Periodic Review Report
NYSDEC ERP Site #B00016
Reporting Period: October 8, 2017 to October 8, 2018

Location:

Former Photech Imaging Site
NYSDEC ERP Site #B00016
1000 Driving Park Avenue
Rochester, New York

Prepared for:

City of Rochester Division of Environmental Quality
30 Church Street
Room 300B
Rochester, New York 14614

LaBella Project No. 2182451

November 5, 2018

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1.0 INTRODUCTION & BACKGROUND

LaBella Associates, D.P.C. (LaBella) is pleased to submit this Periodic Review Report on behalf of the City of Rochester for the Former Photech Imaging site located at 1000 Driving Park Avenue, City of Rochester, Monroe County, New York. The site is enrolled in the New York State (NYS) Environmental Restoration Program (ERP), (Site Code B00016). A site Location Map is included as Figure 1. LaBella was retained by the City of Rochester to assist with the monitoring and reporting requirements in accordance with the Site Management Plan (SMP).

Based upon the results of site investigation activities, the types of contamination at the site that were identified to require remediation included:

- Heavy metals including cadmium and silver; and,
- Volatile organic compounds (VOCs).

Remedial actions performed at the site in accordance with the March 2006 Record of Decision include:

- Asbestos abatement, building and equipment decontamination, and building demolition (completed);
- A design-phase investigation to delineate the extent of soil contamination, and to confirm the extent of groundwater contamination (completed);
- Removal of the silver recovery system (completed);
- Excavation and off-site disposal of contaminated soils exceeding commercial soil cleanup objectives (completed);
- Application of Daramend in Area of Concern 2 and 7 (completed);
- Removal of nearly all on-site utilities (completed);
- Development and implementation of a SMP for long term management of remaining contamination as required by the Environmental Easement (completed);
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site (completed);
- Inclusion in the City of Rochester Building Information System (BIS) (completed);
- Periodic certification of the institutional and engineering controls (on-going); and,
- Implementation of a long-term groundwater monitoring plan (on-going).

The site was previously remediated under the NYS ERP administered by the New York State Department of Environmental Conservation (NYSDEC) and in accordance with State Assistance Contract (SAC) #C303768.

A SMP was prepared for the Site to manage remaining contamination until the Deed Restriction is extinguished. In accordance with the SMP and the requirements in NYSDEC Division of Environmental Restoration (DER)-10 Technical Guidance for Site Investigation and Remediation, dated May, 2010, and the guidelines provided by NYSDEC, an annual inspection was conducted of all remedial components installed at the Site and the four (4) groundwater monitoring wells were sampled. This work was performed on September 20, 2018 and September 21, 2018.

1.1 Effectiveness of the Remedial Program

Progress made during the reporting period toward meeting the remedial objectives for the site include continued monitoring of groundwater and maintenance of the institutional and engineering controls in accordance with the SMP. Monitoring data from the work completed to date shows that the remedial program is currently meeting the remedial objectives for the site.

1.2 Compliance

No areas were identified as being currently out of compliance with the SMP requirements. As such, no steps are currently deemed necessary to correct areas of non-compliance.

2.0 SITE OVERVIEW

The Former Photech Imaging site is located in an M-1 Industrial District in the City of Rochester, Monroe County, New York. The site is situated on an approximately 12.5-acre area parcel and was originally developed in 1948 for manufacturing photographic film and paper. Several different companies have owned and operated the facility for photographic paper and film production since its construction in 1948. The most recent owner, Photech Imaging Systems, Inc., ceased operations and abandoned the facility in 1991. Large amounts of chemicals, wastes, and various supplies and materials were left “as-is” on-site when the facility was abandoned. In 1994, the NYSDEC and the United States Environmental Protection Agency (USEPA) performed a bulk waste and chemical removal action at the site. This work successfully removed bulk chemicals from the facility; however, tanks were not certified as “clean”; small containers of chemicals were left in some of the buildings; and residual chemicals remained in some of the process vessels and piping.

Historically a total of 15 former buildings totaling approximately 108,000 square feet of space occupied the site. The buildings were vandalized following abandonment, with ceilings, walls, piping and equipment severely damaged. As a result, asbestos and chemical residues were distributed throughout many interior areas of the buildings. Additionally, the roofs failed on several of the buildings and there was a fire in 2004 in the former warehouse portion of the facility.

During 2010, the City of Rochester demolished all of the site buildings including the sub grade tunnels. Prior to demolition, asbestos containing materials and residual chemicals inside the buildings were removed and disposed of. In addition, suspect building materials (e.g. concrete floors) were assessed for chemicals of concern and remediated prior to demolition.

During Site building demolition activities remedial actions were performed to remove soils impacted with Polycyclic Aromatic Hydrocarbon (PAH) Semivolatile Organic Compounds (SVOCs) along the eastern side and a drywell along the western side of Building 11 in order to prevent contaminated materials from entering demolition excavations. A total of 601 tons of contaminated soil was removed from AOC 1A and a total of 95 tons of contaminated soil was removed from AOC 1B and transported offsite for disposal, as a regulated solid waste. A source removal action was performed during building demolition to remove source area soils associated with two (2) former sumps in buildings formerly located within AOC 7. A total of 170 tons of cadmium-impacted soil was removed from this area for offsite disposal.

Following building demolition activities, a design phase investigation was completed to delineate the extent of soil contamination and confirm the extent of groundwater contamination. The design phase investigation data was input into a Geographical Information System (GIS) spatial database and used to develop interpolation models illustrating the areal extent of impacted soil at concentrations above the NYSDEC Part 375 commercial use soil cleanup objectives. This information was utilized to guide remedial actions to remove the silver recovery system, and to excavate and dispose of contaminated soils exceeding the commercial use soil cleanup objectives. Following excavation of contaminated soil, Daramend was applied to excavations AOC 2 and AOC 7 to further reduce the contaminant mass at the site. Additionally nearly all on-site utilities were removed.

3.0 MONITORING PLAN COMPLIANCE AND REMEDY EVALUATION

3.1 Monitoring Plan Components

Monitoring and laboratory analyses were completed in accordance with the SMP. A summary of the routine monitoring and analyses is provided in the table below

Monitoring Program	Frequency	Monitored	Matrix	Analysis
Groundwater	Annually until otherwise approved by NYSDEC and NYSDOH	RMW-3, RMW-4, RMW-9, and Well-09	Groundwater	TCL VOCs & RCRA Metals
Site Cover / Property Use	Annually until otherwise approved by NYSDEC and NYSDOH	Site Cover Condition and Property Use	Not Applicable	Not Applicable

TCL VOCs denotes Target Compound List Volatile Organic Compounds, RCRA denotes Resource Conservation and Recovery Act

3.2 Groundwater Monitoring Data

Groundwater monitoring was performed once during the reporting period using low flow sampling methodology in accordance with the SMP. Post-remediation groundwater sampling has included ten (10) rounds of sampling in addition to the original two (2) rounds of sampling included in the Final Engineering Report (FER). The Post-remediation groundwater sampling events have occurred on the following dates:

- June 2012
- September 2012
- April 2013
- September 2013
- February 2014
- June 2014
- October 2015
- September 2016
- September 2017
- September 2018

The following is a summary of groundwater sampling results for each of the four (4) groundwater monitoring wells at the site. The results are shown on Figure 2 and summarized on Table 1. The laboratory analytical report is included as Appendix 1 and the Data Usability Summary Report is included as Appendix 2. Low flow groundwater sampling logs are included in Appendix 3.

RMW-3

Trichloroethene was detected at a concentrations of 8.87 micrograms per liter (ug/l) during the September 2018 sampling event which is above the NYSDEC Part 703 Groundwater Standard. Trichloroethene has been detected in well RMW-3 above the NYSDEC Part 703 Groundwater Standards during the ten (10) post-remediation groundwater sampling events, and the concentrations reported for the September 2018 were similar to previous sampling events.

No metals were detected at concentrations that exceeded the Part 703 Groundwater Standards during the September 2018 groundwater sampling event. Metals have not been detected in well RMW-3 above the NYSDEC Part 703 Groundwater Standards during the ten (10) post-remediation groundwater sampling events.

RMW-4

One (1) VOC, naphthalene was detected at a concentration of 12.5 µg/l that exceeded the NYSDEC Part 703 Groundwater Standards during the September 2018 groundwater sampling event.

Arsenic was detected at a concentration of 29.5 µg/l that exceeded the Part 703 Groundwater Standards during the September 2018 groundwater sampling event. Metals have not been detected in well RMW-4 above the NYSDEC Part 703 Groundwater Standards during the most recent post-remediation groundwater sampling event in September 2017.

RMW-9

Two (2) VOCs (1,1-Dichloroethane at 11.6 ug/l and Vinyl Chloride at 79.2 ug/l) were detected at concentrations that exceed the NYSDEC Part 703 Groundwater Standards during the September 2018 sampling event. These two (2) VOCs have been reported at concentrations that exceed the NYSDEC Part 703 Groundwater Standards during the ten (10) post-remediation groundwater sampling events, and the concentrations reported for the September 2018 were similar to previous sampling events.

No metals were detected at concentrations that exceeded the NYSDEC Part 703 Groundwater Standards during the September 2018 groundwater sampling event. Metals have not been detected in well RMW-9 above the NYSDEC Part 703 Groundwater Standards during the ten (10) post-remediation groundwater sampling events.

Well-09

One (1) VOCs(1,1-Dichloroethane and 1,1-Dichloroethene) were detected at concentrations above the laboratory MDLs, however, only 1,1-Dichloroethane at 6.57 ug/l was slightly exceeded the NYSDEC Part 703 Groundwater Standard during the September 2018 sampling event. 1,1-Dichloroethane has been reported at concentrations greater than the NYSDEC Part 703 Groundwater Standard during the ten (10) post-remediation sampling events, and the concentrations reported for the September 2018 were similar to previous sampling events.

No metals were detected at concentrations that exceeded the NYSDEC Part 703 Groundwater Standards during the September 2018 groundwater sampling event. Metals have not been detected in well Well-09 above the NYSDEC Part 703 Groundwater Standards during five (5) most recent post-remediation groundwater sampling events.

3.3 Site Cover System

A site-wide inspection of the cover system was conducted on September 21, 2018 to assess the general condition of the site as well as conditions of the cover system. Based on the results of the general site condition inspection, the site remains primarily undeveloped with the exception of the new road that was constructed in 2017, and the soil covered areas appear to remain intact and covered with vegetation which is mowed. A copy of the site inspection form and photographs of the site during the inspection are included in Appendix 4.

3.4 Groundwater Monitoring Conclusions

There were no deficiencies to the groundwater monitoring plan. Contaminants of concern identified in groundwater previously were generally at similar levels that have been reported during previous sampling events. The following conclusions are made regarding the sampling results:

- Naphthalene was detected in groundwater sample RMW-4 at a concentration of 12.5 µg/l. Naphthalene was only detected in well RMW-4 during the September 2017 sampling event. RMW-4 will continue to be monitored during future events.
- As stated in the Final Engineering Report, concentrations of Trichloroethene, 1,1-Dichloroethene, 1,1—Dichloroethane, cis-1,2—Dichloroethene, and Vinyl Chloride appear to be associated with off-site migration from the Delphi Automotive Systems Site (NYSDEC Site No. 828064);
- The remedy is effective based on the groundwater sampling results.

4.0 IC/EC COMPLIANCE

4.1 Institutional Controls

The following Institutional Controls are included in the SMP for the Site:

- Compliance with the Environmental Easement and the SMP.
- All Engineering Controls must be operated and maintained in accordance with the SMP.
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.
- Inclusion in the City of Rochester Building Information System flagging system as a local governmental institutional control (www.cityofrochester.gov/EICproperties).

The site-wide inspection determined that Institutional Controls have been complied with including compliance with the Environmental Easement and the SMP. There are no new conclusions or recommendations for change of Institutional Controls at this time.

4.2 Engineering Controls

The only Engineering Control at the site is the requirement that any buildings have a sub-slab Depressurization System (SSDS) which are constructed within an identified area of concern and are designed for full or part time occupancy. No new buildings have been constructed at the Site, thus no SSDS/Engineering Controls are present at the site at this time.

The EC/IC Certification statement and forms are included as Appendix 5.

5.0 OPERATION & MAINTENANCE COMPLIANCE REPORT

There are currently no active Engineering Controls at the site so operation and maintenance activities have not been completed at the site. In addition the site cover system appears intact and no maintenance was initiated. An updated Site Management Plan (SMP) will be provided that will summarize modifications (i.e. new road) and future sale/subdivisions.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Compliance

The requirements dictated in the SMP regarding IC/EC's and the Monitoring Plan were met during the reporting period.

6.2 Performance and Effectiveness of Remedy

An evaluation of the components of the SMP during this reporting period indicates that, as of the end date of this report, the IC/EC controls were protective of human health and the environment. The monitoring plan sufficiently monitored the performance of the remedy.

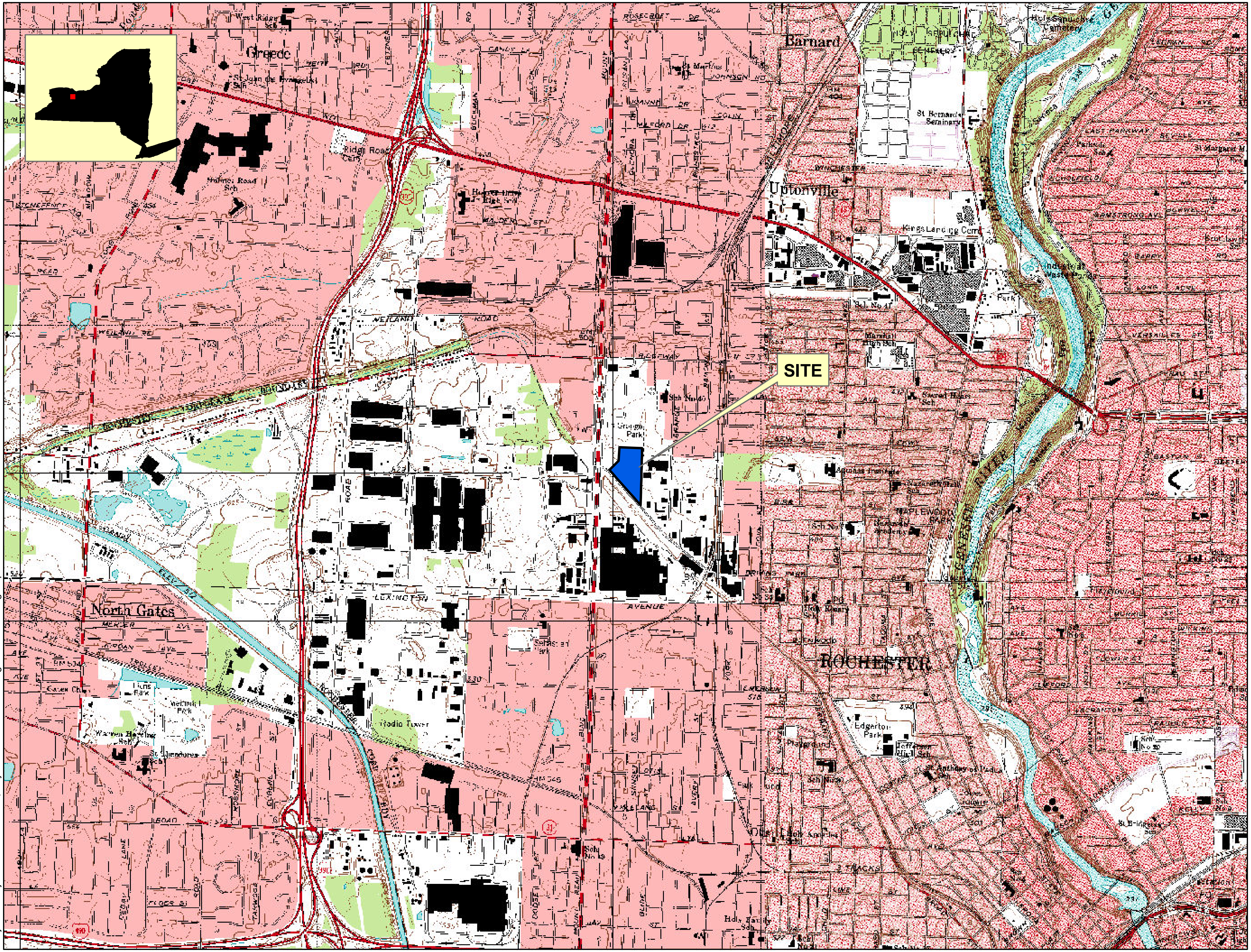
6.3 Recommendations

Since residual contamination remains at the site, applicable site management requirements should be continued. However, since residual contamination at the site is considered low in concentration and has been documented in post remediation groundwater samples to remain consistent at the site over time, it is recommended that monitoring activities be changed from annually to once every three years.

6.4 Potential Change in Use

There is a potential sale of the site that may transpire during the next reporting period. A 60-Day Advance Notification of Transfer of Ownership required by 6NYCRR Part 375-1.11(d) and 375-1.9(f) will be provided 60 days prior to change of use.

FIGURES



SITE LOCATION MAP

OCTOBER 8, 2017 TO
OCTOBER 8, 2018
PERIODIC REVIEW REPORT

ENVIRONMENTAL RESTORATION
PROGRAM SITE #B00016

FORMER PHOTECH SITE
1000 DRIVING PARK AVE
ROCHESTER, NEW YORK

VOLUNTEER:
CITY OF ROCHESTER

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S

0 1,000 2,000 Feet

1 inch = 2,000 feet

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10/29/2018

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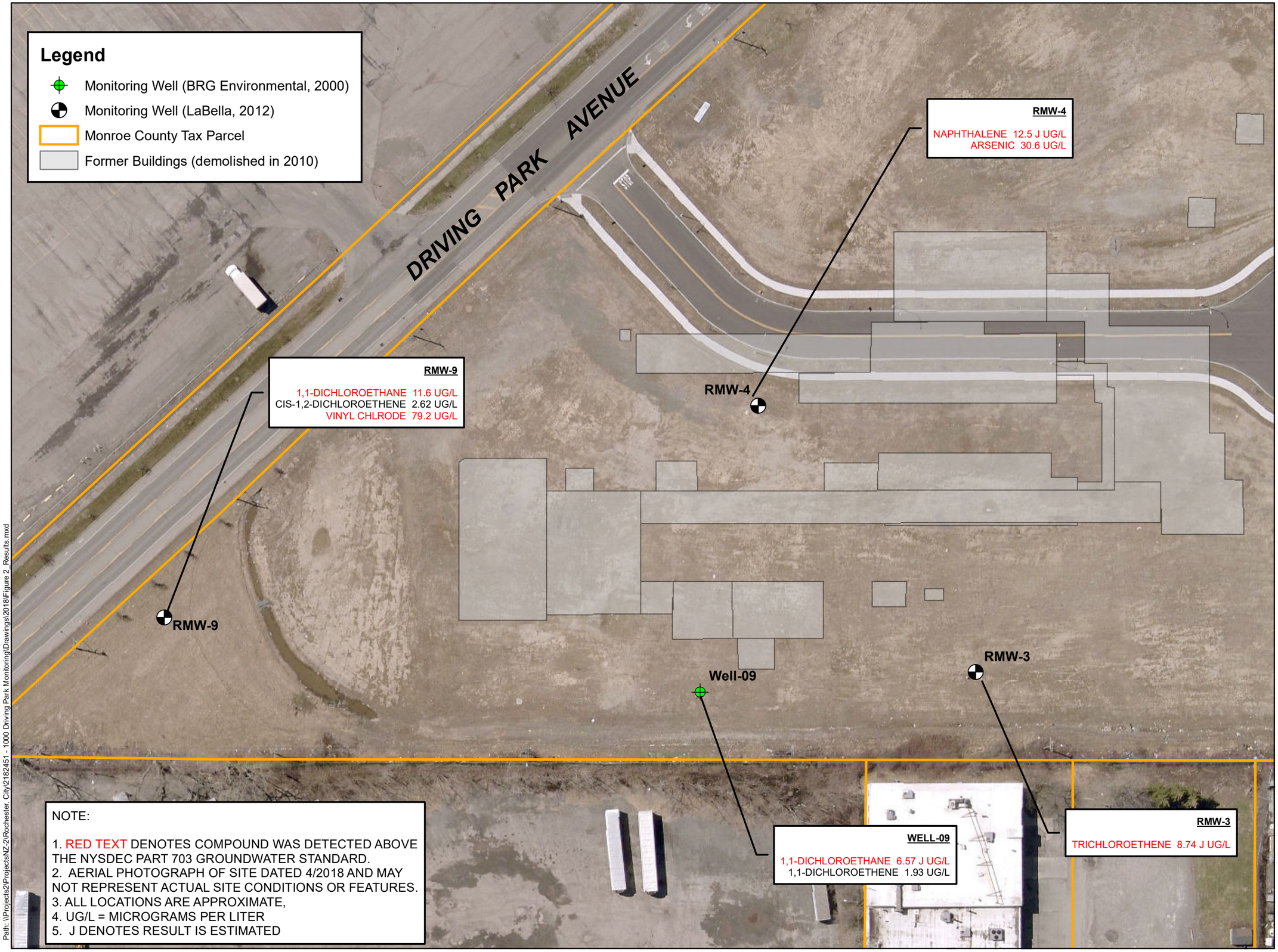
FIGURE 1

\\Projects2\ProjectsNZ-2\Rochester, City\2182451 - 1000 Driving Park Monitoring\Reports\2018 PRR



NOTE:

1. RED TEXT DENOTES COMPOUND WAS DETECTED ABOVE THE NYSDEC PART 703 GROUNDWATER STANDARD.
2. AERIAL PHOTOGRAPH OF SITE DATED 4/2018 AND MAY NOT REPRESENT ACTUAL SITE CONDITIONS OR FEATURES.
3. ALL LOCATIONS ARE APPROXIMATE,
4. UG/L = MICROGRAMS PER LITER
5. J DENOTES RESULT IS ESTIMATED

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ANNUAL MONITORING DETECTED RESULTS AND WELL LOCATIONS

OCTOBER 8, 2017 TO OCTOBER 8, 2018 PERIODIC REVIEW REPORT

ENVIRONMENTAL RESTORATION PROGRAM SITE #B00016

FORMER PHOTECH SITE
1000 DRIVING PARK AVE
ROCHESTER, NEW YORK

VOLUNTEER:
CITY OF ROCHESTER

N
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S

0 15 30 60 Feet

1 inch = 60 feet

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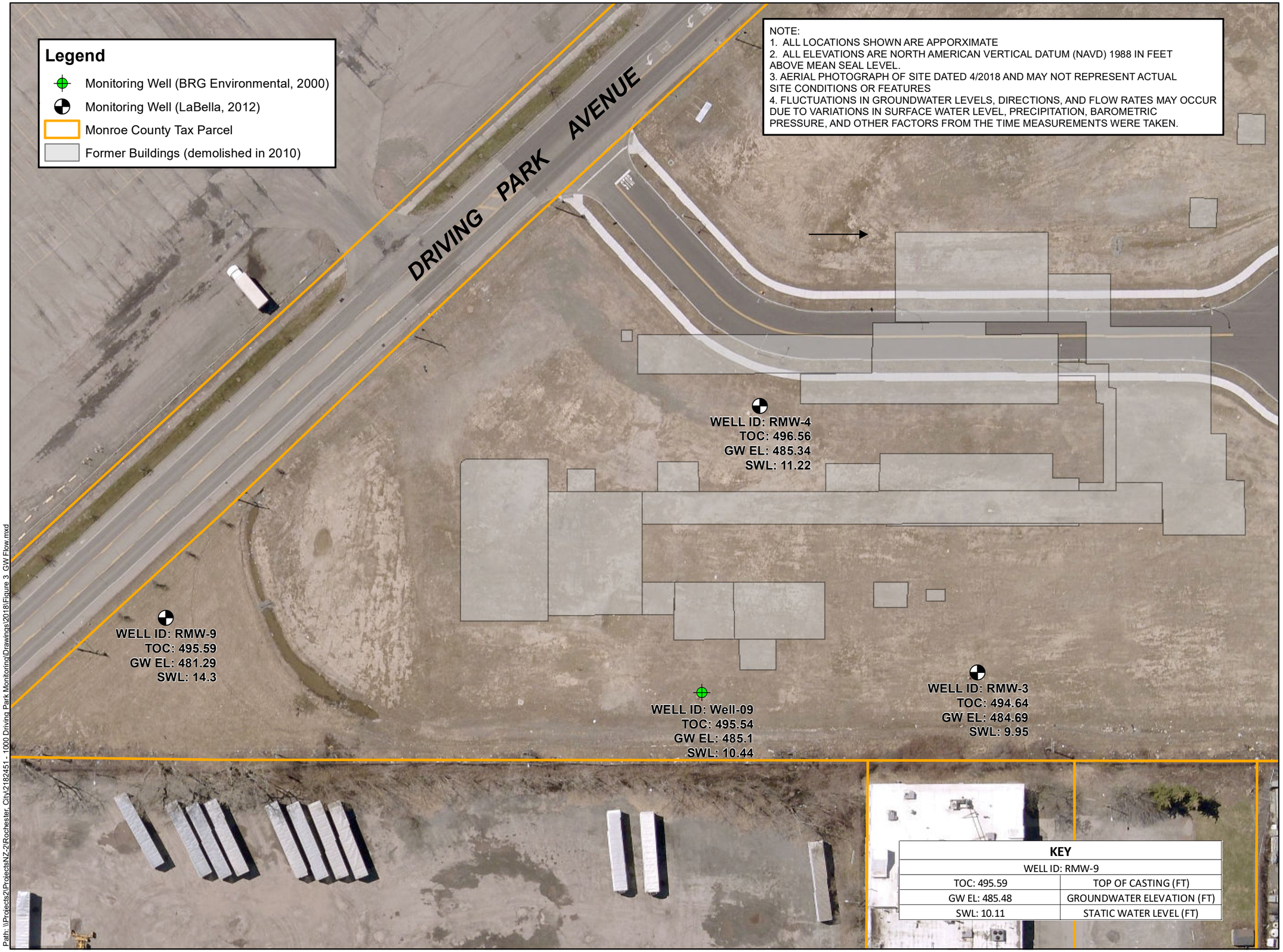
11/5/2018

2182451

FIGURE 2

Path: \\Projects2\Projects\NZ-2\Rochester, City\2182451 - 1000 Driving Park Monitoring\Drawings\2018\Figure 2_Results.mxd



NOTE:
1. ALL LOCATIONS SHOWN ARE APPORXIMATE
2. ALL ELEVATIONS ARE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 IN FEET ABOVE MEAN SEAL LEVEL.
3. AERIAL PHOTOGRAPH OF SITE DATED 4/2018 AND MAY NOT REPRESENT ACTUAL SITE CONDITIONS OR FEATURES
4. FLUCTUATIONS IN GROUNDWATER LEVELS, DIRECTIONS, AND FLOW RATES MAY OCCUR DUE TO VARIATIONS IN SURFACE WATER LEVEL, PRECIPITATION, BAROMETRIC PRESSURE, AND OTHER FACTORS FROM THE TIME MEASUREMENTS WERE TAKEN.

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SEPTEMBER 2018 GROUNDWATER ELEVATIONS AND WELL LOCATIONS

OCTOBER 8, 2017 TO OCTOBER 8, 2018 PERIODIC REVIEW REPORT

ENVIRONMENTAL RESTORATION PROGRAM SITE #B00016

FORMER PHOTECH SITE 1000 DRIVING PARK AVE ROCHESTER, NEW YORK

VOLUNTEER: CITY OF ROCHESTER

W S N E

0 15 30 60 Feet

1 inch = 60 feet

INTENDED TO PRINT 11" X 17"

11/5/2018

2182451

FIGURE 3

Path: \\Projects2\Projects\NZ-2\Rochester, City\2182451 - 1000 Driving Park Monitoring\Drawings\2018\Figure 3_GW Flow.mxd

TABLES

TABLE 1
Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York
NYSDEC Site No. B00016

RMW-3

Sample ID		NYSDEC Part 703 Groundwater Standard	RMW-3										
Lab Sample Number			D3257-01	D4241-10	SB67810-05	E3912-13	F1474-14	F2732-10	L793892-09	L858898-02	L937868-04	L937868-01	L1028256
Sampling Date			6/25/2012	9/12/2012	4/10/2013	9/26/2013	2/20/2014	6/10/2014	10/8/2015	9/9/2016	9/18/2017	9/18/2017	9/20/2018
Matrix			WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER (DUP)	WATER
Dilution Factor			1	1	1	1	1	1	1	1	1	1	1
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	CAS #												
1,1,1-Trichloroethane	71-55-6	5	2.5 U	0.9 J	0.58 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3	5	1.1 J	1 J	0.68 J	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	75-35-4	5	2.5 U	2.5 U	0.49 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	5	2.5 U	2.5 U	0.36 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	78-93-3	50	12.5 U	12.5 U	1.73 U	25 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
Acetone	67-64-1	50	12.5 U	12.5 U	2.56 U	25 U	5 U	5 U	50 U	50 U	50 U	50 U	50 U
Benzene	71-43-2	1	2.5 U	2.5 U	0.67 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	75-15-0	NA	2.5 U	2.5 U	0.63 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	67-66-3	7	0.53 J	2.5 U	0.69 J	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	5	1.8 J	2.6 J	0.72 J	1.1 J	0.53 J	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	110-82-7	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	5	2.5 U	2.5 U	0.45 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U
Ethyl Benzene	100-41-4	5	2.5 U	2.5 U	0.73 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	98-82-8	5	2.5 U	2.5 U	0.62 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	179601-23-1	NA	5 U	5 U	1.64 U	10 U	2 U	2 U	NA	NA	2 U	2 U	2 U
Methylcyclohexane	108-87-2	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	95-47-6	5	2.5 U	2.5 U	0.88 U	5 U	1 U	1 U	NA	NA	1 U	1 U	1 U
Toluene	108-88-3	5	2.5 U	2.5 U	0.81 U	5 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U
Total Xylenes	1330-20-7	5	7.5 U	NA	2.52 U	15 U	3 U	1 U	3 U	3 U	2 U	2 U	1 U
Trichloroethene	79-01-6	5	**14**	**14**	**8.69**	**14.2**	**6.1**	4.7	**7.05** J*	**9.04**	**7.98** J	**7.71** J	**8.74** J
Trichlorofluoromethane	75-69-4	5	2.5 U	2.5 U	0.63 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	75-01-4	2	2.5 U	2.5 U	0.81 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Concentration.			17.43	18.5	17.43	18.5	18.5	4.7	7.05	9.04	7.98	7.71	8.74
Arsenic	7440-38-2	25	5 U	5.44 J	1.8 U	10 UN	10 UN	10 U	10 U	10 U	10 U	10 U	10 U
Barium	7440-39-3	1000	66.3	76.1	73.2	53 N	62.9 N	81.4	60.5	73	49.3	54.1	51.7
Cadmium	7440-43-9	5	1.5 U	1.5 U	0.8 U	3 UN	3 U	3 U	2 U	2 U	2 U	2 U	2 U
Chromium	7440-47-3	50	2.5 U	2.5 U	1.4 J	5 UN	5.49 N*	5 U	10 U	10 U	40 U	40 U	10 U
Lead	7439-92-1	25	9.12	8.47	2	6 UN	11.1	6 U	5 U	5 U	5.13	5.4	5 U
Mercury	7439-97-6	0.7	0.1 U	0.1 U	0.08 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Selenium	7782-49-2	10	5 U	5 U	3 U	10 UN	10 U	10 U	10 U	10 U	10 U	10 U	10 R
Silver	7440-22-4	50	2.5 U	2.5 U	0.9 U	5 UN	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Bold - Indicates the compound was detected above the NYSDEC TOGS limit.

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

J* - Result is an estimaterion due to poor calibration performance.

NA - Not analyzed

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

R - The calibration for the analyte was rejected.

TABLE 1

Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York
NYSDEC Site No. B00016

RMW-4

Sample ID		NYSDEC Part 703 Groundwater Standard	RMW-4										
Lab Sample Number			D3257-10	D4241-04	SB67810-10	E3912-10	F1474-10	F2732-02	L793892-07	L858898-08	I937868-02	L1028256	L1028256
Sampling Date			6/26/2012	9/13/2012	4/12/2013	9/25/2013	2/19/2014	6/9/2014	10/8/2015	9/7/2016	9/18/2017	9/20/2018	9/20/2018
Matrix		Water	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER (DUPE)
Dilution Factor			1	1	1	1	1	1	1	1	1	1	1
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	CAS #												
1,1,1-Trichloroethane	71-55-6	5	2.5 U	2.5 U	0.58 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,1-Dichloroethane	75-34-3	5	2.5 U	2.5 U	0.68 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,1-Dichloroethene	75-35-4	5	2.5 U	2.5 U	0.49 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	5	2.5 U	2.5 U	0.36 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2-Butanone	78-93-3	50	4.8 J	3.8 J	3.43 J	25 U	5 U	5.7	10 U	10 U	10 U	10 U	10 U
Acetone	67-64-1	50	**59**	38	20.3	24.4 J	6.9	**94.8**	50 U	50 U	50 UJ	50 U	50 U
Benzene	71-43-2	1	0.5 J	0.6 J	0.67 U	0.56 J	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Carbon Disulfide	75-15-0	NA	0.69 J	0.5 J	0.89 J	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Chloroform	67-66-3	7	2.5 U	2.5 U	0.69 U	5 U	1 U	1 U	5 U	5 U	5 UJ	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	5	2.5 U	2.5 U	0.72 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Cyclohexane	110-82-7	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Dichlorodifluoromethane	75-71-8	5	2.1 J	1.3 J	2.39	5 U	1.8	1 U	5 U	5 U	5 UJ	5 U	5 U
Ethyl Benzene	100-41-4	5	0.61 J	1 J	1.42	0.81 J	1 U	1.2	1.68	1.28	1 UJ	1 U	1 U
Isopropylbenzene	98-82-8	5	2.5 U	2.5 U	0.67 J	5 U	1 U	0.45 J	1 U	1 U	1 UJ	1 U	1 U
m/p-Xylenes	179601-23-1	NA	1.7 J	2.6 J	4.07	10 U	2 U	3.2	NA	NA	2 UJ	2 U	2 U
Methylcyclohexane	108-87-2	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
o-Xylene	95-47-6	5	0.44 J	0.7 J	1.09	0.7 J	1 U	0.82 J	NA	NA	1 UJ	1 U	1 U
Toluene	108-88-3	5	1.2 J	1.4 J	1.5	1.6 J	1 U	1.2	5 U	5 U	1 UJ	1 U	1 U
Total Xylenes	1330-20-7	5	2.1 J	3.3	**5.16**	0.7	3 U	4.02 J	**5.98**	4.65	2 UJ	2 U	2 U
Trichloroethene	79-01-6	5	0.5 J	0.5 J	0.76 U	5 U	1 U	0.71 J	1 U	1 U	1 UJ	1 UJ	1 UJ
Trichlorofluoromethane	75-69-4	5	2.5 U	2.5 U	0.74 J	5 U	**7.6**	1.4	5 U	5 U	5 UJ	5 U	5 U
Vinyl chloride	75-01-4	2	2.5 U	2.5 U	0.81 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Naphthalene	91-20-3	10	--	--	--	--	--	--	--	--	**15.4**	**12.5** J	**12.2**
Total Concentration.			73.64	50.4	73.64	50.4	50.4	113.5	7.66	5.93	15.4	12.5	12.2
Arsenic	7440-38-2	25	12.3	15.6	13.6	10 UN	10 UN	11.8	21.9	**26.9**	19.5	**29.5**	**30.6**
Barium	7440-39-3	1000	10.2 J	12.8 J	6.4	59.7 N	18.3 JN	20.6 J	8.91	13.4	11	9.6	5.65
Cadmium	7440-43-9	5	1.5 U	1.5 U	0.8 U	3 UN	3 U	3 U	2 U	2 U	2 U	2 U	2 U
Chromium	7440-47-3	50	1.13 J	1.74 J	0.9 U	9.5 N	**51.3** N*	5 U	10 U	10 U	10 U	10 U	10 U
Lead	7439-92-1	25	14.3	10	2.7 J	6 UN	6.16	6 U	8.03	5.1	7.1	5 U	5 U
Mercury	7439-97-6	0.7	0.1 U	0.1 U	0.08 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Selenium	7782-49-2	10	5 U	5 U	3 U	10 UN	10 U	10 U	10 U	10 U	10 U	10 R	10 R
Silver	7440-22-4	50	2.5 U	2.5 U	0.9 U	5 UN	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Bold - Indicates the compound was detected above the NYSDEC TOGS limit.

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

J* - Result is an estimaterion due to poor calibration performance.

NA - Not analyzed

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

R - The calibration for the analyte was rejected.

TABLE 1

Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York
NYSDEC Site No. B00016

RMW-9

Sample ID		NYSDEC Part 703 Groundwater Standard	RMW-9									
Lab Sample Number			D3257-05	D4241-03	SB67810-09	E3912-15	F1474-12	F2732-08	L793892-04	L858898-05	L937868-05	L1028256
Sampling Date			6/25/2012	9/13/2012	4/11/2013	9/26/2013	2/20/2014	6/10/2014	10/7/2015	9/8/2016	9/18/2017	9/21/2018
Matrix		Water	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor			1	1	1	1	1	1	1	1	1	1
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	CAS #											
1,1,1-Trichloroethane	71-55-6	5	2.5 U	2.5 U	0.58 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3	5	**17**	**19**	**10.7**	**20.7**	**13.7**	**10.3**	**12.3**	**14.4**	**12.9**	**11.6**
1,1-Dichloroethene	75-35-4	5	2.5 U	2.5 U	0.49 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	5	2.5 U	2.5 U	0.36 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	78-93-3	50	12.5 U	12.5 U	1.73 U	25 U	5 U	5 U	10 U	10 U	10 U	10 U
Acetone	67-64-1	50	12.5 U	12.5 U	2.56 U	25 U	5 U	1 U	50 U	50 U	50 U	50 U
Benzene	71-43-2	1	2.5 U	2.5 U	0.67 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	75-15-0	NA	2.5 U	2.5 U	0.63 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	67-66-3	7	2.5 U	2.5 U	0.69 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	5	**31**	**30**	**16.3**	**24.2**	**13.5**	**10**	**7.97**	**6.53**	**5.1**	2.62
Cyclohexane	110-82-7	NA	2.5 U	2.5 U	NR	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	5	2.5 U	2.5 U	0.45 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U
Ethyl Benzene	100-41-4	5	2.5 U	2.5 U	0.73 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	98-82-8	5	2.5 U	2.5 U	0.62 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	179601-23-1	NA	5 U	5 U	1.64 U	10 U	2 U	2 U	NA	NA	2 U	2 U
Methylcyclohexane	108-87-2	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	95-47-6	5	2.5 U	2.5 U	0.88 U	5 U	1 U	1 U	NA	NA	1 U	1 U
Toluene	108-88-3	5	2.5 U	2.5 U	0.81 U	5 U	1 U	1 U	5 U	5 U	1 U	1 U
Total Xylenes	1330-20-7	5	7.5 U	NA	2.52 U	15 U	3 U	1 U	3 U	3 U	2 U	2 U
Trichloroethene	79-01-6	5	2.5 U	2.5 U	0.76 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ
Trichlorofluoromethane	75-69-4	5	2.5 U	2.5 U	0.63 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U
Vinyl chloride	75-01-4	2	**79**	**110**	**60.7**	**150 E**	**43.6**	**46.3**	**98.4**	**84.8**	**123**	**79.2**
Total Concentration.			127	159	127	159	159	20.3	118.67	105.73	141	90.8
Arsenic	7440-38-2	25	5 U	5.79 J	1.8 U	10 UN	10 UN	10 U	10 U	10 U	10 U	10 U
Barium	7440-39-3	1000	86.1	79.5	70	118 N	70.1 N	84.1	97.4	93.1	102	97.8
Cadmium	7440-43-9	5	1.5 U	1.5 U	0.8 U	3 UN	3 U	3 U	2 U	2 U	2 U	2 U
Chromium	7440-47-3	50	2.5 U	2.5 U	1 J	5 UN	**57** N*	5.31	10 U	10 U	10 U	10 U
Lead	7439-92-1	25	8.52	7.33	2 U	6 UN	6 U	6 U	5 U	5 U	5 U	5 U
Mercury	7439-97-6	0.7	0.1 U	0.1 U	0.08 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Selenium	7782-49-2	10	5.81 J	5 U	3 U	10 UN	10 U	10 U	10 U	10 U	10 U	10 R
Silver	7440-22-4	50	2.5 U	2.5 U	0.9 U	5 UN	5 U	5 U	5 U	5 U	5 U	5 U

Bold - Indicates the compound was detected above the NYSDEC TOGS limit.

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

J* - Result is an estimaterion due to poor calibration performance.

NA - Not analyzed

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

R - The calibration for the analyte was rejected.

TABLE 1

Former Photech Imaging Site
1000 Driving Park Avenue
Rochester, New York
NYSDEC Site No. B00016

WELL-09

Sample ID		NYSDEC Part 703 Groundwater Standard	WELL-09									
Lab Sample Number			D3257-02	D4241-03	SB67810-06	E3912-14	F1474-03	F2732-09	L793892-10	L858898-12	L937868-03	L1028256
Sampling Date			6/25/2012	9/13/2012	4/11/2013	9/26/2013	2/21/2014	6/10/2014	10/8/2015	9/8/2016	9/18/2017	9/21/2018
Matrix		Water	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor			1	1	1	1	1	1	1	1	1	1
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	CAS #											
1,1,1-Trichloroethane	71-55-6	5	2.5 U	2.5 U	0.67 J	5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3	5	**6.3**	**12**	**7.39**	**16** U	**10.3**	**5.2**	**7.55**	**10.1**	**9.06** J	**6.57** J
1,1-Dichloroethene	75-35-4	5	1.4 J	2.8 J	2.31	4.3 J	3.1	1.5	2.19	2.37	3 J	1.93
1,2,4-Trichlorobenzene	120-82-1	5	2.5 U	2.5 U	0.36 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	78-93-3	50	12.5 U	12.5 U	1.73 U	25 U	5 U	5 U	10 U	10 U	10 U	10 U
Acetone	67-64-1	50	12.5 U	12.5 U	2.56 U	25 U	5 U	5 U	50 U	50 U	50 U	50 U
Benzene	71-43-2	1	2.5 U	2.5 U	0.67 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	75-15-0	NA	2.5 U	2.5 U	0.63 U	5 U	0.33 J	1 U	1 U	1 U	1 U	1 U
Chloroform	67-66-3	7	2.5 U	2.5 U	0.69 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	5	2.5 U	2.5 U	0.72 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	110-82-7	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	5	2.5 U	2.5 U	0.45 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U
Ethyl Benzene	100-41-4	5	2.5 U	2.5 U	0.73 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	98-82-8	5	2.5 U	2.5 U	0.62 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	179601-23-1	NA	5 U	5 U	1.64 U	10 U	2 U	2 U	NA	NA	2 U	2 U
Methylcyclohexane	108-87-2	NA	2.5 U	2.5 U	NA	5 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	95-47-6	5	2.5 U	2.5 U	0.88 U	5 U	1 U	1 U	NA	NA	1 U	1 U
Toluene	108-88-3	5	2.5 U	2.5 U	0.81 U	5 U	1 U	1 U	5 U	5 U	1 U	1 U
Total Xylenes	1330-20-7	5	7.5 U	NA	2.52 U	15 U	3 U	1 U	3 U	3 U	2 U	2 U
Trichloroethene	79-01-6	5	0.81 J	0.7 J	0.76 U	0.93 J	0.84 J	0.44 J	1 U	1 U	1 UJ	1 UJ
Trichlorofluoromethane	75-69-4	5	2.5 U	2.5 U	0.63 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U
Vinyl chloride	75-01-4	2	2.5 U	2.5 U	0.81 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	91-20-3	10										
Total Concentration.			9.34	16.8	9.34	16.8	16.8	7.14	9.74	12.47	12.06	6.57
Arsenic	7440-38-2	25	5 U	6.12 J	1.8 U	10 UN	10 UN	10 U	10 U	10 U	10 U	10 U
Barium	7440-39-3	1000	70.5	81.7	91.3	66.1 N	51 N	56.1	51.9	52.7	54.4	45.5
Cadmium	7440-43-9	5	1.5 U	1.5 U	0.8 U	3 UN	3 U	3 U	3 U	3 U	2 U	2 U
Chromium	7440-47-3	50	2.5 U	2.5 U	1.3 U	5 UN	**92** N*	5 U	5 U	5 U	10 U	10 U
Lead	7439-92-1	25	9.44	8.26	2.3	6 UN	4.31 J	6 U	6 U	6 U	5 U	5 U
Mercury	7439-97-6	0.7	0.1 U	0.1 U	0.08 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Selenium	7782-49-2	10	5 U	5 U	3 U	10 UN	10 U	10 U	10 U	10 U	10 U	10 R
Silver	7440-22-4	50	2.5 U	2.5 U	0.9 U	5 UN	5 U	5 U	5 U	5 U	5 U	5 U

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APPENDIX 1

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 29, 2018

LaBella Associates, P.C.

