO15 ~~IS~~ LCS	~~A1796~~	1ppm	~~1.5~~	~~30~~	~~50 ppb~~	M	

A1203 A1203 STD IS NOW LCS

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Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Finial Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-1892	3/3/11	3/10/11	TO15 IS	A1906	1ppm	1.5	30	50	PO	
A-1893	↓	↓	STD	A1907	↓	↓	↓	↓	↓	
A-1894			LCS	A1908						
A-1895			4AcH	9515						
A-1896			4RCHS	A1895	50ppb	3.0		5		
A-1897			FORM	A0974	11.5ppm	0.20	45	50		
A-1898			SILOX	A1908	500ppb	3.0	30	↓		
A-1899			SUL	A0270	1ppm	1.5	↓	↓		
A-1900			H2S	A0269	10ppm	↓	↓	1ppb		
A-1901			TO15/16 IS	A1892	50ppb	0.5	45	↓		
A-1902			STD	A1893	↓	↓	↓			
A-1903	↓	↓	LCS	A1894	↓	↓	↓	↓	↓	
A-										
A-										
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A-										

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GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CANISTER CLEANING LOG

Centek Laboratories, LLC

QC Canister Cleaning Logbook

Instrument: Entech 3100

Canister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date	
1202	1.4 L	218	30	11/02/16 RSP	WAC110316A	1ug/m3+0.25	+ 30	+ 30 11/03/16 RSP
1321							+ 30	+
1206							+ 30	+
209							+ 30	+
218							+ 30	+
1320		1207			WAC110316B		+ 30	+
1208							+ 30	+
1200							+ 30	+
484							+ 30	+
1207							+ 30	+
216		215			WAC110316C		+ 30	+
1323							+ 30	+
210							+ 30	+
487							+ 30	+
215							+ 30	+
1319		1203			WAC110316D		+ 30	+
485							+ 30	+
483							+ 30	+
1201							+ 30	+
1203							+ 30	+
171	1L	419			WAC110316E		+ 30	+
193							+ 30	+
542							+ 30	+
243							+ 30	+
419							+ 30	+

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Centek Laboratories, LLC

QC Canister Cleaning Logbook

Instrument: Entech 3100

Canister Number	Canister Size	QC Can Number	# of Cycles	Int & Date Cleaned	QC Batch Number	Detection Limits	Leak Test 24hr Int & Date	
143	1L	569	20	2/16/17 [illegible]	WC[illegible]17A	1[illegible] +0.25	+ 30	+ 30 2/19/17
1191	↓	↓	↓	↓	↓	↓	+ 30	+ ↓
93							+ 30	+
563							+ 30	+
569							+ 30	+
229		1318			B		+ 30	+
131		↓					+ 30	+
542							+ 30	+
237							+ 30	+
1319							+ 30	+
556		~~1318~~ 94			C		+ 30	+
1184		↓					+ 30	+
459							+ 30	+
290							+ 30	+
~~1318~~ 94							+ 30	+
136		362			D		+ 30	+
359		↓					+ 30	+
222							+ 30	+
1195							+ 30	+
362							+ 30	+
233		163			E		+ 30	+
595		↓					+ 30	+
137							+ 30	+
96							+ 30	+
163								

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m C151

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021706.D Vial: 1
Acq On : 17 Feb 2017 6:47 pm Operator: RJP
Sample : WAC021717A Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 08:10:52 2017 Quant Results File: A120_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A120_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 30 16:04:21 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.64	128	52270	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.02	114	198116	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	175690	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.54	95	99310	0.89	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 89.00%			
Target Compounds						Qvalue