Sample Delivery Group:	L1028256
Samples Received:	09/22/2018
Project Number:	2182451
Description:	Former Photech Imaging - GW Sampling
Report To:	Mr. Mike Pelychaty 300 State Street, Suite 201 Rochester, NY 14614

Entire Report Reviewed By:

T. Alan Harvill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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RMW-4 L1028256-01 GW

Collected by	Collected date/time	Received date/time
Alexander DaSilva	09/20/18 11:50	09/22/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1170490	1	09/24/18 12:45	09/28/18 11:28	ABL
Metals (ICP) by Method 6010C	WG1170427	1	09/25/18 07:45	09/25/18 12:29	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1170992	1	09/25/18 18:32	09/25/18 18:32	BMB

RMW-3 L1028256-02 GW

Collected by	Collected date/time	Received date/time
Alexander DaSilva	09/20/18 14:50	09/22/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1170490	1	09/24/18 12:45	09/28/18 11:40	ABL
Metals (ICP) by Method 6010C	WG1170427	1	09/25/18 07:45	09/25/18 13:00	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1170992	1	09/25/18 15:55	09/25/18 15:55	JHH

RMW-9 L1028256-03 GW

Collected by	Collected date/time	Received date/time
Alexander DaSilva	09/21/18 10:32	09/22/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1170490	1	09/24/18 12:45	09/28/18 11:42	ABL
Metals (ICP) by Method 6010C	WG1170427	1	09/25/18 07:45	09/25/18 13:03	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1170992	1	09/25/18 16:15	09/25/18 16:15	JHH

WELL-09 L1028256-04 GW

Collected by	Collected date/time	Received date/time
Alexander DaSilva	09/21/18 08:45	09/22/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1170490	1	09/24/18 12:45	09/28/18 11:45	ABL
Metals (ICP) by Method 6010C	WG1170427	1	09/25/18 07:45	09/25/18 13:06	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1170992	1	09/25/18 16:35	09/25/18 16:35	JHH

DUPE L1028256-05 GW

Collected by	Collected date/time	Received date/time
Alexander DaSilva	09/20/18 11:55	09/22/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1170490	1	09/24/18 12:45	09/28/18 11:47	ABL
Metals (ICP) by Method 6010C	WG1170427	1	09/25/18 07:45	09/25/18 13:08	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1170992	1	09/25/18 16:55	09/25/18 16:55	JHH

1 Cp
2 Tc
3 Ss
4 Cn
5 Su
6 Gl
7 Al
8 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Project Manager

6010C Metals (ICP)

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180925122940	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:29
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	29.5		6.50	10.0
Barium	7440-39-3	9.60		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	ND		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	20180925130035	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:00
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		6.50	10.0
Barium	7440-39-3	51.7		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	ND		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	20180925130321	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:03
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		6.50	10.0
Barium	7440-39-3	97.8		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	ND		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	20180925130607	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:06
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		6.50	10.0
Barium	7440-39-3	45.5		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	ND		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	20180925130855	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:08
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	30.6		6.50	10.0
Barium	7440-39-3	5.65		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	ND		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-1

ESC Sample ID:	R3344895-1	**SDG:**	L1028256
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20180925122138	**Received Date/Time:**	_____
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:43
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:21
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	U		6.50	10.0
Barium	7440-39-3	U		1.70	5.00
Cadmium	7440-43-9	U		0.700	2.00
Chromium	7440-47-3	U		1.40	10.0
Lead	7439-92-1	U		1.90	5.00
Selenium	7782-49-2	U		7.40	10.0
Silver	7440-22-4	U		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-2

ESC Sample ID:	R3344895-2	**SDG:**	L1028256
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20180925122415	**Received Date/Time:**	_____
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:43
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:24
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	988		6.50	10.0
Barium	7440-39-3	1050		1.70	5.00
Cadmium	7440-43-9	1000		0.700	2.00
Chromium	7440-47-3	1010		1.40	10.0
Lead	7439-92-1	1010		1.90	5.00
Selenium	7782-49-2	1000		7.40	10.0
Silver	7440-22-4	196		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-3

ESC Sample ID:	R3344895-3	**SDG:**	L1028256
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	20180925122651	**Received Date/Time:**	_____
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:43
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:26
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	990		6.50	10.0
Barium	7440-39-3	1060		1.70	5.00
Cadmium	7440-43-9	1010		0.700	2.00
Chromium	7440-47-3	1020		1.40	10.0
Lead	7439-92-1	1020		1.90	5.00
Selenium	7782-49-2	1000		7.40	10.0
Silver	7440-22-4	199		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-5

ESC Sample ID:	R3344895-5	**SDG:**	L1028256
Client Sample ID:	MS	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180925123506	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:35
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	1020		6.50	10.0
Barium	7440-39-3	1050		1.70	5.00
Cadmium	7440-43-9	1010		0.700	2.00
Chromium	7440-47-3	1010		1.40	10.0
Lead	7439-92-1	1020		1.90	5.00
Selenium	7782-49-2	1020		7.40	10.0
Silver	7440-22-4	198		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-6

ESC Sample ID:	R3344895-6	**SDG:**	L1028256
Client Sample ID:	MSD	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180925123743	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:37
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	1000		6.50	10.0
Barium	7440-39-3	1020		1.70	5.00
Cadmium	7440-43-9	987		0.700	2.00
Chromium	7440-47-3	985		1.40	10.0
Lead	7439-92-1	1000		1.90	5.00
Selenium	7782-49-2	1010		7.40	10.0
Silver	7440-22-4	193		2.80	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-4

ESC Sample ID:	R3344895-4	**SDG:**	L1028256
Client Sample ID:	SD	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180925123230	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:32
Dilution Factor:	5	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		32.5	50.0
Barium	7440-39-3	9.46		8.50	25.0
Cadmium	7440-43-9	ND		3.50	10.0
Chromium	7440-47-3	ND		7.00	50.0
Lead	7439-92-1	ND		9.50	25.0
Selenium	7782-49-2	ND		37.0	50.0
Silver	7440-22-4	ND		14.0	25.0

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13
Concentration Units:	mg/l		

	ICV				**ICVLL**				**CCV**			
Sample ID:	ICP130925180941-2				ICP130925180952-2				ICP130925181212-2			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ARSENIC	1	0.9653521	96.50	0.896000	0.01	0.01008443	101	70.200000	1	1.0096	101	1.290000
BARIUM	1	1.027663	103	0.139000	0.0050	0.005338363	107	2.860000	0.50	0.5089495	102	0.284000
CADMIUM	1	0.9925033	99.30	0.182000	0.0020	0.001717181	85.90	19.700000	0.50	0.4994124	99.90	0.213000
CHROMIUM	1	0.9991224	99.90	0.404000	0.01	0.0100127	100	7.280000	1	1.010668	101	0.411000
LEAD	1	0.9926386	99.30	0.325000	0.0050	0.005005193	100	45.400000	0.50	0.4991884	99.80	1.130000
SELENIUM	1	0.9798715	98	0.868000	0.01	0.007467689	74.70	151.000000	1	0.9832672	98.30	2.610000
SILVER	1	0.9775499	97.80	0.094600	0.0050	0.005007763	100	9.700000	0.50	0.4889042	97.80	0.272000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCV Limits: 90 - 110 CCVLL Limits: 70 - 130

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13
Concentration Units:	mg/l		

	CCV				**CCV**				**CCVLL**			
Sample ID:	ICP130925181249				ICP130925181325				ICP130925181348-2			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ARSENIC	1	1.017136	102	0.427000	1	1.013593	101	0.112000	0.01	0.01076691	108	13.300000
BARIUM	0.50	0.5087063	102	0.253000	0.50	0.5085206	102	0.303000	0.0050	0.005418526	108	1.100000
CADMIUM	0.50	0.497808	99.60	0.358000	0.50	0.4993538	99.90	0.182000	0.0020	0.001551583	77.60	11.200000
CHROMIUM	1	1.010102	101	0.073400	1	1.01302	101	0.331000	0.01	0.01033111	103	6.930000
LEAD	0.50	0.499924	100	0.552000	0.50	0.5045607	101	0.144000	0.0050	0.007420245	148	38.400000
SELENIUM	1	1.000213	100	0.888000	1	0.9845507	98.50	1.730000	0.01	-0.005149632	0	206.000000
SILVER	0.50	0.4890387	97.80	0.177000	0.50	0.4906026	98.10	0.231000	0.0050	0.005127309	103	16.500000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCV Limits: 90 - 110 CCVLL Limits: 70 - 130

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13
Concentration Units:	mg/l		

CCVLL

Sample ID: ICP130925181407-2

Analyte	True	Found	%R	%RSD
ARSENIC	0.01	0.007058503	70.60	111.000000
BARIUM	0.0050	0.005040508	101	9.460000
CADMIUM	0.0020	0.001608429	80.40	26.800000
CHROMIUM	0.01	0.009344286	93.40	6.600000
LEAD	0.0050	0.005145512	103	17.600000
SELENIUM	0.01	0.008260789	82.60	40.100000
SILVER	0.0050	0.004764667	95.30	2.670000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCV Limits: 90 - 110 CCVLL Limits: 70 - 130

3-IN

BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20180925094433-2		20180925121525-2		20180925122138		20180925125155	
Analyte	mg/l		mg/l		mg/l		mg/l	
ARSENIC	-0.003200317	U	0.007510844	U	ND		-0.003573566	U
BARIUM	-0.0001221891	U	-0.0004328221	U	ND		0.000008278435	U
CADMIUM	-0.0002897999	U	-0.0004702492	U	ND		-0.0001633401	U
CHROMIUM	0.0007181058	U	0.0004873887	U	ND		0.0007519114	U
LEAD	0.001570207	U	-0.001657701	U	ND		0.0006344326	U
SELENIUM	-0.01149915	U	-0.02033162	U	ND		-0.009110148	U
SILVER	0.0003900013	U	-0.0004691841	U	ND		0.0005228268	U

3-IN BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20180925132808	
Analyte	mg/l	
ARSENIC	0.002953834	U
BARIUM	-0.0003013687	U
CADMIUM	-0.0005623109	U
CHROMIUM	0.0003997025	U
LEAD	-0.00149562	U
SELENIUM	-0.01615926	U
SILVER	0.0003735213	U

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Date:**	09/25/18 10:03
Instrument Run:	092518ICP13		

Analyte	**True**	**Found**		**True**	**Found**	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	502.0835	100	500	503.5302	101
ANTIMONY	0	-0.005304535		0.50	0.5004786	100
ARSENIC	0	-0.04209281		0.50	0.4659808	93.20
BARIUM	0	0.002190955		0.50	0.4946687	98.90
BERYLLIUM	0	0.00002534815		0.50	0.4917634	98.40
BORON	0	-0.1140817		1	0.8863283	88.60
CADMIUM	0	0.0000564461		1	1.035831	104
CALCIUM	500	500.8576	100	500	501.8091	100
CERIUM	0	0.3439768		0	0.3871136	
CHROMIUM	0	0.002086854		0.50	0.4919825	98.40
COBALT	0	-0.002492696		0.50	0.522204	104
COPPER	0	0.003324833		0.50	0.5290533	106
IRON	200	197.2701	98.60	200	198.0609	99
LANTHANUM	0	-0.004811011		0	-0.006320731	
LEAD	0	-0.03255129		1	0.9784543	97.80
LITHIUM	0	0.008986447		0	0.008932932	
MAGNESIUM	500	506.2256	101	500	507.4899	101
MANGANESE	0	0.004558789		0.50	0.495926	99.20
MOLYBDENUM	0	-0.0002925881		0.50	0.480748	96.10
NICKEL	0	-0.003226502		1	1.033258	103
PHOSPHORUS	0	-0.01508778		0	-0.01466029	
POTASSIUM	0	-0.02073136		0	-0.02914809	
SELENIUM	0	-0.02686818		0.50	0.4828054	96.60
SILICON	0	-0.002312111		1	0.9711941	97.10
SILVER	0	0.0009712783		1	1.095538	110
SODIUM	0	-0.02045438		0	-0.04835644	
STRONTIUM	0	-0.004754229		0	-0.004745638	
SULFUR	0	-0.03583872		0	-0.06629199	
THALLIUM	0	-0.02620037		0.50	0.4502903	90.10
TIN	0	-0.0008615589		0.50	0.4431175	88.60
TITANIUM	0	-0.004366733		0.50	0.4983637	99.70
VANADIUM	0	-0.02640264		0.50	0.4605412	92.10
ZINC	0	0.004472979		1	0.9193251	91.90

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Date:**	09/25/18 14:21
Instrument Run:	092518ICP13		

Analyte	**True**	**Found**		**True**	**Found**	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	499.8905	100	500	502.7562	101
ANTIMONY	0	0.004035763		0.50	0.5075787	102
ARSENIC	0	-0.04394514		0.50	0.4773837	95.50
BARIUM	0	0.002154566		0.50	0.4960565	99.20
BERYLLIUM	0	-0.00004666011		0.50	0.4904465	98.10
BORON	0	-0.1099579		1	0.9023569	90.20
CADMIUM	0	0.0004487536		1	1.041845	104
CALCIUM	500	499.8405	100	500	501.7187	100
CERIUM	0	0.3685199		0	0.3899311	
CHROMIUM	0	0.002664665		0.50	0.4973789	99.50
COBALT	0	-0.002732709		0.50	0.526086	105
COPPER	0	0.003489445		0.50	0.5304102	106
IRON	200	196.8919	98.40	200	197.7463	98.90
LANTHANUM	0	-0.004338202		0	-0.0086799	
LEAD	0	-0.03035842		1	0.9823334	98.20
LITHIUM	0	0.008986685		0	0.009345256	
MAGNESIUM	500	506.7418	101	500	509.5413	102
MANGANESE	0	0.004492358		0.50	0.4977028	99.50
MOLYBDENUM	0	-0.001021858		0.50	0.4815807	96.30
NICKEL	0	-0.003329094		1	1.039298	104
PHOSPHORUS	0	-0.007245041		0	-0.01097173	
POTASSIUM	0	0.03897791		0	0.0006740713	
SELENIUM	0	-0.03236416		0.50	0.5011159	100
SILICON	0	-0.001019133		1	0.9802184	98
SILVER	0	0.0007245846		1	1.104511	110
SODIUM	0	0.2196707		0	0.1694594	
STRONTIUM	0	-0.004710589		0	-0.004714641	
SULFUR	0	-0.06256519		0	-0.0248184	
THALLIUM	0	-0.02681168		0.50	0.4470868	89.40
TIN	0	-0.004142202		0.50	0.4445064	88.90
TITANIUM	0	-0.004429262		0.50	0.4963633	99.30
VANADIUM	0	-0.02699762		0.50	0.4629485	92.60
ZINC	0	0.003959069		1	0.9207955	92.10

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344895-5
R3344895-6

MS Sample / File ID:	R3344895-5 / 20180925123506	**SDG:**	L1028256
MSD Sample / File ID:	R3344895-6 / 20180925123743	**Analytical Batch:**	WG1170427
OS Sample / File ID:	L1028256-01 / 20180925122940	**Matrix:**	GW
Instrument ID:	ICP13		
Analytical Method:	6010C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Arsenic	1000	29.5	1020	1000	99.3	97.5	1	75.0 - 125	1.73	20
Barium	1000	9.60	1050	1020	104	101	1	75.0 - 125	2.36	20
Cadmium	1000	ND	1010	987	101	98.7	1	75.0 - 125	2.54	20
Chromium	1000	ND	1010	985	100	98.1	1	75.0 - 125	2.07	20
Lead	1000	ND	1020	1000	102	99.8	1	75.0 - 125	2.09	20
Selenium	1000	ND	1020	1010	102	101	1	75.0 - 125	1.60	20
Silver	200	ND	198	193	99.0	96.5	1	75.0 - 125	2.55	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344895-2
R3344895-3

LCS Sample / File ID:	R3344895-2 / 20180925122415	**SDG:**	L1028256
LCSD Sample / File ID:	R3344895-3 / 20180925122651	**Analytical Batch:**	WG1170427
Instrument ID:	ICP13	**Dilution Factor:**	1
Analytical Method:	6010C	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*%*	*%*	*%*	*%*	*%*
Arsenic	1000	988	990	98.8	99.0	80.0 - 120	0.177	20
Barium	1000	1050	1060	105	106	80.0 - 120	0.726	20
Cadmium	1000	1000	1010	100	101	80.0 - 120	0.724	20
Chromium	1000	1010	1020	101	102	80.0 - 120	1.52	20
Lead	1000	1010	1020	101	102	80.0 - 120	0.564	20
Selenium	1000	1000	1000	100	100	80.0 - 120	0.256	20
Silver	200	196	199	97.8	99.7	80.0 - 120	1.91	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

8-IN

ICP AND ICP/MS SERIAL DILUTIONS

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344895-4

SD Sample / File ID:	R3344895-4 / 20180925123230	**SDG:**	L1028256
OS Sample / File ID:	L1028256-01 / 20180925122940	**Analytical Batch:**	WG1170427
Lab File ID:	20180925123230	**Dilution Factor:**	5
Instrument ID:	ICP13	**Matrix:**	GW
Analytical Method:	6010C		

Analyte	**OS Result** *ug/l*	**SD Result** *ug/l*	**RPD** *%*	**RPD Limits** *%*
Arsenic	29.5	ND	0.000	10
Barium	9.60	9.46	1.47	10
Cadmium	ND	ND	0.000	10
Chromium	ND	ND	0.000	10
Lead	ND	ND	0.000	10
Selenium	ND	ND	0.000	10
Silver	ND	ND	0.000	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

10A-IN

INTERELEMENT CORRECTION FACTORS

SDG: L1028256 **Analytical Method:** 6010C
Instrument ID: ICP13 **Date:** 01/19/18 07:43

Analyte	Wavelength	ARSENIC	CHROMIUM	COBALT	COPPER	PHOSPHORUS	SILICON	STRONTIUM
	nm	189.0420	267.7160	228.6160	324.7540	177.4950	251.6110	421.5520
ALUMINUM	308.2150							
ANTIMONY	206.8330		-0.00073740					-0.00001216
BERYLLIUM	313.0420					-0.03986507		
CADMIUM	228.8020	-0.17032479				-0.01762108		
COBALT	228.6160							
LEAD	220.3530				-0.00008183			
PHOSPHORUS	177.4950						-0.00001698	
THALLIUM	190.8560			-0.00020630				

10A-IN

INTERELEMENT CORRECTION FACTORS

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Date:**	01/19/18 07:43

Analyte	Wavelength	TITANIUM	VANADIUM
	nm	334.9410	292.4020
ALUMINUM	308.2150		-0.01099337
ANTIMONY	206.8330		
BERYLLIUM	313.0420		-0.01057157
CADMIUM	228.8020		
COBALT	228.6160	-0.00557132	
LEAD	220.3530		
PHOSPHORUS	177.4950		-0.00005985
THALLIUM	190.8560		

10C-IN

LINEAR DYNAMIC RANGE

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Date:**	09/05/18 11:16

Analyte	LDR *ppm*
ALUMINUM	500
ANTIMONY	20
ARSENIC	100
BARIUM	50
BERYLLIUM	10
BORON	50
CADMIUM	20
CALCIUM	1000
CHROMIUM	100
COBALT	100
COPPER	66
IRON	500
LEAD	100
LITHIUM	50
MAGNESIUM	1000
MANGANESE	13
MOLYBDENUM	20
NICKEL	100
PHOSPHORUS	100
POTASSIUM	500
SELENIUM	100
SILICON	100
SILVER	20
SODIUM	1000
STRONTIUM	20
SULFUR	100
THALLIUM	20
TIN	50
TITANIUM	50
VANADIUM	20
ZINC	20

12-IN

ANALYSIS LOG

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Calibration Start Date:**	09/25/18 09:19
Analytical Run:	092518ICP13	**Calibration End Date:**	09/25/18 09:38

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP130925180916	20180925091625	09/25/18 09:16	1	
CAL	STD1	20180925091915	09/25/18 09:19	1	
CAL	STD2	20180925092157	09/25/18 09:21	1	
CAL	STD3	20180925092435	09/25/18 09:24	1	
CAL	STD4	20180925092712	09/25/18 09:27	1	
CAL	STD5	20180925092958	09/25/18 09:29	1	
CAL	STD6	20180925093251	09/25/18 09:32	1	
CAL	STD7	20180925093544	09/25/18 09:35	1	
CAL	STD8	20180925093834	09/25/18 09:38	1	
ICV	ICP130925180941-2	20180925094142-2	09/25/18 09:41	1	
ICB	ICP130925180944-2	20180925094433-2	09/25/18 09:44	1	
ICVLL	ICP130925180952-2	20180925095250-2	09/25/18 09:52	1	
ICSA	ICP130925181003-2	20180925100343-2	09/25/18 10:03	1	
ICSAB	ICP130925181006-2	20180925100620-2	09/25/18 10:06	1	
CCV	ICP130925181212-2	20180925121234-2	09/25/18 12:12	1	
CCB	ICP130925181215-2	20180925121525-2	09/25/18 12:15	1	
BLANK	R3344895-1	20180925122138	09/25/18 12:21	1	WG1170427
LCS	R3344895-2	20180925122415	09/25/18 12:24	1	WG1170427
LCSD	R3344895-3	20180925122651	09/25/18 12:26	1	WG1170427
RMW-4	L1028256-01	20180925122940	09/25/18 12:29	1	WG1170427
SD	R3344895-4	20180925123230	09/25/18 12:32	5	WG1170427
MS	R3344895-5	20180925123506	09/25/18 12:35	1	WG1170427
MSD	R3344895-6	20180925123743	09/25/18 12:37	1	WG1170427
CCV	ICP130925181249	20180925124904	09/25/18 12:49	1	
CCB	ICP130925181251	20180925125155	09/25/18 12:51	1	
RMW-3	L1028256-02	20180925130035	09/25/18 13:00	1	WG1170427
RMW-9	L1028256-03	20180925130321	09/25/18 13:03	1	WG1170427
WELL-09	L1028256-04	20180925130607	09/25/18 13:06	1	WG1170427
DUPE	L1028256-05	20180925130855	09/25/18 13:08	1	WG1170427
CCV	ICP130925181325	20180925132518	09/25/18 13:25	1	
CCB	ICP130925181328	20180925132808	09/25/18 13:28	1	
CCVLL	ICP130925181348-2	20180925134843-2	09/25/18 13:48	1	
CCVLL	ICP130925181407-2	20180925140728-2	09/25/18 14:07	1	
ICSA	ICP130925181421-2	20180925142110-2	09/25/18 14:21	1	
ICSAB	ICP130925181423-2	20180925142347-2	09/25/18 14:23	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
ARSENIC	0.01	.007312524	73.10	0.50	.4797218	95.90
BARIUM	0.0050	.004928709	98.60	0.50	.5160504	103
CADMIUM	0.0020	.001589609	79.50	0.50	.4926913	98.50
CHROMIUM	0.01	.01002182	100	0.50	.4956397	99.10
LEAD	0.0050	.005032409	101	0.50	.4890636	97.80
SELENIUM	0.01	.0020491	20.50	0.50	.4735656	94.70
SILVER	0.0050	.005128126	103	0.50	.4932936	98.70
File ID:		20180925091915			20180925092157	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ARSENIC	1	.9976131	99.80	2	2.006276	100
BARIUM	1	1.040548	104	2	2.061144	103
CADMIUM	1	1.00114	100	2	2.001258	100
CHROMIUM	1	1.005266	101	2	1.998457	99.90
LEAD	1	.9959028	99.60	2	2.004783	100
SELENIUM	1	.9846138	98.50	2	2.014341	101
SILVER	1	.9981035	99.80	2	2.002625	100
File ID:		20180925092435			20180925092712	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ARSENIC			
BARIUM	10	9.982914	99.80
CADMIUM			
CHROMIUM			
LEAD			
SELENIUM			
SILVER			
File ID:		20180925092958	

16A-IN

INITIAL CALIBRATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
ARSENIC	189.042	8	5	0.999918	63.12744	-0.105631
BARIUM	233.527	8	5	0.99996	2652.743	1.748409
CADMIUM	228.802	8	5	0.99999	3707.281	2.510955
CHROMIUM	267.716	8	5	0.999991	4877.982	10.38561
LEAD	220.353	8	5	0.999972	377.3082	-0.329304
SELENIUM	196.09	8	5	0.999788	55.08733	0.289053
SILVER	328.068	8	5	0.99999	7583.123	-3.06965

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

Sample ID: CALBLK Units: mg/l
Analyzed: 09/25/18 09:16 Sequence: 18 Standard ID: 18I14585

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7433.060	7423.381	7436.756	7439.043
YTTRIUM	360.073	Axial	127101.7	126506.9	127508.4	127289.7
YTTRIUM	360.073	Radial	8079.146	8086.948	8046.924	8103.566
INDIUM	230.606	Axial	2371.441	2365.893	2376.723	2371.708

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	10.02697	9.271032	11.21897	9.590909
ANTIMONY	206.833	Axial	0.6825683	0.8491963	0.1791587	1.019350
ARSENIC	189.042	Axial	-0.1056813	-0.1469298	0.6747386	-0.8448527
BARIUM	233.527	Axial	1.747853	2.606875	1.269509	1.367174
BERYLLIUM	313.042	Radial	-3.40833	-2.333333	-2.608333	-5.283333
BORON	249.678	Radial	0.6250000	0.04166667	3.583333	-1.75
CADMIUM	228.802	Axial	2.510306	3.485976	2.130738	1.914205
CALCIUM	317.933	Radial	60.69792	60.46875	60.01736	61.60764
CALCIUM	373.690	Radial	23.21875	23.51042	21.78819	24.35764
CERIUM	535.353	Radial	32.08333	33.61111	24.97222	37.66667
CHROMIUM	267.716	Axial	10.39177	8.444260	14.36303	8.368027
COBALT	228.616	Axial	-0.9942994	-1.409302	-0.5170969	-1.056499
COPPER	324.754	Axial	123.8629	122.1298	126.1449	123.3139
IRON	259.940	Radial	0.6805556	-1.333333	1.541667	1.833333
IRON	271.441	Radial	1.125	1.833333	0.4166667	1.125
LANTHANUM	333.749	Radial	1.596065	1.951389	3.881944	-1.045139
LEAD	220.353	Axial	-0.3295075	0.1136863	-0.1042721	-0.9979365
LITHIUM	670.784	Radial	-5.08922	5.234848	-17.46212	-3.040404
MAGNESIUM	279.079	Radial	0.7083333	0.4583333	-0.6666667	2.333333
MANGANESE	257.610	Axial	4.439601	4.118136	4.787677	4.412989
MOLYBDENUM	202.030	Axial	0.8781005	0.4374861	0.9896701	1.207145
NICKEL	231.604	Axial	-1.40967	-0.8771930	-1.010774	-2.341063
PHOSPHORUS	177.495	Axial	1.310027	1.499001	1.132956	1.298125
POTASSIUM	766.490	Radial	34.83712	13.67045	44.39773	46.44318
SELENIUM	196.090	Axial	0.2887251	0.7661341	0.2110154	-0.1109742
SILICON	251.611	Axial	31.21529	31.32280	30.68276	31.64030
SILVER	328.068	Axial	-3.06565	-4.450915	-1.124063	-3.621982
SODIUM	589.592	Radial	97.30556	88.45833	102.5417	100.9167
SODIUM	818.326	Radial	-44.3236	-33.41667	-51.58333	-47.97083
STRONTIUM	421.552	Radial	-0.08489088	-4.339935	-0.1166058	4.201869
SULFUR	182.034	Axial	2.834667	2.875861	2.643563	2.984578
THALLIUM	190.856	Axial	0.4699122	0.2998538	0.2999063	0.8099765
TIN	189.989	Axial	0.4709446	0.2409505	1.218483	-0.04659936
TITANIUM	334.941	Radial	3.363890	3.447084	5.822908	0.8216782
VANADIUM	292.402	Radial	-0.9583333	-1.375	-0.04166667	-1.458333
ZINC	206.200	Axial	1.906958	2.420608	1.530601	1.769666

Sample ID: STD1 Units: mg/l
Analyzed: 09/25/18 09:19 Sequence: 19 Standard ID: 18I14575

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7503.049	7519.177	7497.150	7492.819
YTTRIUM	360.073	Axial	127307.5	127348.0	127133.5	127441.1
YTTRIUM	360.073	Radial	8172.294	8147.969	8181.101	8187.813
INDIUM	230.606	Axial	2379.371	2381.494	2378.729	2377.889

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	20.94678	22.86315	20.52483	19.45235
ANTIMONY	206.833	Axial	2.024154	0.8415443	2.315666	2.915251
ARSENIC	189.042	Axial	0.3598610	0.9172614	-0.3285132	0.4908348
BARIUM	233.527	Axial	14.96332	15.78144	14.03317	15.07535
BERYLLIUM	313.042	Radial	23.86944	21.85417	22.90	26.85417
BORON	249.678	Radial	30.61111	29.50	31.70833	30.6250
CADMIUM	228.802	Axial	8.484126	9.329628	8.185412	7.937339
CALCIUM	317.933	Radial	479.0822	479.1285	477.6250	480.4931
CHROMIUM	267.716	Axial	59.36763	57.77870	60.05819	60.26600
COBALT	228.616	Axial	22.28583	22.32203	22.97576	21.55970
COPPER	324.754	Axial	232.9839	239.0599	231.4630	228.4289
IRON	259.940	Radial	25.44444	26.45833	24.58333	25.29167
LEAD	220.353	Axial	1.574638	1.480179	1.350281	1.893454
LITHIUM	670.784	Radial	81.70623	70.10606	96.26515	78.74747
MAGNESIUM	279.079	Radial	38.91667	38.6250	38.66667	39.45833
MANGANESE	257.610	Axial	340.3682	338.8103	341.9368	340.3574
MOLYBDENUM	202.030	Axial	5.259898	5.135465	5.059425	5.584805
NICKEL	231.604	Axial	8.074188	8.083500	8.086193	8.052871
PHOSPHORUS	177.495	Axial	3.502127	3.686431	3.743197	3.076752
POTASSIUM	766.490	Radial	405.1755	393.4470	412.6326	409.4470
SELENIUM	196.090	Axial	0.4054480	0.1758636	0.4091619	0.6313184
SILICON	251.611	Axial	417.1703	417.5957	418.7448	415.1704
SILVER	328.068	Axial	35.87935	38.56073	30.34081	38.73649
SODIUM	589.592	Radial	1050.556	1047.292	1052.875	1051.500
STRONTIUM	421.552	Radial	345.3158	341.7812	352.1959	341.9702
SULFUR	182.034	Axial	27.79509	27.50389	27.59080	28.29057
THALLIUM	190.856	Axial	1.063722	1.252274	1.341506	0.5973859
TIN	189.989	Axial	10.39278	10.45525	9.918916	10.80418
TITANIUM	334.941	Radial	83.83778	81.17064	84.25544	86.08726
VANADIUM	292.402	Radial	6.680556	6.291667	6.583333	7.166667
ZINC	206.200	Axial	92.33118	92.40950	92.35477	92.22926

Sample ID: STD2 Units: mg/l
Analyzed: 09/25/18 09:21 Sequence: 20 Standard ID: 18I14572

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7536.961	7541.210	7525.653	7544.019
YTTRIUM	360.073	Axial	127455.8	127061.9	127516.1	127789.3
YTTRIUM	360.073	Radial	8204.875	8191.874	8219.439	8203.313
INDIUM	230.606	Axial	2368.152	2371.672	2362.866	2369.917

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	75.68648	75.78948	74.59991	76.67004
ARSENIC	189.042	Axial	30.59945	31.16602	30.91236	29.71997
BARIUM	233.527	Axial	1389.860	1394.527	1384.013	1391.039
BERYLLIUM	313.042	Radial	6507.322	6502.697	6508.926	6510.341
CADMIUM	228.802	Axial	1854.621	1859.676	1853.097	1851.091
CHROMIUM	267.716	Axial	2434.847	2438.469	2441.818	2424.255
COBALT	228.616	Axial	1143.924	1144.034	1140.876	1146.863
COPPER	324.754	Axial	5527.915	5509.582	5516.606	5557.558
IRON	259.940	Radial	121.1284	121.8781	122.7311	118.7760
LEAD	220.353	Axial	183.9442	185.1772	182.3933	184.2621
LITHIUM	670.784	Radial	3110.794	3096.151	3116.900	3119.330
MANGANESE	257.610	Axial	16337.40	16307.20	16329.12	16375.89
MOLYBDENUM	202.030	Axial	404.9929	405.6959	404.1366	405.1460
NICKEL	231.604	Axial	483.3431	484.4405	481.0469	484.5419
PHOSPHORUS	177.495	Axial	12.16769	11.74448	12.40989	12.34870
SELENIUM	196.090	Axial	26.74490	26.67414	27.10654	26.45402
SILICON	251.611	Axial	1045.557	1039.743	1043.824	1053.105
SILVER	328.068	Axial	3748.031	3753.833	3729.982	3760.280
STRONTIUM	421.552	Radial	16853.87	16798.48	16881.91	16881.24
SULFUR	182.034	Axial	14.09472	13.27493	14.32849	14.68073
THALLIUM	190.856	Axial	45.73893	45.80365	45.50429	45.90886
TIN	189.989	Axial	100.7648	99.86137	100.9416	101.4914
TITANIUM	334.941	Radial	819.2560	818.5129	817.6480	821.6070
VANADIUM	292.402	Radial	201.6264	200.8825	202.8310	201.1657
ZINC	206.200	Axial	894.4452	896.3447	893.1740	893.8168

Sample ID: STD3 Units: mg/l
Analyzed: 09/25/18 09:24 Sequence: 21 Standard ID: 18I14571

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7536.670	7548.268	7532.693	7529.050
YTTRIUM	360.073	Axial	127422.4	127819.8	127117.8	127329.8
YTTRIUM	360.073	Radial	8197.664	8181.188	8178.984	8232.820
INDIUM	230.606	Axial	2347.266	2342.904	2345.402	2353.492

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	155.9318	155.0249	156.9097	155.8607
ARSENIC	189.042	Axial	63.74721	63.65373	62.92908	64.65882
BARIUM	233.527	Axial	2800.553	2802.028	2798.546	2801.087
BERYLLIUM	313.042	Radial	13218.39	13164.55	13220.71	13269.91
BORON	249.678	Radial	153.5602	151.2063	153.8014	155.6729
CADMIUM	228.802	Axial	3765.770	3750.025	3764.119	3783.165
CALCIUM	317.933	Radial	483.4276	483.1981	483.6723	483.4124
CHROMIUM	267.716	Axial	4926.418	4920.110	4937.937	4921.208
COBALT	228.616	Axial	2307.671	2307.009	2307.437	2308.568
COPPER	324.754	Axial	10999.91	11039.53	10971.05	10989.16
IRON	259.940	Radial	247.1856	247.4626	248.1284	245.9657
LEAD	220.353	Axial	371.6040	371.4495	372.0732	371.2893
LITHIUM	670.784	Radial	6319.128	6276.390	6316.458	6364.536
MANGANESE	257.610	Axial	32810.05	32820.02	32786.15	32823.97
MOLYBDENUM	202.030	Axial	814.2028	813.2430	813.7128	815.6527
NICKEL	231.604	Axial	979.6072	974.7086	981.6578	982.4554
PHOSPHORUS	177.495	Axial	23.99015	24.54757	22.43675	24.98614
SELENIUM	196.090	Axial	55.28921	56.00458	53.96516	55.89790
SILICON	251.611	Axial	2139.459	2127.166	2134.788	2156.421
SILVER	328.068	Axial	7584.713	7573.725	7582.972	7597.441
SODIUM	589.592	Radial	1038.278	1024.168	1051.531	1039.137
STRONTIUM	421.552	Radial	34126.47	33940.35	34095.70	34343.34
SULFUR	182.034	Axial	26.65305	25.73554	26.88637	27.33725
THALLIUM	190.856	Axial	92.34074	92.77337	91.20167	93.04718
TIN	189.989	Axial	203.8604	203.1986	204.8857	203.4967
TITANIUM	334.941	Radial	1653.205	1653.126	1648.856	1657.633
VANADIUM	292.402	Radial	410.4785	408.7770	409.2497	413.4088
ZINC	206.200	Axial	1820.724	1827.549	1819.511	1815.114

Sample ID: STD4 Units: mg/l
Analyzed: 09/25/18 09:27 Sequence: 22 Standard ID: 18I05716

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7536.179	7532.679	7545.518	7530.340
YTTRIUM	360.073	Axial	126789.8	126786.4	126830.5	126752.6
YTTRIUM	360.073	Radial	8226.111	8223.290	8184.039	8271.003
INDIUM	230.606	Axial	2318.396	2319.097	2317.850	2318.240

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	315.1591	315.1040	314.9290	315.4442
ARSENIC	189.042	Axial	128.3008	128.3394	128.0290	128.5339
BARIUM	233.527	Axial	5545.308	5548.822	5548.209	5538.893
BERYLLIUM	313.042	Radial	26460.28	26420.19	26359.50	26601.16
BORON	249.678	Radial	308.2702	307.3471	309.0803	308.3832
CADMIUM	228.802	Axial	7524.679	7553.174	7500.471	7520.390
CALCIUM	317.933	Radial	894.5278	898.4583	889.6350	895.4903
CHROMIUM	267.716	Axial	9734.881	9730.958	9743.183	9730.503
COBALT	228.616	Axial	4596.576	4600.300	4596.645	4592.783
COPPER	324.754	Axial	21689.97	21692.79	21665.66	21711.46
IRON	259.940	Radial	486.2260	484.9983	488.1507	485.5289
LEAD	220.353	Axial	739.1789	738.6289	738.4098	740.4980
MANGANESE	257.610	Axial	64659.42	64732.21	64629.86	64616.19
MOLYBDENUM	202.030	Axial	1614.576	1614.824	1611.391	1617.515
NICKEL	231.604	Axial	1950.782	1949.900	1949.734	1952.713
PHOSPHORUS	177.495	Axial	47.59810	51.30937	46.19481	45.29014
POTASSIUM	766.490	Radial	800.5134	801.3366	803.4713	796.7323
SELENIUM	196.090	Axial	112.7975	111.7186	113.6024	113.0715
SILICON	251.611	Axial	4453.066	4423.667	4452.527	4483.003
SILVER	328.068	Axial	15145.82	15139.67	15110.53	15187.26
SODIUM	589.592	Radial	2021.287	2014.628	2003.700	2045.534
STRONTIUM	421.552	Radial	68018.10	67806.14	67904.27	68343.90
SULFUR	182.034	Axial	52.15807	53.32889	51.40892	51.73638
THALLIUM	190.856	Axial	183.8115	184.6710	182.5116	184.2519
TIN	189.989	Axial	407.4760	408.6851	406.2481	407.4947
TITANIUM	334.941	Radial	3324.838	3321.455	3318.746	3334.313
VANADIUM	292.402	Radial	816.4600	816.3231	812.5728	820.4840
ZINC	206.200	Axial	3647.564	3637.865	3649.228	3655.599

Sample ID: STD5 Units: mg/l
Analyzed: 09/25/18 09:29 Sequence: 23 Standard ID: 18I14573

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7470.573	7457.996	7489.289	7464.435
YTTRIUM	360.073	Axial	124854.7	124854.1	124871.9	124838.1
YTTRIUM	360.073	Radial	8237.275	8249.879	8241.625	8220.321
INDIUM	230.606	Axial	2266.096	2264.245	2270.742	2263.302

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	555.3573	551.5668	559.1624	555.3426
BARIUM	233.527	Axial	26617.48	26573.58	26659.77	26619.10
CALCIUM	317.933	Radial	4207.819	4190.903	4220.348	4212.204
CALCIUM	373.690	Radial	3144.344	3153.069	3152.580	3127.383
IRON	259.940	Radial	2411.941	2404.067	2412.843	2418.914
IRON	271.441	Radial	180.0591	180.9298	178.8861	180.3613
MAGNESIUM	279.079	Radial	389.3561	387.3919	389.7756	390.9008
POTASSIUM	766.490	Radial	3790.305	3766.403	3801.636	3802.875
SILICON	251.611	Axial	19845.08	19908.75	19819.32	19807.16
SODIUM	589.592	Radial	9732.717	9726.256	9754.572	9717.324
SODIUM	818.326	Radial	466.3599	463.5853	474.6135	460.8808
SULFUR	182.034	Axial	262.4130	261.2424	266.0744	259.9223

Sample ID: STD6 Units: mg/l
Analyzed: 09/25/18 09:32 Sequence: 24 Standard ID: 18H16986

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6628.006	6616.572	6646.623	6620.823
YTTRIUM	360.073	Axial	107989.2	107506.5	108383.8	108077.3
YTTRIUM	360.073	Radial	7745.647	7729.496	7735.175	7772.268
INDIUM	230.606	Axial	1745.594	1742.862	1749.098	1744.821

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	12868.69	12857.09	12837.66	12911.33
CALCIUM	373.690	Radial	70513.88	70434.70	70413.82	70693.13
CERIUM	535.353	Radial	2437.673	2415.362	2441.007	2456.649
IRON	271.441	Radial	1626.966	1633.247	1618.929	1628.721
MAGNESIUM	279.079	Radial	9033.699	9034.239	9025.740	9041.119
POTASSIUM	766.490	Radial	18153.38	18109.86	18142.13	18208.15
SODIUM	818.326	Radial	11429.68	11400.68	11423.81	11464.55
SULFUR	182.034	Axial	1153.394	1159.371	1162.393	1138.418

Sample ID: STD7 Units: mg/l
Analyzed: 09/25/18 09:35 Sequence: 25 Standard ID: 18I14574

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6362.762	6355.589	6374.308	6358.388
YTTRIUM	360.073	Axial	102531.3	102401.0	102506.7	102686.3
YTTRIUM	360.073	Radial	7642.504	7676.367	7681.194	7569.951
INDIUM	230.606	Axial	1597.953	1596.815	1599.674	1597.371

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	25346.12	25497.49	25447.85	25093.01
CALCIUM	373.690	Radial	136823.6	137587.4	137498.3	135385.0
IRON	271.441	Radial	3143.840	3155.589	3159.155	3116.775
MAGNESIUM	279.079	Radial	17754.03	17791.98	17862.96	17607.15
POTASSIUM	766.490	Radial	36110.72	36356.89	36219.33	35755.94
SODIUM	818.326	Radial	22589.15	22770.39	22662.42	22334.65
SULFUR	182.034	Axial	2240.129	2247.428	2249.261	2223.697

Sample ID: STD8 Units: mg/l
Analyzed: 09/25/18 09:38 Sequence: 26 Standard ID: 18G25990

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7445.050	7444.796	7439.173	7451.181
YTTRIUM	360.073	Axial	126272.4	126346.7	126155.0	126315.7
YTTRIUM	360.073	Radial	8086.088	8091.163	8124.351	8042.750
INDIUM	230.606	Axial	2375.464	2370.952	2376.874	2378.566

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
LANTHANUM	333.749	Radial	6403.155	6422.549	6409.684	6377.233

Sample ID: ICV-2 Units: mg/l
Analyzed: 09/25/18 09:41 Sequence: 27 Standard ID: 18F29789

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	7369.484	7371.906	7370.939	7357.369	7377.724
YTTRIUM	360.073	Axial	123295.9	123273.4	123293.6	123031.2	123585.2
YTTRIUM	360.073	Radial	8091.747	8062.438	8097.861	8139.267	8067.422
INDIUM	230.606	Axial	2214.894	2214.973	2214.050	2213.421	2217.131

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	539.6475	9.868040	9.900160	9.815977	9.900625	9.855399
ANTIMONY	206.833	Axial	152.9044	0.9946593	0.9940657	0.9951685	0.9856677	1.003735
ARSENIC	189.042	Axial	60.31447	0.9653521	0.9766236	0.9669901	0.9565304	0.9612642
BARIUM	233.527	Axial	2704.543	1.027663	1.026056	1.027040	1.028200	1.029357
BERYLLIUM	313.042	Radial	13059.68	1.003759	1.007330	1.003234	1.002499	1.001973
BORON	249.678	Radial	150.9883	0.9943768	0.9971627	0.9852589	0.9892537	1.005832
CADMIUM	228.802	Axial	3650.505	0.9925033	0.9928564	0.9899865	0.9943043	0.9928659
CALCIUM	317.933	Radial	4156.545	10.05102	10.09871	10.05302	9.980629	10.07173
CHROMIUM	267.716	Axial	4737.827	0.9991224	0.9958069	0.9973124	1.004959	0.9984113
COBALT	228.616	Axial	2205.361	1.007353	1.005533	1.008926	1.006011	1.008941
COPPER	324.754	Axial	10461.15	0.9856383	0.9838861	0.9853276	0.9881871	0.9851524
IRON	259.940	Radial	2368.154	9.989238	10.00462	10.00087	9.959561	9.991911
LEAD	220.353	Axial	349.4994	0.9926386	0.9927422	0.9884832	0.9929774	0.9963515
LITHIUM	670.784	Radial	6142.511	0.9878673	0.9909809	0.9890878	0.9849191	0.9864813
MAGNESIUM	279.079	Radial	383.8340	10.18283	10.18545	10.10940	10.22423	10.21225
MANGANESE	257.610	Axial	31236.74	0.9914179	0.9911829	0.9918409	0.9928463	0.9898016
MOLYBDENUM	202.030	Axial	801.7371	1.013431	1.012158	1.011435	1.014165	1.015966
NICKEL	231.604	Axial	929.2582	1.000642	0.9976510	1.001506	1.000404	1.003007
PHOSPHORUS	177.495	Axial	23.70888	0.9974840	0.9756512	1.028616	0.8999476	1.085721
POTASSIUM	766.490	Radial	3740.317	9.720205	9.667475	9.712742	9.756458	9.744146
SELENIUM	196.090	Axial	53.80348	0.9798715	0.9727082	0.9738793	0.9817963	0.9911022
SILICON	251.611	Axial	2102.195	1.054507	1.055885	1.050036	1.056375	1.055733
SILVER	328.068	Axial	7187.949	0.9775499	0.9779702	0.9772752	0.9764046	0.9785497
SODIUM	589.592	Radial	9628.776	10.07456	10.11910	10.06699	10.05213	10.06000
STRONTIUM	421.552	Radial	13476.78	0.4024405	0.4030793	0.4025180	0.4020221	0.4021427
SULFUR	182.034	Axial	242.8451	10.02699	10.11446	9.986819	9.909768	10.09693
THALLIUM	190.856	Axial	85.57580	0.9755015	0.9876761	0.9724937	0.9694677	0.9723684
TIN	189.989	Axial	197.7893	0.9923897	0.9876366	0.9901431	0.9919568	0.9998223
TITANIUM	334.941	Radial	1657.851	1.014126	1.016801	1.016149	1.011381	1.012174
VANADIUM	292.402	Radial	404.9188	1.007855	1.000604	1.013210	1.017244	1.000363
ZINC	206.200	Axial	1770.333	0.9935313	0.9934879	0.9943638	0.9917455	0.9945279
CERIUM	535.353	Radial	37.16097	0.01997974	0.003612523	0.02441820	0.05121591	0.0006723297
LANTHANUM	333.749	Radial	-3.14485	-0.007411104	-0.009615692	-0.002849840	-0.01048737	-0.006691516

Sample ID: ICB-2 Units: mg/l
Analyzed: 09/25/18 09:44 Sequence: 28

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7424.109	7443.380	7421.107	7407.839
YTTRIUM	360.073	Axial	126446.9	126490.1	126513.9	126336.6
YTTRIUM	360.073	Radial	8050.623	8031.747	8035.889	8084.233
INDIUM	230.606	Axial	2374.996	2377.961	2377.526	2369.500

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	9.374708	-0.01158222	0.01857243	-0.03709646	-0.01622262
ANTIMONY	206.833	Axial	0.9673702	0.001852524	0.003121165	-0.002215925	0.004652332
ARSENIC	189.042	Axial	-0.3076314	-0.003200317	-0.009002240	0.003192457	-0.003791167
BARIUM	233.527	Axial	1.422460	-0.0001221891	-0.0001984263	0.00002023057	-0.0001883715
BERYLLIUM	313.042	Radial	-4.99583	-0.0001236179	-0.0001439927	-0.00004416543	-0.0001826955
BORON	249.678	Radial	0.2083333	-0.002816783	-0.004738259	-0.01000994	0.006297850
CADMIUM	228.802	Axial	1.434688	-0.0002897999	-0.0002873648	-0.0003722381	-0.0002097967
CALCIUM	317.933	Radial	63.07870	0.006411743	0.01127052	0.005113193	0.002851519
CERIUM	535.353	Radial	23.18519	-0.03505272	0.008828602	-0.08156886	-0.03241790
CHROMIUM	267.716	Axial	13.81790	0.0007181058	0.0007757431	0.001077716	0.0003008586
COBALT	228.616	Axial	-0.9866957	0.000003748001	0.0002774979	0.00008250751	-0.0003487615
COPPER	324.754	Axial	127.8302	0.0004283280	0.0004357270	0.0004395183	0.0004097388
IRON	259.940	Radial	2.986111	0.009792895	0.005977267	0.01783359	0.005567832
LANTHANUM	333.749	Radial	0.6365741	-0.001498321	-0.0002925524	0.0007050983	-0.004907510
LEAD	220.353	Axial	0.2631633	0.001570207	-0.0007626915	0.003139366	0.002333945
LITHIUM	670.784	Radial	-17.0740	-0.001936961	-0.004366888	-0.0002528502	-0.001191146
MAGNESIUM	279.079	Radial	-0.1111111	-0.02162316	0.03590362	-0.02880170	-0.07197141
MANGANESE	257.610	Axial	7.089269	0.00008272268	0.00009113200	0.0001247646	0.00003227147
MOLYBDENUM	202.030	Axial	1.001195	0.0001570158	-0.0004162186	0.0005275811	0.0003596847
NICKEL	231.604	Axial	-1.72735	-0.0003175797	-0.0001285020	0.0003474353	-0.001171672
PHOSPHORUS	177.495	Axial	1.268983	-0.001767142	0.003770494	0.01386439	-0.02293631
POTASSIUM	766.490	Radial	46.21465	0.03040469	0.05852137	0.05147005	-0.01877735
SELENIUM	196.090	Axial	-0.3439578	-0.01149915	-0.01308933	-0.006257777	-0.01515034
SILICON	251.611	Axial	32.02130	0.0004795163	-0.001894965	0.002223046	0.001110468
SILVER	328.068	Axial	-0.1109724	0.0003900013	0.0003827521	0.0005868146	0.0002004371
SODIUM	589.592	Radial	72.98611	-0.02550721	-0.03158275	-0.03290564	-0.01203324
STRONTIUM	421.552	Radial	3.221604	0.00009935668	0.0001203809	0.00009414368	0.00008354548
SULFUR	182.034	Axial	2.301105	-0.02195558	-0.04262914	-0.01372889	-0.009508718
THALLIUM	190.856	Axial	0.6249910	0.001659771	-0.0002939418	-0.005147133	0.01042039
TIN	189.989	Axial	0.2240526	-0.001230618	0.00008219714	-0.002536446	-0.001237606
TITANIUM	334.941	Radial	2.140790	-0.0007481080	0.0005221046	-0.001280180	-0.001486249
VANADIUM	292.402	Radial	-0.1666667	0.001957835	0.001649177	-0.0002258084	0.004450135
ZINC	206.200	Axial	2.047336	0.00007893850	0.0004503715	-0.0001650630	-0.00004849300

Sample ID: ICVLL-2 Units: mg/l
Analyzed: 09/25/18 09:52 Sequence: 31 Standard ID: 18I14575

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7518.124	7526.641	7518.988	7508.741
YTTRIUM	360.073	Axial	127848.5	128289.3	127794.5	127461.7
YTTRIUM	360.073	Radial	8153.243	8184.972	8140.639	8134.118
INDIUM	230.606	Axial	2388.023	2387.009	2387.015	2390.044

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	18.80621	0.1605961	0.1683803	0.1320401	0.1813678
ANTIMONY	206.833	Axial	2.493888	0.01154997	0.01215665	0.01238341	0.01010985
ARSENIC	189.042	Axial	0.5374083	0.01008443	0.01724753	0.009903512	0.003102263
BARIUM	233.527	Axial	16.09194	0.005338363	0.005322380	0.005498570	0.005194138
BERYLLIUM	313.042	Radial	23.46667	0.002051637	0.002068777	0.001997783	0.002088353
BORON	249.678	Radial	30.52778	0.1961921	0.1919579	0.2037082	0.1929100
CADMIUM	228.802	Axial	8.977632	0.001717181	0.001452631	0.001600402	0.002098511
CALCIUM	317.933	Radial	495.5938	1.057823	1.054943	1.068293	1.050231
CHROMIUM	267.716	Axial	59.56779	0.01001270	0.009192080	0.01026033	0.01058570
COBALT	228.616	Axial	21.49284	0.009525996	0.009934426	0.008860223	0.009783338
COPPER	324.754	Axial	248.6842	0.01140738	0.01128125	0.01119360	0.01174729
IRON	259.940	Radial	25.65278	0.1045290	0.1113103	0.1035442	0.09873255
LEAD	220.353	Axial	1.569678	0.005005193	0.006510072	0.006115804	0.002389703
LITHIUM	670.784	Radial	90.63215	0.01527663	0.01492058	0.01721011	0.01369922
MAGNESIUM	279.079	Radial	40.88889	1.059737	1.088089	1.042381	1.048740
MANGANESE	257.610	Axial	356.2529	0.01076920	0.01077195	0.01078472	0.01075093
MOLYBDENUM	202.030	Axial	4.831747	0.004893114	0.003429039	0.005015367	0.006234935
NICKEL	231.604	Axial	10.25085	0.01163925	0.01179649	0.01168876	0.01143251
PHOSPHORUS	177.495	Axial	3.440373	0.09229843	0.09317080	0.08400990	0.09971460
POTASSIUM	766.490	Radial	424.4255	1.013538	0.9590058	1.037856	1.043753
SELENIUM	196.090	Axial	0.7085077	0.007467689	0.01621727	-0.005281092	0.01146689
SILICON	251.611	Axial	422.1431	0.1917916	0.1899102	0.1929217	0.1925427
SILVER	328.068	Axial	35.11000	0.005007763	0.005236278	0.004449621	0.005337391
SODIUM	589.592	Radial	1074.125	1.023748	1.028445	1.017840	1.024960
STRONTIUM	421.552	Radial	349.8512	0.01037119	0.01020076	0.01065777	0.01025504
SULFUR	182.034	Axial	27.55601	1.010961	0.9743865	1.046877	1.011620
THALLIUM	190.856	Axial	1.329300	0.009099336	0.009819194	0.01087063	0.006608185
TIN	189.989	Axial	10.67707	0.05029123	0.04494839	0.05373217	0.05219312
TITANIUM	334.941	Radial	84.98566	0.04963238	0.04870506	0.05111500	0.04907709
VANADIUM	292.402	Radial	5.222222	0.01524896	0.01577873	0.01122363	0.01874451
ZINC	206.200	Axial	110.0810	0.05955970	0.05950402	0.05981183	0.05936327
CERIUM	535.353	Radial	24.14815	-0.03241745	-0.03730431	-0.006284977	-0.05366307
LANTHANUM	333.749	Radial	0.03819444	-0.002450158	0.0005341168	-0.006221605	-0.001662985

Sample ID: ICSA-2 Units: mg/l
Analyzed: 09/25/18 10:03 Sequence: 32 Standard ID: 18I14579

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6425.926	6412.051	6430.592	6435.135
YTTRIUM	360.073	Axial	104549.0	104465.4	104577.3	104604.4
YTTRIUM	360.073	Radial	7636.869	7699.452	7598.934	7612.220
INDIUM	230.606	Axial	1673.883	1674.540	1673.877	1673.233

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	25440.61	502.0835	501.4141	500.9693	503.8670
ANTIMONY	206.833	Axial	-0.1189747	-0.005304535	0.0005260234	0.004240200	-0.02067983
ARSENIC	189.042	Axial	-2.38899	-0.04209281	-0.03637542	-0.03240065	-0.05750236
BARIUM	233.527	Axial	6.533372	0.002190955	0.003319724	0.001418715	0.001834425
BERYLLIUM	313.042	Radial	-2.90005	0.00002534815	0.0002107253	0.0001312749	-0.0002659557
BORON	249.678	Radial	-15.6799	-0.1140817	-0.1085187	-0.1203028	-0.1134237
CADMIUM	228.802	Axial	2.352918	0.00005644610	-0.0003021105	0.0001916151	0.0002798338
CALCIUM	373.690	Radial	137419.2	500.8576	499.6838	500.5248	502.3641
CERIUM	535.353	Radial	111.9248	0.3439768	0.3265899	0.3536681	0.3516725
CHROMIUM	267.716	Axial	16.91640	0.002086854	0.002045253	0.001719269	0.002496040
COBALT	228.616	Axial	-4.82806	-0.002492696	-0.001803699	-0.003086669	-0.002587718
COPPER	324.754	Axial	131.4603	0.003324833	0.003492750	0.003799426	0.002682322
IRON	271.441	Radial	3111.889	197.2701	196.4194	197.6677	197.7234
LANTHANUM	333.749	Radial	-1.38703	-0.004811011	-0.001884467	-0.007533711	-0.005014853
LEAD	220.353	Axial	-8.90127	-0.03255129	-0.02631790	-0.03559914	-0.03573682
LITHIUM	670.784	Radial	47.92543	0.008986447	0.008157063	0.01047442	0.008327855
MAGNESIUM	279.079	Radial	17976.41	506.2256	504.8620	506.6646	507.1502
MANGANESE	257.610	Axial	125.4292	0.004558789	0.004590012	0.004624793	0.004461563
MOLYBDENUM	202.030	Axial	0.5573455	-0.0002925881	-0.0003725682	-0.0004632812	-0.00004191489
NICKEL	231.604	Axial	-3.26260	-0.003226502	-0.003056181	-0.003943179	-0.002680146
PHOSPHORUS	177.495	Axial	0.8369440	-0.01508778	-0.008939322	-0.01758145	-0.01874255
POTASSIUM	766.490	Radial	25.48240	-0.02073136	-0.02124398	-0.03961171	-0.001338390
SELENIUM	196.090	Axial	-1.03018	-0.02686818	-0.01648322	-0.03370161	-0.03041971
SILICON	251.611	Axial	21.82510	-0.002312111	-0.002564764	-0.0009976126	-0.003373956
SILVER	328.068	Axial	3.531283	0.0009712783	0.001837360	0.0005649417	0.0005115336
SODIUM	589.592	Radial	73.78895	-0.02045438	-0.00005510194	-0.01636325	-0.04494479
STRONTIUM	421.552	Radial	-150.328	-0.004754229	-0.004680005	-0.005017490	-0.004565192
SULFUR	182.034	Axial	1.703514	-0.03583872	-0.08166390	-0.006775036	-0.01907722
THALLIUM	190.856	Axial	-1.39639	-0.02620037	-0.01681969	-0.04192059	-0.01986083
TIN	189.989	Axial	0.2570085	-0.0008615589	0.002898764	-0.003372359	-0.002111082
TITANIUM	334.941	Radial	-3.53393	-0.004366733	-0.003395098	-0.002892202	-0.006812899
VANADIUM	292.402	Radial	-10.9386	-0.02640264	-0.02648807	-0.02778972	-0.02493013
ZINC	206.200	Axial	8.592379	0.004472979	0.003729633	0.004949704	0.004739600

Sample ID: ICSAB-2 Units: mg/l
Analyzed: 09/25/18 10:06 Sequence: 33 Standard ID: 18I14580

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6469.435	6461.069	6480.866	6466.369
YTTRIUM	360.073	Axial	105335.3	105150.3	105420.8	105434.9
YTTRIUM	360.073	Radial	7670.611	7642.290	7716.562	7652.982
INDIUM	230.606	Axial	1679.753	1681.972	1683.776	1673.510

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	25626.63	503.5302	504.3301	503.0690	503.1916
ANTIMONY	206.833	Axial	67.83431	0.5004786	0.4994626	0.4964003	0.5055730
ARSENIC	189.042	Axial	25.51042	0.4659808	0.4560768	0.4551550	0.4867105
BARIUM	233.527	Axial	1143.632	0.4946687	0.4938386	0.4941865	0.4959810
BERYLLIUM	313.042	Radial	6063.539	0.4917634	0.4929732	0.4902142	0.4921026
BORON	249.678	Radial	127.6473	0.8863283	0.8792548	0.8898053	0.8899249
CADMIUM	228.802	Axial	3344.465	1.035831	1.037024	1.035591	1.034877
CALCIUM	373.690	Radial	138289.4	501.8091	502.7185	501.4747	501.2341
CERIUM	535.353	Radial	122.7302	0.3871136	0.3908685	0.4055942	0.3648780
CHROMIUM	267.716	Axial	1997.501	0.4919825	0.4934286	0.4892547	0.4932642
COBALT	228.616	Axial	866.6727	0.5222040	0.5227974	0.5185583	0.5252564
COPPER	324.754	Axial	4844.758	0.5290533	0.5279297	0.5295944	0.5296360
IRON	271.441	Radial	3138.202	198.0609	198.9058	197.8299	197.4469
LANTHANUM	333.749	Radial	-2.31824	-0.006320731	-0.008235466	-0.006971271	-0.003755455
LEAD	220.353	Axial	261.2673	0.9784543	0.9762997	0.9834145	0.9756486
LITHIUM	670.784	Radial	47.83570	0.008932932	0.008585389	0.008291429	0.009921979
MAGNESIUM	279.079	Radial	18101.12	507.4899	508.3605	507.6511	506.4582
MANGANESE	257.610	Axial	13350.93	0.4959260	0.4961779	0.4963793	0.4952207
MOLYBDENUM	202.030	Axial	334.2780	0.4807480	0.4810707	0.4826464	0.4785269
NICKEL	231.604	Axial	727.7451	1.033258	1.031186	1.036337	1.032250
PHOSPHORUS	177.495	Axial	0.8517572	-0.01466029	-0.05161563	0.01134859	-0.003713830
POTASSIUM	766.490	Radial	22.52172	-0.02914809	-0.01424432	-0.05520342	-0.01799652
SELENIUM	196.090	Axial	23.40071	0.4828054	0.4600961	0.4924414	0.4958786
SILICON	251.611	Axial	1656.118	0.9711941	0.9720859	0.9640802	0.9774161
SILVER	328.068	Axial	6882.356	1.095538	1.097442	1.095363	1.093809
SODIUM	589.592	Radial	49.03238	-0.04835644	-0.04635402	-0.04449121	-0.05422410
STRONTIUM	421.552	Radial	-150.730	-0.004745638	-0.004796770	-0.004711522	-0.004728623
SULFUR	182.034	Axial	1.073955	-0.06629199	-0.03694039	-0.06251730	-0.09941829
THALLIUM	190.856	Axial	30.13831	0.4502903	0.4582040	0.4545285	0.4381384
TIN	189.989	Axial	77.75766	0.4431175	0.4361956	0.4494629	0.4436940
TITANIUM	334.941	Radial	773.9364	0.4983637	0.4981795	0.4989711	0.4979405
VANADIUM	292.402	Radial	174.9048	0.4605412	0.4650358	0.4651577	0.4514299
ZINC	206.200	Axial	1438.168	0.9193251	0.9163226	0.9203921	0.9212607

Sample ID: CCV-2 Units: mg/l
Analyzed: 09/25/18 12:12 Sequence: 79 Standard ID: 18I14581

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7072.610	7052.177	7094.827	7070.827
YTTRIUM	360.073	Axial	117855.3	118083.9	117565.4	117916.7
YTTRIUM	360.073	Radial	7898.117	7885.861	7906.858	7901.630
INDIUM	230.606	Axial	2055.662	2055.454	2057.527	2054.005

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	528.0200	9.892559	9.836610	9.936105	9.904962
ANTIMONY	206.833	Axial	73.16650	0.4937144	0.4909620	0.4963467	0.4938345
ARSENIC	189.042	Axial	60.54259	1.009600	0.9994415	1.005094	1.024265
BARIUM	233.527	Axial	1286.304	0.5089495	0.5101474	0.5093534	0.5073477
BERYLLIUM	313.042	Radial	2555.467	0.2014349	0.2002736	0.2012754	0.2027559
BORON	249.678	Radial	149.0563	1.005730	0.9879579	1.024701	1.004532
CADMIUM	228.802	Axial	1764.063	0.4994124	0.4998057	0.4982081	0.5002235
CALCIUM	373.690	Radial	14915.85	52.49414	52.41462	52.40410	52.66369
CHROMIUM	267.716	Axial	4581.006	1.010668	1.013780	1.012279	1.005946
COBALT	228.616	Axial	2106.082	1.036509	1.036402	1.037206	1.035920
COPPER	324.754	Axial	10077.84	0.9934441	0.9916341	0.9932487	0.9954495
IRON	259.940	Radial	2315.243	10.00543	10.00105	9.988039	10.02719
LEAD	220.353	Axial	162.9821	0.4991884	0.4927577	0.5015465	0.5032611
LITHIUM	670.784	Radial	5975.462	0.9845564	0.9814103	0.9847682	0.9874905
MAGNESIUM	279.079	Radial	366.0129	9.947670	9.895072	9.888595	10.05934
MANGANESE	257.610	Axial	30274.19	1.005223	1.007319	1.005025	1.003326
MOLYBDENUM	202.030	Axial	194.0401	0.2547490	0.2552342	0.2534604	0.2555523
NICKEL	231.604	Axial	891.8505	1.034703	1.033287	1.035098	1.035723
PHOSPHORUS	177.495	Axial	23.14559	1.015920	1.100831	0.9063682	1.040560
POTASSIUM	766.490	Radial	17959.33	48.17555	48.19125	48.08538	48.25000
SELENIUM	196.090	Axial	51.81493	0.9832672	0.9900932	1.004855	0.9548533
SILICON	251.611	Axial	3692.515	1.950655	1.953529	1.946468	1.951966
SILVER	328.068	Axial	3434.862	0.4889042	0.4874258	0.4892772	0.4900097
SODIUM	818.326	Radial	2355.746	51.28504	51.48175	50.82757	51.54581
STRONTIUM	421.552	Radial	32593.92	0.9971674	0.9959770	0.9938032	1.001722
SULFUR	182.034	Axial	118.3137	5.032581	5.072964	4.922575	5.102204
THALLIUM	190.856	Axial	77.18647	0.9478897	0.9359430	0.9409029	0.9668233
TIN	189.989	Axial	94.46849	0.4927079	0.4934798	0.4899637	0.4946803
TITANIUM	334.941	Radial	1630.099	1.021604	1.018428	1.020383	1.026002
VANADIUM	292.402	Radial	400.3993	1.021035	1.021981	1.022763	1.018360
ZINC	206.200	Axial	1709.700	0.9997914	1.001086	0.9966752	1.001613
CERIUM	535.353	Radial	43.73266	0.05046100	0.06187832	0.05931889	0.03018579
LANTHANUM	333.749	Radial	-2.39844	-0.006335820	-0.001289962	-0.009743122	-0.007974377

Sample ID: CCB-2 Units: mg/l
Analyzed: 09/25/18 12:15 Sequence: 80

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7446.781	7444.419	7457.942	7437.982
YTTRIUM	360.073	Axial	126942.1	127398.5	126568.2	126859.6
YTTRIUM	360.073	Radial	8000.072	8024.257	8021.851	7954.108
INDIUM	230.606	Axial	2387.459	2384.664	2387.941	2389.770

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	10.81307	0.01669899	-0.02097261	0.02800369	0.04306587
ANTIMONY	206.833	Axial	0.5058964	-0.001154149	-0.004638229	0.003517260	-0.002341479
ARSENIC	189.042	Axial	0.3692240	0.007510844	0.007257797	0.008192521	0.007082213
BARIUM	233.527	Axial	0.6006184	-0.0004328221	-0.0005479416	-0.0007043019	-0.00004622281
BERYLLIUM	313.042	Radial	-4.14166	-0.00006029629	0.0001852637	-0.0001335133	-0.0002326393
BORON	249.678	Radial	-0.06944444	-0.004647398	-0.008906890	-0.0002916247	-0.004743679
CADMIUM	228.802	Axial	0.7693598	-0.0004702492	-0.0003013332	-0.0004241633	-0.0006852511
CALCIUM	317.933	Radial	60.44907	0.0008774107	-0.001502692	-0.002859376	0.006994301
CERIUM	535.353	Radial	32.40741	0.002497961	0.03524682	0.01456881	-0.04232175
CHROMIUM	267.716	Axial	12.74289	0.0004873887	0.0001047286	0.0008998847	0.0004575526
COBALT	228.616	Axial	-0.4615001	0.0002290822	0.0005756497	0.0002969326	-0.0001853357
COPPER	324.754	Axial	123.1582	-0.00005032126	-0.0002087763	-0.00009087618	0.0001486887
IRON	259.940	Radial	4.083333	0.01453860	0.01804089	0.01414574	0.01142916
LANTHANUM	333.749	Radial	2.390046	0.001266361	0.003043641	0.0005466917	0.0002087515
LEAD	220.353	Axial	-0.9621459	-0.001657701	0.001367968	-0.0005256488	-0.005815421
LITHIUM	670.784	Radial	-18.1683	-0.002122320	-0.003906477	-0.003113000	0.0006525175
MAGNESIUM	279.079	Radial	-1.43055	-0.05728171	-0.03551668	-0.05898027	-0.07734819
MANGANESE	257.610	Axial	6.661640	0.00006864229	0.0001133718	0.00006895347	0.00002360159
MOLYBDENUM	202.030	Axial	1.313806	0.0005441399	0.001287086	0.0001139832	0.0002313505
NICKEL	231.604	Axial	-0.8506083	0.0005664133	-0.0004564850	0.0008949266	0.001260798
PHOSPHORUS	177.495	Axial	1.083304	-0.01006703	0.04628303	-0.06417180	-0.01231233
POTASSIUM	766.490	Radial	71.30556	0.09752034	0.1088826	0.1301718	0.05350662
SELENIUM	196.090	Axial	-0.8323508	-0.02033162	-0.01811418	-0.01810925	-0.02477142
SILICON	251.611	Axial	23.76717	-0.003662493	-0.003445508	-0.002697579	-0.004844391
SILVER	328.068	Axial	-6.62029	-0.0004691841	-0.0005622645	-0.0004538329	-0.0003914548
SODIUM	589.592	Radial	22.08333	-0.07940678	-0.07983593	-0.07991783	-0.07846659
STRONTIUM	421.552	Radial	7.097904	0.0002172902	0.00006108459	0.0002801205	0.0003106655
SULFUR	182.034	Axial	2.149278	-0.02853420	-0.05318879	-0.03899944	0.006585635
THALLIUM	190.856	Axial	0.07046455	-0.004282138	-0.009160507	-0.0005430070	-0.003142900
TIN	189.989	Axial	0.6834617	0.001054355	0.003809229	-0.0004434433	-0.0002027196
TITANIUM	334.941	Radial	3.417451	0.00004963251	-0.0001721055	0.0004216677	-0.0001006646
VANADIUM	292.402	Radial	-0.5555556	0.0009971882	-0.004924785	0.002274492	0.005641858
ZINC	206.200	Axial	1.167879	-0.0004130795	-0.0003702577	-0.0003957967	-0.0004731841

Sample ID: BLANK DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:21 Sequence: 81

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7392.259	7398.966	7393.229	7384.581
YTTRIUM	360.073	Axial	125331.8	126452.9	123205.9	126336.5
YTTRIUM	360.073	Radial	8083.757	8063.274	8122.809	8065.188
INDIUM	230.606	Axial	2335.587	2334.159	2339.091	2333.511

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	-0.2796914	-0.002780786	-0.007688319	0.002914528	-0.003568566
BARIUM	233.527	Axial	2.363893	0.0002369292	0.0001458012	0.0004068663	0.0001581200
CADMIUM	228.802	Axial	0.6589280	-0.0004986573	-0.0004427672	-0.0004029128	-0.0006502920
CHROMIUM	267.716	Axial	14.74653	0.0009403010	0.0004979451	0.001357516	0.0009654424
LEAD	220.353	Axial	-0.3638042	-0.0001071047	-0.001777307	0.001173163	0.0002828293
SELENIUM	196.090	Axial	-0.2332930	-0.009505597	-0.008285521	-0.01132949	-0.008901775
SILVER	328.068	Axial	-0.2478312	0.0003747509	0.0003277372	0.0007446209	0.00005189469
ALUMINUM	308.215	Radial	9.265969	-0.01430863	-0.008271985	-0.02918394	-0.005469977
ANTIMONY	206.833	Axial	-0.1966656	-0.005701853	-0.01113720	-0.0003618787	-0.005606479
BERYLLIUM	313.042	Radial	-3.02500	0.00002966010	-0.00004473171	-0.00006736001	0.0002010720
BORON	249.678	Radial	0.3055556	-0.002140441	-0.01054321	-0.01077110	0.01489298
CALCIUM	317.933	Radial	63.30671	0.006328666	0.005119315	0.005227673	0.008639010
CERIUM	535.353	Radial	31.24074	-0.003405092	-0.01487561	0.01258004	-0.007919705
COBALT	228.616	Axial	-1.15683	-0.00007657902	-0.0001106508	-0.00009385040	-0.00002523586
COPPER	324.754	Axial	130.7622	0.0008068757	0.0007050690	0.0005523056	0.001163253
IRON	259.940	Radial	5.013889	0.01828956	0.01282329	0.02146489	0.02058050
LANTHANUM	333.749	Radial	0.6678241	-0.001464544	-0.004342627	0.00009301390	-0.0001440190
LITHIUM	670.784	Radial	-15.7028	-0.001701409	-0.001878873	-0.002457334	-0.0007680196
MAGNESIUM	279.079	Radial	0.09722222	-0.01623045	-0.01320891	0.005504599	-0.04098703
MANGANESE	257.610	Axial	10.55856	0.0001923535	0.0001615135	0.0001093018	0.0003062451
MOLYBDENUM	202.030	Axial	0.5360236	-0.0004252067	-0.00003487988	-0.0007566316	-0.0004841086
NICKEL	231.604	Axial	-0.4665457	0.0009401483	0.001732834	0.0004769079	0.0006107028
PHOSPHORUS	177.495	Axial	0.7663150	-0.02380420	-0.01942126	-0.05634190	0.004350551
POTASSIUM	766.490	Radial	649.1982	1.612981	1.567499	1.682962	1.588480
SILICON	251.611	Axial	84.97689	0.02713579	0.02722663	0.02725099	0.02692977
SODIUM	589.592	Radial	358.7083	0.2764912	0.2715927	0.2828864	0.2749946
STRONTIUM	421.552	Radial	7.422904	0.0002251000	0.0004709803	-0.00001662605	0.0002209457
SULFUR	182.034	Axial	2.580364	-0.009939017	-0.02084517	-0.001775371	-0.007196511
THALLIUM	190.856	Axial	0.4331457	-0.0003226850	0.0007664645	0.0002741823	-0.002008702
TIN	189.989	Axial	0.5064790	0.0001921111	-0.001496831	0.001549970	0.0005231940
TITANIUM	334.941	Radial	3.099324	-0.0001675686	-0.001614869	-0.00001403375	0.001126197
VANADIUM	292.402	Radial	-1.29166	-0.0008308027	-0.003228117	-0.001331727	0.002067436
ZINC	206.200	Axial	17.77133	0.008891020	0.009038040	0.008649285	0.008985735

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCS DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:24 Sequence: 82

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7271.971	7257.965	7281.859	7276.090
YTTRIUM	360.073	Axial	122826.7	122419.8	122814.7	123245.7
YTTRIUM	360.073	Radial	7942.866	8001.263	7825.843	8001.493
INDIUM	230.606	Axial	2178.828	2172.925	2184.952	2178.606

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	54.82389	0.8893621	0.8801071	0.9095475	0.8784317
BARIUM	233.527	Axial	2448.142	0.9426563	0.9427554	0.9435059	0.9417078
CADMIUM	228.802	Axial	3274.123	0.9020466	0.9030516	0.9050405	0.8980478
CHROMIUM	267.716	Axial	4289.878	0.9079215	0.9084810	0.9111561	0.9041273
LEAD	220.353	Axial	314.9361	0.9093570	0.9130333	0.9091355	0.9059021
SELENIUM	196.090	Axial	48.76976	0.8996726	0.8882694	0.8981324	0.9126158
SILVER	328.068	Axial	1286.740	0.1759965	0.1768892	0.1752753	0.1758250
ALUMINUM	308.215	Radial	495.3649	9.218106	9.142463	9.510432	9.001425
ANTIMONY	206.833	Axial	137.1361	0.9036606	0.9143544	0.8952062	0.9014211
BERYLLIUM	313.042	Radial	11972.88	0.9376875	0.9253982	0.9644386	0.9232255
BORON	249.678	Radial	138.2358	0.9273677	0.9071532	0.9562446	0.9187054
CALCIUM	317.933	Radial	3758.575	9.248790	9.145078	9.473204	9.128086
CERIUM	535.353	Radial	42.26113	0.04327999	0.02329995	0.01488708	0.09165295
COBALT	228.616	Axial	2010.559	0.9336116	0.9364960	0.9299649	0.9343740
COPPER	324.754	Axial	9640.013	0.9108793	0.9100023	0.9115832	0.9110526
IRON	259.940	Radial	2149.559	9.238898	9.138438	9.516107	9.062148
LANTHANUM	333.749	Radial	-15.7157	-0.02754910	-0.02433517	-0.03468486	-0.02362728
LITHIUM	670.784	Radial	5631.473	0.9229201	0.9077882	0.9521827	0.9087895
MAGNESIUM	279.079	Radial	344.3281	9.306414	9.194096	9.580450	9.144696
MANGANESE	257.610	Axial	28274.87	0.9008286	0.9018950	0.9015825	0.8990084
MOLYBDENUM	202.030	Axial	728.0443	0.9325305	0.9308823	0.9348952	0.9318141
NICKEL	231.604	Axial	841.5481	0.9213129	0.9255577	0.9193496	0.9190315
PHOSPHORUS	177.495	Axial	20.94972	0.8871137	0.7816641	1.006981	0.8726958
POTASSIUM	766.490	Radial	3559.400	9.422415	9.259890	9.653707	9.353646
SILICON	251.611	Axial	1755.451	0.8814502	0.8843372	0.8820418	0.8779714
SODIUM	589.592	Radial	8764.237	9.336193	9.219387	9.589943	9.199250
STRONTIUM	421.552	Radial	30505.82	0.9282216	0.9157324	0.9546230	0.9143095
SULFUR	182.034	Axial	220.0493	9.197871	9.026710	9.411590	9.155312
THALLIUM	190.856	Axial	77.58015	0.8985993	0.9083599	0.9100112	0.8774269
TIN	189.989	Axial	177.2631	0.9011089	0.8959012	0.9034741	0.9039513
TITANIUM	334.941	Radial	1489.511	0.9282617	0.9133364	0.9570910	0.9143578
VANADIUM	292.402	Radial	365.9416	0.9282617	0.9204370	0.9467253	0.9176230
ZINC	206.200	Axial	1574.153	0.8951773	0.8977642	0.8946093	0.8931583

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCSD DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:26 Sequence: 83

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7252.649	7261.154	7252.972	7243.823
YTTRIUM	360.073	Axial	121492.4	120375.1	121700.4	122401.6
YTTRIUM	360.073	Radial	8074.669	8069.354	8080.377	8074.277
INDIUM	230.606	Axial	2175.810	2177.676	2172.196	2177.557

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	54.77442	0.8909353	0.8924765	0.8918026	0.8885269
BARIUM	233.527	Axial	2459.401	0.9495210	0.9468547	0.9504928	0.9512155
CADMIUM	228.802	Axial	3289.137	0.9086033	0.9061338	0.9105671	0.9091091
CHROMIUM	267.716	Axial	4307.713	0.9217936	0.9338615	0.9165970	0.9149224
LEAD	220.353	Axial	316.2809	0.9144998	0.9111993	0.9162346	0.9160655
SELENIUM	196.090	Axial	48.76361	0.9019820	0.8993267	0.8973652	0.9092542
SILVER	328.068	Axial	1297.214	0.1793898	0.1829397	0.1800360	0.1751936
ALUMINUM	308.215	Radial	498.2357	9.116059	9.071166	9.116521	9.160490
ANTIMONY	206.833	Axial	138.8543	0.9174822	0.9123330	0.9142680	0.9258455
BERYLLIUM	313.042	Radial	12162.64	0.9368033	0.9369827	0.9399888	0.9334384
BORON	249.678	Radial	140.0300	0.9238450	0.9241567	0.9187870	0.9285913
CALCIUM	317.933	Radial	3792.388	9.176896	9.149502	9.216969	9.164217
CERIUM	535.353	Radial	34.61104	0.01021178	0.04358086	0.01344400	-0.02638952
COBALT	228.616	Axial	2021.376	0.9399283	0.9408429	0.9409685	0.9379736
COPPER	324.754	Axial	9788.060	0.9354027	0.9497455	0.9313396	0.9251231
IRON	259.940	Radial	2167.192	9.160562	9.075819	9.210546	9.195322
LANTHANUM	333.749	Radial	-15.8930	-0.02736403	-0.02337088	-0.03142601	-0.02729520
LITHIUM	670.784	Radial	5693.097	0.9175794	0.9178746	0.9201221	0.9147415
MAGNESIUM	279.079	Radial	347.2297	9.229537	9.297883	9.118712	9.272014
MANGANESE	257.610	Axial	28503.79	0.9181607	0.9315261	0.9137304	0.9092256
MOLYBDENUM	202.030	Axial	734.5251	0.9433545	0.9413119	0.9431895	0.9455620
NICKEL	231.604	Axial	846.5330	0.9280425	0.9316865	0.9314237	0.9210172
PHOSPHORUS	177.495	Axial	21.20328	0.9012675	0.8655754	0.8540813	0.9841459
POTASSIUM	766.490	Radial	4116.256	10.72932	10.74400	10.70743	10.73653
SILICON	251.611	Axial	1790.640	0.9095292	0.9235785	0.9005188	0.9044904
SODIUM	589.592	Radial	9101.673	9.537683	9.521477	9.587092	9.504479
STRONTIUM	421.552	Radial	30993.76	0.9274799	0.9279576	0.9300076	0.9244743
SULFUR	182.034	Axial	221.7506	9.295175	9.228006	9.246095	9.411425
THALLIUM	190.856	Axial	77.61956	0.9003170	0.8951256	0.9027086	0.9031167
TIN	189.989	Axial	177.0491	0.9024283	0.9022099	0.8998486	0.9052265
TITANIUM	334.941	Radial	1515.803	0.9290168	0.9311074	0.9306224	0.9253208
VANADIUM	292.402	Radial	370.6424	0.9247101	0.9218672	0.9325157	0.9197475
ZINC	206.200	Axial	1573.286	0.8970702	0.8939292	0.8978442	0.8994374

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1028256-01 DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:29 Sequence: 84

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7117.646	7105.977	7127.997	7118.962
YTTRIUM	360.073	Axial	119664.6	119507.3	119596.6	119889.8
YTTRIUM	360.073	Radial	7957.871	7892.514	7950.829	8030.269
INDIUM	230.606	Axial	2092.525	2089.792	2092.132	2095.650

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	1.503714	0.02653703	0.01454385	0.03797329	0.02709394
BARIUM	233.527	Axial	23.62123	0.008639877	0.008387179	0.008462569	0.009069882
CADMIUM	228.802	Axial	1.892579	-0.0001443445	-0.0001763746	0.0002033151	-0.0004599739
CHROMIUM	267.716	Axial	25.29006	0.003377786	0.003485197	0.003380936	0.003267224
LEAD	220.353	Axial	0.8104612	0.003307222	0.002649577	0.004632640	0.002639448
SELENIUM	196.090	Axial	0.1775712	-0.001878386	0.001001069	-0.003635391	-0.003000836
SILVER	328.068	Axial	-2.15591	0.0001024270	-0.0008516229	0.0008587652	0.0003001388
ALUMINUM	308.215	Radial	120.5500	2.096556	2.039859	2.114832	2.134979
ANTIMONY	206.833	Axial	1.119099	0.003145960	0.0005755463	0.006070881	0.002791453
BERYLLIUM	313.042	Radial	-2.22224	0.00008908946	0.0002352454	0.00002012092	0.00001190208
BORON	249.678	Radial	14.27870	0.09183641	0.08687120	0.1006501	0.08798791
CALCIUM	317.933	Radial	2789.038	6.810339	6.813430	6.852688	6.764900
CERIUM	535.353	Radial	29.94963	-0.006361174	0.07648662	-0.07225624	-0.02331390
COBALT	228.616	Axial	1.791105	0.001289860	0.001292770	0.001193975	0.001382835
COPPER	324.754	Axial	204.6767	0.008648679	0.008874696	0.008616563	0.008454777
IRON	259.940	Radial	195.6681	0.8366487	0.8476523	0.8316546	0.8306393
LANTHANUM	333.749	Radial	1.235714	-0.0005447183	-0.002293421	0.001883951	-0.001224685
LITHIUM	670.784	Radial	75.25947	0.01311102	0.01179479	0.01285243	0.01468582
MAGNESIUM	279.079	Radial	67.03185	1.792727	1.771257	1.810285	1.796640
MANGANESE	257.610	Axial	696.1597	0.02263237	0.02265695	0.02279800	0.02244217
MOLYBDENUM	202.030	Axial	9.459108	0.01129237	0.01191588	0.01119834	0.01076289
NICKEL	231.604	Axial	8.163895	0.01070794	0.01030186	0.01204969	0.009772262
PHOSPHORUS	177.495	Axial	1.812918	0.02576844	0.06609002	0.003521405	0.007693902
POTASSIUM	766.490	Radial	6920.924	18.36987	18.49503	18.32776	18.28683
SILICON	251.611	Axial	26401.83	13.82962	13.78298	13.85387	13.85199
SODIUM	818.326	Radial	4346.531	93.14798	93.83067	93.23514	92.37813
STRONTIUM	421.552	Radial	453.7203	0.01377865	0.01381678	0.01350854	0.01401063
SULFUR	182.034	Axial	432.4913	18.58867	18.68626	18.26139	18.81836
THALLIUM	190.856	Axial	0.7814381	0.004453683	0.01177380	0.001134975	0.0004522747
TIN	189.989	Axial	5.994716	0.02886543	0.02522363	0.02985052	0.03152214
TITANIUM	334.941	Radial	92.79479	0.05578327	0.05899692	0.05501032	0.05334255
VANADIUM	292.402	Radial	5.457559	0.01618326	0.02238452	0.01266582	0.01349943
ZINC	206.200	Axial	23.85765	0.01281510	0.01232310	0.01280812	0.01331409

Rows shaded in gray for analytes that were not ordered.

Sample ID: SD DF: 5x Ref Sample ID: L1028256-01 Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:32 Sequence: 85

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7323.421	7333.598	7339.264	7297.402
YTTRIUM	360.073	Axial	124059.0	124106.9	124474.7	123595.4
YTTRIUM	360.073	Radial	8053.275	8095.277	8049.067	8015.480
INDIUM	230.606	Axial	2269.595	2269.207	2275.393	2264.186

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	0.06077087	0.002620428	0.02101960	0.08483145	-0.06654463
BARIUM	233.527	Axial	6.173661	0.001702542	0.009037906	0.009316804	0.007183419
CADMIUM	228.802	Axial	1.729755	-0.0002035350	0.0003080542	-0.002689572	-0.0006715074
CHROMIUM	267.716	Axial	12.16449	0.0004243610	0.002262766	0.005161414	-0.001058765
LEAD	220.353	Axial	-0.01936673	0.0008189440	0.008686343	0.002633362	0.0009644537
SELENIUM	196.090	Axial	-0.5448756	-0.01527689	-0.06508451	-0.1110579	-0.05301090
SILVER	328.068	Axial	-4.00552	-0.0001361072	0.003679073	-0.003774292	-0.001946390
ALUMINUM	308.215	Radial	32.22104	0.4161340	2.034507	1.973443	2.234062
ANTIMONY	206.833	Axial	0.3620446	-0.002034536	-0.03225848	-0.009946350	0.01168680
BERYLLIUM	313.042	Radial	-3.83445	-0.00003391616	-0.0002967885	0.00004575949	-0.0002577134
BORON	249.678	Radial	2.438944	0.01201683	0.06434223	0.07440175	0.04150853
CALCIUM	317.933	Radial	632.2299	1.409738	7.002883	7.038430	7.104764
CERIUM	535.353	Radial	31.32486	-0.002510536	-0.1149387	0.05526077	0.02201983
COBALT	228.616	Axial	-0.6825337	0.0001206375	0.001134949	-0.001029567	0.001704180
COPPER	324.754	Axial	143.3330	0.002125906	0.01142145	0.009396416	0.01107073
IRON	259.940	Radial	42.84737	0.1787645	0.9173320	0.8678290	0.8963067
LANTHANUM	333.749	Radial	3.882402	0.003572240	0.04181997	0.007967204	0.003796425
LITHIUM	670.784	Radial	1.582643	0.001080767	0.004449112	-0.001839238	0.01360163
MAGNESIUM	279.079	Radial	12.98452	0.3279584	1.702259	1.599435	1.617680
MANGANESE	257.610	Axial	153.8483	0.004716954	0.02351336	0.02353032	0.02371062
MOLYBDENUM	202.030	Axial	2.030191	0.001482627	0.007490332	0.01071690	0.004032168
NICKEL	231.604	Axial	0.8287019	0.002284564	0.01417906	0.01219353	0.007895874
PHOSPHORUS	177.495	Axial	1.657799	0.01640424	0.1326121	0.1279303	-0.01447880
POTASSIUM	766.490	Radial	1490.134	3.835988	19.46892	19.02700	19.04392
SILICON	251.611	Axial	5610.517	2.822482	14.10841	14.18154	14.04726
SODIUM	589.592	Radial	17706.81	18.70237	93.42630	93.46357	93.64564
STRONTIUM	421.552	Radial	94.11034	0.002826502	0.01385113	0.01418334	0.01436305
SULFUR	182.034	Axial	89.51188	3.645506	18.36261	17.65783	18.66216
THALLIUM	190.856	Axial	-0.1928784	-0.007184720	-0.05060459	-0.03136718	-0.02579904
TIN	189.989	Axial	1.775341	0.006632386	0.02679848	0.05083186	0.02185545
TITANIUM	334.941	Radial	19.04418	0.009663692	0.04545795	0.04288892	0.05660850
VANADIUM	292.402	Radial	-0.1105574	0.002100574	0.02015571	-0.003666629	0.01501953
ZINC	206.200	Axial	38.24126	0.02055678	0.1036712	0.1030488	0.1016317

Rows shaded in gray for analytes that were not ordered.