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

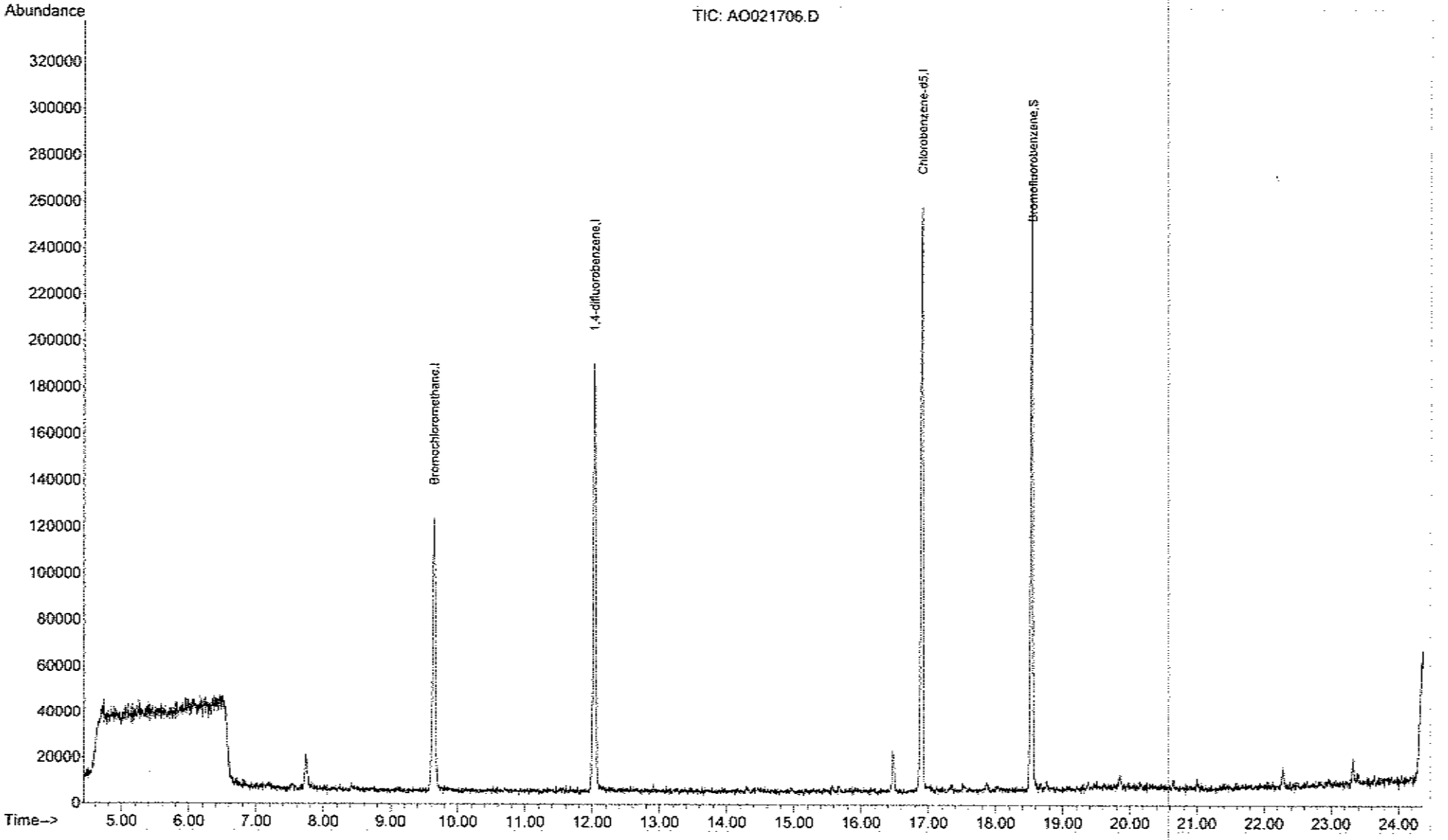
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021706.D
Acq On : 17 Feb 2017 6:47 pm
Sample : WAC021717A
Misc : A120_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 18 9:10 2017

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

Quant Results File: A120_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



AO021706.D A312_1UG.M Wed Mar 29 09:03:43 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021707.D Vial: 2
Acq On : 17 Feb 2017 7:25 pm Operator: RJP
Sample : WAC021717B Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 08:10:53 2017 Quant Results File: A120_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A120_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 30 16:04:21 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.63	128	49106	1.00	ppb	-0.01
35) 1,4-difluorobenzene	12.03	114	191028	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	168917	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	93615	0.87	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 87.00%			
Target Compounds						Qvalue