Sample ID: MS DF: 1x Ref Sample ID: L1028256-01 Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:35 Sequence: 86

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7081.381	7081.896	7108.253	7053.995
YTTRIUM	360.073	Axial	118272.9	118304.5	118295.5	118218.5
YTTRIUM	360.073	Radial	7959.462	7829.936	8019.652	8028.799
INDIUM	230.606	Axial	2040.933	2043.773	2048.188	2030.838

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	55.22487	0.9199252	0.9248972	0.9209192	0.9139592
BARIUM	233.527	Axial	2382.594	0.9421164	0.9437093	0.9381268	0.9445132
CADMIUM	228.802	Axial	3220.821	0.9112563	0.9126494	0.9084279	0.9126917
CHROMIUM	267.716	Axial	4118.189	0.9051306	0.9077547	0.9074599	0.9001772
LEAD	220.353	Axial	298.5540	0.9202979	0.9162247	0.9187589	0.9259102
SELENIUM	196.090	Axial	48.60000	0.9208414	0.9250327	0.9033670	0.9341244
SILVER	328.068	Axial	1254.112	0.1781321	0.1774195	0.1792634	0.1777135
ALUMINUM	308.215	Radial	662.7985	12.37102	12.74821	12.11944	12.24543
ANTIMONY	206.833	Axial	134.6557	0.9112311	0.9153126	0.9061120	0.9122685
BERYLLIUM	313.042	Radial	12167.90	0.9509306	0.9708559	0.9353213	0.9466146
BORON	249.678	Radial	151.4531	1.014156	1.023720	1.013440	1.005310
CALCIUM	317.933	Radial	6410.540	15.84591	16.13851	15.63776	15.76146
CERIUM	535.353	Radial	35.32314	0.01545618	0.06001658	0.02486641	-0.03851446
COBALT	228.616	Axial	1936.531	0.9599929	0.9611259	0.9527934	0.9660594
COPPER	324.754	Axial	9459.764	0.9284831	0.9275412	0.9301959	0.9277122
IRON	259.940	Radial	2422.510	10.39016	10.60739	10.24011	10.32298
LANTHANUM	333.749	Radial	-15.5920	-0.02729117	-0.03253318	-0.02573500	-0.02360532
LITHIUM	670.784	Radial	5673.824	0.9278421	0.9454337	0.9137847	0.9243079
MAGNESIUM	279.079	Radial	413.0348	11.14294	11.33550	10.95807	11.13525
MANGANESE	257.610	Axial	27830.73	0.9208177	0.9203014	0.9226852	0.9194665
MOLYBDENUM	202.030	Axial	713.0435	0.9379115	0.9411868	0.9340741	0.9384737
NICKEL	231.604	Axial	821.0205	0.9595176	0.9547923	0.9584935	0.9652671
PHOSPHORUS	177.495	Axial	21.68274	0.9465048	1.050455	0.9402428	0.8488161
POTASSIUM	766.490	Radial	10687.19	28.41418	28.96577	28.07516	28.20162
SILICON	251.611	Axial	32059.25	16.99420	17.00718	17.00960	16.96583
SODIUM	818.326	Radial	4724.173	101.1544	103.4574	99.44019	100.5656
STRONTIUM	421.552	Radial	30976.28	0.9405072	0.9571540	0.9255301	0.9388377
SULFUR	182.034	Axial	626.8810	27.13465	27.61600	27.00718	26.78077
THALLIUM	190.856	Axial	71.18008	0.8800917	0.8841229	0.8703058	0.8858464
TIN	189.989	Axial	175.5233	0.9163246	0.9099595	0.9192176	0.9197966
TITANIUM	334.941	Radial	1657.653	1.031095	1.057224	1.008116	1.027947
VANADIUM	292.402	Radial	372.5393	0.9430051	0.9621081	0.9288847	0.9380225
ZINC	206.200	Axial	1578.366	0.9217710	0.9231226	0.9166824	0.9255081

Rows shaded in gray for analytes that were not ordered.

Sample ID: MSD DF: 1x Ref Sample ID: L1028256-01 Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 12:37 Sequence: 87

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6852.900	6524.728	6991.777	7042.194
YTTRIUM	360.073	Axial	117976.9	117860.3	117733.0	118337.3
YTTRIUM	360.073	Radial	8044.954	8063.707	8029.337	8041.819
INDIUM	230.606	Axial	1968.005	1877.332	2009.598	2017.083

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	52.53047	0.9041126	0.8979790	0.9091683	0.9051906
BARIUM	233.527	Axial	2251.626	0.9201802	0.9280261	0.9169723	0.9155423
CADMIUM	228.802	Axial	3037.968	0.8883939	0.8979709	0.8865228	0.8806879
CHROMIUM	267.716	Axial	4023.967	0.8865961	0.8898878	0.8827855	0.8871150
LEAD	220.353	Axial	281.8941	0.9012676	0.9065496	0.8957772	0.9014760
SELENIUM	196.090	Axial	46.28604	0.9062009	0.9100995	0.9007383	0.9077648
SILVER	328.068	Axial	1219.436	0.1736539	0.1748202	0.1740333	0.1721082
ALUMINUM	308.215	Radial	667.5731	12.32399	12.33848	12.24902	12.38446
ANTIMONY	206.833	Axial	127.9910	0.8951966	0.9053501	0.9031395	0.8771001
BERYLLIUM	313.042	Radial	11780.22	0.9107068	0.9119306	0.9117229	0.9084669
BORON	249.678	Radial	147.5738	0.9774367	0.9936444	0.9772334	0.9614322
CALCIUM	317.933	Radial	6305.181	15.41352	15.45979	15.43423	15.34653
CERIUM	535.353	Radial	35.72840	0.01517180	0.03918764	0.03198291	-0.02565516
COBALT	228.616	Axial	1831.429	0.9416102	0.9454324	0.9375607	0.9418376
COPPER	324.754	Axial	9253.822	0.9103337	0.9145299	0.9107856	0.9056856
IRON	259.940	Radial	2382.655	10.10888	10.11624	10.18740	10.02298
LANTHANUM	333.749	Radial	-13.7332	-0.02406356	-0.02809452	-0.02521687	-0.01887929
LITHIUM	670.784	Radial	5523.375	0.8935359	0.8931502	0.8945463	0.8929112
MAGNESIUM	279.079	Radial	406.0181	10.83507	10.95529	10.72746	10.82245
MANGANESE	257.610	Axial	27184.42	0.9016919	0.9025284	0.9036617	0.8988857
MOLYBDENUM	202.030	Axial	675.8094	0.9186868	0.9247170	0.9146798	0.9166636
NICKEL	231.604	Axial	778.5678	0.9436912	0.9464358	0.9385591	0.9460787
PHOSPHORUS	177.495	Axial	20.50836	0.9229655	0.8766662	1.017988	0.8742425
POTASSIUM	766.490	Radial	10817.59	28.45092	28.43099	28.46118	28.46059
SILICON	251.611	Axial	33453.84	17.77883	17.81812	17.84535	17.67302
SODIUM	818.326	Radial	4708.498	99.74182	99.98769	99.81920	99.41857
STRONTIUM	421.552	Radial	30067.16	0.9030746	0.9045872	0.9040860	0.9005505
SULFUR	182.034	Axial	604.2381	27.02834	27.06678	27.42544	26.59280
THALLIUM	190.856	Axial	67.60785	0.8670352	0.8765022	0.8709542	0.8536491
TIN	189.989	Axial	165.5259	0.8929525	0.8956156	0.8937931	0.8894489
TITANIUM	334.941	Radial	1627.247	1.001161	1.003756	1.000761	0.9989665
VANADIUM	292.402	Radial	362.4659	0.9076837	0.9203930	0.9039742	0.8986838
ZINC	206.200	Axial	1483.509	0.8953701	0.9014954	0.8943325	0.8902824

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 09/25/18 12:49 Sequence: 91 Standard ID: 18I14581

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7014.770	6975.018	7026.105	7043.186
YTTRIUM	360.073	Axial	116840.3	116887.8	116615.1	117017.9
YTTRIUM	360.073	Radial	7764.416	7770.636	7756.123	7766.489
INDIUM	230.606	Axial	2040.505	2034.439	2041.995	2045.080

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	519.4632	9.900051	9.869011	9.964627	9.866514
ANTIMONY	206.833	Axial	71.82296	0.4886153	0.4922696	0.4872803	0.4862960
ARSENIC	189.042	Axial	60.49607	1.017136	1.016605	1.021720	1.013083
BARIUM	233.527	Axial	1275.167	0.5087063	0.5101298	0.5076227	0.5083665
BERYLLIUM	313.042	Radial	2536.853	0.2034090	0.2039713	0.2032449	0.2030109
BORON	249.678	Radial	151.5864	1.040587	1.013397	1.057327	1.051037
CADMIUM	228.802	Axial	1744.008	0.4978080	0.4996696	0.4976314	0.4961229
CALCIUM	373.690	Radial	14783.93	52.92651	52.93696	52.99297	52.84961
CHROMIUM	267.716	Axial	4539.007	1.010102	1.009822	1.010943	1.009541
COBALT	228.616	Axial	2090.495	1.036490	1.041108	1.036976	1.031385
COPPER	324.754	Axial	10012.06	0.9955566	0.9951278	0.9949186	0.9966234
IRON	259.940	Radial	2273.064	9.992311	9.967423	10.02544	9.984071
LEAD	220.353	Axial	162.0177	0.4999240	0.5031026	0.4985392	0.4981302
LITHIUM	670.784	Radial	5908.914	0.9903524	0.9916456	0.9877229	0.9916887
MAGNESIUM	279.079	Radial	363.7385	10.05629	10.03747	10.00615	10.12526
MANGANESE	257.610	Axial	30146.78	1.009693	1.008892	1.011889	1.008297
MOLYBDENUM	202.030	Axial	192.6052	0.2549493	0.2549749	0.2550802	0.2547929
NICKEL	231.604	Axial	887.5343	1.037344	1.039141	1.037569	1.035321
PHOSPHORUS	177.495	Axial	22.31946	0.9859878	0.9756634	1.086973	0.8953268
POTASSIUM	766.490	Radial	17761.90	48.46698	48.38582	48.61952	48.39560
SELENIUM	196.090	Axial	52.27009	1.000213	1.009023	0.9912694	1.000347
SILICON	251.611	Axial	3736.777	1.991516	1.988930	1.995623	1.989995
SILVER	328.068	Axial	3406.220	0.4890387	0.4898327	0.4891669	0.4881165
SODIUM	818.326	Radial	2322.392	51.42668	51.71859	51.54406	51.01740
STRONTIUM	421.552	Radial	32311.29	1.005543	1.006812	1.005631	1.004185
SULFUR	182.034	Axial	117.9889	5.060660	5.072173	5.052188	5.057619
THALLIUM	190.856	Axial	75.95952	0.9397139	0.9469780	0.9394111	0.9327527
TIN	189.989	Axial	92.88592	0.4884211	0.4878931	0.4864217	0.4909483
TITANIUM	334.941	Radial	1618.120	1.031582	1.029245	1.030979	1.034521
VANADIUM	292.402	Radial	396.7878	1.029235	1.020703	1.037313	1.029688
ZINC	206.200	Axial	1696.934	1.000518	1.005493	0.9976063	0.9984538
CERIUM	535.353	Radial	45.45212	0.06067510	0.004613127	0.09402577	0.08338639
LANTHANUM	333.749	Radial	-3.19440	-0.007701141	-0.006162326	-0.007681762	-0.009259335

Sample ID: CCB Units: mg/l
Analyzed: 09/25/18 12:51 Sequence: 92

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7364.725	7358.291	7366.117	7369.767
YTTRIUM	360.073	Axial	125662.7	125530.6	125937.0	125520.4
YTTRIUM	360.073	Radial	7917.909	7860.833	7948.872	7944.021
INDIUM	230.606	Axial	2344.329	2344.496	2340.926	2347.566

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	9.611718	-0.004301490	-0.04889408	0.01814805	0.01784156
ANTIMONY	206.833	Axial	0.3030072	-0.002442186	-0.005270990	-0.0002396503	-0.001815917
ARSENIC	189.042	Axial	-0.3282318	-0.003573566	-0.0005242177	-0.007722279	-0.002474202
BARIUM	233.527	Axial	1.754904	0.000008278435	-0.0006529759	0.0002219132	0.0004558980
BERYLLIUM	313.042	Radial	-3.19861	0.00001116862	0.00007326110	-0.00009738355	0.00005762832
BORON	249.678	Radial	4.763889	0.02802074	0.03013874	0.03116116	0.02276232
CADMIUM	228.802	Axial	1.887522	-0.0001633401	-0.00003582989	0.00004314540	-0.0004973358
CALCIUM	317.933	Radial	62.53819	0.007656588	0.007733500	0.006351222	0.008885042
CERIUM	535.353	Radial	39.00926	0.03083093	0.03965857	0.09212182	-0.03928760
CHROMIUM	267.716	Axial	13.89280	0.0007519114	0.0009310038	0.0004636137	0.0008611168
COBALT	228.616	Axial	-1.30059	-0.0001370581	0.0003877953	-0.0007143773	-0.00008459212
COPPER	324.754	Axial	124.9271	0.0002311307	0.0006427658	0.00009385349	-0.00004322725
IRON	259.940	Radial	1.875	0.005198602	0.003093320	0.006606498	0.005895988
LANTHANUM	333.749	Radial	0.7650463	-0.001289671	-0.002905849	0.0004257258	-0.001388891
LEAD	220.353	Axial	-0.08874024	0.0006344326	0.0009892929	0.00001869650	0.0008953083
LITHIUM	670.784	Radial	-10.9158	-0.0009686202	-0.0005040296	0.0003421854	-0.002744016
MAGNESIUM	279.079	Radial	-0.3194444	-0.02742827	-0.02332541	-0.02552957	-0.03342983
MANGANESE	257.610	Axial	5.674961	0.00003998925	-0.0001043130	0.0001130241	0.0001112566
MOLYBDENUM	202.030	Axial	0.7083196	-0.0002042388	0.0001215876	-0.0003287384	-0.0004055656
NICKEL	231.604	Axial	-1.12169	0.0002768780	-0.0008516254	0.001686519	-0.000004259470
PHOSPHORUS	177.495	Axial	1.132258	-0.007399912	-0.04148482	0.02123692	-0.001951835
POTASSIUM	766.490	Radial	64.31439	0.08077990	0.05613817	0.08310824	0.1030933
SELENIUM	196.090	Axial	-0.2108663	-0.009110148	-0.006468958	-0.01500345	-0.005858039
SILICON	251.611	Axial	28.24660	-0.001306137	-0.002499340	-0.001533873	0.0001148026
SILVER	328.068	Axial	0.8836536	0.0005228268	0.001125643	0.0003604734	0.00008236407
SODIUM	589.592	Radial	46.95833	-0.05225673	-0.04113662	-0.04711227	-0.06852131
STRONTIUM	421.552	Radial	3.827869	0.0001200552	0.0002857755	-0.00003302780	0.0001074180
SULFUR	182.034	Axial	1.846595	-0.04020971	-0.03517687	-0.03625541	-0.04919684
THALLIUM	190.856	Axial	0.4034353	-0.0006616539	0.0001396839	-0.001419057	-0.0007055886
TIN	189.989	Axial	0.5797875	0.0005689305	-0.0003959242	-0.002671626	0.004774341
TITANIUM	334.941	Radial	1.917048	-0.0008669581	-0.0006050144	-0.0007508211	-0.001245039
VANADIUM	292.402	Radial	-3.23611	-0.005847816	-0.009975944	-0.006784616	-0.0007828881
ZINC	206.200	Axial	1.169632	-0.0004047198	-0.00005274320	-0.0008366192	-0.0003247971

Sample ID: L1028256-02 DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 13:00 Sequence: 95

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6829.343	6853.062	6794.324	6840.644
YTTRIUM	360.073	Axial	114903.5	114727.8	114834.6	115148.2
YTTRIUM	360.073	Radial	7704.843	7721.687	7656.776	7736.065
INDIUM	230.606	Axial	1987.264	1990.223	1983.672	1987.898

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	-0.2974653	-0.003433352	-0.01148113	0.004163719	-0.002982643
BARIUM	233.527	Axial	114.9217	0.04649339	0.04647364	0.04691655	0.04609000
CADMIUM	228.802	Axial	1.531563	-0.0002279877	-0.0002489871	-0.0003784149	-0.00005656099
CHROMIUM	267.716	Axial	18.32217	0.002025856	0.001663687	0.002614550	0.001799331
LEAD	220.353	Axial	0.6080751	0.002795662	0.003795031	0.002950585	0.001641371
SELENIUM	196.090	Axial	-0.3862597	-0.01290559	0.003617310	-0.02032942	-0.02200465
SILVER	328.068	Axial	-3.74272	-0.0001410235	-0.0005662510	0.0005746610	-0.0004314804
ALUMINUM	308.215	Radial	27.15685	0.3441419	0.3460169	0.3109751	0.3754338
ANTIMONY	206.833	Axial	0.4188394	-0.001461986	-0.001973509	0.001526992	-0.003939440
BERYLLIUM	313.042	Radial	-4.69445	-0.0001163939	-0.0002013878	-0.000003631251	-0.0001441626
BORON	249.678	Radial	45.83172	0.3141372	0.3238273	0.3118916	0.3066928
CALCIUM	373.690	Radial	38117.76	137.6465	138.2121	138.0990	136.6284
CERIUM	535.353	Radial	52.22424	0.09036408	0.07899404	0.08427481	0.1078234
COBALT	228.616	Axial	0.06522652	0.0004578163	-0.000007711911	0.0006577546	0.0007234062
COPPER	324.754	Axial	132.9280	0.002143207	0.001994510	0.002316224	0.002118886
IRON	259.940	Radial	84.73721	0.3725937	0.3744726	0.3672884	0.3760203
LANTHANUM	333.749	Radial	4.347829	0.004625728	0.008670580	0.004478074	0.0007285301
LITHIUM	670.784	Radial	170.4064	0.02957864	0.02792635	0.02942399	0.03138559
MAGNESIUM	279.079	Radial	1423.784	39.72409	39.83511	39.98808	39.34906
MANGANESE	257.610	Axial	7278.753	0.2477904	0.2484254	0.2479840	0.2469617
MOLYBDENUM	202.030	Axial	0.4318578	-0.0005135082	0.000002330340	-0.001226104	-0.0003167505
NICKEL	231.604	Axial	3.882776	0.006068507	0.006082145	0.005423488	0.006699889
PHOSPHORUS	177.495	Axial	1.953866	0.03610503	0.01291004	0.06212122	0.03328383
POTASSIUM	766.490	Radial	2353.609	6.392886	6.512041	6.447764	6.218853
SILICON	251.611	Axial	12725.04	6.934067	6.926164	6.943522	6.932516
SODIUM	818.326	Radial	2314.572	51.64672	52.52540	51.76117	50.65358
STRONTIUM	421.552	Radial	7662.084	0.2402981	0.2412072	0.2415005	0.2381866
SULFUR	182.034	Axial	1140.161	51.27842	51.36617	51.48244	50.98666
THALLIUM	190.856	Axial	0.2195979	-0.002226850	0.003534509	-0.002696490	-0.007518571
TIN	189.989	Axial	0.003747319	-0.002328862	-0.001662863	-0.002753167	-0.002570555
TITANIUM	334.941	Radial	32.17627	0.01864706	0.01876040	0.01942781	0.01775296
VANADIUM	292.402	Radial	-1.45415	-0.001411506	-0.0005432896	-0.0009995854	-0.002691643
ZINC	206.200	Axial	16.25946	0.008795678	0.008455267	0.009059805	0.008871962

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1028256-03 DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 13:03 Sequence: 96

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6643.926	6591.662	6685.909	6654.207
YTTRIUM	360.073	Axial	109645.6	109959.6	110297.2	108680.0
YTTRIUM	360.073	Radial	7590.728	7560.526	7588.916	7622.743
INDIUM	230.606	Axial	1884.261	1871.629	1889.179	1891.975

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	-0.1701319	-0.001367364	-0.003400817	0.01064872	-0.01135000
BARIUM	233.527	Axial	210.2719	0.08802475	0.08878665	0.08751927	0.08776834
CADMIUM	228.802	Axial	2.373007	0.00003782374	-0.0001688575	0.0002546267	0.00002770196
CHROMIUM	267.716	Axial	15.48450	0.001545015	0.002629103	0.001835078	0.0001708628
LEAD	220.353	Axial	0.1417943	0.001344636	0.0006776791	0.003960156	-0.0006039282
SELENIUM	196.090	Axial	-0.3068073	-0.01143919	0.00007218820	-0.01323253	-0.02115722
SILVER	328.068	Axial	-3.85801	-0.0001829597	-0.0001286151	-0.0006329239	0.0002126600
ALUMINUM	308.215	Radial	10.57312	0.02282401	0.003943058	0.04383397	0.02069500
ANTIMONY	206.833	Axial	0.5316917	-0.0005646854	0.0004376372	-0.001127572	-0.001004121
BERYLLIUM	313.042	Radial	-1.44792	0.0001438170	0.0002703188	0.0001226663	0.00003846574
BORON	249.678	Radial	58.43828	0.4078161	0.4127087	0.4104240	0.4003157
CALCIUM	373.690	Radial	34711.66	127.2232	127.1806	127.1963	127.2926
CERIUM	535.353	Radial	40.00283	0.04188955	0.07459961	0.002606269	0.04846277
COBALT	228.616	Axial	-0.5329259	0.0001389727	0.0003569035	-0.00004514582	0.0001051606
COPPER	324.754	Axial	128.6315	0.002333302	0.002710833	0.002314392	0.001974680
IRON	259.940	Radial	55.81799	0.2481903	0.2484381	0.2535923	0.2425406
LANTHANUM	333.749	Radial	3.429507	0.003208134	0.006872563	0.00009887674	0.002652961
LITHIUM	670.784	Radial	316.7061	0.05507442	0.05537394	0.05543177	0.05441754
MAGNESIUM	279.079	Radial	1974.210	55.91575	55.93241	56.05477	55.76006
MANGANESE	257.610	Axial	3386.893	0.1207654	0.1199892	0.1199710	0.1223361
MOLYBDENUM	202.030	Axial	0.5329038	-0.0003571169	-0.001319761	0.0001445920	0.0001038181
NICKEL	231.604	Axial	0.3888457	0.001906623	0.001783176	0.001849791	0.002086901
PHOSPHORUS	177.495	Axial	1.114691	-0.002707547	0.004656983	-0.03547118	0.02269156
POTASSIUM	766.490	Radial	6647.843	18.49823	18.37564	18.51000	18.60904
SILICON	251.611	Axial	7098.078	4.047152	4.030919	4.013820	4.096718
SODIUM	818.326	Radial	9375.828	209.4684	209.6656	209.3553	209.3843
STRONTIUM	421.552	Radial	37520.90	1.194383	1.193595	1.194243	1.195313
SULFUR	182.034	Axial	1494.164	69.11616	69.61185	69.45968	68.27696
THALLIUM	190.856	Axial	-0.1650219	-0.007248959	-0.007014827	-0.004309980	-0.01042207
TIN	189.989	Axial	0.2544162	-0.0009057336	0.004105113	-0.005377939	-0.001444375
TITANIUM	334.941	Radial	14.55634	0.007441009	0.007343844	0.006552895	0.008426288
VANADIUM	292.402	Radial	-1.44269	-0.001451939	-0.007798806	0.002268684	0.001174305
ZINC	206.200	Axial	27.18772	0.01587980	0.01573901	0.01577805	0.01612235

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1028256-04 DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 13:06 Sequence: 97

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6779.142	6746.099	6785.087	6806.241
YTTRIUM	360.073	Axial	113222.3	113540.5	113049.4	113077.1
YTTRIUM	360.073	Radial	7643.762	7585.776	7697.870	7647.641
INDIUM	230.606	Axial	1957.018	1949.106	1957.875	1964.074

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	0.001819437	0.001706554	0.002100240	0.002185695	0.0008337266
BARIUM	233.527	Axial	100.7514	0.04098425	0.04076614	0.04130887	0.04087773
CADMIUM	228.802	Axial	1.571305	-0.0002129113	-0.0002048557	-0.0005574994	0.0001236212
CHROMIUM	267.716	Axial	14.41966	0.001189191	0.001288991	0.0007754692	0.001503112
LEAD	220.353	Axial	0.3643815	0.002052775	0.006562253	0.0004034750	-0.0008074036
SELENIUM	196.090	Axial	0.2871908	0.0005041129	0.01308936	-0.001597475	-0.009979548
SILVER	328.068	Axial	1.995542	0.0007021009	-0.0006577176	0.001083099	0.001680922
ALUMINUM	308.215	Radial	17.47544	0.1576217	0.1689051	0.1321113	0.1718487
ANTIMONY	206.833	Axial	0.6500285	0.0001941696	0.0002928149	-0.0008528956	0.001142589
BERYLLIUM	313.042	Radial	-5.77067	-0.0002070692	-0.00002526286	-0.00008727522	-0.0005086694
BORON	249.678	Radial	26.63097	0.1822702	0.1835170	0.1787271	0.1845664
CALCIUM	373.690	Radial	43596.24	158.7036	159.9982	157.6319	158.4808
CERIUM	535.353	Radial	50.67148	0.08558066	0.07681959	0.08262554	0.09729686
COBALT	228.616	Axial	-2.15733	-0.0006911814	-0.001097844	-0.0003610394	-0.0006146607
COPPER	324.754	Axial	129.1106	0.001949459	0.001556918	0.002525651	0.001765809
IRON	259.940	Radial	153.8935	0.6845423	0.6969005	0.6836413	0.6730851
LANTHANUM	333.749	Radial	1.518299	0.00002095064	0.002528395	-0.004234739	0.001769195
LITHIUM	670.784	Radial	174.1956	0.03044323	0.02804443	0.03266622	0.03061902
MAGNESIUM	279.079	Radial	1696.488	47.71531	48.11036	47.35510	47.68047
MANGANESE	257.610	Axial	1013.075	0.03488284	0.03474400	0.03476004	0.03514447
MOLYBDENUM	202.030	Axial	0.9121209	0.0001524911	-0.0001291413	0.00004239872	0.0005442158
NICKEL	231.604	Axial	0.6591860	0.002217266	0.002230130	0.001658866	0.002762802
PHOSPHORUS	177.495	Axial	0.4888346	-0.03412698	-0.01892314	-0.04009495	-0.04336284
POTASSIUM	766.490	Radial	2065.710	5.645104	5.681737	5.616133	5.637441
SILICON	251.611	Axial	13555.59	7.497560	7.509654	7.496451	7.486576
SODIUM	818.326	Radial	3288.874	73.57506	74.54098	73.18183	73.00236
STRONTIUM	421.552	Radial	10553.81	0.3336399	0.3373645	0.3317112	0.3318441
SULFUR	182.034	Axial	1278.836	57.95733	58.09795	58.87139	56.90265
THALLIUM	190.856	Axial	0.06651211	-0.004181943	-0.01520416	0.007450017	-0.004791687
TIN	189.989	Axial	0.8610154	0.002366826	0.004500625	0.003296078	-0.0006962232
TITANIUM	334.941	Radial	26.12040	0.01489464	0.01880580	0.01316115	0.01271697
VANADIUM	292.402	Radial	-0.7210696	0.0004736578	-0.001040294	0.003030887	-0.0005696204
ZINC	206.200	Axial	17.08958	0.009375570	0.009622804	0.009360061	0.009143845

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1028256-05 DF: 1x Batch: WG1170427 Units: mg/l
Analyzed: 09/25/18 13:08 Sequence: 98

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7036.224	7038.764	7031.607	7038.301
YTTRIUM	360.073	Axial	117483.1	117178.2	117214.8	118056.4
YTTRIUM	360.073	Radial	7807.543	7775.980	7852.170	7794.478
INDIUM	230.606	Axial	2073.474	2072.348	2072.905	2075.169

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	1.543734	0.02750807	0.02334607	0.03140899	0.02776914
BARIUM	233.527	Axial	14.43102	0.005087829	0.005078004	0.005315656	0.004869827
CADMIUM	228.802	Axial	1.092377	-0.0003659675	-0.0003527857	-0.0001738661	-0.0005712507
CHROMIUM	267.716	Axial	16.56928	0.001544392	0.0009367349	0.001602993	0.002093447
LEAD	220.353	Axial	0.8397401	0.003418039	0.004691099	0.001363628	0.004199391
SELENIUM	196.090	Axial	-0.2982863	-0.01096635	-0.02381329	-0.008692733	-0.0003930237
SILVER	328.068	Axial	-5.73194	-0.0004134532	0.0002800564	-0.001340639	-0.0001797770
ALUMINUM	308.215	Radial	49.33509	0.7656234	0.7960860	0.7468495	0.7539345
ANTIMONY	206.833	Axial	0.5981670	-0.0003273400	0.00001126112	0.003819936	-0.004813217
BERYLLIUM	313.042	Radial	-1.37725	0.0001525927	0.0002241416	0.0001069385	0.0001266981
BORON	249.678	Radial	15.34319	0.1009812	0.1010003	0.1007263	0.1012171
CALCIUM	317.933	Radial	2685.675	6.681280	6.697753	6.692399	6.653688
CERIUM	535.353	Radial	36.91978	0.02447631	0.02370588	0.01003744	0.03968561
COBALT	228.616	Axial	1.419312	0.001116545	0.001383989	0.0008183119	0.001147333
COPPER	324.754	Axial	144.9871	0.003050981	0.003528993	0.002552609	0.003071341
IRON	259.940	Radial	95.99890	0.4169213	0.4158564	0.4153592	0.4195482
LANTHANUM	333.749	Radial	2.781298	0.001996821	0.001137682	0.001210288	0.003642493
LITHIUM	670.784	Radial	62.46302	0.01121990	0.009847273	0.01290277	0.01090965
MAGNESIUM	279.079	Radial	59.52728	1.620868	1.586871	1.644911	1.630822
MANGANESE	257.610	Axial	370.2177	0.01219643	0.01212216	0.01218078	0.01228633
MOLYBDENUM	202.030	Axial	8.617341	0.01031970	0.009957236	0.01021186	0.01078999
NICKEL	231.604	Axial	9.521302	0.01235167	0.01208976	0.01147801	0.01348724
PHOSPHORUS	177.495	Axial	1.257990	0.0008391901	-0.02934267	0.02917739	0.002682852
POTASSIUM	766.490	Radial	6726.341	18.19554	18.11760	18.24218	18.22684
SILICON	251.611	Axial	21334.55	11.38016	11.41391	11.36319	11.36337
SODIUM	818.326	Radial	4332.006	94.60419	94.29542	94.92856	94.58858
STRONTIUM	421.552	Radial	410.8575	0.01271820	0.01283313	0.01269456	0.01262691
SULFUR	182.034	Axial	409.8507	17.81443	17.72934	18.02371	17.69025
THALLIUM	190.856	Axial	0.3387521	-0.0008818968	-0.01021747	0.01234790	-0.004776114
TIN	189.989	Axial	0.2362875	-0.001104032	0.001987019	-0.003535540	-0.001763575
TITANIUM	334.941	Radial	35.93228	0.02076211	0.02123225	0.01921603	0.02183804
VANADIUM	292.402	Radial	3.370860	0.01104988	0.009481474	0.01228008	0.01138809
ZINC	206.200	Axial	24.10669	0.01312260	0.01328834	0.01335294	0.01272651

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 09/25/18 13:25 Sequence: 101 Standard ID: 18I14581

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7013.623	7021.384	7002.750	7016.734
YTTRIUM	360.073	Axial	116660.6	116479.6	116684.6	116817.4
YTTRIUM	360.073	Radial	7731.136	7741.582	7726.767	7725.057
INDIUM	230.606	Axial	2034.834	2037.925	2033.322	2033.256

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	517.1878	9.899096	9.858707	9.849633	9.988948
ANTIMONY	206.833	Axial	73.01826	0.4968982	0.4932905	0.5056051	0.4917990
ARSENIC	189.042	Axial	60.27523	1.013593	1.014648	1.013740	1.012390
BARIUM	233.527	Axial	1274.502	0.5085206	0.5093243	0.5094955	0.5067420
BERYLLIUM	313.042	Radial	2506.266	0.2018244	0.2009768	0.2026317	0.2018646
BORON	249.678	Radial	146.1815	1.007658	1.011042	1.001427	1.010505
CADMIUM	228.802	Axial	1749.149	0.4993538	0.4994839	0.5001893	0.4983881
CALCIUM	373.690	Radial	14599.13	52.48938	52.25997	52.46331	52.74484
CHROMIUM	267.716	Axial	4545.081	1.013020	1.016663	1.012324	1.010075
COBALT	228.616	Axial	2085.196	1.036736	1.035498	1.037164	1.037546
COPPER	324.754	Axial	9960.428	0.9919069	0.9903267	0.9936760	0.9917182
IRON	259.940	Radial	2266.722	10.00736	9.941489	10.01776	10.06283
LEAD	220.353	Axial	163.0704	0.5045607	0.5053743	0.5039847	0.5043232
LITHIUM	670.784	Radial	5894.966	0.9922716	0.9863864	0.9945842	0.9958442
MAGNESIUM	279.079	Radial	359.4855	9.981426	9.900987	10.05929	9.983997
MANGANESE	257.610	Axial	30009.07	1.006626	1.006074	1.007936	1.005869
MOLYBDENUM	202.030	Axial	191.4357	0.2534355	0.2537873	0.2528378	0.2536815
NICKEL	231.604	Axial	881.6415	1.033330	1.033329	1.030520	1.036141
PHOSPHORUS	177.495	Axial	22.58031	0.9982575	1.058157	0.9379704	0.9986454
POTASSIUM	766.490	Radial	17750.24	48.64400	48.51276	48.81542	48.60382
SELENIUM	196.090	Axial	51.44795	0.9845507	0.9648460	0.9949111	0.9938952
SILICON	251.611	Axial	3661.745	1.954247	1.956003	1.956015	1.950722
SILVER	328.068	Axial	3411.869	0.4906026	0.4910166	0.4893211	0.4914700
SODIUM	818.326	Radial	2338.277	51.99115	51.72083	52.03427	52.21836
STRONTIUM	421.552	Radial	31986.97	0.9997384	0.9949086	1.002032	1.002274
SULFUR	182.034	Axial	118.0554	5.064365	5.072226	5.022296	5.098574
THALLIUM	190.856	Axial	76.47291	0.9487383	0.9471225	0.9500637	0.9490285
TIN	189.989	Axial	92.92560	0.4887156	0.4919405	0.4915506	0.4826556
TITANIUM	334.941	Radial	1596.987	1.022473	1.022348	1.026473	1.018598
VANADIUM	292.402	Radial	395.0614	1.029165	1.024489	1.037566	1.025441
ZINC	206.200	Axial	1693.375	0.9985663	1.001079	0.9983425	0.9962773
CERIUM	535.353	Radial	47.91148	0.07170012	0.07185796	0.04588894	0.09735345
LANTHANUM	333.749	Radial	-3.16838	-0.007678507	-0.01095841	-0.006074796	-0.006002319

Sample ID: CCB Units: mg/l
Analyzed: 09/25/18 13:28 Sequence: 102

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7367.143	7353.546	7375.114	7372.769
YTTRIUM	360.073	Axial	125893.6	125906.4	125939.0	125835.5
YTTRIUM	360.073	Radial	7828.304	7752.389	7886.403	7846.122
INDIUM	230.606	Axial	2345.378	2341.142	2349.213	2345.778

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	9.418095	-0.005637514	0.01692008	-0.03328873	-0.0005438997
ANTIMONY	206.833	Axial	0.4620085	-0.001400755	0.0008069271	0.0004777256	-0.005486916
ARSENIC	189.042	Axial	0.07968314	0.002953834	0.01075906	0.001033757	-0.002931316
BARIUM	233.527	Axial	0.9405119	-0.0003013687	-0.0002597187	-0.00006011139	-0.0005842759
BERYLLIUM	313.042	Radial	-4.2375	-0.00007424255	-0.00005503131	-0.0001560759	-0.00001162046
BORON	249.678	Radial	1.805556	0.008156778	0.005308394	0.003167986	0.01599395
CADMIUM	228.802	Axial	0.4230196	-0.0005623109	-0.0006870495	-0.0003288043	-0.0006710790
CALCIUM	317.933	Radial	60.34259	0.003900029	0.009643892	0.006735166	-0.004678972
CERIUM	535.353	Radial	39.39815	0.03427258	0.05110949	0.04625682	0.005451435
CHROMIUM	267.716	Axial	12.21769	0.0003997025	-0.00008365457	0.0004118914	0.0008708706
COBALT	228.616	Axial	-0.6749418	0.0001331005	-0.00005102823	0.0002491904	0.0002011394
COPPER	324.754	Axial	127.0250	0.0004054358	0.0003353345	0.0002762546	0.0006047184
IRON	259.940	Radial	2.930556	0.009924332	0.01308596	0.004517027	0.01217000
LANTHANUM	333.749	Radial	1.407407	-0.0002550947	-0.004224000	0.003268526	0.0001901901
LEAD	220.353	Axial	-0.8845074	-0.001495620	0.0008079146	-0.002311340	-0.002983435
LITHIUM	670.784	Radial	-12.0479	-0.001181971	-0.002212956	-0.001583899	0.0002509416
MAGNESIUM	279.079	Radial	1.152778	0.01286288	0.005508361	0.01986725	0.01321303
MANGANESE	257.610	Axial	4.732583	0.00001045237	-0.0001521731	0.00009490701	0.00008862322
MOLYBDENUM	202.030	Axial	0.1545194	-0.0009057748	-0.001052057	-0.001333025	-0.0003322421
NICKEL	231.604	Axial	-1.07233	0.0003255254	-0.0006943885	0.001314255	0.0003567095
PHOSPHORUS	177.495	Axial	1.306064	0.0003092876	-0.02813312	0.01628765	0.01277333
POTASSIUM	766.490	Radial	82.49621	0.1321267	0.1416538	0.1625982	0.09212824
SELENIUM	196.090	Axial	-0.5956286	-0.01615926	-0.01969698	-0.01784735	-0.01093345
SILICON	251.611	Axial	24.41688	-0.003240880	-0.002786255	-0.004832396	-0.002103990
SILVER	328.068	Axial	-0.2358108	0.0003735213	0.0003882151	-0.00006062415	0.0007929730
SODIUM	589.592	Radial	581.1944	0.5319793	0.5504320	0.5699654	0.4755404
STRONTIUM	421.552	Radial	2.938178	0.00009328935	0.0001314683	0.0001994780	-0.00005107823
SULFUR	182.034	Axial	2.400976	-0.01707360	-0.01664189	-0.003809563	-0.03076934
THALLIUM	190.856	Axial	0.4924665	0.0002897447	-0.007673148	0.01081025	-0.002267869
TIN	189.989	Axial	0.6188405	0.0007652897	0.0004417097	-0.00009271928	0.001946879
TITANIUM	334.941	Radial	0.5989171	-0.001677036	0.0008292581	-0.002967843	-0.002892522
VANADIUM	292.402	Radial	-1.38888	-0.001198711	-0.001401028	0.005669871	-0.007864977
ZINC	206.200	Axial	0.8678921	-0.0005748538	-0.0007738606	-0.00002540363	-0.0009252971

Sample ID: CCVLL-2 Units: mg/l
Analyzed: 09/25/18 13:48 Sequence: 106 Standard ID: 18I14575

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7443.397	7450.324	7442.564	7437.302
YTTRIUM	360.073	Axial	126277.1	126774.3	126203.7	125853.2
YTTRIUM	360.073	Radial	7997.378	8094.368	7998.573	7899.194
INDIUM	230.606	Axial	2357.612	2358.481	2365.609	2348.744

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	20.35057	0.1966188	0.1932470	0.1741428	0.2224665
ANTIMONY	206.833	Axial	1.915874	0.007973935	0.003385695	0.01073680	0.009799309
ARSENIC	189.042	Axial	0.5749067	0.01076691	0.01239652	0.01017100	0.009733222
BARIUM	233.527	Axial	16.14484	0.005418526	0.005477194	0.005358171	0.005420213
BERYLLIUM	313.042	Radial	22.66806	0.002024249	0.002052193	0.002017275	0.002003280
BORON	249.678	Radial	30.3750	0.1991058	0.1966326	0.1948562	0.2058285
CADMIUM	228.802	Axial	8.274398	0.001551583	0.001385733	0.001731422	0.001537594
CALCIUM	317.933	Radial	484.3241	1.053399	1.052672	1.045662	1.061864
CHROMIUM	267.716	Axial	60.37867	0.01033111	0.009506916	0.01080265	0.01068377
COBALT	228.616	Axial	22.61173	0.01012253	0.01060619	0.01022831	0.009533090
COPPER	324.754	Axial	244.5547	0.01130682	0.01154136	0.01097204	0.01140707
IRON	259.940	Radial	25.98611	0.1080861	0.1096007	0.09867593	0.1159817
LEAD	220.353	Axial	2.453936	0.007420245	0.005258214	0.006351737	0.01065078
LITHIUM	670.784	Radial	71.37290	0.01243718	0.01258606	0.009643204	0.01508228
MAGNESIUM	279.079	Radial	39.11111	1.033010	1.042911	1.011934	1.044186
MANGANESE	257.610	Axial	358.8268	0.01098492	0.01085480	0.01109767	0.01100229
MOLYBDENUM	202.030	Axial	4.505974	0.004543956	0.004313065	0.005434069	0.003884735
NICKEL	231.604	Axial	9.710790	0.01122542	0.01149598	0.01108916	0.01109111
PHOSPHORUS	177.495	Axial	3.838434	0.1113431	0.1267801	0.08399921	0.1232499
POTASSIUM	766.490	Radial	459.4356	1.127605	1.156063	1.140827	1.085925
SELENIUM	196.090	Axial	0.005450639	-0.005149632	0.001950166	-0.01735109	-0.00004796888
SILICON	251.611	Axial	415.2991	0.1909692	0.1898108	0.1904639	0.1926330
SILVER	328.068	Axial	35.57225	0.005127309	0.004403069	0.006057233	0.004921626
SODIUM	589.592	Radial	1356.458	1.347532	1.359865	1.354529	1.328202
STRONTIUM	421.552	Radial	341.7877	0.01032956	0.01035854	0.01022325	0.01040689
SULFUR	182.034	Axial	27.60141	1.024140	1.059049	1.000090	1.013280
THALLIUM	190.856	Axial	1.376789	0.009795104	0.01057820	0.007917916	0.01088920
TIN	189.989	Axial	10.51698	0.05001999	0.04971123	0.05020278	0.05014596
TITANIUM	334.941	Radial	83.93258	0.04998297	0.05080703	0.04893587	0.05020602
VANADIUM	292.402	Radial	7.152778	0.02034450	0.01934205	0.02373212	0.01795935
ZINC	206.200	Axial	110.1708	0.06021808	0.06047384	0.06057888	0.05960151
CERIUM	535.353	Radial	29.91667	-0.007322008	0.004569438	-0.03765564	0.01112018
LANTHANUM	333.749	Radial	2.348380	0.001223225	-0.001837663	0.002831155	0.002676184

Sample ID: CCVLL-2 Units: mg/l
Analyzed: 09/25/18 14:07 Sequence: 107 Standard ID: 18I14575

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	7407.840	7397.723	7407.346	7418.452
YTTRIUM	360.073	Axial	125482.6	125359.2	125268.5	125820.0
YTTRIUM	360.073	Radial	7962.132	7912.802	7968.736	8004.858
INDIUM	230.606	Axial	2346.089	2342.179	2340.519	2355.568

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	19.02730	0.1730778	0.1501725	0.1911922	0.1778688
ANTIMONY	206.833	Axial	1.789222	0.007214404	0.01314138	0.008693429	-0.0001915970
ARSENIC	189.042	Axial	0.3391729	0.007058503	0.003708745	0.001491356	0.01597541
BARIUM	233.527	Axial	15.06936	0.005040508	0.004725973	0.004806678	0.005588871
BERYLLIUM	313.042	Radial	23.15417	0.002069898	0.001949211	0.002171444	0.002089039
BORON	249.678	Radial	29.31944	0.1928667	0.1919415	0.1908447	0.1958141
CADMIUM	228.802	Axial	8.446101	0.001608429	0.001523029	0.001226344	0.002075913
CALCIUM	317.933	Radial	467.9850	1.017926	1.011988	1.025918	1.015870
CHROMIUM	267.716	Axial	55.25655	0.009344286	0.009750665	0.008634154	0.009648040
COBALT	228.616	Axial	22.12042	0.009958755	0.009856180	0.009791161	0.01022892
COPPER	324.754	Axial	228.1864	0.009918644	0.009199925	0.01079243	0.009763580
IRON	259.940	Radial	24.61111	0.1026560	0.1066084	0.09352206	0.1078373
LEAD	220.353	Axial	1.595604	0.005145512	0.005216757	0.004205901	0.006013877
LITHIUM	670.784	Radial	83.90152	0.01453201	0.01644580	0.01482928	0.01232095
MAGNESIUM	279.079	Radial	37.51389	0.9943057	0.9336411	1.009046	1.040230
MANGANESE	257.610	Axial	335.0246	0.01031279	0.01030874	0.01035826	0.01027138
MOLYBDENUM	202.030	Axial	4.740041	0.004866366	0.005373814	0.005079620	0.004145665
NICKEL	231.604	Axial	8.837665	0.01038697	0.01036929	0.01025578	0.01053584
PHOSPHORUS	177.495	Axial	2.970500	0.07370834	0.06478216	0.06157964	0.09476322
POTASSIUM	766.490	Radial	423.6010	1.037627	0.9991953	1.050515	1.063170
SELENIUM	196.090	Axial	0.7417330	0.008260789	0.004441845	0.01028273	0.01005780
SILICON	251.611	Axial	409.9426	0.1895940	0.1908364	0.1886488	0.1892970
SILVER	328.068	Axial	32.63974	0.004764667	0.004653987	0.004903780	0.004736233
SODIUM	589.592	Radial	1264.458	1.255198	1.238774	1.257664	1.269154
STRONTIUM	421.552	Radial	332.6151	0.01009710	0.01018991	0.01012430	0.009977088
SULFUR	182.034	Axial	26.41328	0.9802718	1.004040	0.9629805	0.9737944
THALLIUM	190.856	Axial	1.595806	0.01225439	0.01732343	0.01744224	0.001997520
TIN	189.989	Axial	11.16447	0.05350968	0.05221463	0.05370582	0.05460859
TITANIUM	334.941	Radial	85.32768	0.05109150	0.05349023	0.04938967	0.05039458
VANADIUM	292.402	Radial	7.222222	0.02061365	0.02481004	0.01551195	0.02151895
ZINC	206.200	Axial	90.21489	0.04935924	0.04933507	0.04982461	0.04891805
CERIUM	535.353	Radial	32.72222	0.004698656	0.06680185	-0.03630877	-0.01639711
LANTHANUM	333.749	Radial	1.762731	0.0002875584	-0.001650544	0.002080590	0.0004326295

Sample ID: ICSA-2 Units: mg/l
Analyzed: 09/25/18 14:21 Sequence: 108 Standard ID: 18I14579

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6340.849	6332.389	6348.051	6342.108
YTTRIUM	360.073	Axial	103858.8	103718.7	103781.1	104076.7
YTTRIUM	360.073	Radial	7546.730	7513.257	7534.859	7592.073
INDIUM	230.606	Axial	1652.527	1652.068	1651.568	1653.946

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	25030.50	499.8905	501.4329	499.0382	499.2005
ANTIMONY	206.833	Axial	1.113506	0.004035763	0.007317708	0.003065083	0.001724498
ARSENIC	189.042	Axial	-2.45588	-0.04394514	-0.06211952	-0.02958683	-0.04012906
BARIUM	233.527	Axial	6.367990	0.002154566	0.001594119	0.002392689	0.002476890
BERYLLIUM	313.042	Radial	-3.74389	-0.00004666011	-0.00007605968	-0.0001289092	0.00006498860
BORON	249.678	Radial	-14.9183	-0.1099579	-0.1024824	-0.1159672	-0.1114242
CADMIUM	228.802	Axial	3.561122	0.0004487536	0.0003456651	0.0002057945	0.0007948013
CALCIUM	373.690	Radial	135521.7	499.8405	500.8746	499.8063	498.8406
CERIUM	535.353	Radial	116.3965	0.3685199	0.3338957	0.3818292	0.3898348
CHROMIUM	267.716	Axial	19.10515	0.002664665	0.003243771	0.002626802	0.002123422
COBALT	228.616	Axial	-5.15846	-0.002732709	-0.002494236	-0.003410970	-0.002292920
COPPER	324.754	Axial	132.0490	0.003489445	0.002805146	0.004232288	0.003430902
IRON	271.441	Radial	3069.292	196.8919	197.3071	196.9968	196.3718
LANTHANUM	333.749	Radial	-1.09593	-0.004338202	-0.005357862	-0.002835695	-0.004821050
LEAD	220.353	Axial	-8.21099	-0.03035842	-0.03403958	-0.03128273	-0.02575296
LITHIUM	670.784	Radial	47.36726	0.008986685	0.01071519	0.007779428	0.008465436
MAGNESIUM	279.079	Radial	17782.31	506.7418	507.6898	507.9546	504.5811
MANGANESE	257.610	Axial	122.8369	0.004492358	0.004498677	0.004560841	0.004417556
MOLYBDENUM	202.030	Axial	0.05406807	-0.001021858	-0.001330342	-0.001241645	-0.0004935863
NICKEL	231.604	Axial	-3.29222	-0.003329094	-0.004045952	-0.002461512	-0.003479818
PHOSPHORUS	177.495	Axial	0.9776691	-0.007245041	-0.006597792	0.007054597	-0.02219193
POTASSIUM	766.490	Radial	46.40491	0.03897791	0.04488738	0.03292855	0.03911780
SELENIUM	196.090	Axial	-1.27458	-0.03236416	-0.02940774	-0.04658715	-0.02109759
SILICON	251.611	Axial	23.82686	-0.001019133	-0.004959684	0.00001920152	0.001883084
SILVER	328.068	Axial	1.980861	0.0007245846	0.001102748	0.0003779052	0.0006931004
SODIUM	589.592	Radial	284.6607	0.2196707	0.2412472	0.2203191	0.1974459
STRONTIUM	421.552	Radial	-147.227	-0.004710589	-0.004627921	-0.004536634	-0.004967210
SULFUR	182.034	Axial	1.129504	-0.06256519	-0.05474915	-0.04574459	-0.08720183
THALLIUM	190.856	Axial	-1.41859	-0.02681168	-0.02005102	-0.02654175	-0.03384226
TIN	189.989	Axial	-0.3077436	-0.004142202	0.001053010	-0.009865723	-0.003613894
TITANIUM	334.941	Radial	-3.60781	-0.004429262	-0.002268150	-0.003215068	-0.007804568
VANADIUM	292.402	Radial	-11.0355	-0.02699762	-0.02652657	-0.02515922	-0.02930707
ZINC	206.200	Axial	7.690627	0.003959069	0.003680232	0.004038076	0.004158899

Sample ID: ICSAB-2 Units: mg/l
Analyzed: 09/25/18 14:23 Sequence: 109 Standard ID: 18I14580

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	6378.887	6377.999	6376.871	6381.791
YTTRIUM	360.073	Axial	104322.3	104009.7	104691.2	104266.1
YTTRIUM	360.073	Radial	7567.199	7577.126	7575.195	7549.276
INDIUM	230.606	Axial	1661.203	1660.964	1660.682	1661.963

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	25242.43	502.7562	504.6880	501.4854	502.0954
ANTIMONY	206.833	Axial	67.82608	0.5075787	0.5102253	0.4979919	0.5145190
ARSENIC	189.042	Axial	25.77147	0.4773837	0.4932801	0.4608960	0.4779752
BARIUM	233.527	Axial	1130.784	0.4960565	0.4980536	0.4964802	0.4936356
BERYLLIUM	313.042	Radial	5965.814	0.4904465	0.4909836	0.4890961	0.4912597
BORON	249.678	Radial	128.1898	0.9023569	0.8939239	0.9032552	0.9098916
CADMIUM	228.802	Axial	3316.789	1.041845	1.043998	1.041726	1.039810
CALCIUM	373.690	Radial	136401.1	501.7187	503.8149	500.3388	501.0023
CERIUM	535.353	Radial	121.7276	0.3899311	0.4050419	0.3776000	0.3871515
CHROMIUM	267.716	Axial	1999.897	0.4973789	0.4957083	0.4954256	0.5010028
COBALT	228.616	Axial	863.4897	0.5260860	0.5252100	0.5255459	0.5275020
COPPER	324.754	Axial	4810.186	0.5304102	0.5321399	0.5300722	0.5290186
IRON	271.441	Radial	3090.994	197.7463	198.3539	197.0912	197.7938
LANTHANUM	333.749	Radial	-3.69977	-0.008679900	-0.007438282	-0.01000350	-0.008597915
LEAD	220.353	Axial	259.4058	0.9823334	0.9770728	0.9846082	0.9853193
LITHIUM	670.784	Radial	49.59457	0.009345256	0.01008994	0.007757690	0.01018814
MAGNESIUM	279.079	Radial	17929.28	509.5413	511.8741	507.3848	509.3650
MANGANESE	257.610	Axial	13269.82	0.4977028	0.4981935	0.4956963	0.4992185
MOLYBDENUM	202.030	Axial	330.1685	0.4815807	0.4807767	0.4800447	0.4839207
NICKEL	231.604	Axial	723.9196	1.039298	1.037186	1.040548	1.040161
PHOSPHORUS	177.495	Axial	0.9110099	-0.01097173	0.001607203	-0.02524376	-0.009278630
POTASSIUM	766.490	Radial	32.86673	0.0006740713	0.01464147	-0.04105244	0.02843319
SELENIUM	196.090	Axial	23.93811	0.5011159	0.5004830	0.5066823	0.4961825
SILICON	251.611	Axial	1655.172	0.9802184	0.9873992	0.9748846	0.9783713
SILVER	328.068	Axial	6871.993	1.104511	1.108948	1.102616	1.101970
SODIUM	589.592	Radial	241.0852	0.1694594	0.1799276	0.1672672	0.1611835
STRONTIUM	421.552	Radial	-147.725	-0.004714641	-0.004659890	-0.004628148	-0.004855885
SULFUR	182.034	Axial	1.918305	-0.02481840	-0.01390645	-0.01549717	-0.04505158
THALLIUM	190.856	Axial	29.59440	0.4470868	0.4538889	0.4391943	0.4481772
TIN	189.989	Axial	76.90701	0.4445064	0.4471368	0.4477458	0.4386366
TITANIUM	334.941	Radial	760.4529	0.4963633	0.4981361	0.4973374	0.4936164
VANADIUM	292.402	Radial	173.4497	0.4629485	0.4657063	0.4607697	0.4623695
ZINC	206.200	Axial	1420.301	0.9207955	0.9233929	0.9198531	0.9191403

3015 GW/SPLP ICP Metals Prep Benchsheet

Workgroup: WG1170427

Prep Start Date/Time: 09/25/18 07:43-10:13 **Analyst:** AF846 **Analyst Verified pH:** AF846 **Leachate Fluid Type:** NA **Vessel ESC Lot ID:** ESC38823
Pipette ID: F13412591 **Carousel ID:** 8 **Microwave ID:** MD9640 **Dig. Start Date/Time:** 09/25/18 07:48:10 **Prep End Date/Time:** 09/25/18 11:35 **SOP:** 340704
Method: 3015 **Filter Lot#:** NA **pH Lot #:** 10BDH1981

Nitric Acid: 18I08003 Amt. Used: 3 mL Exp. Date:09/08/19 **Hydrochloric Acid:** 18I13436 Amt. Used: 2 mL Exp. Date:03/13/19
High Spike: 18I11161 Amt. Used: 0.45 mL Exp. Date:03/11/19 **High Spike 2:** 18I11162 Amt. Used: 0.45 mL Exp. Date:03/11/19

Sample Number	Prep Flags	Initial Sample Vol (mL)	Final Volume (mL)	Sample Description	Initial pH	Review Analyst	Review Date	Sample Comments
BLANK		45	50	NANOPURE	7	AF846	09/25/18 11:37:38	
LCS		45	50	NANOPURE	7	AF846	09/25/18 11:37:38	
LCSD		45	50	NANOPURE	7	AF846	09/25/18 11:37:38	
MS(L1028256-01)		45	50	CLEAR	<2	AF846	09/25/18 11:37:38	
MSD(L1028256-01)		45	50	CLEAR	<2	AF846	09/25/18 11:37:38	
1. L1027768-01		5	50	BROWN	<2	AF846	09/25/18 11:37:38	EXCESSIVE VOLUME LOST DURING DIGESTION
2. L1028018-01		5	50	YELLOW	<2	AF846	09/25/18 11:37:38	PRESERVED 09/23 PRESERVED 09/23 PRESERVED 09/23 PRESERVED 09/23 PRESERVED 09/23 PRESERVED 09/23 PRESERVED 09/23 EXCESSIVE VOLUME LOST DURING DIGESTION
3. L1028156-01	T2	5	50	WHITE	9	AF846	09/25/18 11:37:38	PH not adjusted due to matrix.
4. L1028158-01		45	50	BLACK CLOUDY	<2	AF846	09/25/18 11:37:38	PH not adjusted due to matrix.
5. L1028159-01		45	50	CLOUDY WITH SEDIMENT	<2	AF846	09/25/18 11:37:38	PH not adjusted due to matrix.
6. L1028256-01		45	50	CLEAR	<2	AF846	09/25/18 11:37:38	ms/msd
7. L1028256-02		45	50	CLEAR	<2	AF846	09/25/18 11:37:38	
8. L1028256-03		45	50	CLEAR	<2	AF846	09/25/18 11:37:38	
9. L1028256-04		45	50	CLEAR	<2	AF846	09/25/18 11:37:38	
10. L1028256-05		45	50	CLOUDY	<2	AF846	09/25/18 11:37:38	
11. L1028280-03		45	50	BROWN	<2	AF846	09/25/18 11:37:38	LEAD pH adj. in login@1600on9/24

Comments:
L1027768-01 Time Added: 09/25/18 10:13:56
L1028018-01 Time Added: 09/25/18 10:13:56
L1028156-01 T2 AND POURED TO 5ML DILUTED TO 45ML WITH NANOPURE DUE TO REACTIVITY AND INABILITY TO HOLD PH; SAMPLE LABELED AS T2 WITH DILUTION NEEDEDL1027768-01AND L1028018-01 POURED TO 5ML AND DILUTED TO 45ML WITH NANOPURE DUE TO EXTREME REACTIVITY DURING DIGESTION

Reviewed By:AF846 on 09/25/18 11:37:38

7470A Mercury

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180928112819	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:28
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	20180928114031	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:40
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	20180928114258	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:42
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	20180928114524	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:45
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	20180928114752	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:47
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3346032-1

ESC Sample ID:	R3346032-1	**SDG:**	L1028256
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20180928112059	**Received Date/Time:**	_____
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:44
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:20
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	U		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3346032-2

ESC Sample ID:	R3346032-2	**SDG:**	L1028256
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20180928112325	**Received Date/Time:**	_____
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:44
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:23
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	3.30		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3346032-3

ESC Sample ID:	R3346032-3	**SDG:**	L1028256
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	20180928112552	**Received Date/Time:**	_____
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:44
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:25
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	3.20		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3346032-4

ESC Sample ID:	R3346032-4	**SDG:**	L1028256
Client Sample ID:	MS	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180928113538	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:35
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	3.31		0.0490	0.200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3346032-5

ESC Sample ID:	R3346032-5	**SDG:**	L1028256
Client Sample ID:	MSD	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180928113805	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:38
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):	_____	**Final Wt/Vol:**	30.0 mL

Analyte	**CAS**	**Result**	**Qualifier**	**MDL**	**RDL**
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	3.08		0.0490	0.200

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W
Concentration Units:	mg/l		

	ICV				**ICVLL**				**CCVLL**			
Sample ID:	CVAA50928180724				CVAA50928180734				CVAA50928181034			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
MERCURY	0.0030	0.003091	103	0.192000	0.0002	0.0002340	117	1.360000	0.0002	0.0002077	104	0.230000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCVLL Limits: 70 - 130 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W
Concentration Units:	mg/l		

	CCV				**CCV**				**CCV**			
Sample ID:	CVAA50928181101				CVAA50928181130-2				CVAA50928181200			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
MERCURY	0.0025	0.0026303	105	0.551000	0.0025	0.0026587	106	0.565000	0.0025	0.0025676	103	0.651000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCVLL Limits: 70 - 130 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W
Concentration Units:	mg/l		

CCVLL

Sample ID: CVAA50928181216

Analyte	True	Found	%R	%RSD
MERCURY	0.0002	0.0002268	113	0.322000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCVLL Limits: 70 - 130 CCV Limits: 90 - 110

3-IN

BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20180928072647		20180928110351		20180928112059		20180928113311-2	
Analyte	mg/l		mg/l		mg/l		mg/l	
MERCURY	-0.00003850	U	-0.00003710	U	ND		-0.00003300	U

3-IN BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20180928120232	
Analyte	mg/l	
MERCURY	-0.00004380	U

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3346032-4
R3346032-5

MS Sample / File ID:	R3346032-4 / 20180928113538	**SDG:**	L1028256
MSD Sample / File ID:	R3346032-5 / 20180928113805	**Analytical Batch:**	WG1170490
OS Sample / File ID:	L1028256-01 / 20180928112819	**Matrix:**	GW
Instrument ID:	CVAA5		
Analytical Method:	7470A		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Mercury	3.00	ND	3.31	3.08	110	103	1	75.0 - 125	7.28	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3346032-2
R3346032-3

LCS Sample / File ID:	R3346032-2 / 20180928112325	**SDG:**	L1028256
LCSD Sample / File ID:	R3346032-3 / 20180928112552	**Analytical Batch:**	WG1170490
Instrument ID:	CVAA5	**Dilution Factor:**	1
Analytical Method:	7470A	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*%*	*%*	*%*	*%*	*%*
Mercury	3.00	3.30	3.20	110	107	80.0 - 120	3.10	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

10C-IN

LINEAR DYNAMIC RANGE

SDG:	L1028256	**Analytical Method:**	7470A
Instrument ID:	CVAA5	**Date:**	01/19/17 08:54

Analyte	LDR
	ppm
MERCURY	0.01

12-IN

ANALYSIS LOG

SDG:	L1028256	**Analytical Method:**	7470A
Instrument ID:	CVAA5	**Calibration Start Date:**	09/28/18 07:02
Analytical Run:	092818CVAA5 W	**Calibration End Date:**	09/28/18 07:14

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	CVAA50928180700	20180928070015	09/28/18 07:00	1	
CAL	STD1	20180928070242	09/28/18 07:02	1	
CAL	STD2	20180928070509	09/28/18 07:05	1	
CAL	STD3	20180928070735	09/28/18 07:07	1	
CAL	STD4	20180928071000	09/28/18 07:10	1	
CAL	STD5	20180928071225	09/28/18 07:12	1	
CAL	STD6	20180928071449	09/28/18 07:14	1	
ICV	CVAA50928180724	20180928072419	09/28/18 07:24	1	
ICB	CVAA50928180726	20180928072647	09/28/18 07:26	1	
ICVLL	CVAA50928180734	20180928073407	09/28/18 07:34	1	
CCVLL	CVAA50928181034	20180928103434	09/28/18 10:34	1	
CCV	CVAA50928181101	20180928110125	09/28/18 11:01	1	
CCB	CVAA50928181103	20180928110351	09/28/18 11:03	1	
BLANK	R3346032-1	20180928112059	09/28/18 11:20	1	WG1170490
LCS	R3346032-2	20180928112325	09/28/18 11:23	1	WG1170490
LCSD	R3346032-3	20180928112552	09/28/18 11:25	1	WG1170490
RMW-4	L1028256-01	20180928112819	09/28/18 11:28	1	WG1170490
CCV	CVAA50928181130-2	20180928113045-2	09/28/18 11:30	1	
CCB	CVAA50928181133-2	20180928113311-2	09/28/18 11:33	1	
MS	R3346032-4	20180928113538	09/28/18 11:35	1	WG1170490
MSD	R3346032-5	20180928113805	09/28/18 11:38	1	WG1170490
RMW-3	L1028256-02	20180928114031	09/28/18 11:40	1	WG1170490
RMW-9	L1028256-03	20180928114258	09/28/18 11:42	1	WG1170490
WELL-09	L1028256-04	20180928114524	09/28/18 11:45	1	WG1170490
DUPE	L1028256-05	20180928114752	09/28/18 11:47	1	WG1170490
CCV	CVAA50928181200	20180928120005	09/28/18 12:00	1	
CCB	CVAA50928181202	20180928120232	09/28/18 12:02	1	
CCVLL	CVAA50928181216	20180928121604	09/28/18 12:16	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	PPB	PPB	%	PPB	PPB	%
MERCURY	0.20	.147860616	73.90	0.40	.397496772	99.40
File ID:		20180928070242			20180928070509	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	PPB	PPB	%	PPB	PPB	%
MERCURY	1	.995766092	99.60	2	2.069337976	103
File ID:		20180928070735			20180928071000	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	PPB	PPB	%	PPB	PPB	%
MERCURY	5	5.038468712	101	10	9.96746738	99.70
File ID:		20180928071225			20180928071449	

16A-IN

INITIAL CALIBRATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
MERCURY	253.7	0	5	0.999936	0.000195	-0.025774

Calibration Type

0 = Linear Regression

Weightage

5 = None

Sample ID: CALBLK
Analyzed: 09/28/18 07:00 Sequence: 1 Standard ID:

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	47.0	48.0	51.0	43.0

Sample ID: STD1 Units: PPB
Analyzed: 09/28/18 07:02 Sequence: 2 Standard ID: 18I27680

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	891.00	883.00	891.00	900

Sample ID: STD2 Units: PPB
Analyzed: 09/28/18 07:05 Sequence: 3 Standard ID: 18I27680

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	2172.000	2147.000	2173.000	2197.000

Sample ID: STD3 Units: PPB
Analyzed: 09/28/18 07:07 Sequence: 4 Standard ID: 18I27680

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	5242.000	5270.00	5226.000	5231.000

Sample ID: STD4 Units: PPB
Analyzed: 09/28/18 07:10 Sequence: 5 Standard ID: 18I27680

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	10751.00	10693.00	10730.00	10830.00

Sample ID: STD5 Units: PPB
Analyzed: 09/28/18 07:12 Sequence: 6 Standard ID: 18I27680

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	25987.00	25679.00	25987.00	26295.00

Sample ID: STD6 Units: PPB
Analyzed: 09/28/18 07:14 Sequence: 7 Standard ID: 18I27680

Analyte	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
MERCURY	51280.00	50900.00	51330.00	51609.00

Sample ID: ICV Units: mg/l
Analyzed: 09/28/18 07:24 Sequence: 8 Standard ID: 18I27679

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.003091000	0.003098700	0.003090100	0.003084300

Sample ID: ICB Units: mg/l
Analyzed: 09/28/18 07:26 Sequence: 9

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00003850000	-0.00003880000	-0.00003840000	-0.00003820000

Sample ID: ICVLL Units: mg/l
Analyzed: 09/28/18 07:34 Sequence: 12 Standard ID: 18I27680

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.0002340000	0.0002297000	0.0002350000	0.0002373000

Sample ID: CCVLL Units: mg/l
Analyzed: 09/28/18 10:34 Sequence: 86 Standard ID: 18I27680

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.0002077000	0.0002083000	0.0002071000	0.0002077000

Sample ID: CCV Units: mg/l
Analyzed: 09/28/18 11:01 Sequence: 97 Standard ID: 18I27680

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.002630300	0.002638800	0.002642300	0.002609900

Sample ID: CCB Units: mg/l
Analyzed: 09/28/18 11:03 Sequence: 98

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00003710000	-0.00003670000	-0.00003670000	-0.00003790000

Sample ID: BLANK DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:20 Sequence: 105

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00001660000	-0.00001720000	-0.00001640000	-0.00001620000

Sample ID: LCS DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:23 Sequence: 106

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.003298700	0.003249300	0.003298000	0.003348900

Sample ID: LCSD DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:25 Sequence: 107

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.003198000	0.003181500	0.003204700	0.003207800

Sample ID: L1028256-01 DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:28 Sequence: 108

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00002360000	-0.00002340000	-0.00002380000	-0.00002340000

Sample ID: CCV-2 Units: mg/l
Analyzed: 09/28/18 11:30 Sequence: 109 Standard ID: 18I27680

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.002658700	0.002638200	0.002673700	0.002664300

Sample ID: CCB-2 Units: mg/l
Analyzed: 09/28/18 11:33 Sequence: 110

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00003300000	-0.00003340000	-0.00003280000	-0.00003300000

Sample ID: MS DF: 1x Ref Sample ID: L1028256-01 Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:35 Sequence: 111

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.003310900	0.003304700	0.003316700	0.003311300

Sample ID: MSD DF: 1x Ref Sample ID: L1028256-01 Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:38 Sequence: 112

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.003078300	0.003067300	0.003066500	0.003101200

Sample ID: L1028256-02 DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:40 Sequence: 113

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00003270000	-0.00003300000	-0.00003260000	-0.00003260000

Sample ID: L1028256-03 DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:42 Sequence: 114

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00001670000	-0.00001700000	-0.00001740000	-0.00001580000

Sample ID: L1028256-04 DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:45 Sequence: 115

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00001650000	-0.00001660000	-0.00001620000	-0.00001680000

Sample ID: L1028256-05 DF: 1x Batch: WG1170490 Units: mg/l
Analyzed: 09/28/18 11:47 Sequence: 116

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00001280000	-0.00001270000	-0.00001210000	-0.00001350000

Sample ID: CCV Units: mg/l
Analyzed: 09/28/18 12:00 Sequence: 121 Standard ID: 18I27680

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.002567600	0.002583800	0.002574500	0.002544600

Sample ID: CCB Units: mg/l
Analyzed: 09/28/18 12:02 Sequence: 122

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		-0.00004380000	-0.00004270000	-0.00004410000	-0.00004470000

Sample ID: CCVLL Units: mg/l
Analyzed: 09/28/18 12:16 Sequence: 123 Standard ID: 18I27680

Analyte	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
MERCURY		0.0002268000	0.0002266000	0.0002260000	0.0002278000

7470A GW HG Metals Prep Benchsheet

Batch: WG1170490

Analyst: ABL802 **Balance ID:** NA **Vessel Vendor:** 39065 **Hotblock ID:** MPD **Hotblock Temp On:** 98 **Hotblock Temp Off:** 98
Hotblock Time On: 09/24/18 12:30:00 **Hotblock Time Off:** 09/24/18 14:30:00 **Prep Date:** 09/24/18 12:44-12:45 **Prep End Date/Time:** 09/24/18 14:31 **SOP:** 340384A
Method: 7470A **15min KMNO4 HoldTime:** 09/24/18 12:15:00 **Filter Lot#:** N/A **pH Lot #:** 10BDH0681 **Thermometer Correction Factor:** -0.7
Calibration and Instrument Stds: 18I24401

LCS/D Standard: 18I21276 Amt. Used: 90 uL Exp. Date:09/28/18 **HNO3:** 18I08003 Amt. Used: 0.75 mL Exp. Date:09/08/19
H2SO4: 18I14630 Amt. Used: 1.50 mL Exp. Date:03/14/19 **KMNO4:** 18I18825 Amt. Used: 5 mL Exp. Date:09/24/18
K2S2O8: 18H20240 Amt. Used: 2.50 mL Exp. Date:02/20/19 **H8N2O6S:** 18I18826 Amt. Used: 2 mL Exp. Date:09/24/18 **SnCl:** 18H05855 mL Exp. Date:06/01/19
HCl: 18I13436 mL Exp. Date:03/13/19

Sample ID	Sample Matrix	Initial Sample Vol (mL)	Final Volume (mL)	Review Analyst	Review Date	Sample Comments
BLANK		30	30.0	ABL802	09/24/18 14:32:12	
LCS		30	30.0	ABL802	09/24/18 14:32:12	
LCSD		30	30.0	ABL802	09/24/18 14:32:12	
MS(L1028256-01)		30	30.0	ABL802	09/24/18 14:32:12	
MSD(L1028256-01)		30	30.0	ABL802	09/24/18 14:32:12	
1. L1028256-01	GW	30	30.0	ABL802	09/24/18 14:32:12	ms/msd
2. L1028256-02	GW	30	30.0	ABL802	09/24/18 14:32:12	
3. L1028256-03	GW	30	30.0	ABL802	09/24/18 14:32:12	
4. L1028256-04	GW	30	30.0	ABL802	09/24/18 14:32:12	
5. L1028256-05	GW	30	30.0	ABL802	09/24/18 14:32:12	
6. L1028306-01	GW	30	30.0	ABL802	09/24/18 14:32:12	
7. L1028306-02	GW	30	30.0	ABL802	09/24/18 14:32:12	
8. L1028306-03	GW	30	30.0	ABL802	09/24/18 14:32:12	
9. L1028306-04	GW	30	30.0	ABL802	09/24/18 14:32:12	
10. L1028306-05	GW	30	30.0	ABL802	09/24/18 14:32:12	
11. L1028306-06	GW	30	30.0	ABL802	09/24/18 14:32:12	
12. L1028306-07	GW	30	30.0	ABL802	09/24/18 14:32:12	
13. L1028306-08	GW	30	30.0	ABL802	09/24/18 14:32:12	
14. L1028306-09	GW	30	30.0	ABL802	09/24/18 14:32:12	
15. L1028306-10	GW	30	30.0	ABL802	09/24/18 14:32:12	
16. L1028306-11	GW	30	30.0	ABL802	09/24/18 14:32:12	
17. L1028306-12	GW	30	30.0	ABL802	09/24/18 14:32:12	
18. L1028306-13	GW	30	30.0	ABL802	09/24/18 14:32:12	
19. L1028306-14	GW	30	30.0	ABL802	09/24/18 14:32:12	
20. L1028306-15	GW	30	30.0	ABL802	09/24/18 14:32:12	

Comments:

Reviewed By: ABL802 on 09/24/18 14:32:12

8260C Volatile Organic Compounds (GC/MS)

2A-OR

SURROGATE RECOVERY

Analytical Method: 8260C **SDG:** L1028256
Matrix: GW

Sample ID	ESC Sample ID	Instrument	File ID	DMC-1	DMC-2	DMC-3	DMC-4	TOT Out
				% Rec.	*% Rec.*	*% Rec.*	*% Rec.*	
RMW-4	L1028256-01	VOCMS25	0925_26	111	110	106	94.1	0
RMW-3	L1028256-02	VOCMS25	0925_18	110	104	103	97.3	0
RMW-9	L1028256-03	VOCMS25	0925_19	110	105	99.1	103	0
WELL-09	L1028256-04	VOCMS25	0925_20	112	104	98.5	95.1	0
DUPE	L1028256-05	VOCMS25	0925_21	108	105	101	103	0
MS	R3344826-6	VOCMS25	0925_29	110	99.6	100	99.9	0
MSD	R3344826-7	VOCMS25	0925_30	110	104	99.4	99.8	0
MS	R3344826-4	VOCMS25	0925_27	115	104	99.6	102	0
MSD	R3344826-5	VOCMS25	0925_28	105	104	107	102	0
BLANK	R3344826-3	VOCMS25	0925_05	102	109	95.1	103	0
LCS	R3344826-1	VOCMS25	0925_02LCS	99.7	106	98.9	103	0
LCSD	R3344826-2	VOCMS25	0925_03	113	98.6	94.5	106	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	Toluene-d8	80.0 - 120
DMC-2	Dibromofluoromethane	75.0 - 120
DMC-3	a,a,a-Trifluorotoluene	80.0 - 120
DMC-4	4-Bromofluorobenzene	77.0 - 126

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-4
R3344826-5

MS Sample / File ID:	R3344826-4 / 0925_27	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-5 / 0925_28	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028028-12 / 0925_25	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Acetone	125	U	145	149	116	119	1	10.0 - 160	2.76	35
Benzene	25.0	U	23.1	23.3	92.2	93.3	1	17.0 - 158	1.13	27
Bromodichloromethane	25.0	U	24.2	24.4	96.7	97.6	1	31.0 - 150	0.852	27
Bromochloromethane	25.0	U	25.2	25.1	101	100	1	38.0 - 142	0.537	26
Bromoform	25.0	U	22.9	23.3	91.4	93.2	1	29.0 - 150	1.91	29
Bromomethane	25.0	U	18.3	17.9	73.2	71.7	1	10.0 - 160	2.00	38
n-Butylbenzene	25.0	U	24.4	24.1	97.7	96.3	1	31.0 - 150	1.41	30
sec-Butylbenzene	25.0	U	26.1	25.7	105	103	1	33.0 - 155	1.72	29
tert-Butylbenzene	25.0	U	29.6	28.6	118	114	1	34.0 - 153	3.33	28
Carbon disulfide	25.0	U	21.2	20.6	84.9	82.3	1	10.0 - 156	3.04	28
Carbon tetrachloride	25.0	U	24.9	24.6	99.7	98.5	1	23.0 - 159	1.18	28
Chlorobenzene	25.0	U	29.0	27.3	116	109	1	33.0 - 152	6.11	27
Chlorodibromomethane	25.0	U	27.3	26.3	109	105	1	37.0 - 149	3.68	27
Chloroethane	25.0	U	18.9	18.6	75.4	74.3	1	10.0 - 160	1.42	30
Chloroform	25.0	U	24.2	24.6	96.9	98.3	1	29.0 - 154	1.42	28
Chloromethane	25.0	U	21.0	21.1	84.1	84.3	1	10.0 - 160	0.188	29
Cyclohexane	25.0	U	24.8	26.1	99.3	104	1	19.0 - 160	4.86	23
1,2-Dibromo-3-Chloropropane	25.0	U	24.6	23.8	98.4	95.0	1	22.0 - 151	3.48	34
1,2-Dibromoethane	25.0	U	26.8	26.2	107	105	1	34.0 - 147	2.56	27
1,2-Dichlorobenzene	25.0	U	26.0	25.9	104	104	1	34.0 - 149	0.202	28
1,3-Dichlorobenzene	25.0	U	25.7	23.8	103	95.3	1	36.0 - 146	7.49	27
1,4-Dichlorobenzene	25.0	U	25.6	25.1	102	101	1	35.0 - 142	1.82	27
Dichlorodifluoromethane	25.0	U	25.7	24.2	103	96.8	1	10.0 - 160	6.19	29
1,1-Dichloroethane	25.0	0.519	25.1	24.6	98.1	96.2	1	25.0 - 158	1.93	27
1,2-Dichloroethane	25.0	U	24.7	25.1	98.8	100	1	29.0 - 151	1.60	27
1,1-Dichloroethene	25.0	0.893	27.5	26.6	106	103	1	11.0 - 160	3.47	29
cis-1,2-Dichloroethene	25.0	0.310	24.3	24.8	95.8	97.9	1	10.0 - 160	2.17	27
trans-1,2-Dichloroethene	25.0	U	24.8	23.8	99.3	95.0	1	17.0 - 153	4.45	27
1,2-Dichloropropane	25.0	U	24.8	24.3	99.2	97.0	1	30.0 - 156	2.20	27
cis-1,3-Dichloropropene	25.0	U	24.4	24.0	97.7	96.2	1	34.0 - 149	1.54	28
trans-1,3-Dichloropropene	25.0	U	26.4	24.7	106	98.9	1	32.0 - 149	6.68	28
Ethylbenzene	25.0	U	29.8	28.0	119	112	1	30.0 - 155	6.23	27
2-Hexanone	125	U	149	157	119	126	1	21.0 - 160	5.68	29
Isopropylbenzene	25.0	U	25.6	25.1	103	100	1	28.0 - 157	2.16	27
p-Isopropyltoluene	25.0	U	26.5	26.2	106	105	1	30.0 - 154	1.01	29
2-Butanone (MEK)	125	U	151	155	120	124	1	10.0 - 160	2.58	32
Methyl Acetate	125	U	133	134	107	107	1	18.0 - 151	0.466	30
Methyl Cyclohexane	25.0	0.948	25.1	24.0	96.4	92.3	1	11.0 - 160	4.22	24
Methylene Chloride	25.0	U	22.0	21.3	88.0	85.3	1	23.0 - 144	3.09	28
4-Methyl-2-pentanone (MIBK)	125	U	161	151	129	121	1	29.0 - 160	6.29	29
Methyl tert-butyl ether	25.0	U	22.4	21.5	89.7	86.1	1	28.0 - 150	4.05	29
Naphthalene	25.0	U	26.9	26.4	107	106	1	12.0 - 156	1.57	35
n-Propylbenzene	25.0	U	26.1	23.3	104	93.3	1	31.0 - 154	11.2	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-4
R3344826-5

MS Sample / File ID:	R3344826-4 / 0925_27	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-5 / 0925_28	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028028-12 / 0925_25	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Styrene	25.0	U	23.9	25.2	95.8	101	1	33.0 - 155	5.21	28
1,1,2,2-Tetrachloroethane	25.0	U	24.1	23.3	96.3	93.3	1	33.0 - 150	3.12	28
Tetrachloroethene	25.0	U	28.2	26.3	113	105	1	10.0 - 160	7.18	27
Toluene	25.0	U	26.0	25.5	104	102	1	26.0 - 154	2.07	28
1,1,2-Trichlorotrifluoroethane	25.0	U	26.8	26.2	107	105	1	23.0 - 160	2.23	30
1,2,3-Trichlorobenzene	25.0	U	23.5	23.3	94.0	93.3	1	17.0 - 150	0.682	36
1,2,4-Trichlorobenzene	25.0	U	25.6	25.4	102	102	1	24.0 - 150	0.816	33
1,1,1-Trichloroethane	25.0	U	27.4	27.0	109	108	1	23.0 - 160	1.34	28
1,1,2-Trichloroethane	25.0	U	25.3	27.2	101	109	1	35.0 - 147	7.15	27
Trichloroethene	25.0	71.8	94.2	95.6	89.6	94.9	1	10.0 - 160	1.40	25
Trichlorofluoromethane	25.0	U	24.1	24.4	96.5	97.8	1	17.0 - 160	1.25	31
1,2,4-Trimethylbenzene	25.0	U	26.3	24.2	105	96.9	1	26.0 - 154	8.19	27
1,3,5-Trimethylbenzene	25.0	U	25.5	25.0	102	99.9	1	28.0 - 153	2.11	27
Vinyl chloride	25.0	U	23.1	23.4	92.2	93.8	1	10.0 - 160	1.68	27
o-Xylene	25.0	U	27.4	27.6	110	110	1	45.0 - 144	0.424	26
m&p-Xylenes	50.0	U	57.4	52.0	115	104	1	43.0 - 146	9.89	26

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-6
R3344826-7

MS Sample / File ID:	R3344826-6 / 0925_29	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-7 / 0925_30	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028256-01 / 0925_26	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Acetone	125	ND	157	165	126	132	1	10.0 - 160	4.84	35
Benzene	25.0	ND	23.6	24.0	94.2	95.8	1	17.0 - 158	1.70	27
Bromodichloromethane	25.0	ND	23.3	24.4	93.1	97.6	1	31.0 - 150	4.74	27
Bromochloromethane	25.0	ND	25.2	26.4	101	106	1	38.0 - 142	4.63	26
Bromoform	25.0	ND	23.0	23.6	92.0	94.5	1	29.0 - 150	2.63	29
Bromomethane	25.0	ND	18.8	18.4	75.1	73.4	1	10.0 - 160	2.24	38
n-Butylbenzene	25.0	ND	25.1	26.6	100	107	1	31.0 - 150	6.13	30
sec-Butylbenzene	25.0	ND	26.3	25.9	105	104	1	33.0 - 155	1.61	29
tert-Butylbenzene	25.0	ND	29.2	28.1	117	113	1	34.0 - 153	3.70	28
Carbon disulfide	25.0	ND	21.4	21.6	85.7	86.5	1	10.0 - 156	0.990	28
Carbon tetrachloride	25.0	ND	24.3	24.7	97.3	98.7	1	23.0 - 159	1.34	28
Chlorobenzene	25.0	ND	28.4	28.9	114	116	1	33.0 - 152	1.92	27
Chlorodibromomethane	25.0	ND	29.7	28.2	119	113	1	37.0 - 149	5.19	27
Chloroethane	25.0	ND	18.3	19.2	73.3	76.7	1	10.0 - 160	4.51	30
Chloroform	25.0	ND	24.3	24.2	97.3	97.0	1	29.0 - 154	0.327	28
Chloromethane	25.0	ND	21.5	21.2	86.0	84.8	1	10.0 - 160	1.34	29
Cyclohexane	25.0	ND	25.1	26.4	100	106	1	19.0 - 160	5.03	23
1,2-Dibromo-3-Chloropropane	25.0	ND	25.0	25.2	99.9	101	1	22.0 - 151	1.03	34
1,2-Dibromoethane	25.0	ND	28.8	26.5	115	106	1	34.0 - 147	8.01	27
1,2-Dichlorobenzene	25.0	ND	26.6	27.9	106	112	1	34.0 - 149	4.96	28
1,3-Dichlorobenzene	25.0	ND	26.5	26.2	106	105	1	36.0 - 146	0.955	27
1,4-Dichlorobenzene	25.0	ND	25.9	25.2	104	101	1	35.0 - 142	2.83	27
Dichlorodifluoromethane	25.0	ND	24.1	26.4	96.5	105	1	10.0 - 160	8.79	29
1,1-Dichloroethane	25.0	ND	25.2	24.5	101	97.9	1	25.0 - 158	2.91	27
1,2-Dichloroethane	25.0	ND	25.0	24.4	99.8	97.6	1	29.0 - 151	2.21	27
1,1-Dichloroethene	25.0	ND	27.9	27.5	111	110	1	11.0 - 160	1.33	29
cis-1,2-Dichloroethene	25.0	ND	24.8	26.0	99.1	104	1	10.0 - 160	5.00	27
trans-1,2-Dichloroethene	25.0	ND	24.4	25.0	97.5	99.9	1	17.0 - 153	2.45	27
1,2-Dichloropropane	25.0	ND	24.4	26.0	97.7	104	1	30.0 - 156	6.31	27
cis-1,3-Dichloropropene	25.0	ND	24.7	24.4	98.9	97.8	1	34.0 - 149	1.13	28
trans-1,3-Dichloropropene	25.0	ND	27.2	25.4	109	101	1	32.0 - 149	6.90	28
Ethylbenzene	25.0	ND	30.1	30.4	118	119	1	30.0 - 155	1.06	27
2-Hexanone	125	ND	171	154	137	123	1	21.0 - 160	10.8	29
Isopropylbenzene	25.0	ND	26.6	25.8	106	103	1	28.0 - 157	3.02	27
p-Isopropyltoluene	25.0	ND	27.4	29.4	110	118	1	30.0 - 154	6.87	29
2-Butanone (MEK)	125	ND	143	152	114	121	1	10.0 - 160	5.85	32
Methyl Acetate	125	ND	131	136	104	109	1	18.0 - 151	4.33	30
Methyl Cyclohexane	25.0	ND	23.7	24.7	94.8	98.7	1	11.0 - 160	4.06	24
Methylene Chloride	25.0	ND	22.1	22.4	88.5	89.6	1	23.0 - 144	1.25	28
4-Methyl-2-pentanone (MIBK)	125	ND	173	152	139	122	1	29.0 - 160	12.9	29
Methyl tert-butyl ether	25.0	ND	21.9	23.0	87.7	92.0	1	28.0 - 150	4.83	29
Naphthalene	25.0	12.5	40.0	43.9	110	126	1	12.0 - 156	9.40	35
n-Propylbenzene	25.0	ND	25.8	26.8	103	107	1	31.0 - 154	3.77	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-6
R3344826-7

MS Sample / File ID:	R3344826-6 / 0925_29	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-7 / 0925_30	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028256-01 / 0925_26	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Styrene	25.0	ND	24.2	25.2	96.9	101	1	33.0 - 155	3.94	28
1,1,2,2-Tetrachloroethane	25.0	ND	24.7	25.0	98.7	99.8	1	33.0 - 150	1.07	28
Tetrachloroethene	25.0	ND	29.1	27.5	116	110	1	10.0 - 160	5.62	27
Toluene	25.0	ND	28.7	28.2	112	110	1	26.0 - 154	1.95	28
1,1,2-Trichlorotrifluoroethane	25.0	ND	25.7	27.6	103	110	1	23.0 - 160	7.15	30
1,2,3-Trichlorobenzene	25.0	ND	24.7	26.7	99.0	107	1	17.0 - 150	7.67	36
1,2,4-Trichlorobenzene	25.0	ND	27.1	28.0	109	112	1	24.0 - 150	3.05	33
1,1,1-Trichloroethane	25.0	ND	26.3	26.9	105	107	1	23.0 - 160	2.14	28
1,1,2-Trichloroethane	25.0	ND	28.5	26.6	114	106	1	35.0 - 147	6.85	27
Trichloroethene	25.0	ND	25.7	24.8	103	99.0	1	10.0 - 160	3.74	25
Trichlorofluoromethane	25.0	ND	26.1	27.2	93.6	98.0	1	17.0 - 160	4.13	31
1,2,4-Trimethylbenzene	25.0	ND	26.0	25.8	104	103	1	26.0 - 154	0.638	27
1,3,5-Trimethylbenzene	25.0	ND	26.1	25.8	105	103	1	28.0 - 153	1.14	27
Vinyl chloride	25.0	ND	23.9	24.7	95.5	98.8	1	10.0 - 160	3.39	27
o-Xylene	25.0	ND	30.6	28.4	121	112	1	45.0 - 144	7.39	26
m&p-Xylenes	50.0	ND	62.4	61.8	122	121	1	43.0 - 146	0.969	26