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

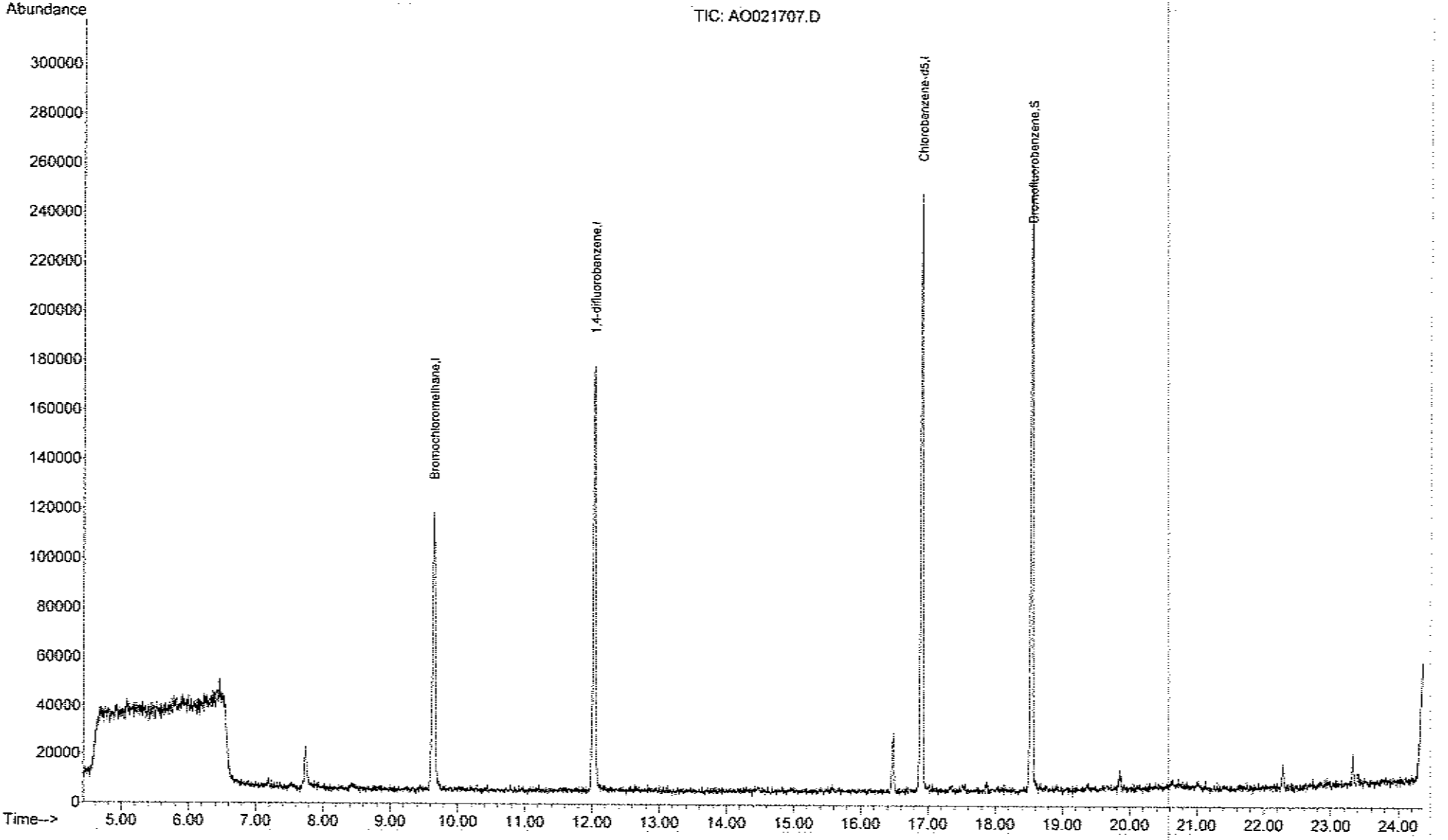
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021707.D
Acq On : 17 Feb 2017 7:25 pm
Sample : WAC021717B
Misc : A120_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 18 9:10 2017

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A120_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



AO021707.D A312_1UG.M Wed Mar 29 09:03:46 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021708.D Vial: 3
Acq On : 17 Feb 2017 8:03 pm Operator: RJP
Sample : WAC021717C Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 08:10:54 2017 Quant Results File: A120_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A120_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 30 16:04:21 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

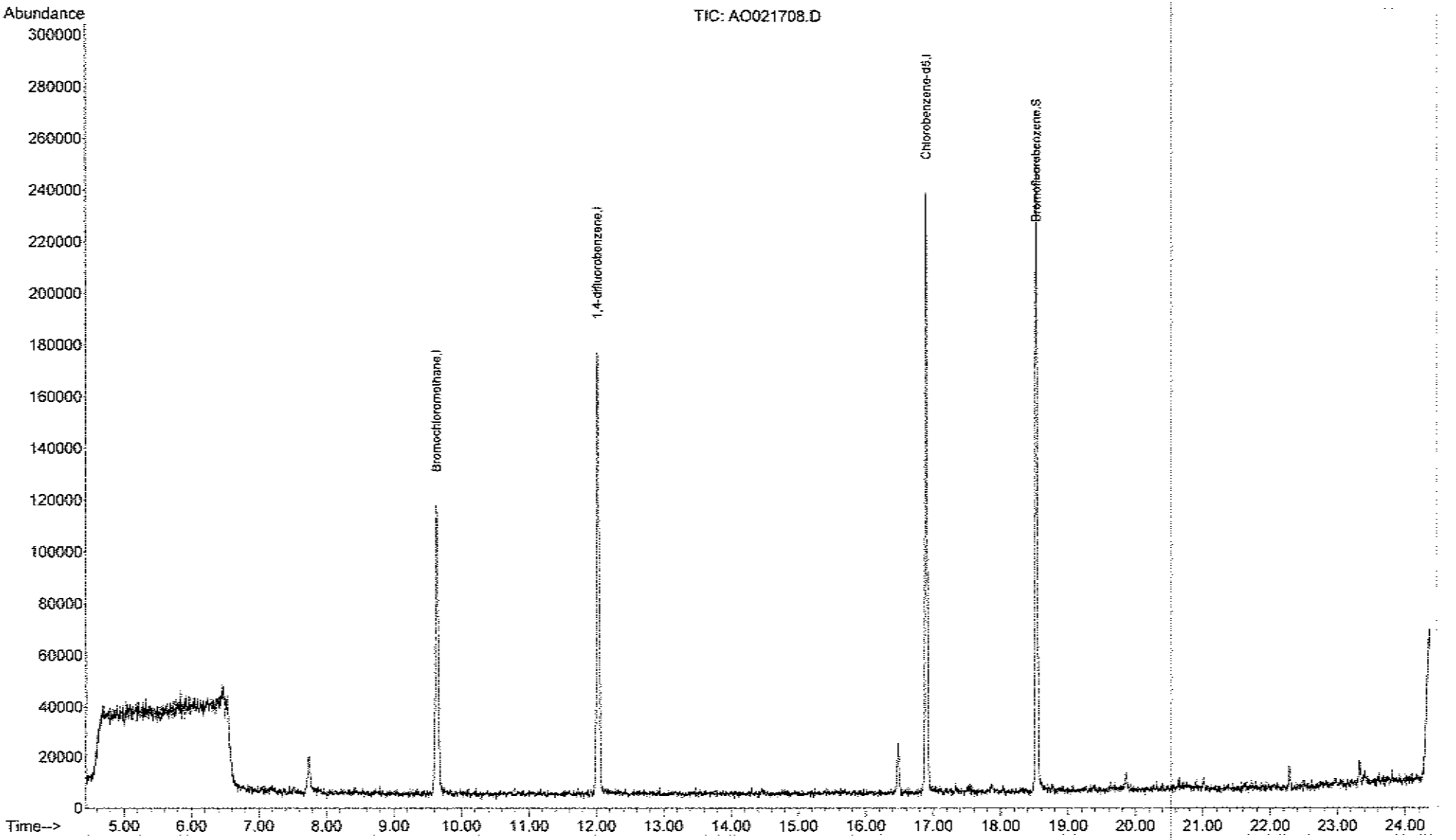
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.64	128	48029	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.02	114	188739	1.00	ppb	0.00
50) Chlorobenzene-d5	16.89	117	164706	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	93087	0.89	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 89.00%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021708.D Vial: 3
Acq On : 17 Feb 2017 8:03 pm Operator: RJP
Sample : WAC021717C Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 20 16:34 2017 Quant Results File: A120_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021709.D Vial: 4
Acq On : 17 Feb 2017 8:41 pm Operator: RJP
Sample : WAC021717D Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 08:10:55 2017 Quant Results File: A120_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A120_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 30 16:04:21 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