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-1
R3344826-2

LCS Sample / File ID:	R3344826-1 / 0925_02LCS	**SDG:**	L1028256
LCSD Sample / File ID:	R3344826-2 / 0925_03	**Analytical Batch:**	WG1170992
Instrument ID:	VOCMS25	**Dilution Factor:**	1
Analytical Method:	8260C	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	*%*	*%*	*%*	*%*	*%*
Acetone	125	112	118	89.7	94.5	19.0 - 160	5.26	27
Benzene	25.0	21.9	22.2	87.5	88.9	70.0 - 123	1.61	20
Bromodichloromethane	25.0	22.3	22.1	89.0	88.3	75.0 - 120	0.796	20
Bromochloromethane	25.0	24.1	23.6	96.6	94.4	76.0 - 122	2.25	20
Bromoform	25.0	22.1	24.1	88.2	96.3	68.0 - 132	8.71	20
Bromomethane	25.0	21.2	20.3	84.8	81.4	10.0 - 160	4.12	25
n-Butylbenzene	25.0	21.9	22.5	87.5	90.1	73.0 - 125	2.93	20
sec-Butylbenzene	25.0	24.0	23.8	95.9	95.1	75.0 - 125	0.856	20
tert-Butylbenzene	25.0	23.7	26.4	94.6	106	76.0 - 124	11.0	20
Carbon disulfide	25.0	21.4	19.8	85.5	79.2	61.0 - 128	7.71	20
Carbon tetrachloride	25.0	24.4	21.9	97.5	87.6	68.0 - 126	10.7	20
Chlorobenzene	25.0	27.3	29.2	109	117	80.0 - 121	6.75	20
Chlorodibromomethane	25.0	26.5	27.4	106	110	77.0 - 125	3.43	20
Chloroethane	25.0	22.3	19.9	89.3	79.5	47.0 - 150	11.6	20
Chloroform	25.0	23.3	21.8	93.0	87.3	73.0 - 120	6.36	20
Chloromethane	25.0	21.4	18.6	85.5	74.4	41.0 - 142	13.9	20
Cyclohexane	25.0	24.0	22.6	95.9	90.2	71.0 - 124	6.10	20
1,2-Dibromo-3-Chloropropane	25.0	22.7	23.9	90.8	95.7	58.0 - 134	5.26	20
1,2-Dibromoethane	25.0	26.4	28.2	105	113	80.0 - 122	6.57	20
1,2-Dichlorobenzene	25.0	24.5	25.8	97.8	103	79.0 - 121	5.33	20
1,3-Dichlorobenzene	25.0	23.8	24.7	95.0	98.9	79.0 - 120	3.93	20
1,4-Dichlorobenzene	25.0	23.9	24.0	95.8	95.8	79.0 - 120	0.0691	20
Dichlorodifluoromethane	25.0	25.0	23.2	100	92.7	51.0 - 149	7.69	20
1,1-Dichloroethane	25.0	23.9	21.7	95.5	86.6	70.0 - 126	9.72	20
1,2-Dichloroethane	25.0	24.3	23.9	97.2	95.7	70.0 - 128	1.61	20
1,1-Dichloroethene	25.0	25.2	23.4	101	93.7	71.0 - 124	7.21	20
cis-1,2-Dichloroethene	25.0	22.8	22.1	91.1	88.6	73.0 - 120	2.83	20
trans-1,2-Dichloroethene	25.0	23.4	22.1	93.6	88.4	73.0 - 120	5.67	20
1,2-Dichloropropane	25.0	23.4	23.3	93.7	93.3	77.0 - 125	0.441	20
cis-1,3-Dichloropropene	25.0	23.6	24.4	94.5	97.6	80.0 - 123	3.22	20
trans-1,3-Dichloropropene	25.0	24.2	24.6	96.9	98.5	78.0 - 124	1.61	20
Ethylbenzene	25.0	27.9	28.9	112	116	79.0 - 123	3.57	20
2-Hexanone	125	150	155	120	124	67.0 - 149	3.42	20
Isopropylbenzene	25.0	23.7	23.7	94.7	95.0	76.0 - 127	0.322	20
p-Isopropyltoluene	25.0	24.0	25.3	96.1	101	76.0 - 125	5.20	20
2-Butanone (MEK)	125	149	147	119	118	44.0 - 160	1.47	20
Methyl Acetate	125	122	135	98.0	108	57.0 - 148	9.87	20
Methyl Cyclohexane	25.0	22.9	22.7	91.7	90.7	68.0 - 126	1.10	20
Methylene Chloride	25.0	22.2	21.1	88.7	84.5	67.0 - 120	4.84	20
4-Methyl-2-pentanone (MIBK)	125	154	165	123	132	68.0 - 142	6.68	20
Methyl tert-butyl ether	25.0	22.1	21.9	88.2	87.7	68.0 - 125	0.573	20
Naphthalene	25.0	23.1	23.7	92.4	94.9	54.0 - 135	2.76	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-1
R3344826-2

LCS Sample / File ID:	R3344826-1 / 0925_02LCS	**SDG:**	L1028256
LCSD Sample / File ID:	R3344826-2 / 0925_03	**Analytical Batch:**	WG1170992
Instrument ID:	VOCMS25	**Dilution Factor:**	1
Analytical Method:	8260C	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	*%*	*%*	*%*	*%*	*%*
n-Propylbenzene	25.0	22.6	25.4	90.3	102	77.0 - 124	11.9	20
Styrene	25.0	23.0	23.8	91.9	95.2	73.0 - 130	3.50	20
1,1,2,2-Tetrachloroethane	25.0	20.2	21.4	80.7	85.7	65.0 - 130	6.00	20
Tetrachloroethene	25.0	25.4	25.2	102	101	72.0 - 132	0.868	20
Toluene	25.0	23.4	25.2	93.5	101	79.0 - 120	7.50	20
1,1,2-Trichlorotrifluoroethane	25.0	25.1	23.4	100	93.7	69.0 - 132	6.82	20
1,2,3-Trichlorobenzene	25.0	20.5	20.3	82.0	81.2	50.0 - 138	1.06	20
1,2,4-Trichlorobenzene	25.0	21.2	21.3	84.7	85.1	57.0 - 137	0.473	20
1,1,1-Trichloroethane	25.0	25.5	23.1	102	92.3	73.0 - 124	9.99	20
1,1,2-Trichloroethane	25.0	25.8	27.0	103	108	80.0 - 120	4.45	20
Trichloroethene	25.0	26.0	25.9	104	104	78.0 - 124	0.330	20
Trichlorofluoromethane	25.0	23.9	21.6	95.5	86.3	59.0 - 147	10.1	20
1,2,4-Trimethylbenzene	25.0	23.1	24.6	92.3	98.5	76.0 - 121	6.43	20
1,3,5-Trimethylbenzene	25.0	23.7	23.6	95.0	94.3	76.0 - 122	0.722	20
Vinyl chloride	25.0	22.8	20.6	91.2	82.4	67.0 - 131	10.2	20
o-Xylene	25.0	24.4	27.7	97.6	111	80.0 - 122	12.6	20
m&p-Xylenes	50.0	55.4	53.9	111	108	80.0 - 122	2.67	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3344826-3

ESC Sample ID:	R3344826-3	**SDG:**	L1028256
Lab File ID:	0925_05	**Preparation Date/Time:**	09/25/18 10:09
Instrument ID:	VOCMS25	**Analysis Date/Time:**	09/25/18 10:09
Analytical Batch:	WG1170992	**Dilution Factor:**	1
Analytical Method:	8260C	**Matrix:**	GW

Sample ID	ESC Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3344826-1	VOCMS25	0925_02LCS	09/25/18 09:09
LCSD	R3344826-2	VOCMS25	0925_03	09/25/18 09:29
RMW-3	L1028256-02	VOCMS25	0925_18	09/25/18 15:55
RMW-9	L1028256-03	VOCMS25	0925_19	09/25/18 16:15
WELL-09	L1028256-04	VOCMS25	0925_20	09/25/18 16:35
DUPE	L1028256-05	VOCMS25	0925_21	09/25/18 16:55
OS	L1028028-12	VOCMS25	0925_25	09/25/18 18:12
RMW-4	L1028256-01	VOCMS25	0925_26	09/25/18 18:32
RMW-4	L1028256-01	VOCMS25	0925_26	09/25/18 18:32
MS	R3344826-4	VOCMS25	0925_27	09/25/18 18:52
MSD	R3344826-5	VOCMS25	0925_28	09/25/18 19:11
MS	R3344826-6	VOCMS25	0925_29	09/25/18 19:31
MSD	R3344826-7	VOCMS25	0925_30	09/25/18 19:51

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0905_05-1	**SDG:**	L1028256
Instrument ID:	VOCMS25	**Analytical Method:**	8260C
Analysis Date/Time:	09/05/18 11:04		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	20
75	95	30	60	45
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	95
175	174	5	9	8
176	174	95	101	98
177	176	5	9	6

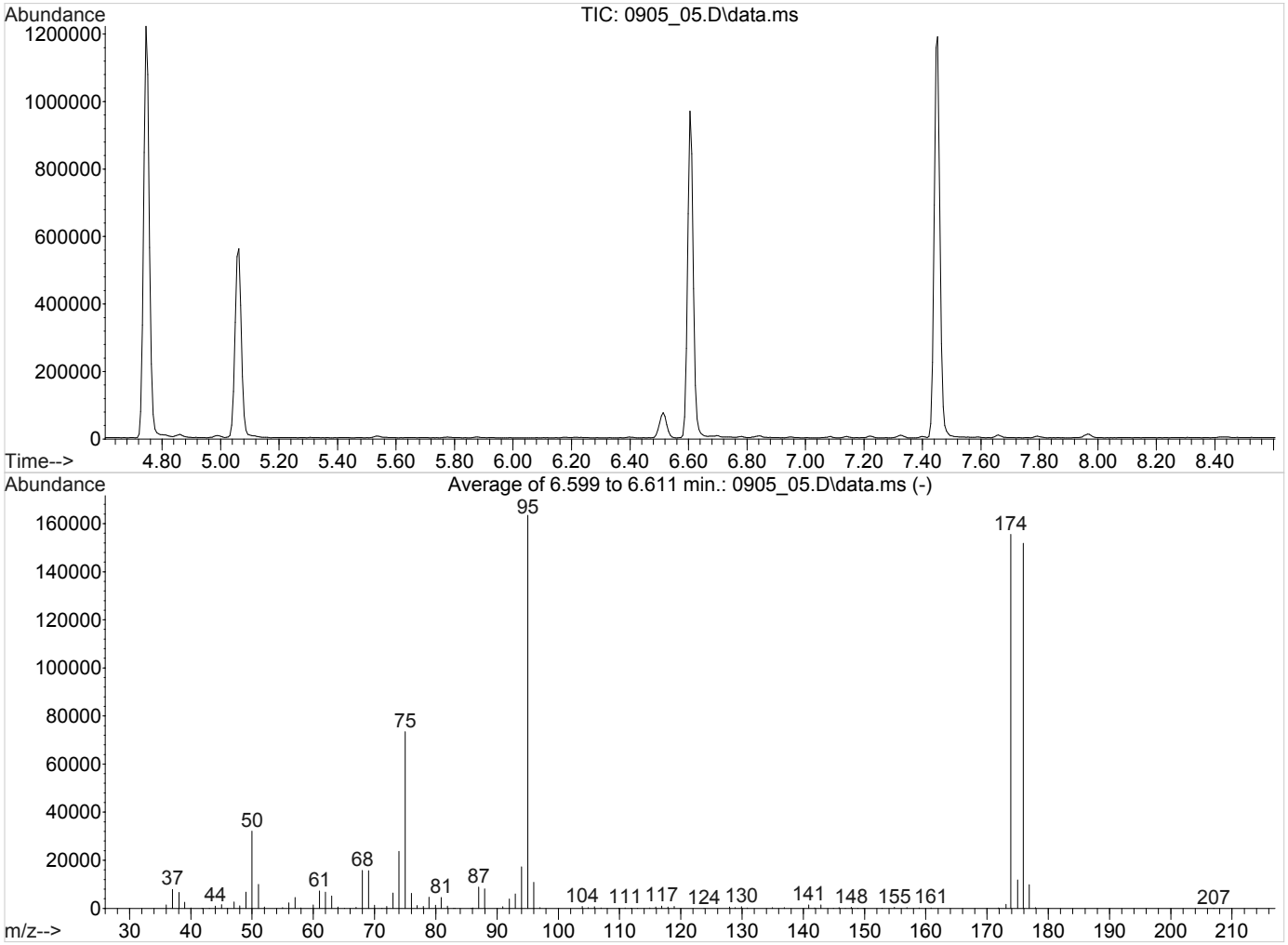
Sample ID	ESC Sample ID	File ID	Analysis date/time
STD-0.25	0.25	0905_08	09/05/18 13:52
STD-0.5	0.5	0905_09	09/05/18 14:12
STD-1	1	0905_10	09/05/18 14:32
STD-2	2	0905_11	09/05/18 14:52
STD-5.0	5.0	0905_12	09/05/18 15:12
STD-25	25	0905_13	09/05/18 15:32
STD-75	75	0905_14	09/05/18 15:52
STD-100	100	0905_15	09/05/18 16:12
STD-200	200	0905_16	09/05/18 16:33
SSCV	VOCMS250905180905_19-1455793	0905_19-1	09/05/18 17:33

BFB

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_05.D
Acq On : 5 Sep 2018 11:04 am
Operator : 605
Sample : INSTBLK
Misc : water
ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V825K15Q.M
Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
Last Update : Mon Nov 13 11:03:41 2017



AutoFind: Scans 1068, 1069, 1070; Background Corrected with Scan 1062

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	32075	PASS
75	95	30	60	44.9	73424	PASS
95	95	100	100	100.0	163520	PASS
96	95	5	9	6.6	10866	PASS
173	174	0.00	2	1.1	1644	PASS
174	95	50	100	95.1	155499	PASS
175	174	5	9	7.6	11830	PASS
176	174	95	101	97.7	151877	PASS
177	176	5	9	6.5	9838	PASS

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0925_01T-1	**SDG:**	L1028256
Instrument ID:	VOCMS25	**Analytical Method:**	8260C
Analysis Date/Time:	09/25/18 08:49		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	22
75	95	30	60	42
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	94
175	174	5	9	7
176	174	95	101	96
177	176	5	9	6

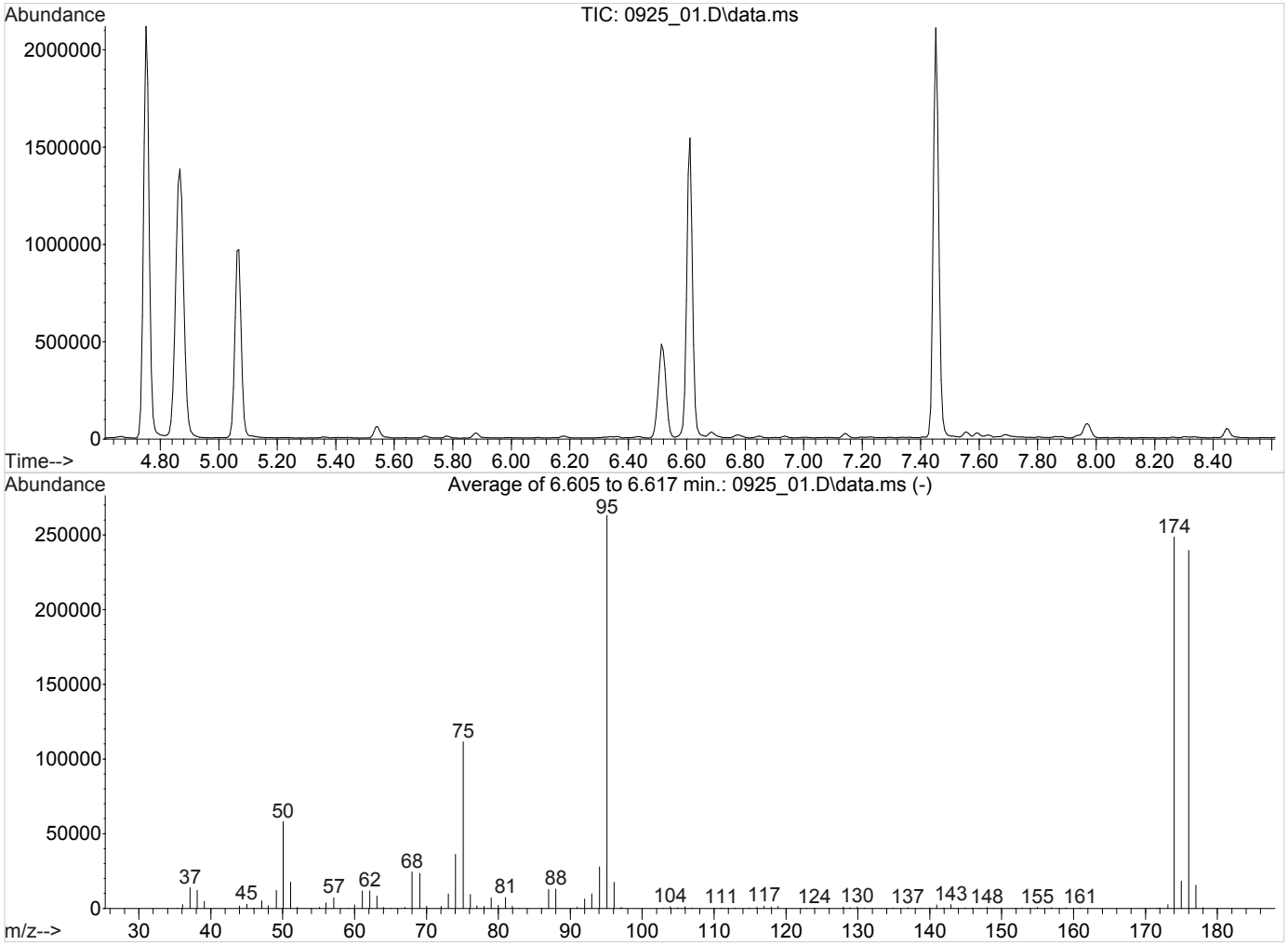
Sample ID	ESC Sample ID	File ID	Analysis date/time
ICV	VOCMS250925180925_02-1455793	0925_02-1	09/25/18 09:09
LCS	R3344826-1	0925_02LCS	09/25/18 09:09
LCSD	R3344826-2	0925_03	09/25/18 09:29
BLANK	R3344826-3	0925_05	09/25/18 10:09
RL	VOCMS250925180925_06-1455793	0925_06-1	09/25/18 11:32
RMW-3	L1028256-02	0925_18	09/25/18 15:55
RMW-9	L1028256-03	0925_19	09/25/18 16:15
WELL-09	L1028256-04	0925_20	09/25/18 16:35
DUPE	L1028256-05	0925_21	09/25/18 16:55
OS	L1028028-12	0925_25	09/25/18 18:12
OS	L1028256-01	0925_26	09/25/18 18:32
RMW-4	L1028256-01	0925_26	09/25/18 18:32
MS	R3344826-4	0925_27	09/25/18 18:52
MSD	R3344826-5	0925_28	09/25/18 19:11
MS	R3344826-6	0925_29	09/25/18 19:31
MSD	R3344826-7	0925_30	09/25/18 19:51

BFB

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_01.D
Acq On : 25 Sep 2018 8:49 am
Operator : 605
Sample : INSTBLK
Misc : water
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V825I05R.M
Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
Last Update : Thu Sep 06 14:18:48 2018



AutoFind: Scans 1069, 1070, 1071; Background Corrected with Scan 1063

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	58095	PASS
75	95	30	60	42.4	111539	PASS
95	95	100	100	100.0	263211	PASS
96	95	5	9	6.6	17364	PASS
173	174	0.00	2	1.0	2407	PASS
174	95	50	100	94.5	248640	PASS
175	174	5	9	7.3	18217	PASS
176	174	95	101	96.4	239616	PASS
177	176	5	9	6.5	15526	PASS

8A-OR

INTERNAL STANDARD AND RETENTION TIME

SDG:	L1028256	**Analytical Method:**	8260C
Instrument ID:	VOCMS25	**Calibration Start Date:**	09/05/18 13:52
Std File:	0925_02-1	**Calibration End Date:**	09/05/18 16:33
		Std Analysis Date:	09/25/18 09:09

Sample ID	File ID	1,4-DCB		DFB		BCP		PFB	
		Response	*RT*	*Response*	*RT*	*Response*	*RT*	*Response*	*RT*
STANDARD		361316	7.45	751890	3.94	116198	5.07	510716	3.63
UPPER LIMIT		722632		1503780		232396		1021432	
LOWER LIMIT		180658		375945		58099		255358	
LCS R3344826-1 WG1170992 1x	0925_02LCS	361316	7.45	751890	3.94	116198	5.07	510716	3.63
LCSD R3344826-2 WG1170992 1x	0925_03	338932	7.45	745597	3.94	108789	5.07	541137	3.63
BLANK R3344826-3 WG1170992 1x	0925_05	375337	7.45	769959	3.94	118500	5.07	515878	3.63
L1028256-02 WG1170992 1x	0925_18	356968	7.46	748913	3.94	114256	5.07	536782	3.63
L1028256-03 WG1170992 1x	0925_19	355421	7.46	728040	3.94	112331	5.07	519316	3.63
L1028256-04 WG1170992 1x	0925_20	354183	7.46	739232	3.94	109702	5.07	511179	3.63
L1028256-05 WG1170992 1x	0925_21	335267	7.46	747517	3.95	115717	5.07	527913	3.64
OS L1028028-12 WG1170992 1x	0925_25	375070	7.46	759012	3.95	114714	5.07	523732	3.64
OS L1028256-01 WG1170992 1x	0925_26	416747	7.46	794603	3.95	127513	5.07	541946	3.64
L1028256-01 WG1170992 1x	0925_26	416747	7.46	794603	3.95	127513	5.07	541946	3.64
MS R3344826-4 WG1170992 1x	0925_27	349444	7.46	704285	3.94	111676	5.07	495013	3.63
MSD R3344826-5 WG1170992 1x	0925_28	360942	7.46	707509	3.94	113640	5.07	506430	3.63
MS R3344826-6 WG1170992 1x	0925_29	355415	7.46	721676	3.94	107590	5.07	498039	3.63
MSD R3344826-7 WG1170992 1x	0925_30	341832	7.46	680224	3.94	108773	5.07	490001	3.63

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4 DFB - 8260-1,4-DIFLUOROBENZENE
BCP - 8260-2-BROMO-1-CHLOROPROPANE PFB - 8260-PENTAFLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_26	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 18:32
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 18:32
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.49	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	2.18	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	3.30	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.36	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.89	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	5.78	ND		0.384	1.00
2-Hexanone	591-78-6	5.54	ND		3.82	10.0
Isopropylbenzene	98-82-8	6.40	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	2.49	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.47	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	9.26	12.5		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	4.79	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_26	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 18:32
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 18:32
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.43	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.95	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	1.89	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	6.18	ND		0.341	1.00
m&p-Xylenes	1330-20-7	5.89	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	7.15	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_26.D
Acq On : 25 Sep 2018 6:32 pm
Operator : 605
Sample : L1028256-01 1x WG1170992
Misc : water
ALS Vial : 26 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:53:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.642	168	541946	40.0000000	ppb	0.02
48) 8260-1,4-DIFLUOROBENZENE	3.947	114	794603	40.0000000	ppb	0.01
56) 8260-2-BROMO-1-CHLOROP...	5.074	79	127513	40.0000000	ppb	# 0.01
76) 8260-1,4-DICHLOROBENZE...	7.458	152	416747	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	3.642	168	544032	40.0000000	ppb	0.02
119) AP9-1,4-DIFLUOROBENZENE	3.947	114	794603	40.0000000	ppb	0.02
124) AP9-2-BROMO-1-CHLOROPR...	5.074	79	127513	40.0000000	ppb	# 0.01
128) AP9-1,4-DICHLOROBENZEN...	7.458	152	416747	40.0000000	ppb	0.00
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.404	111	314126	43.9551394	ppb	0.02
Spiked Amount 40.000	Range 79 - 121		Recovery = 109.89%			
55) A,A,A-TRIFLUOROTOLUENE	4.312	146	468912	42.3985204	ppb	0.01
Spiked Amount 40.000	Range 90 - 116		Recovery = 106.00%			
60) TOLUENE-D8	4.757	98	968105	44.5296373	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 111.32%			
80) 4-BROMOFLUOROBENZENE	6.611	95	347907	37.6307548	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 94.08%			
Target Compounds						Qvalue
4) PROPENE	1.319	41	14596	6.1789689	ppb #	65
5) DICHLORODIFLUOROMETHANE	1.356	85	1584	0.2629532	ppb #	80
8) 1,3-BUTADIENE	1.484	39	3648	0.6613903	ppb #	1
11) TRICHLOROFLUOROMETHANE	1.886	101	22981	2.7046581	ppb	97
12) DICHLOROFLUOROMETHANE	1.916	67	13057	1.3091913	ug/l	95
13) ETHYL ETHER	2.038	59	4879	0.9793775	ppb #	85
14) ACROLEIN	2.361	56	511	0.5550714	ppb #	81
17) ACETONE	2.490	43	21208	9.1998726	ppb	96
19) CARBON DISULFIDE	2.185	76	4233	0.2343560	ppb #	82
21) METHYLENE CHLORIDE	2.465	84	1519	0.2388008	ppb #	70
22) METHYL ACETATE	2.490	43	23523	3.0617885	ppb #	61
27) 1,1-DICHLOROETHANE	2.886	63	2704	0.2245061	ppb	97
33) 2-BUTANONE (MEK)	3.453	43	6513	1.1384369	ppb	92
35) TETRAHYDROFURAN	3.392	42	2647	0.8567198	ppb #	88
37) CYCLOHEXANE	3.300	84	1196	0.1868766	ppb #	48
39) 1,1,1-TRICHLOROETHANE	3.428	97	1078	0.1348879	ppb #	89
47) T-AMYL ALCOHOL	3.751	59	608	0.4493569	ppb #	23
49) TRICHLOROETHENE	3.953	130	1845	0.2895208	ppb #	91
59) 4-METHYL-2-PENTANONE (...	4.995	43	5896	0.5598479	ppb	93
61) TOLUENE	4.794	91	12608	0.5834379	ppb	97
66) 2-HEXANONE	5.544	58	648	0.1420581	ppb #	1
71) ETHYLBENZENE	5.782	106	3848	0.5492815	ppb	96
72) M&P-XYLENE	5.885	106	11820	1.3651859	ppb	99
73) O-XYLENE	6.184	106	3446	0.3985743	ppb	92
79) ISOPROPYLBENZENE	6.403	105	4516	0.1855173	ppb #	92
81) BROMOBENZENE	6.611	77	2296	0.1984300	ppb #	17
86) 4-ETHYLTOLUENE	6.781	105	3188	0.1373467	ppb	98
91) 1,2,4-TRIMETHYLBENZENE	7.147	105	5285	0.2804695	ppb	100
95) DICYCLOPENTADIENE	7.452	66	7060	0.2409915	ppb #	94
97) 1,2,3-TRIMETHYLBENZENE	7.482	105	3870	0.2013566	ppb #	74
103) NAPHTHALENE	9.256	128	233593	12.4916044	ppb	100
105) 1-METHYLNAPHTHALENE	10.140	142	6536	0.8849236	ppb	99
106) 2-METHYLNAPHTHALENE	10.268	142	5118	0.7174050	ppb	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_26.D
Acq On : 25 Sep 2018 6:32 pm
Operator : 605
Sample : L1028256-01 1x WG1170992
Misc : water
ALS Vial : 26 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:53:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

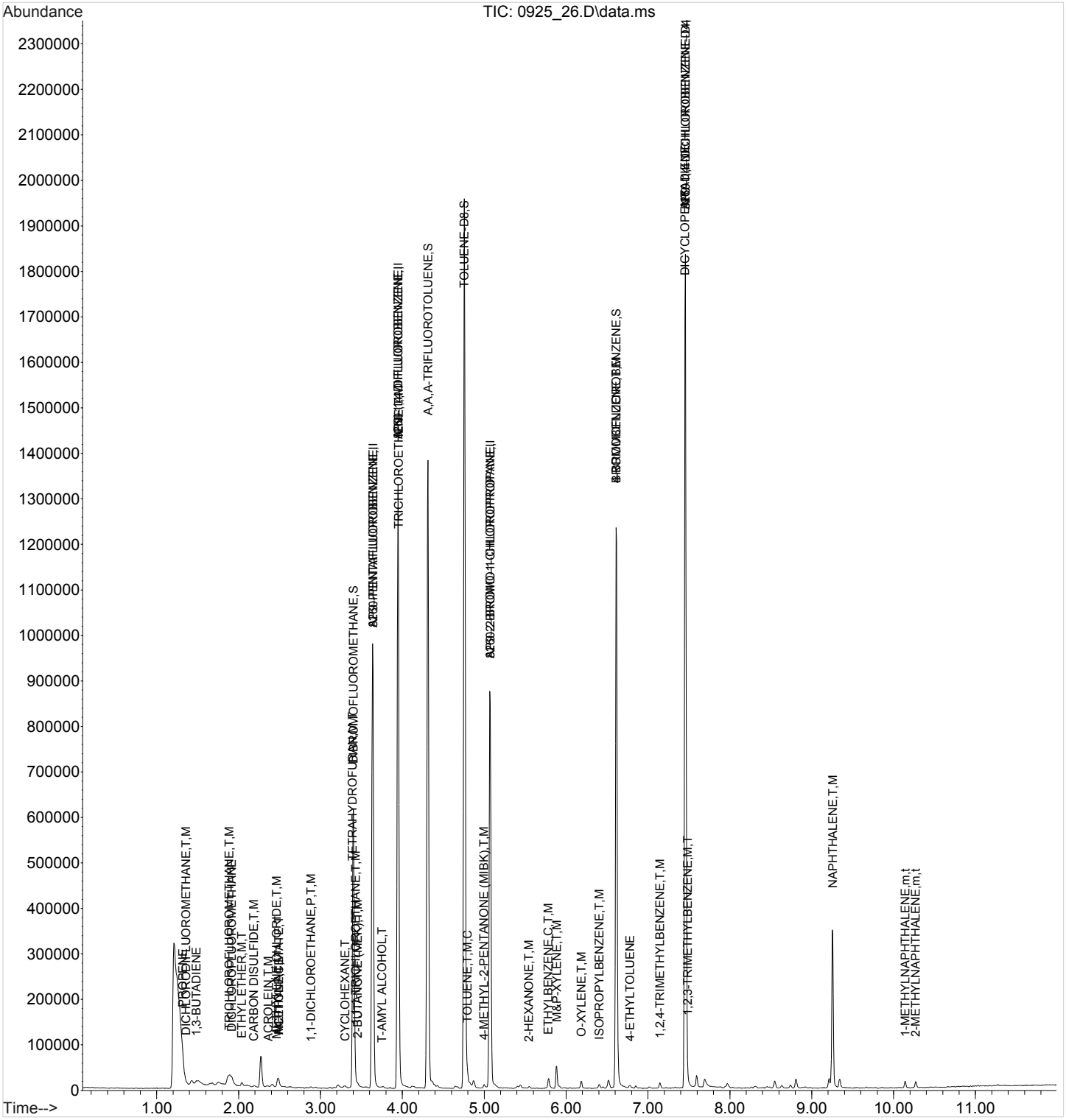
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

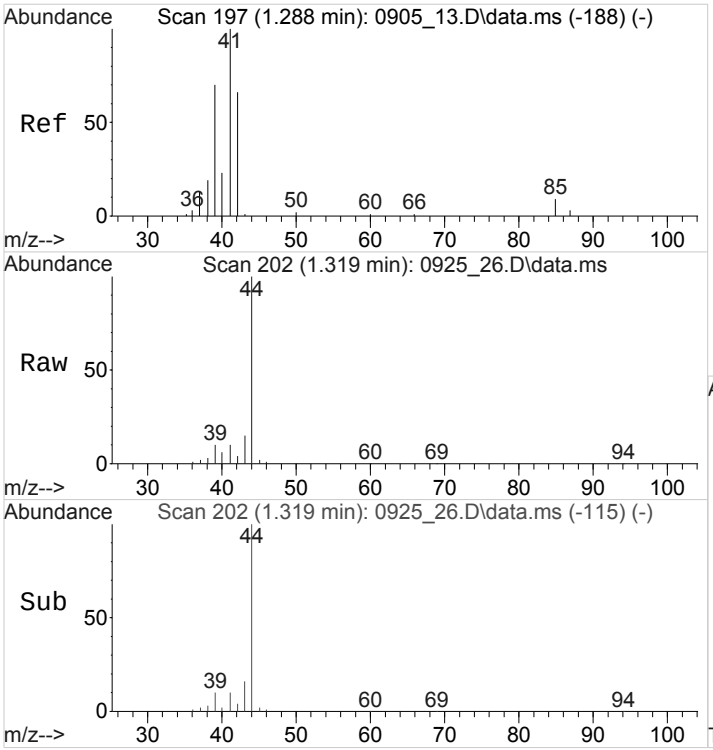
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_26.D
Acq On : 25 Sep 2018 6:32 pm
Operator : 605
Sample : L1028256-01 1x WG1170992
Misc : water
ALS Vial : 26 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:53:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

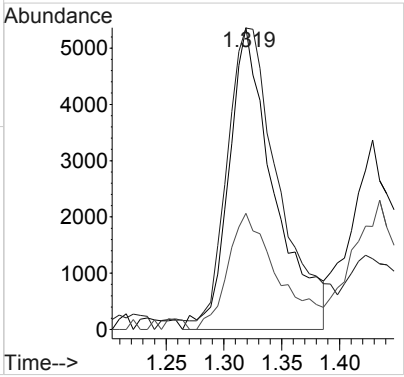


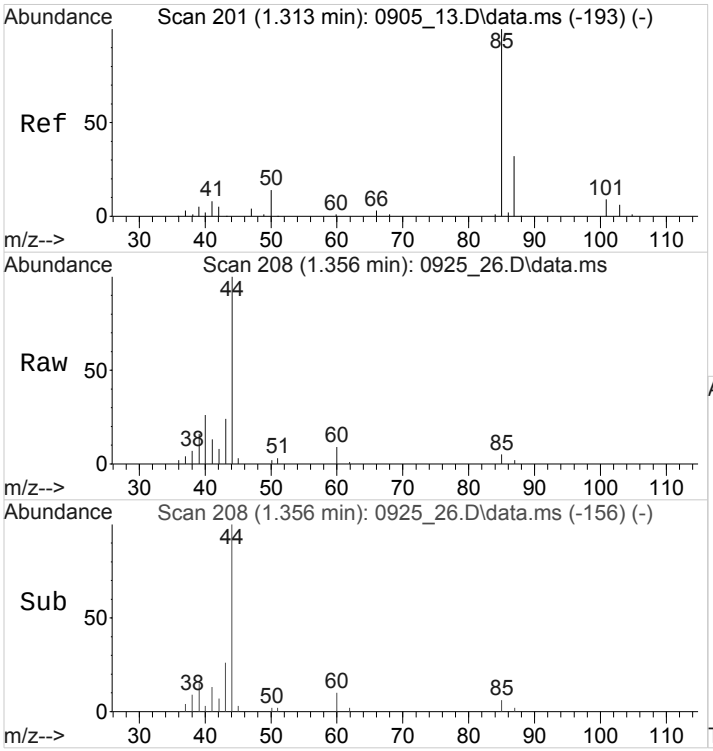


#4
PROPENE
Concen: 6.1789689 ppb
RT: 1.319 min Scan# 202
Delta R.T. 0.031 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 41 Resp: 14596

Ion	Ratio	Lower	Upper
41	100		
39	108.6	59.2	88.8#
42	42.6	52.2	78.4#

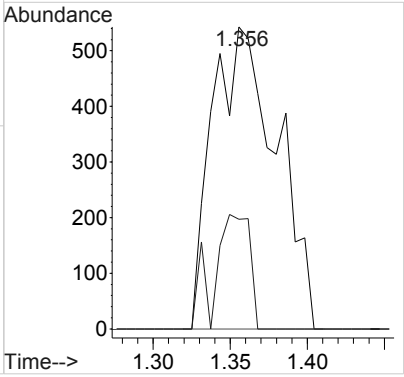


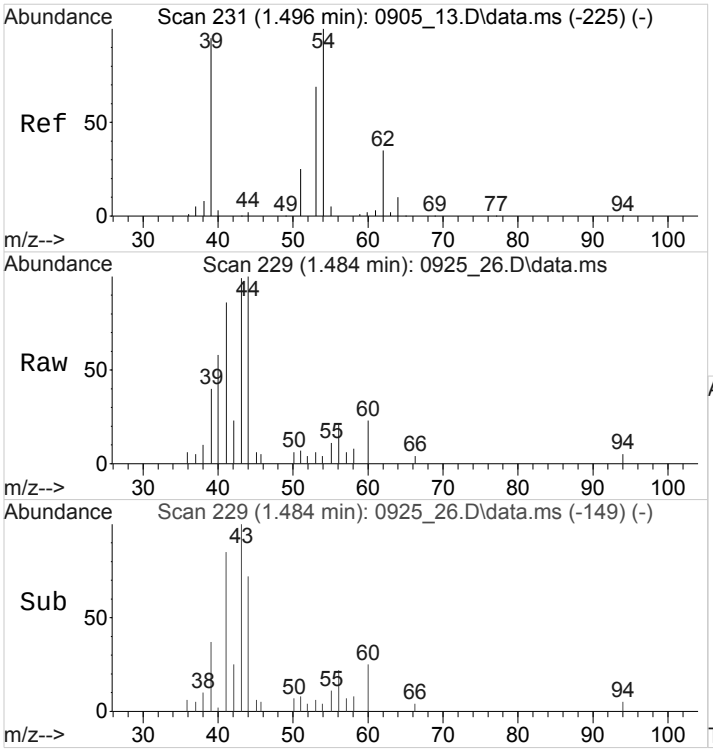


#5
DICHLORODIFLUOROMETHANE
Concen: 0.2629532 ppb
RT: 1.356 min Scan# 208
Delta R.T. 0.043 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 85 Resp: 1584

Ion	Ratio	Lower	Upper
85	100		
87	21.0	25.9	38.9#

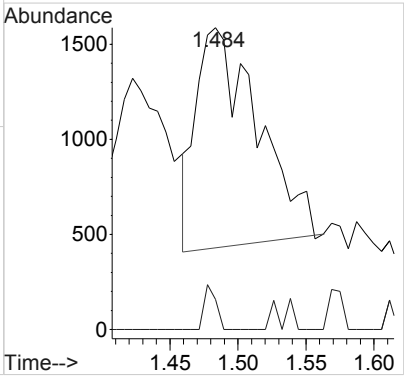


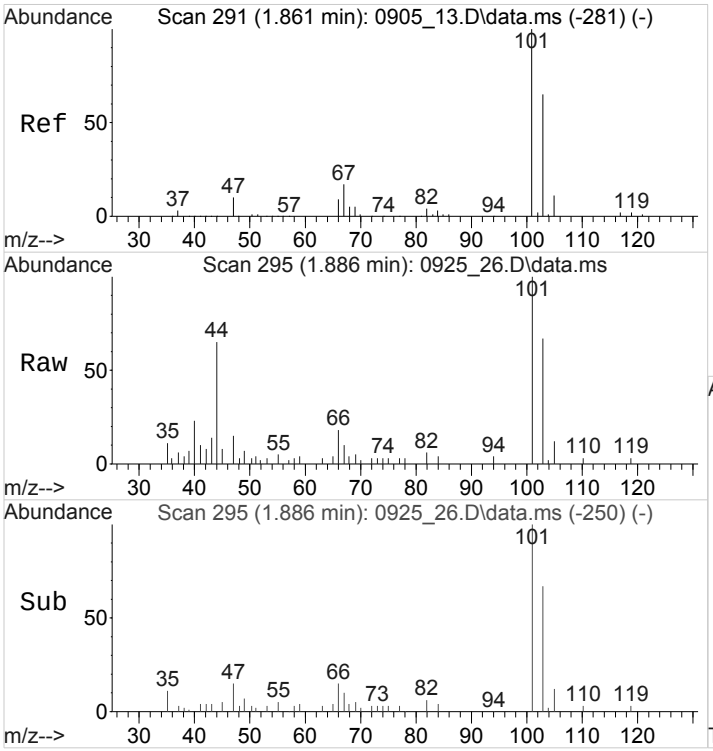


#8
1,3-BUTADIENE
Concen: 0.6613903 ppb
RT: 1.484 min Scan# 229
Delta R.T. -0.011 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 39 Resp: 3648

Ion	Ratio	Lower	Upper
39	100		
54	0.0	85.4	128.2#

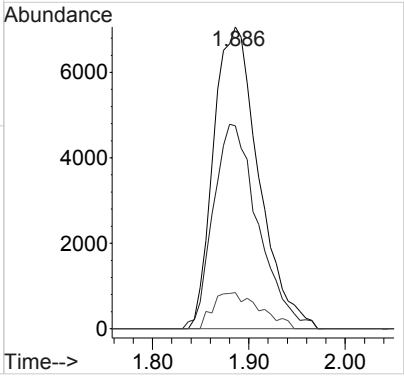


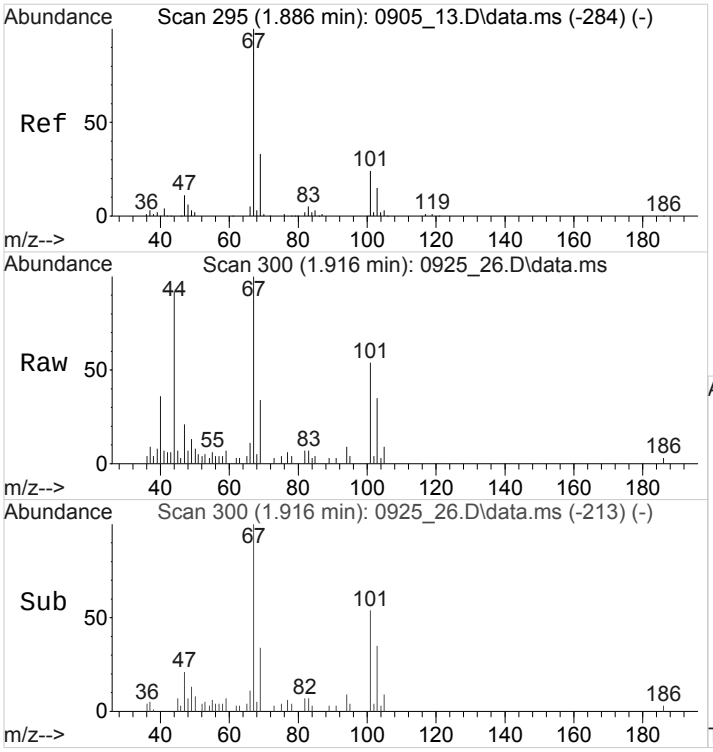


#11
TRICHLOROFLUOROMETHANE
Concen: 2.7046581 ppb
RT: 1.886 min Scan# 295
Delta R.T. 0.024 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:101 Resp: 22981

Ion	Ratio	Lower	Upper
101	100		
103	67.7	52.3	78.5
105	12.5	8.8	13.2

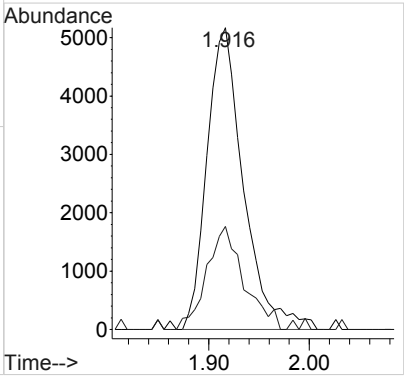


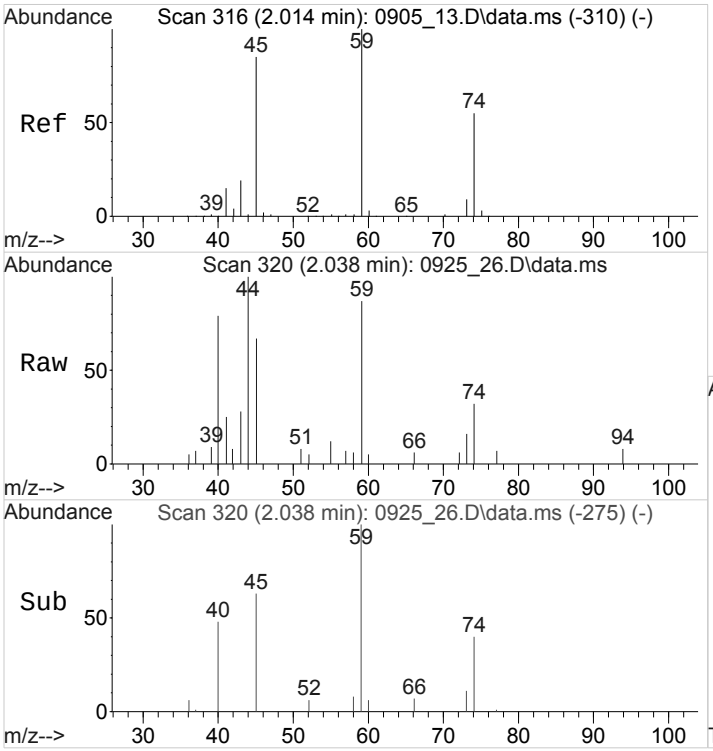


#12
DICHLOROFLUOROMETHANE
Concen: 1.3091913 ug/l
RT: 1.916 min Scan# 300
Delta R.T. 0.031 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 67 Resp: 13057

Ion	Ratio	Lower	Upper
67	100		
69	34.8	25.8	38.6

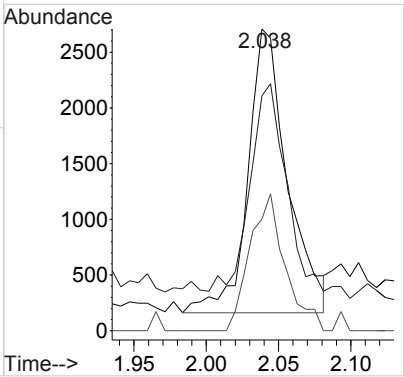


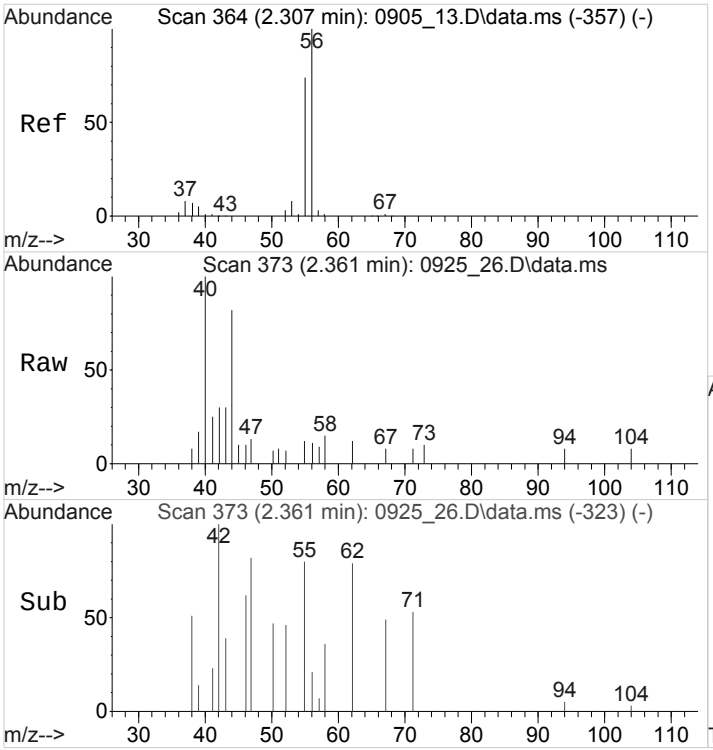


#13
ETHYL ETHER
Concen: 0.9793775 ppb
RT: 2.038 min Scan# 320
Delta R.T. 0.024 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 59 Resp: 4879

Ion	Ratio	Lower	Upper
59	100		
45	73.8	67.4	101.2
74	42.6	45.1	67.7#

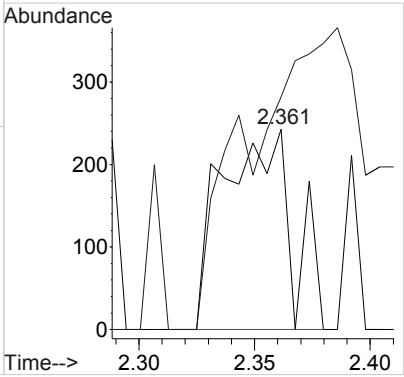


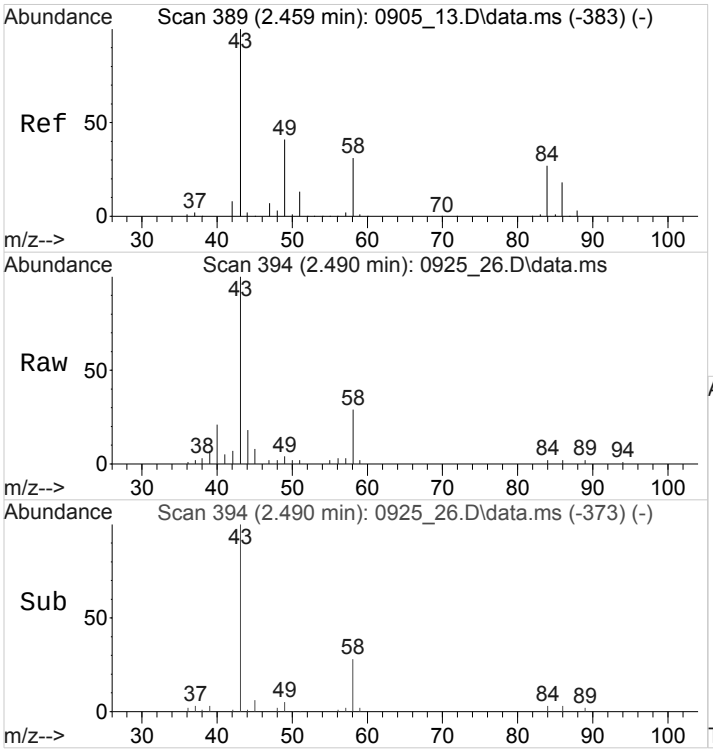


#14
ACROLEIN
Concen: 0.5550714 ppb
RT: 2.361 min Scan# 373
Delta R.T. 0.055 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 56 Resp: 511

Ion	Ratio	Lower	Upper
56	100		
55	58.9	59.8	89.6#

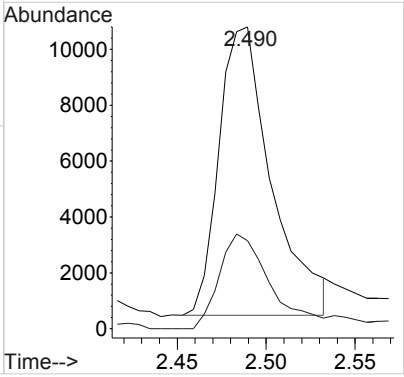


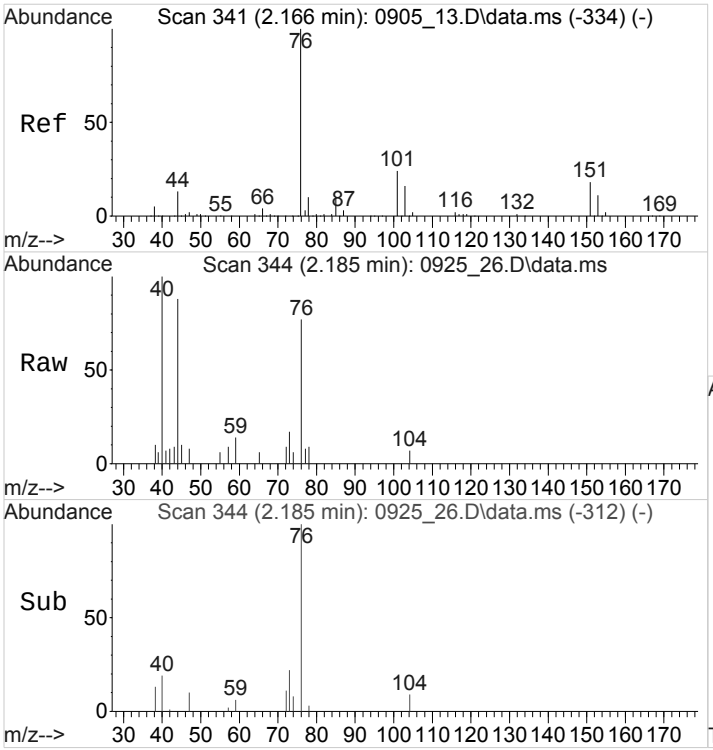


#17
ACETONE
Concen: 9.1998726 ppb
RT: 2.490 min Scan# 394
Delta R.T. 0.032 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 43 Resp: 21208

Ion	Ratio	Lower	Upper
43	100		
58	32.0	27.3	40.9

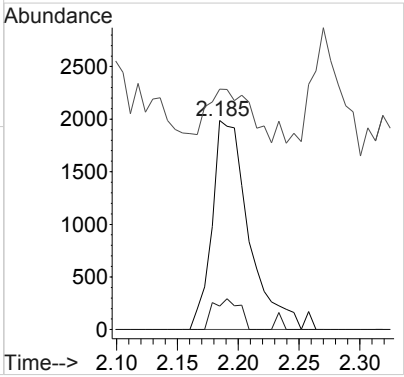


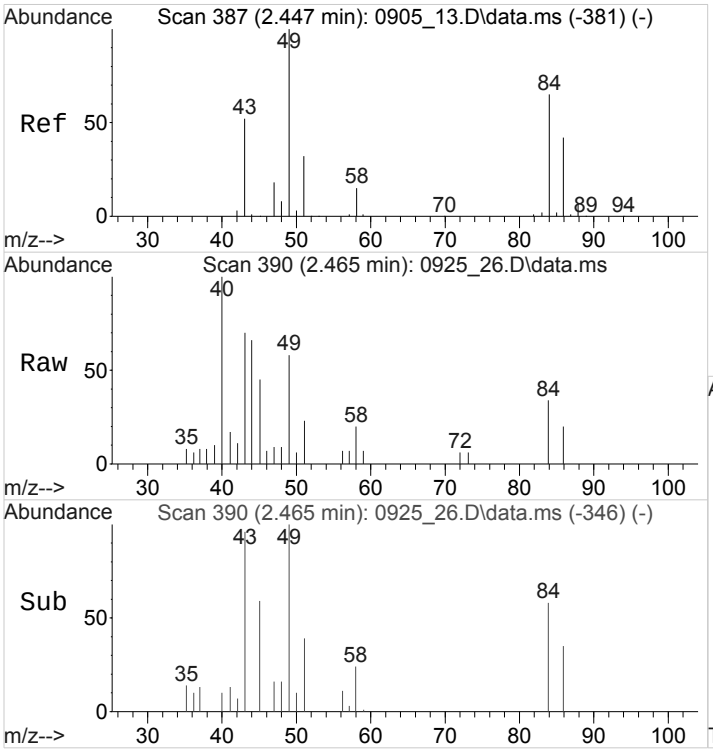


#19
CARBON DISULFIDE
Concen: 0.2343560 ppb
RT: 2.185 min Scan# 344
Delta R.T. 0.019 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 76 Resp: 4233

Ion	Ratio	Lower	Upper
76	100		
78	10.6	7.9	11.9
44	25.1	10.6	16.0#

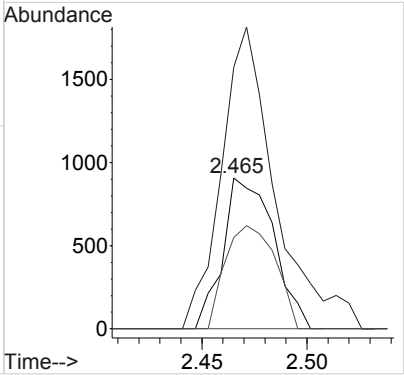


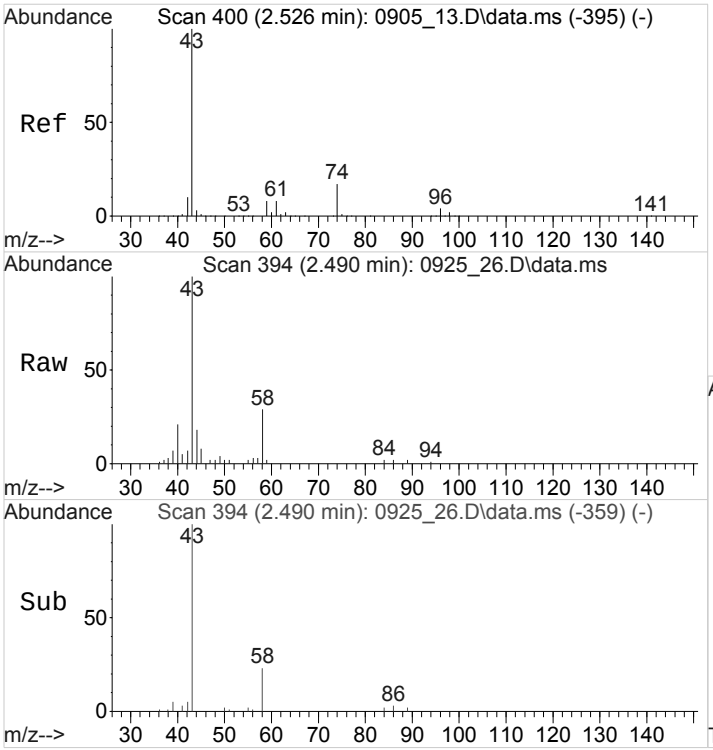


#21
METHYLENE CHLORIDE
Concen: 0.2388008 ppb
RT: 2.465 min Scan# 390
Delta R.T. 0.019 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 84 Resp: 1519

Ion	Ratio	Lower	Upper
84	100		
49	213.4	128.6	193.0#
86	67.7	51.5	77.3

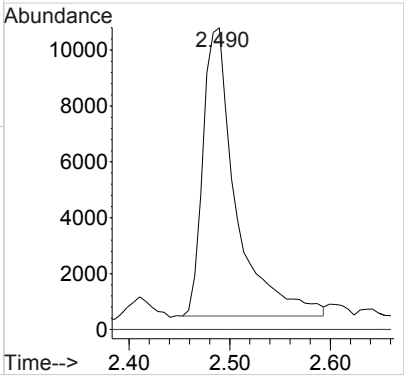


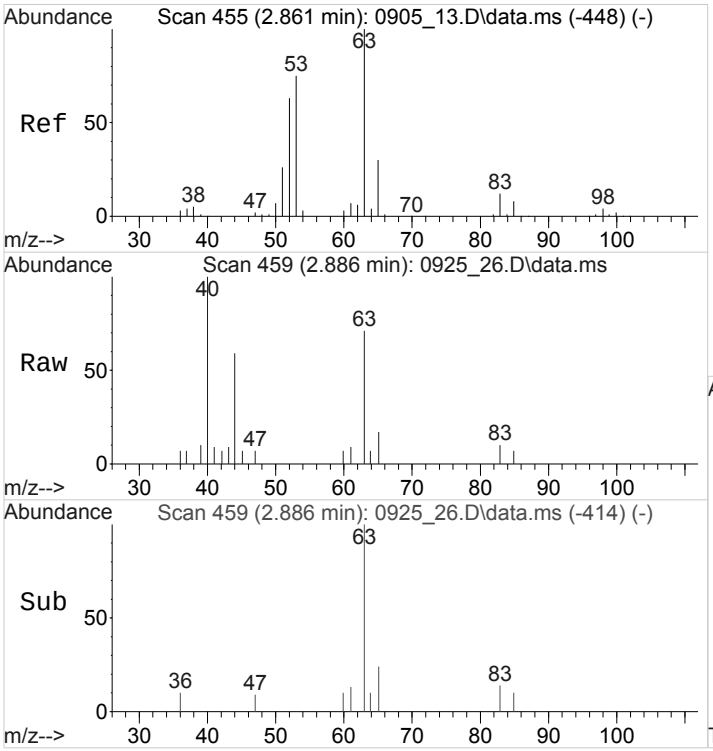


#22
METHYL ACETATE
Concen: 3.0617885 ppb
RT: 2.490 min Scan# 394
Delta R.T. -0.036 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 43 Resp: 23523

Ion	Ratio	Lower	Upper
43	100		
74	0.0	13.4	20.0#
29	0.0	0.0	0.0

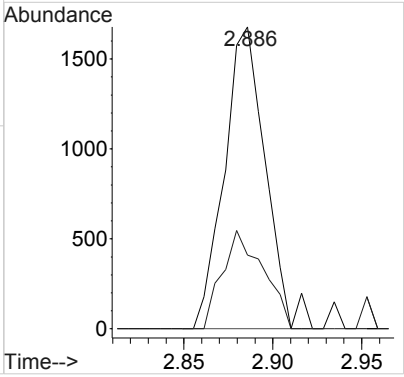


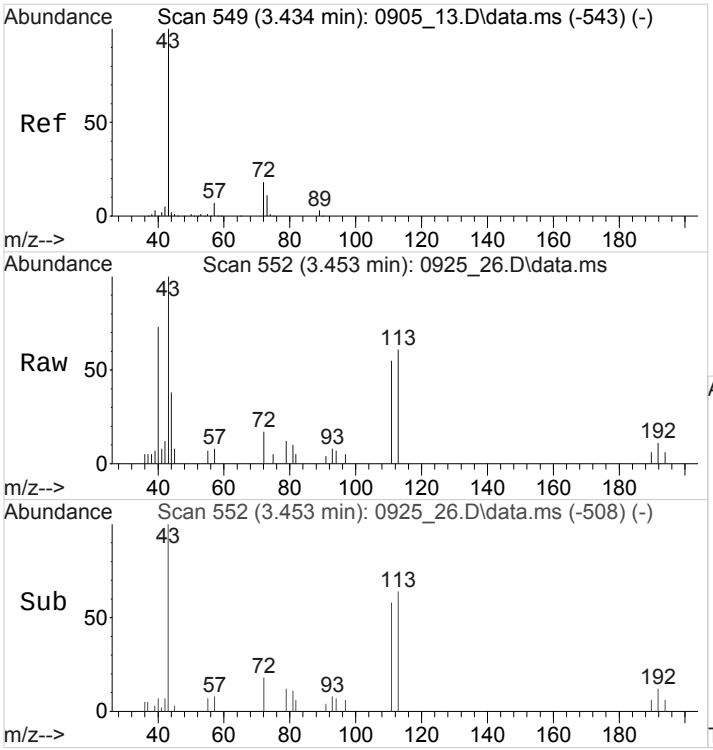


#27
1,1-DICHLOROETHANE
Concen: 0.2245061 ppb
RT: 2.886 min Scan# 459
Delta R.T. 0.024 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 63 Resp: 2704

Ion	Ratio	Lower	Upper
63	100		
65	32.4	24.7	37.1

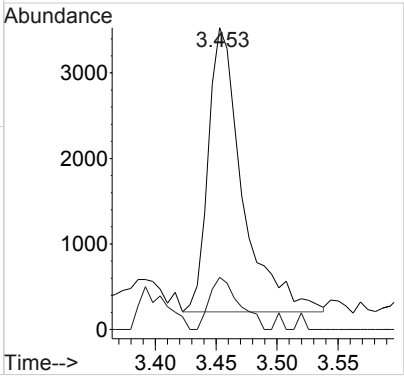


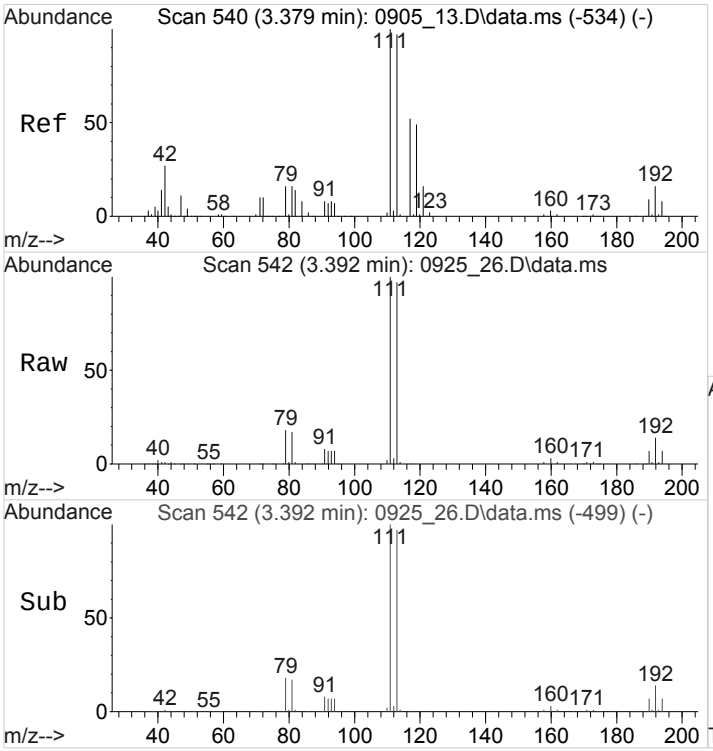


#33
2-BUTANONE (MEK)
Concen: 1.1384369 ppb
RT: 3.453 min Scan# 552
Delta R.T. 0.018 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 43 Resp: 6513

Ion	Ratio	Lower	Upper
43	100		
72	15.9	15.6	23.4

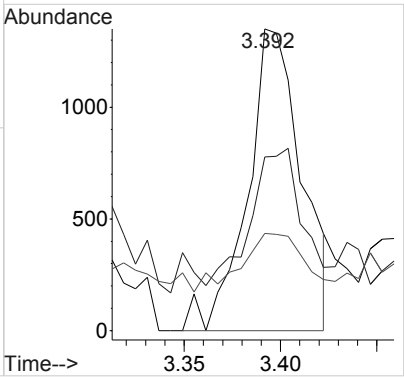


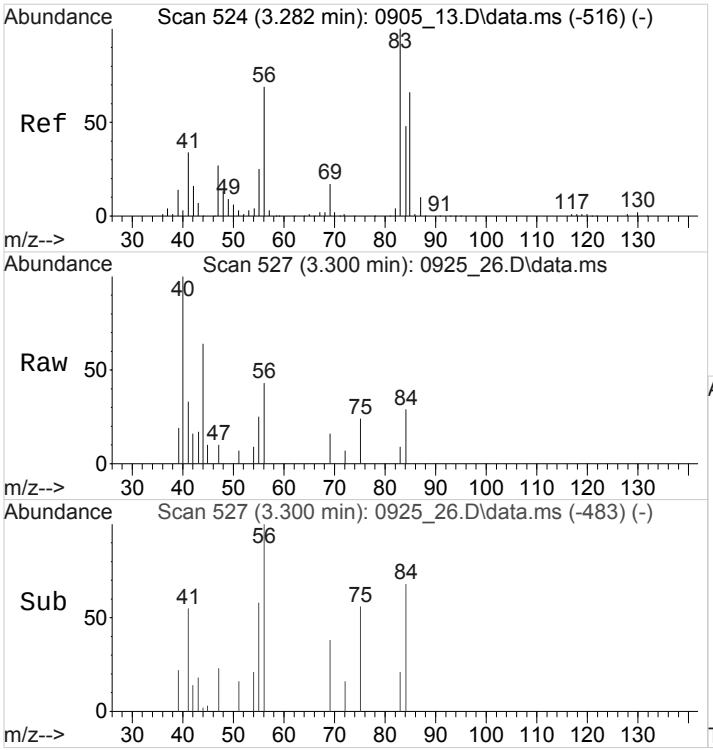


#35
TETRAHYDROFURAN
Concen: 0.8567198 ppb
RT: 3.392 min Scan# 542
Delta R.T. 0.013 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 42 Resp: 2647

Ion	Ratio	Lower	Upper
42	100		
41	41.3	41.9	62.9#
39	19.3	15.8	23.8

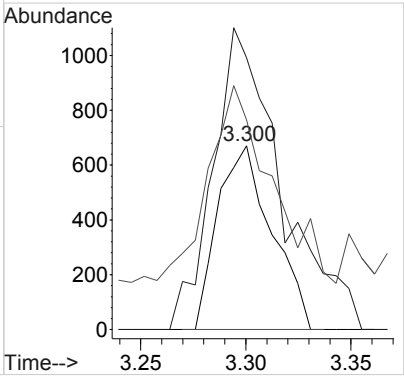


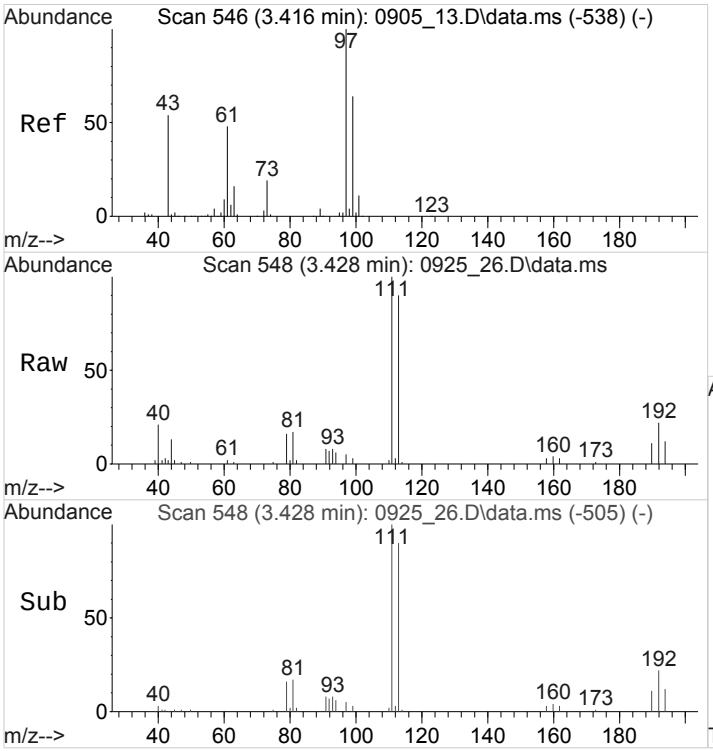


#37
CYCLOHEXANE
Concen: 0.1868766 ppb
RT: 3.300 min Scan# 527
Delta R.T. 0.018 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 84 Resp: 1196

Ion	Ratio	Lower	Upper
84	100		
56	208.2	117.8	176.6#
41	129.4	62.2	93.2#

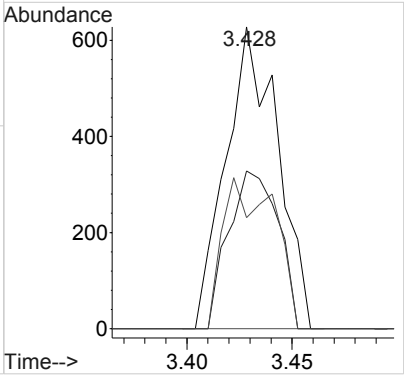


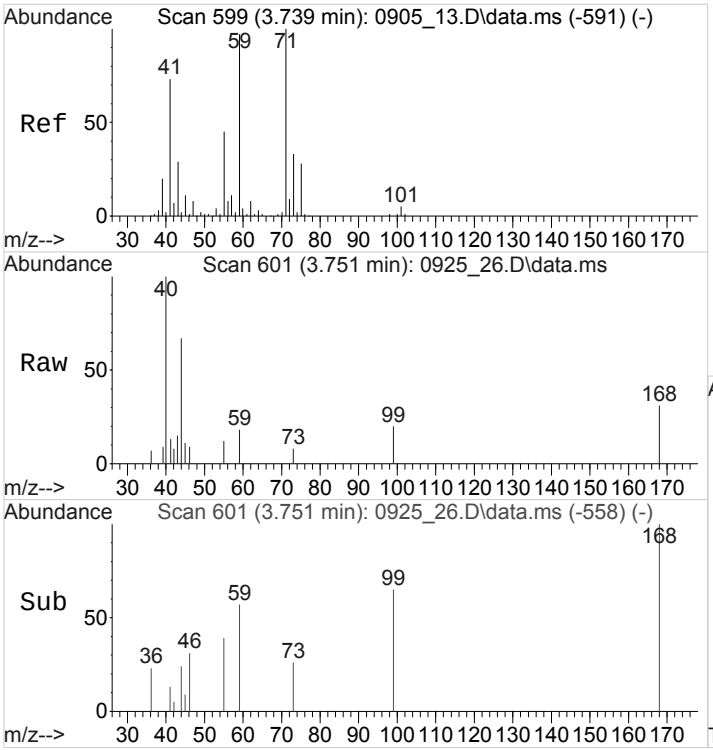


#39
1,1,1-TRICHLOROETHANE
Concen: 0.1348879 ppb
RT: 3.428 min Scan# 548
Delta R.T. 0.012 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 97 Resp: 1078

Ion	Ratio	Lower	Upper
97	100		
99	50.2	50.8	76.2#
61	49.4	38.6	57.8

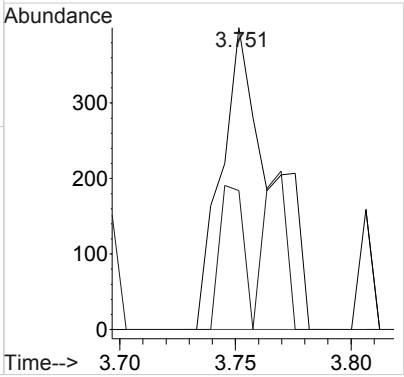


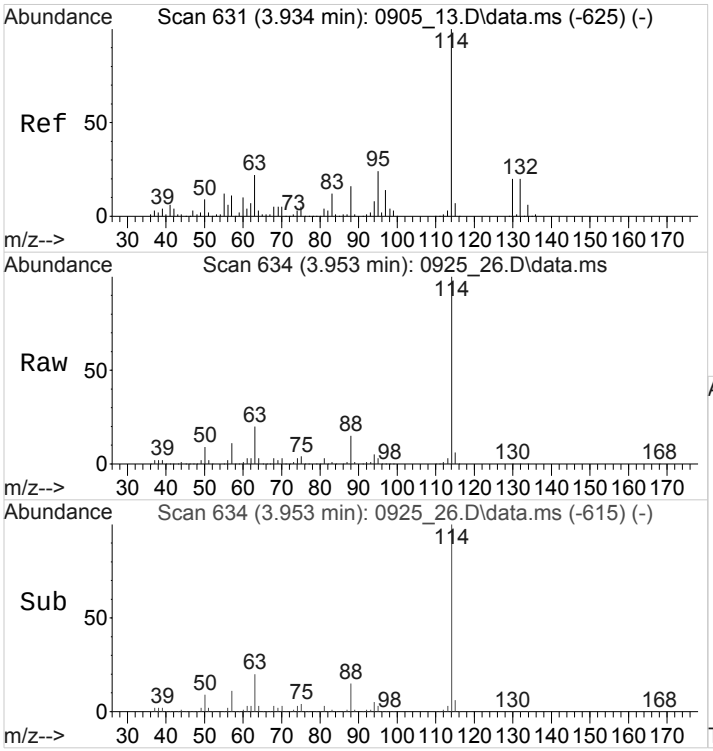


#47
T-AMYL ALCOHOL
Concen: 0.4493569 ppb
RT: 3.751 min Scan# 601
Delta R.T. 0.012 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 59 Resp: 608

Ion	Ratio	Lower	Upper
59	100		
73	0.0	45.5	68.3#

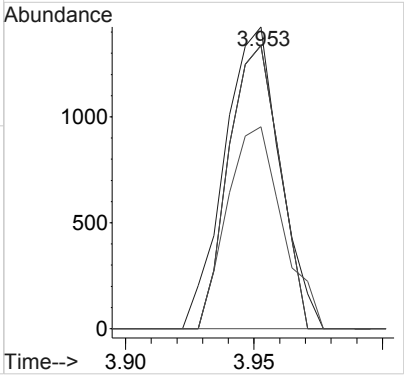


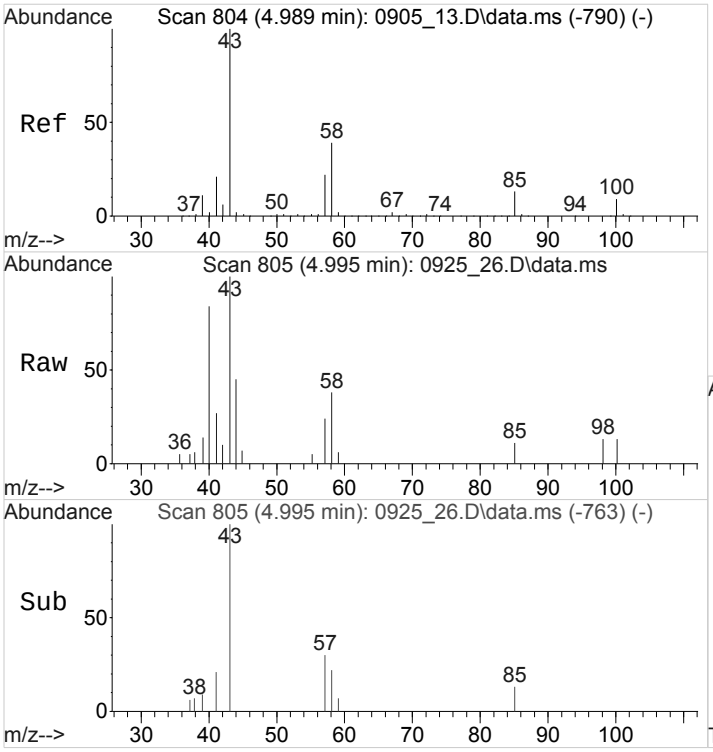


#49
TRICHLOROETHENE
Concen: 0.2895208 ppb
RT: 3.953 min Scan# 634
Delta R.T. 0.018 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:130 Resp: 1845

Ion	Ratio	Lower	Upper
130	100		
132	116.4	78.9	118.3
97	0.0	0.0	0.0
130	100.0	80.0	120.0

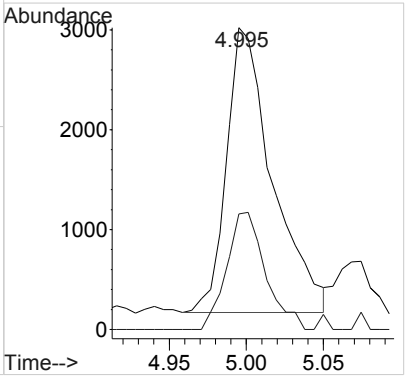


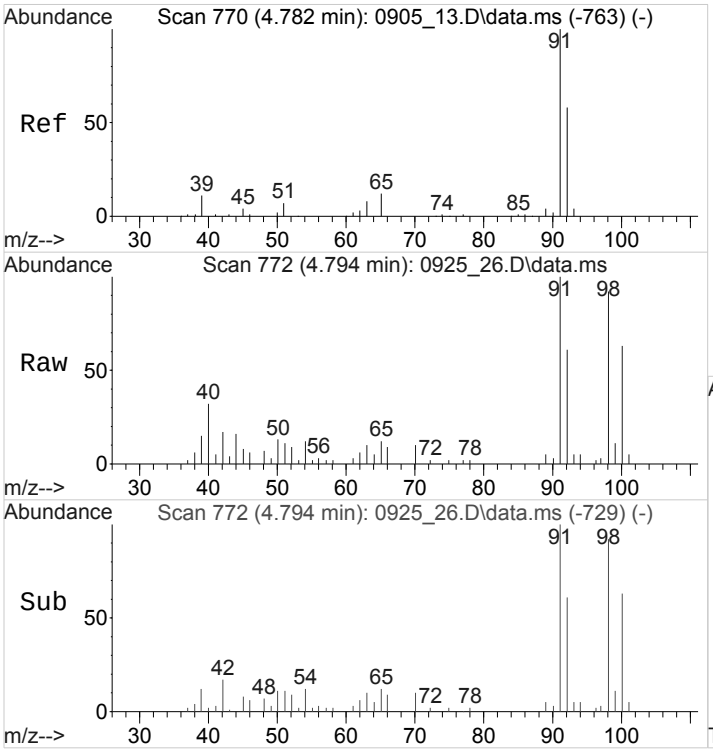


#59
4-METHYL-2-PENTANONE (MIBK)
Concen: 0.5598479 ppb
RT: 4.995 min Scan# 805
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 43 Resp: 5896

Ion	Ratio	Lower	Upper
43	100		
58	34.8	31.5	47.3

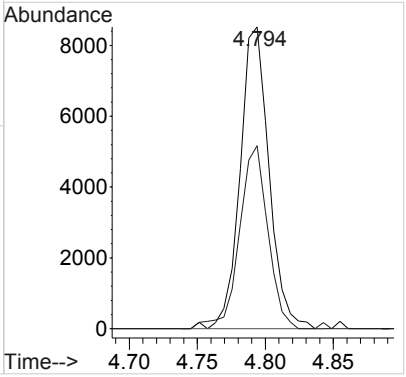


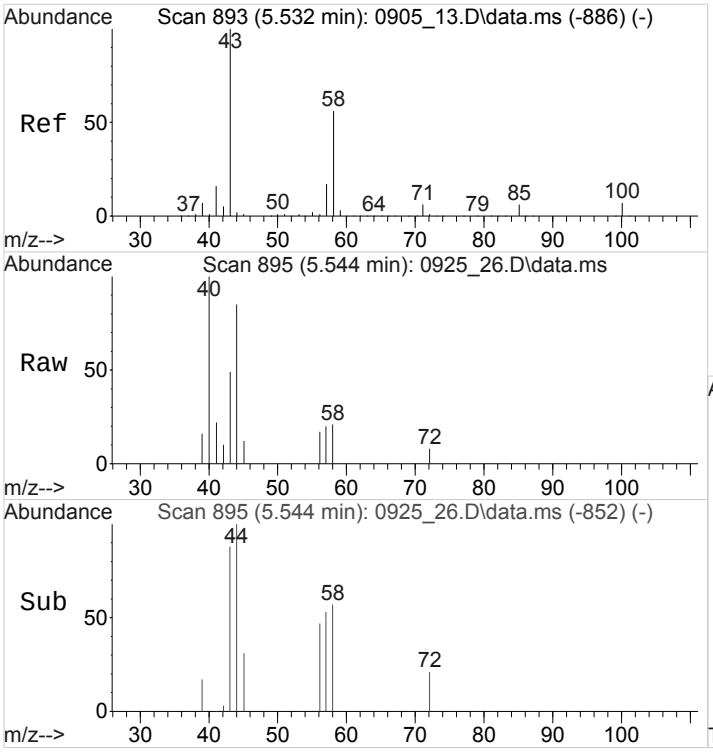


#61
TOLUENE
Concen: 0.5834379 ppb
RT: 4.794 min Scan# 772
Delta R.T. 0.012 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 91 Resp: 12608

Ion	Ratio	Lower	Upper
91	100		
92	59.6	46.0	69.0

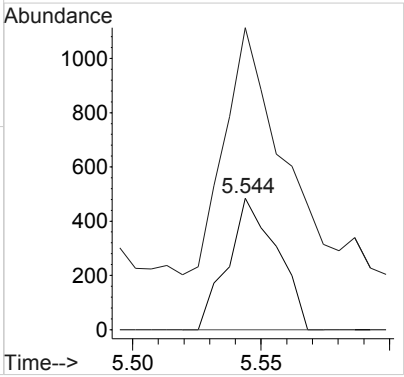


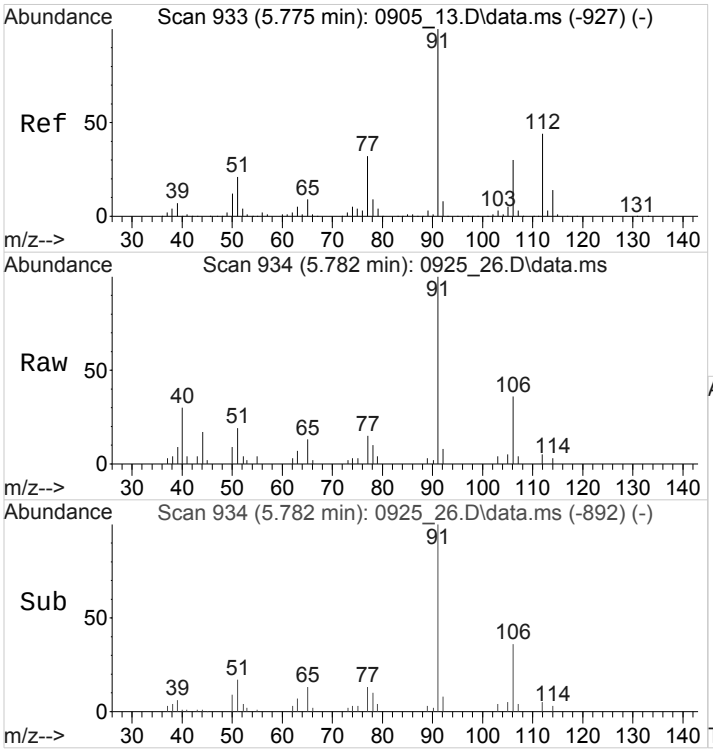


#66
2-HEXANONE
Concen: 0.1420581 ppb
RT: 5.544 min Scan# 895
Delta R.T. 0.012 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 58 Resp: 648

Ion	Ratio	Lower	Upper
58	100		
43	383.8	145.8	218.8#

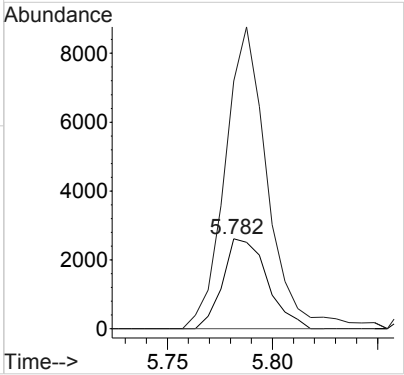


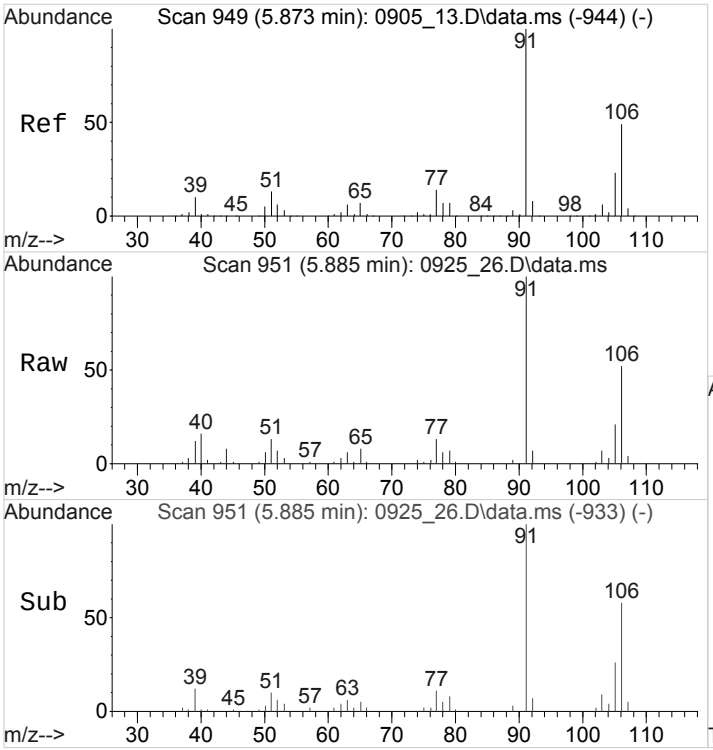


#71
ETHYLBENZENE
Concen: 0.5492815 ppb
RT: 5.782 min Scan# 934
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:106 Resp: 3848

Ion	Ratio	Lower	Upper
106	100		
91	321.4	264.3	396.5

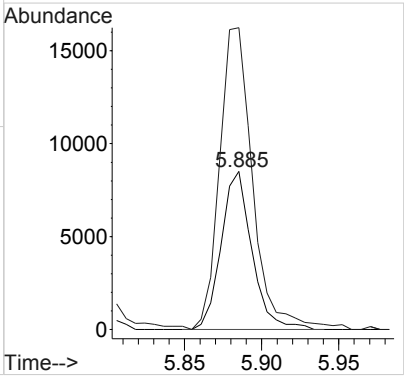


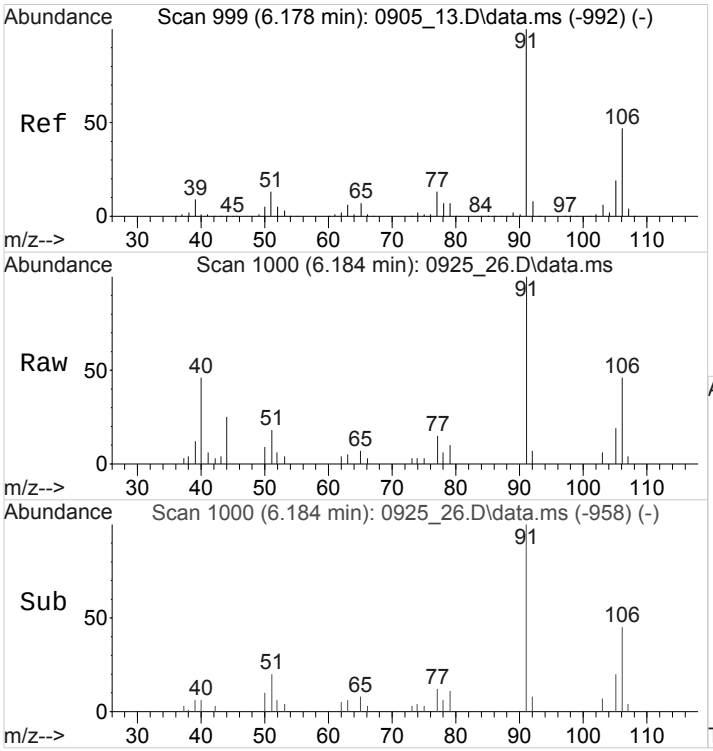


#72
M&P-XYLENE
Concen: 1.3651859 ppb
RT: 5.885 min Scan# 951
Delta R.T. 0.012 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:106 Resp: 11820