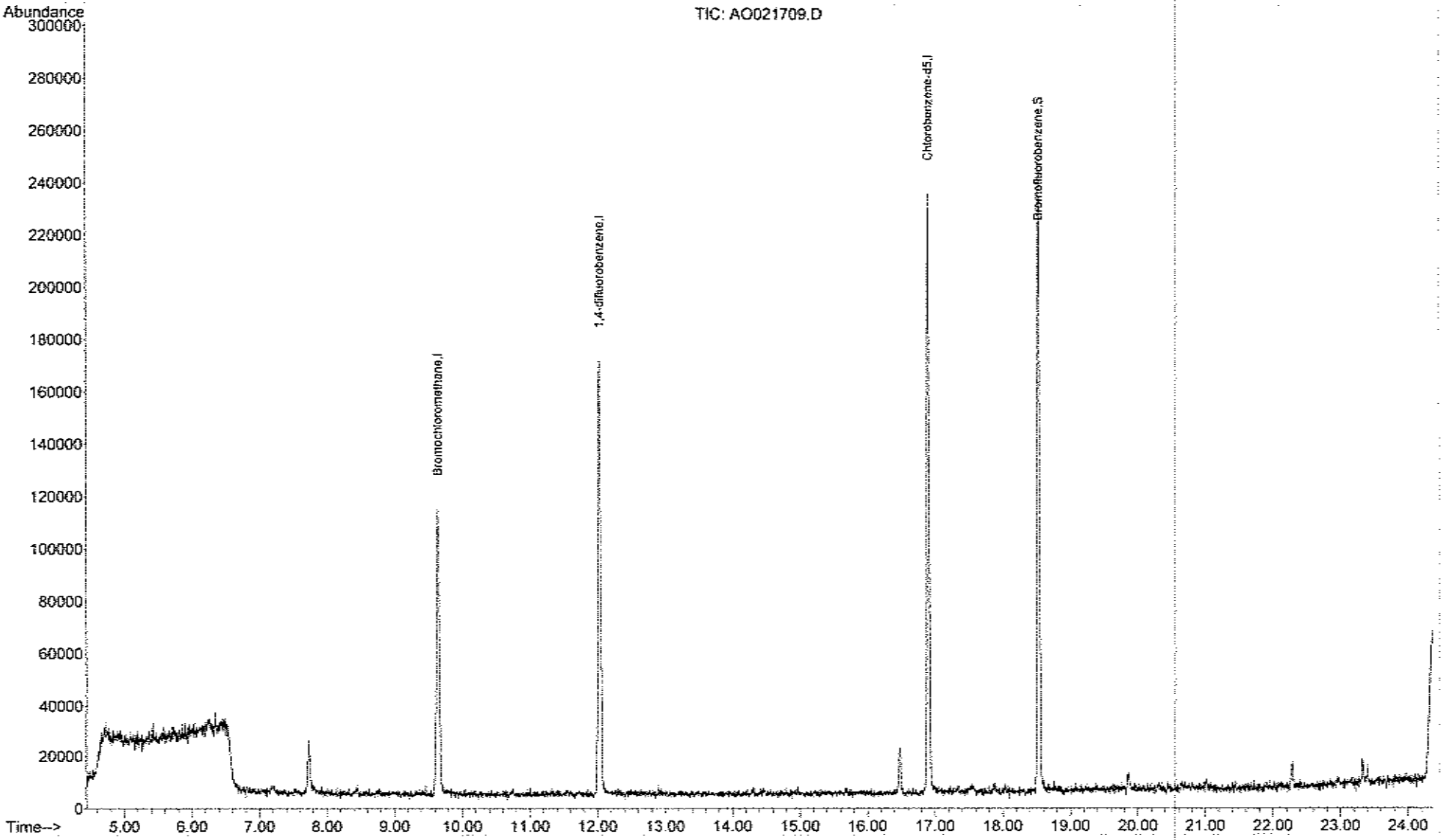
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.64	128	47964	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.03	114	178904	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	160775	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	89341	0.87	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 87.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
AO021709.D A312_1UG.M Wed Mar 29 09:03:51 2017 MSD1 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021709.D Vial: 4
Acq On : 17 Feb 2017 8:41 pm Operator: RJP
Sample : WAC021717D Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 9:10 2017 Quant Results File: A120_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021710.D Vial: 5
Acq On : 17 Feb 2017 9:19 pm Operator: RJP
Sample : WAC021717E Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 08:10:56 2017 Quant Results File: A120_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A120_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 30 16:04:21 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.64	128	48138	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.03	114	175951	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	158218	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	88691	0.88	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 88.00%			
Target Compounds						Qvalue

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

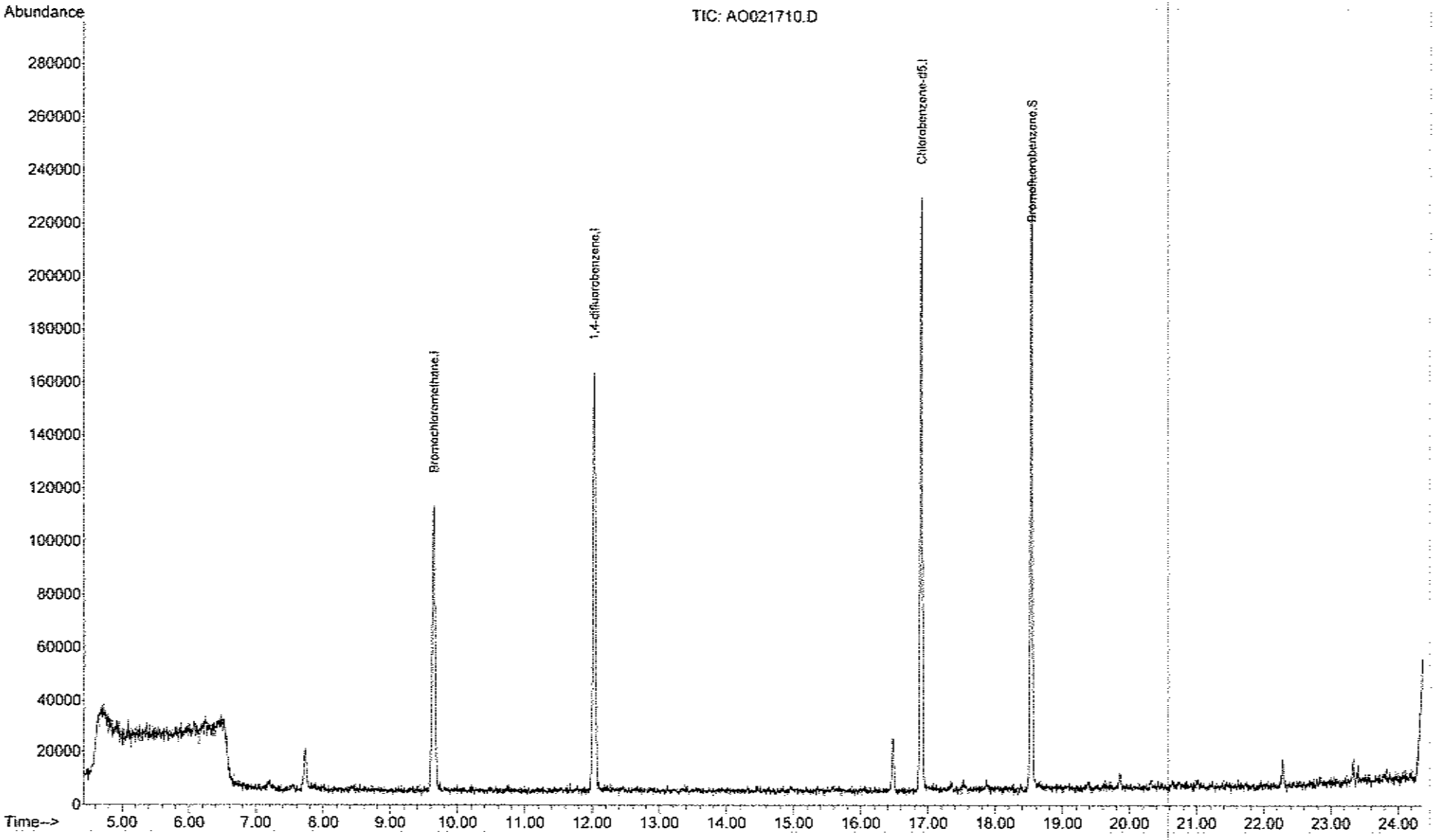
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021710.D
Acq On : 17 Feb 2017 9:19 pm
Sample : WAC021717E
Misc : A120_1UG
MS Integration Params: RTEINT.P
Quant Time: Feb 18 9:10 2017

Vial: 5
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: A120_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021711.D Vial: 6
Acq On : 17 Feb 2017 9:57 pm Operator: RJP
Sample : WAC021717F Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 18 08:10:57 2017 Quant Results File: A120_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\A120_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Mon Jan 30 16:04:21 2017
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

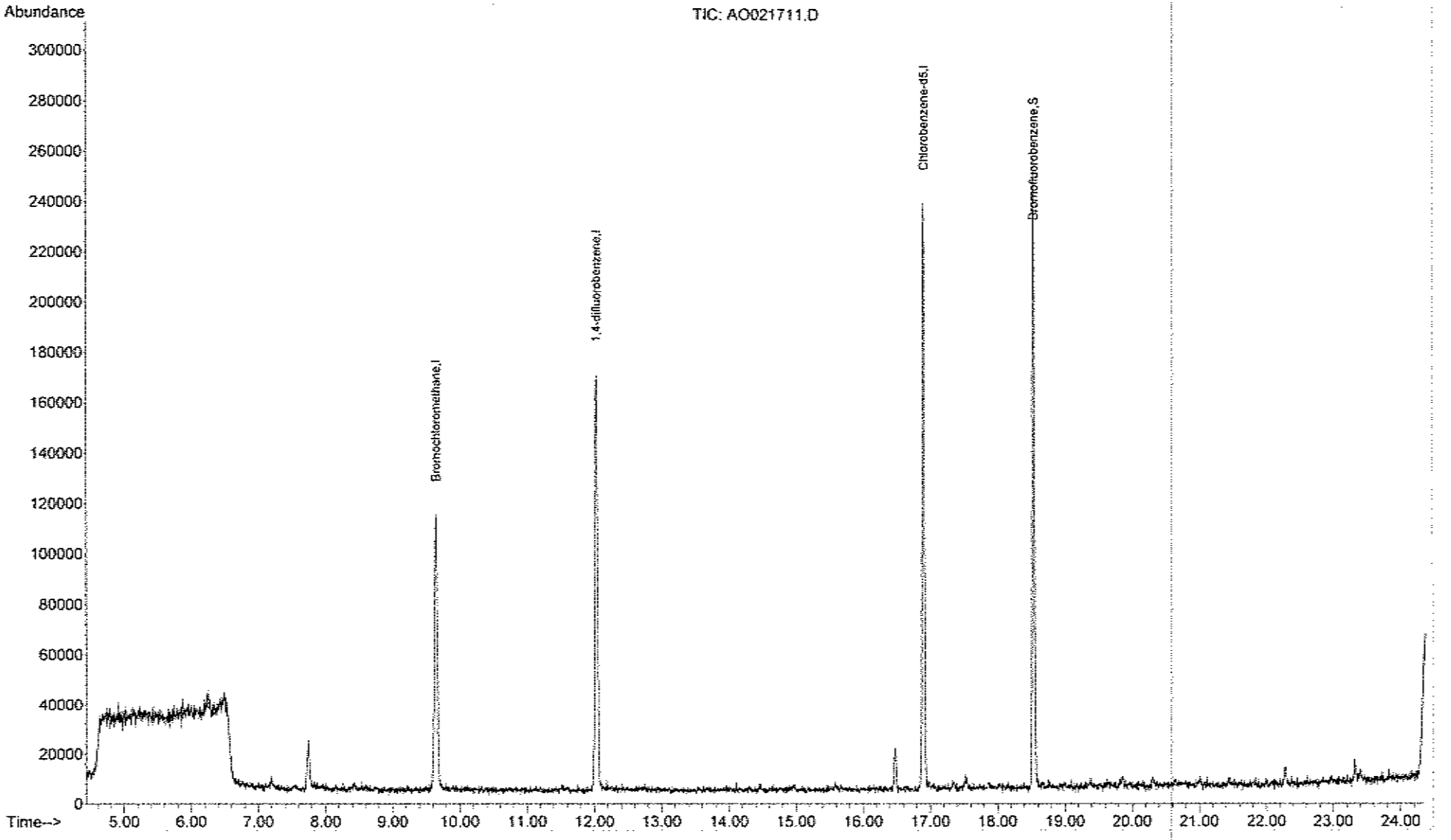
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.65	128	46520	1.00	ppb	0.00
35) 1,4-difluorobenzene	12.03	114	179438	1.00	ppb	0.00
50) Chlorobenzene-d5	16.90	117	160329	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.53	95	89777	0.88	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 88.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
AO021711.D A312_1UG.M Wed Mar 29 09:03:57 2017 MSD1 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\AO021711.D Vial: 6
Acq On : 17 Feb 2017 9:57 pm Operator: RJP
Sample : WAC021717F Inst : MSD #1
Misc : A120_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 20 16:36 2017 Quant Results File: A120_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2016NOV\AN110306.D Vial: 6
Acq On : 3 Nov 2016 12:34 pm Operator: RJP
Sample : WAC110316A Inst : MSD #1
Misc : AO26_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 08 15:11:32 2016 Quant Results File: AO26_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO26_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Oct 27 07:19:53 2016
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

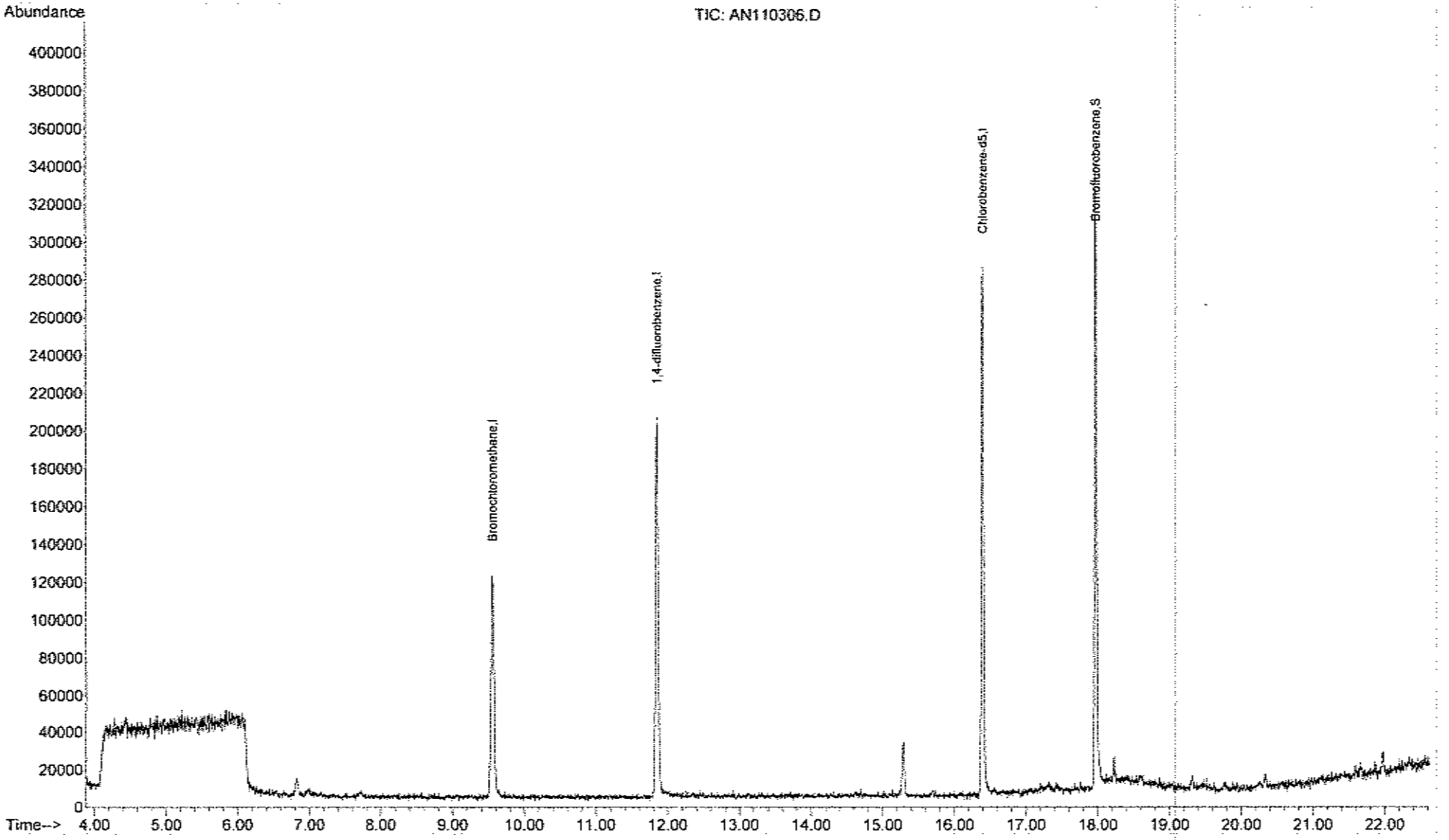
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.55	128	51628	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.85	114	215735	1.00	ppb	0.01
50) Chlorobenzene-d5	16.39	117	192732	1.00	ppb	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	17.96	95	109128	0.84	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 84.00%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2016NOV\AN110306.D Vial: 6
Acq On : 3 Nov 2016 12:34 pm Operator: RJP
Sample : WAC110316A Inst : MSD #1
Misc : AO26_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 8 16:11 2016 Quant Results File: AO26_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2016NOV\AN110307.D Vial: 7
Acq On : 3 Nov 2016 1:10 pm Operator: RJP
Sample : WAC110316B Inst : MSD #1
Misc : AO26_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 08 15:11:33 2016 Quant Results File: AO26_1UG.RES

Quant Method : C:\HPCHEM\1\METHODS\AO26_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Thu Oct 27 07:19:53 2016
Response via : Initial Calibration
DataAcq Meth : 1UG_RUN

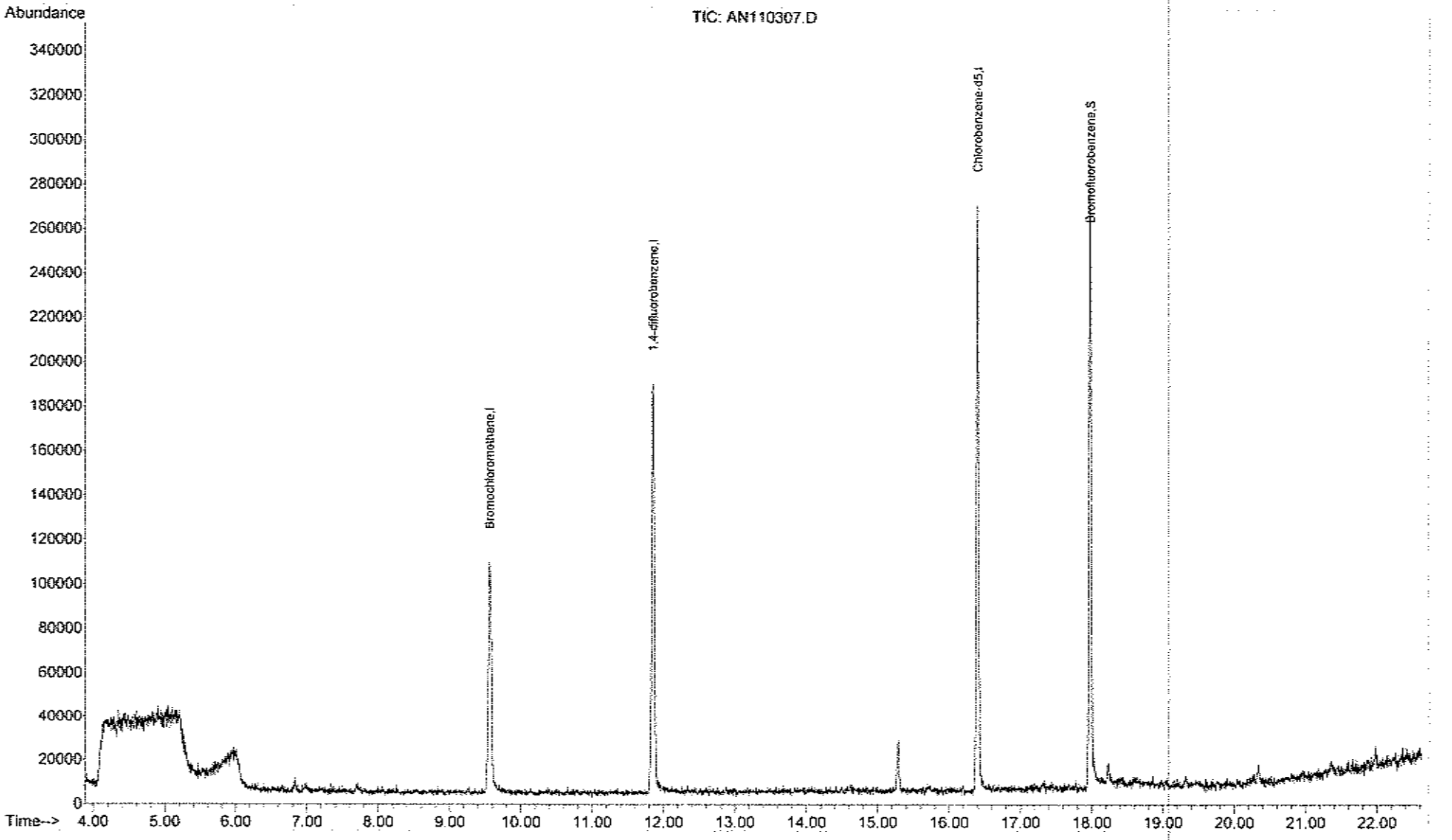
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.56	128	46894	1.00	ppb	0.00
35) 1,4-difluorobenzene	11.84	114	198486	1.00	ppb	0.00
50) Chlorobenzene-d5	16.39	117	177747	1.00	ppb	0.00
System Monitoring Compounds						
66) Bromofluorobenzene	17.96	95	95638	0.80	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 80.00%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA2\2016NOV\AN110307.D Vial: 7
Acq On : 3 Nov 2016 1:10 pm Operator: RJP
Sample : WAC110316B Inst : MSD #1
Misc : AO26_1UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 8 16:11 2016 Quant Results File: AO26_1UG.RES

Method : C:\HPCHEM\1\METHODS\A312_1UG.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Mar 15 10:58:20 2017
Response via : Initial Calibration



AN110307.D A312_1UG.M Wed Mar 29 09:04:33 2017 MSD1 Page 2