Ion	Ratio	Lower	Upper
106	100		
91	206.0	163.2	244.8

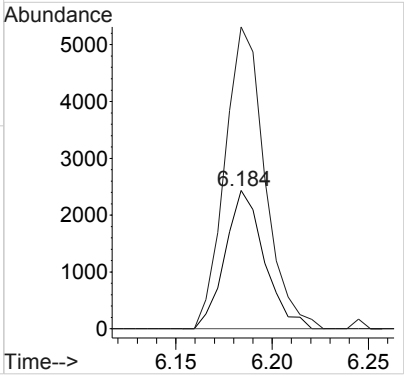


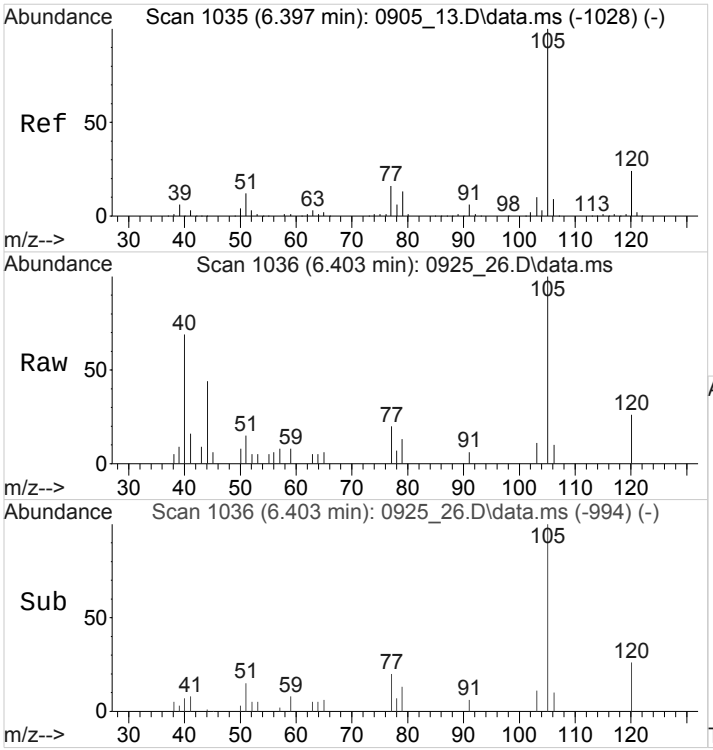


#73
O-XYLENE
Concen: 0.3985743 ppb
RT: 6.184 min Scan# 1000
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:106 Resp: 3446

Ion	Ratio	Lower	Upper
106	100		
91	223.5	168.6	253.0

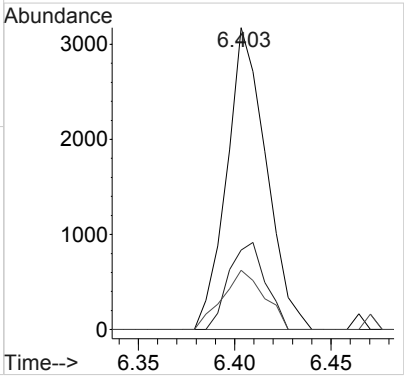


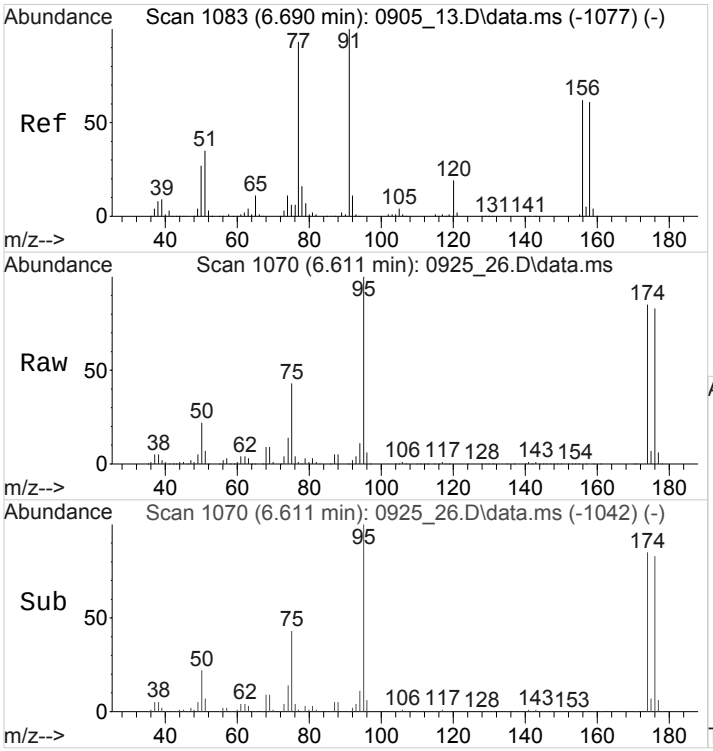


#79
ISOPROPYLBENZENE
Concen: 0.1855173 ppb
RT: 6.403 min Scan# 1036
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:105 Resp: 4516

Ion	Ratio	Lower	Upper
105	100		
120	27.1	19.7	29.5
77	20.9	12.7	19.1#

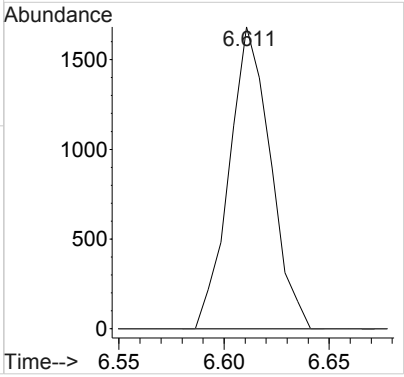


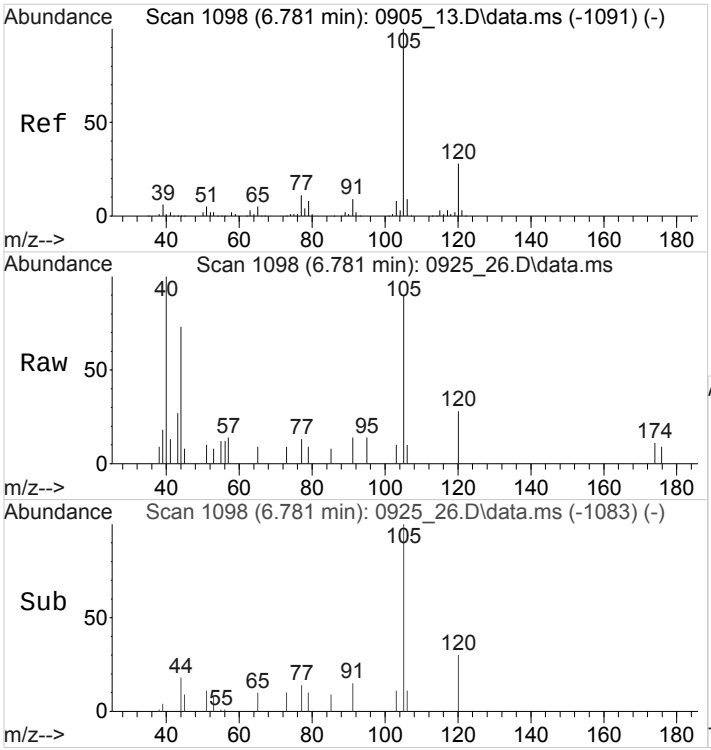


#81
BROMOBENZENE
Concen: 0.1984300 ppb
RT: 6.611 min Scan# 1070
Delta R.T. -0.079 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 77 Resp: 2296

Ion	Ratio	Lower	Upper
77	100		
156	0.0	52.7	79.1#
158	0.0	52.5	78.7#

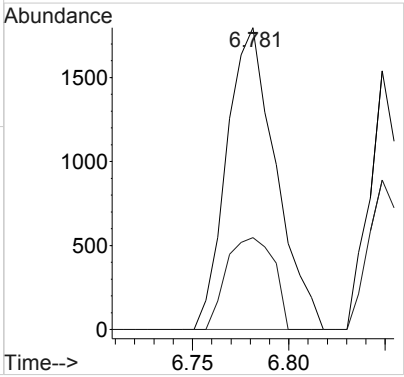


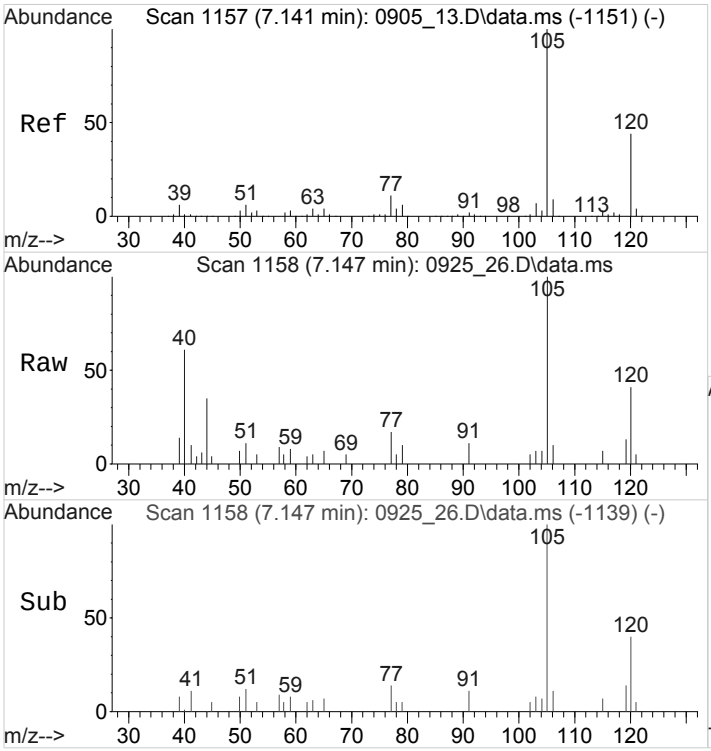


#86
4-ETHYLTOLUENE
Concen: 0.1373467 ppb
RT: 6.781 min Scan# 1098
Delta R.T. 0.000 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:105 Resp: 3188

Ion	Ratio	Lower	Upper
105	100		
120	29.5	22.7	34.1

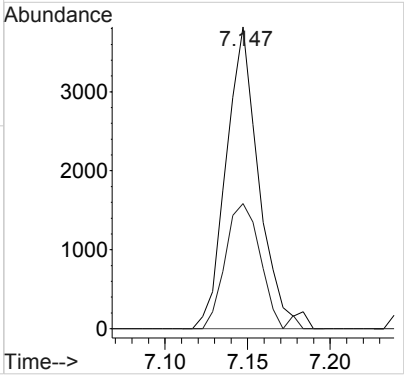


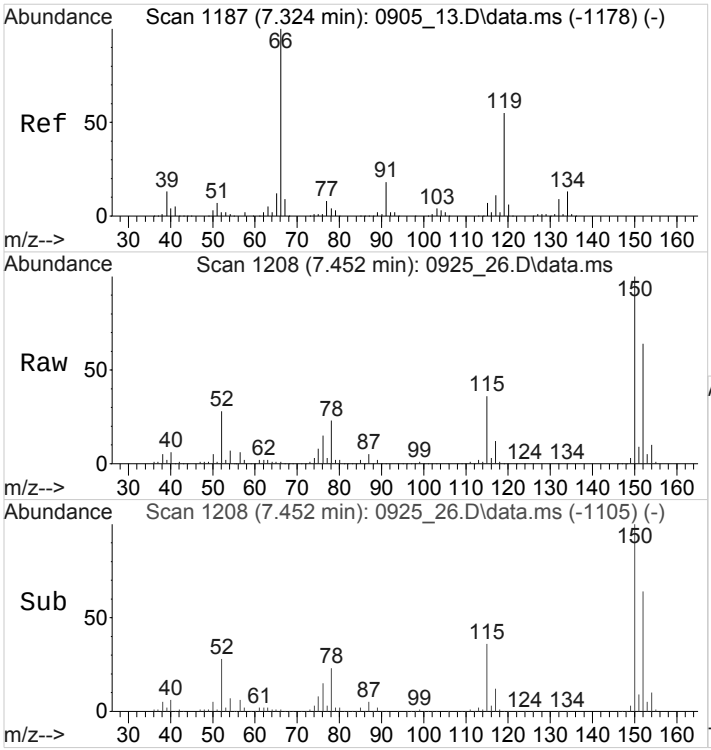


#91
1,2,4-TRIMETHYLBENZENE
Concen: 0.2804695 ppb
RT: 7.147 min Scan# 1158
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:105 Resp: 5285

Ion	Ratio	Lower	Upper
105	100		
120	44.9	35.9	53.9

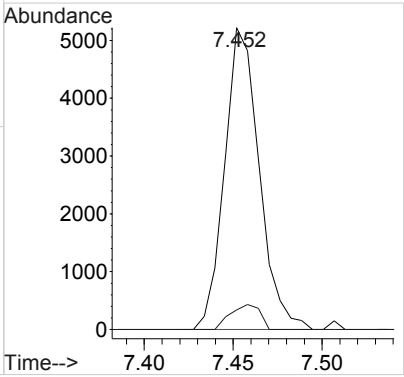


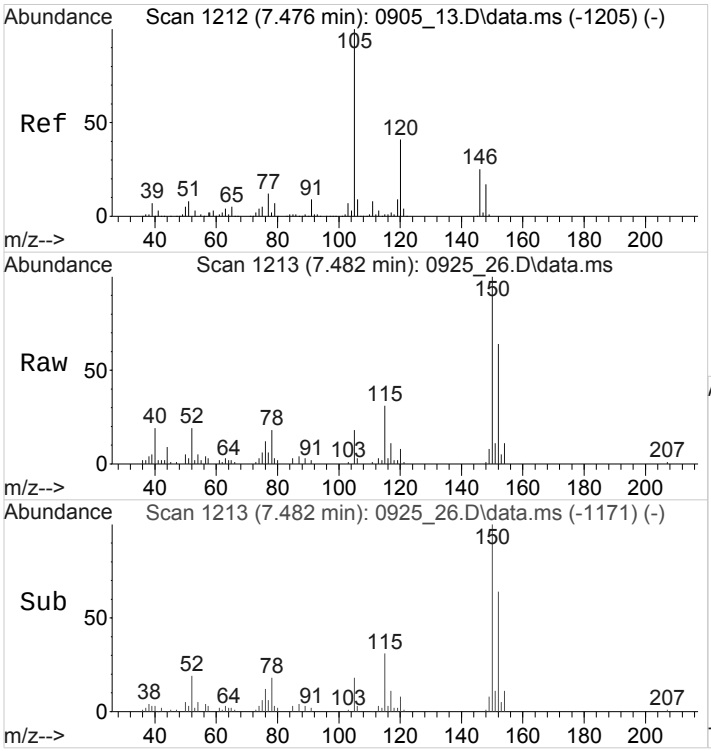


#95
DICYCLOPENTADIENE
Concen: 0.2409915 ppb
RT: 7.452 min Scan# 1208
Delta R.T. 0.128 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion: 66 Resp: 7060

Ion	Ratio	Lower	Upper
66	100		
132	7.1	7.4	11.2#

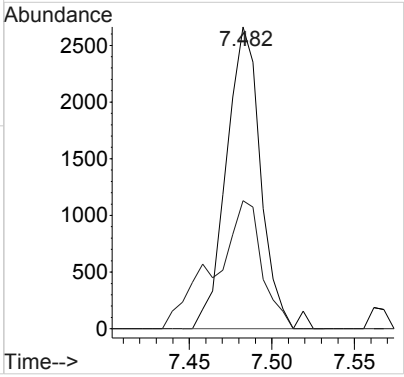


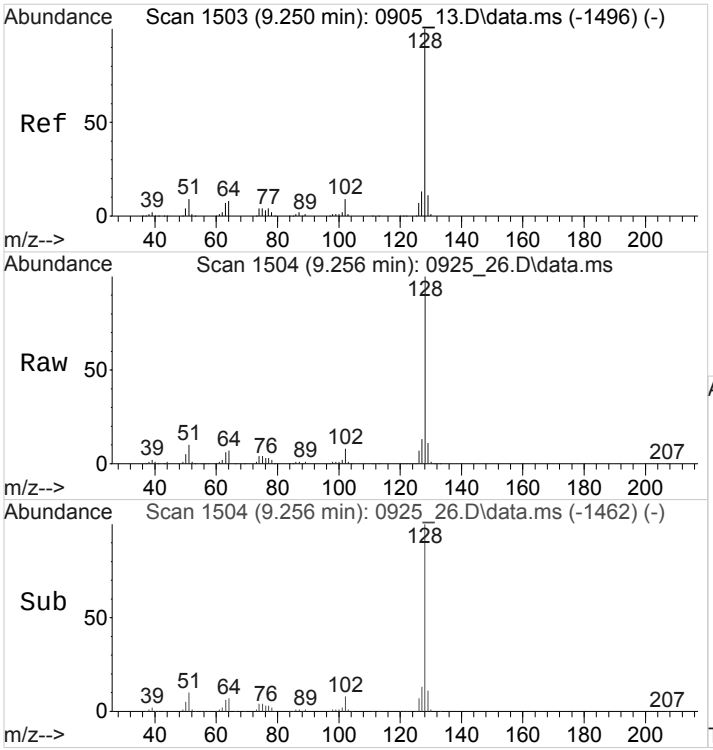


#97
1,2,3-TRIMETHYLBENZENE
Concen: 0.2013566 ppb
RT: 7.482 min Scan# 1213
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:105 Resp: 3870

Ion	Ratio	Lower	Upper
105	100		
120	58.7	33.8	50.8#

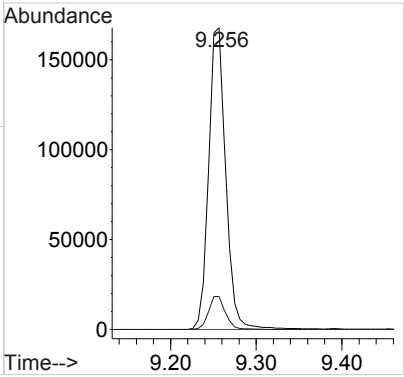


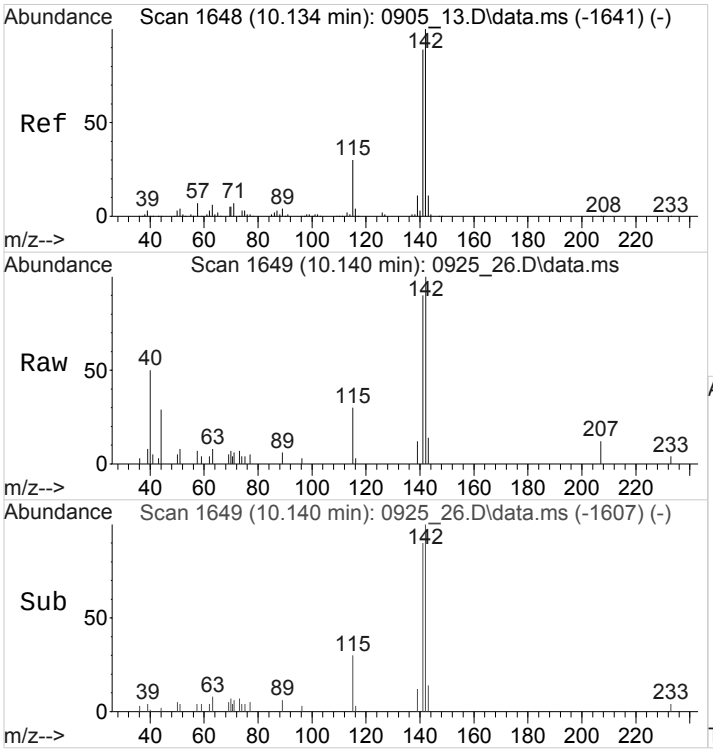


#103
NAPHTHALENE
Concen: 12.4916044 ppb
RT: 9.256 min Scan# 1504
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:128 Resp: 233593

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.6	13.0

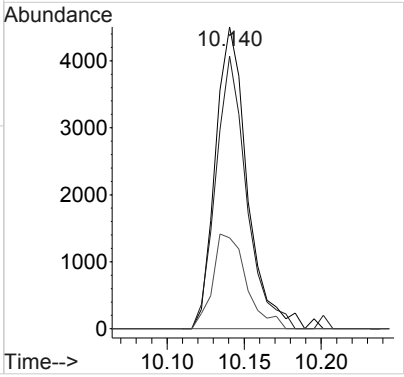


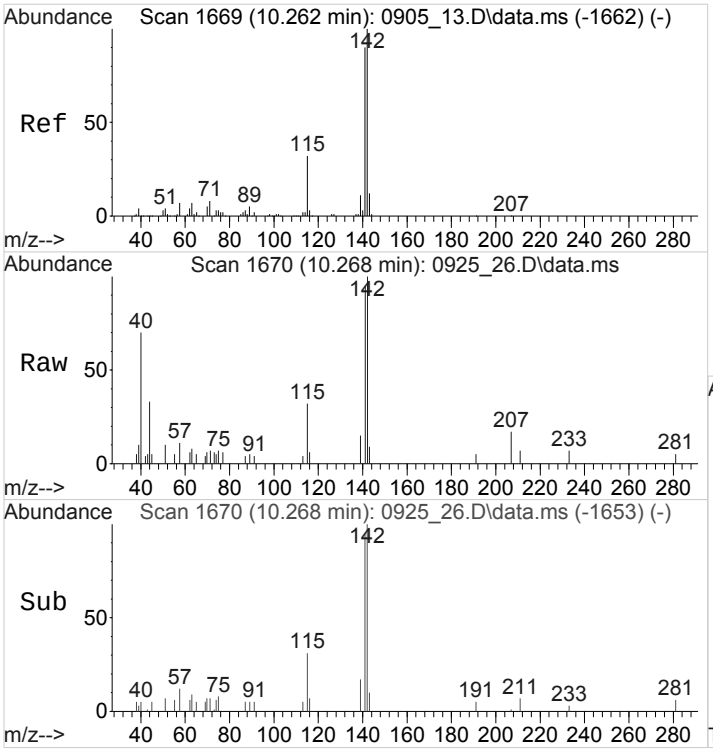


#105
1-METHYLNAPHTHALENE
Concen: 0.8849236 ppb
RT: 10.140 min Scan# 1649
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:142 Resp: 6536

Ion	Ratio	Lower	Upper
142	100		
141	86.8	69.7	104.5
115	32.9	24.5	36.7

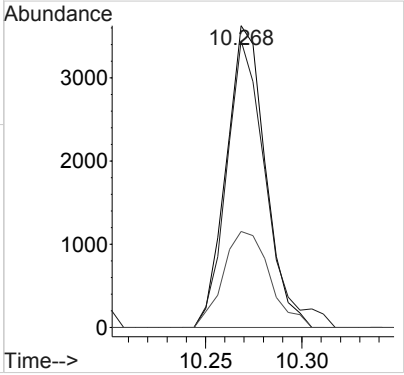




#106
2-METHYLNAPHTHALENE
Concen: 0.7174050 ppb
RT: 10.268 min Scan# 1670
Delta R.T. 0.006 min
Lab File: 0925_26.D
Acq: 25 Sep 2018 6:32 pm

Tgt Ion:142 Resp: 5118

Ion	Ratio	Lower	Upper
142	100		
141	95.9	73.0	109.6
115	37.9	26.0	39.0



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	0925_18	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 15:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 15:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.46	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	0925_18	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 15:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 15:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**MDL**	**RDL**
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.94	8.74		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_18.D
Acq On : 25 Sep 2018 3:55 pm
Operator : 605
Sample : L1028256-02 1x WG1170992
Misc : water
ALS Vial : 18 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:44:20 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

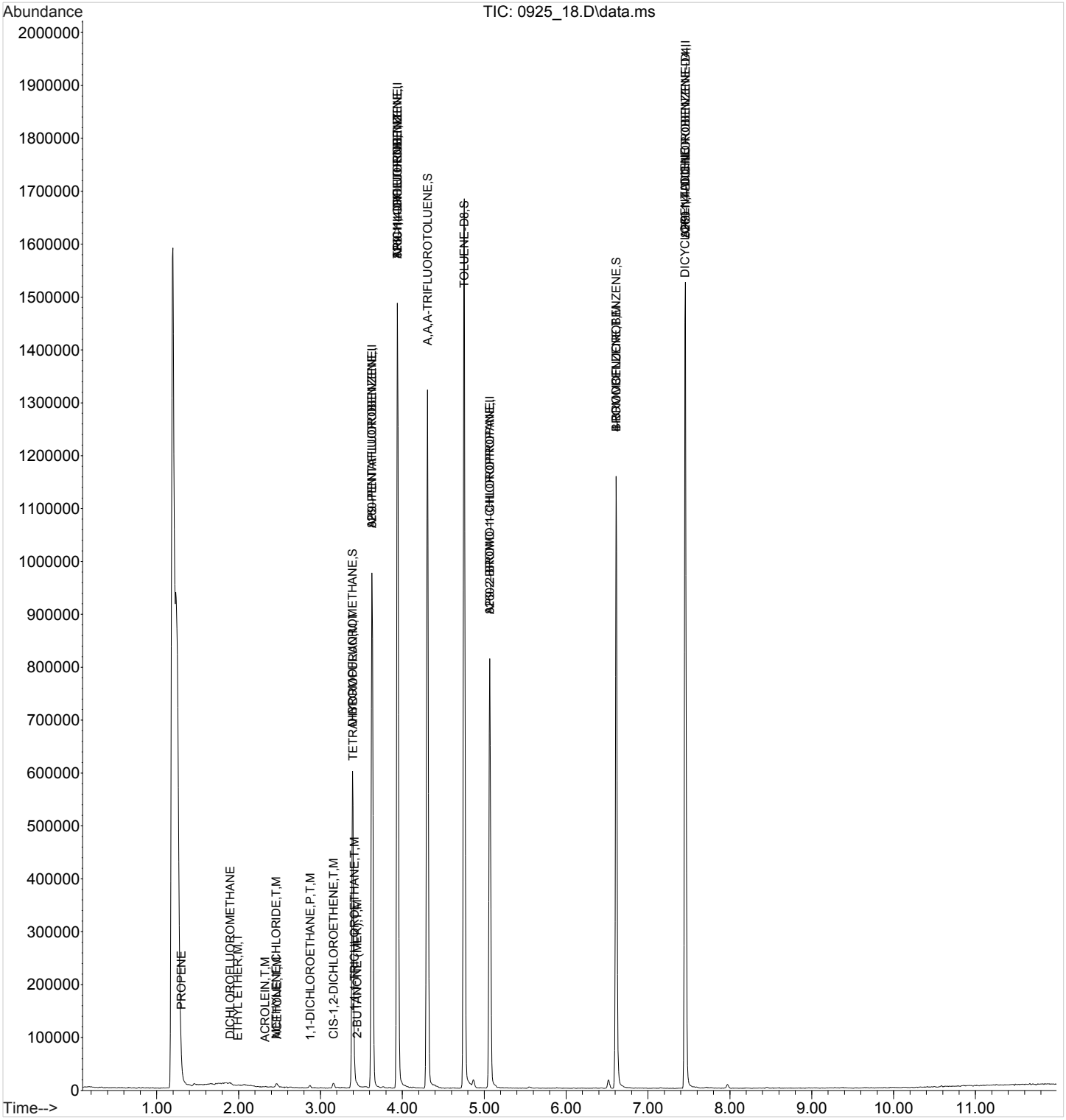
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.629	168	536782	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.940	114	748913	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	114256	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.458	152	356968	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.629	168	538982	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.940	114	748913	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	114179	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.458	152	356968	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	294317	41.5794937	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 103.95%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	431006	41.3486659	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 103.37%				
60) TOLUENE-D8	4.757	98	859326	44.1123398	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 110.28%				
80) 4-BROMOFLUOROBENZENE	6.611	95	308313	38.9327244	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 97.33%				
Target Compounds							Qvalue
4) PROPENE	1.301	41	1564	0.7955503	ppb	#	87
12) DICHLOROFLUOROMETHANE	1.898	67	1672	0.1692599	ug/l	#	68
13) ETHYL ETHER	1.990	59	1657	0.3358148	ppb	#	14
14) ACROLEIN	2.325	56	340	0.3728764	ppb	#	81
17) ACETONE	2.471	43	5061	2.2165448	ppb		93
21) METHYLENE CHLORIDE	2.459	84	1435	0.2277655	ppb		87
27) 1,1-DICHLOROETHANE	2.873	63	3933	0.3296883	ppb		97
32) CIS-1,2-DICHLOROETHENE	3.160	96	2851	0.4715659	ppb		94
33) 2-BUTANONE (MEK)	3.447	43	4658	0.8220258	ppb		94
35) TETRAHYDROFURAN	3.398	42	630	0.2058655	ppb	#	59
39) 1,1,1-TRICHLOROETHANE	3.416	97	1701	0.2148903	ppb	#	88
49) TRICHLOROETHENE	3.940	130	52464	8.7350138	ppb	#	99
81) BROMOBENZENE	6.611	77	1983	0.2000789	ppb	#	17
95) DICYCLOPENTADIENE	7.452	66	5923	0.2360380	ppb		97

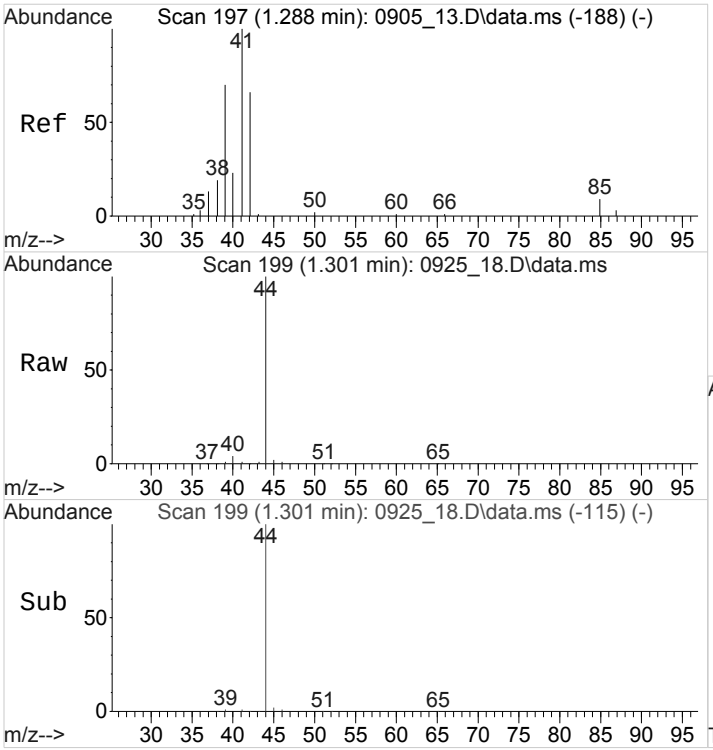
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_18.D
Acq On : 25 Sep 2018 3:55 pm
Operator : 605
Sample : L1028256-02 1x WG1170992
Misc : water
ALS Vial : 18 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:44:20 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

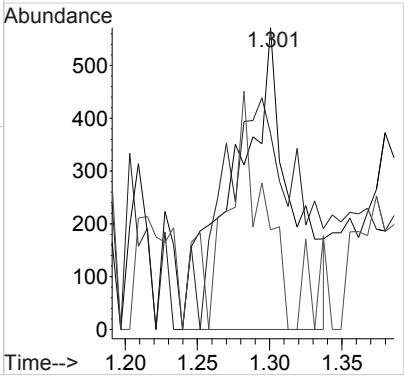


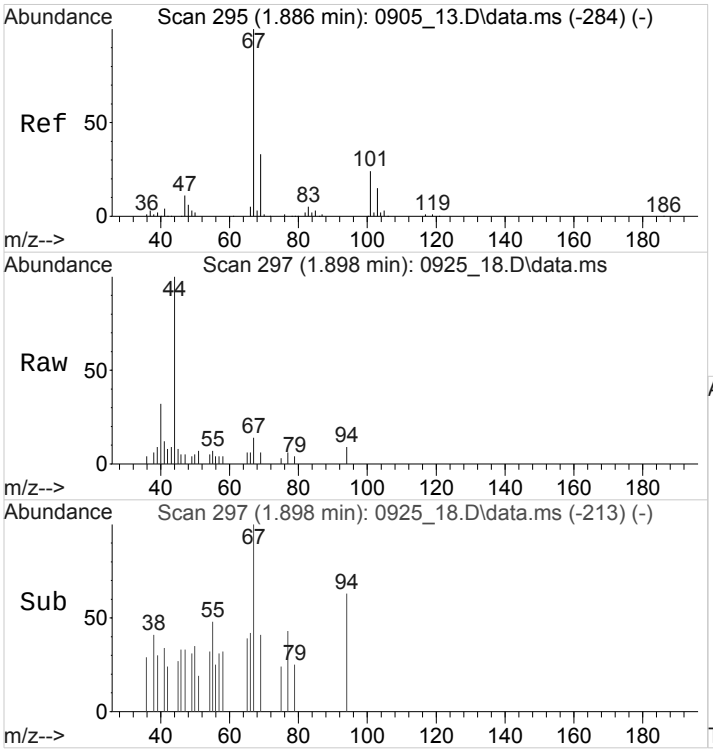


#4
PROPENE
Concen: 0.7955503 ppb
RT: 1.301 min Scan# 199
Delta R.T. 0.013 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 41 Resp: 1564

Ion	Ratio	Lower	Upper
41	100		
39	76.9	59.2	88.8
42	46.2	52.2	78.4#

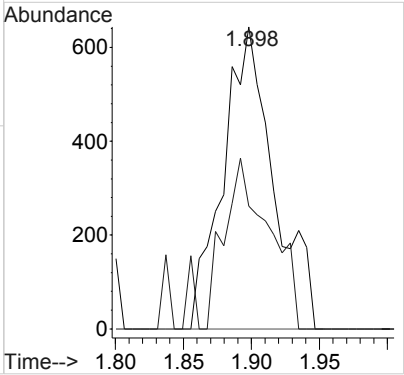


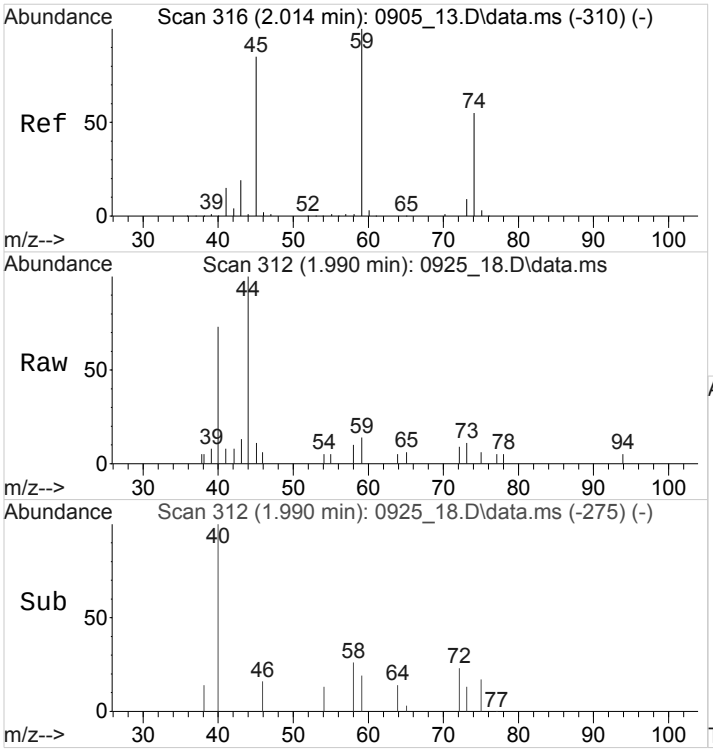


#12
DICHLOROFLUOROMETHANE
Concen: 0.1692599 ug/l
RT: 1.898 min Scan# 297
Delta R.T. 0.012 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 67 Resp: 1672

Ion	Ratio	Lower	Upper
67	100		
69	50.3	25.8	38.6#

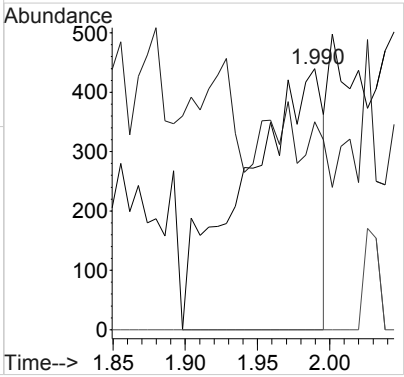


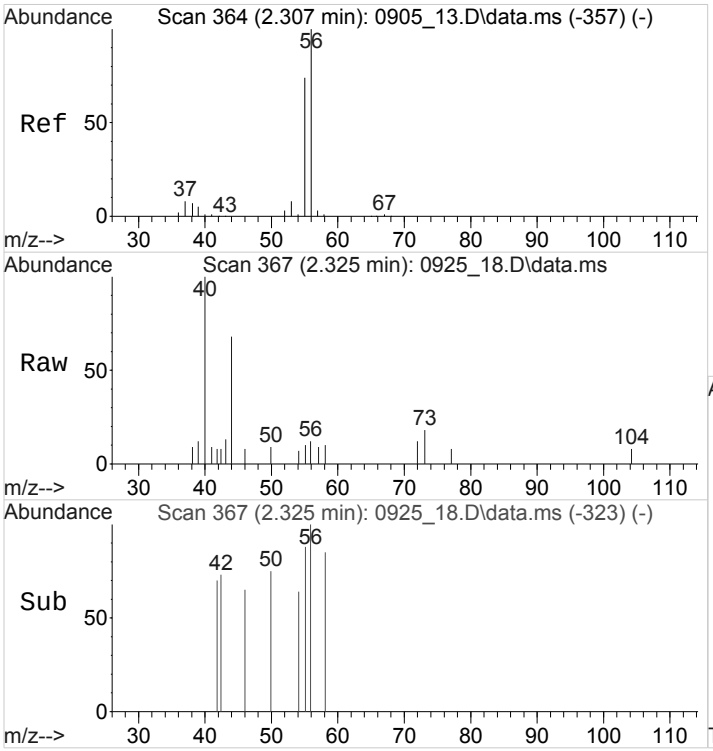


#13
ETHYL ETHER
Concen: 0.3358148 ppb
RT: 1.990 min Scan# 312
Delta R.T. -0.024 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 59 Resp: 1657

Ion	Ratio	Lower	Upper
59	100		
45	0.0	67.4	101.2#
74	0.0	45.1	67.7#

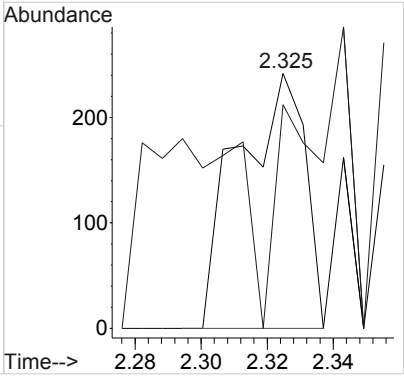


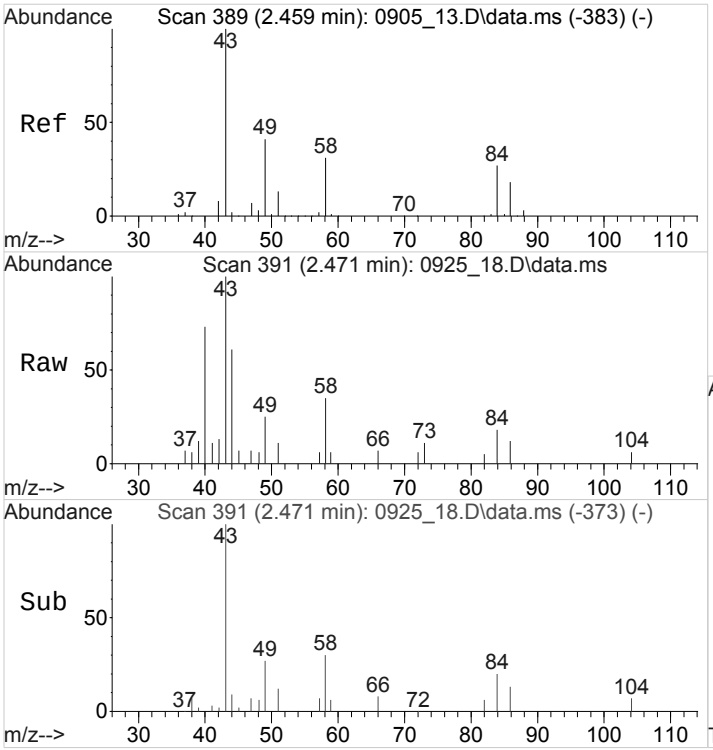


#14
ACROLEIN
Concen: 0.3728764 ppb
RT: 2.325 min Scan# 367
Delta R.T. 0.018 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 56 Resp: 340

Ion	Ratio	Lower	Upper
56	100		
55	58.5	59.8	89.6#

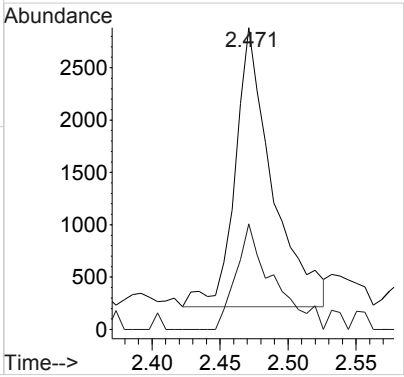


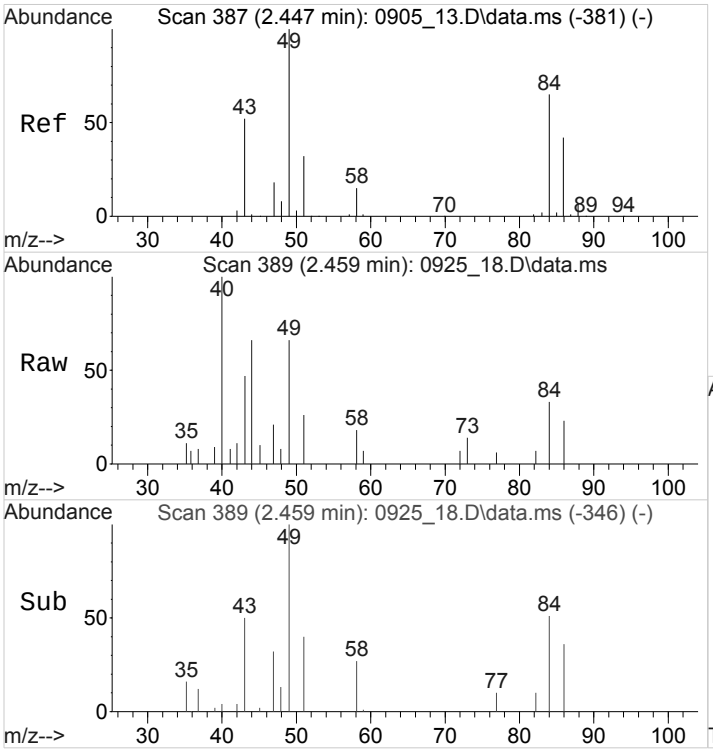


#17
ACETONE
Concen: 2.2165448 ppb
RT: 2.471 min Scan# 391
Delta R.T. 0.013 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 43 Resp: 5061

Ion	Ratio	Lower	Upper
43	100		
58	37.9	27.3	40.9

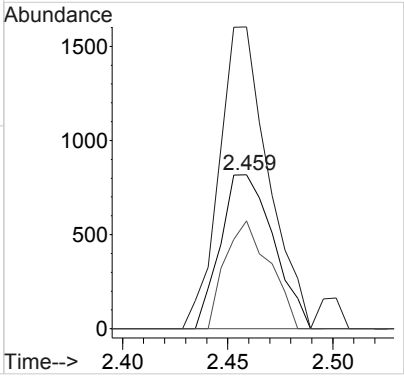


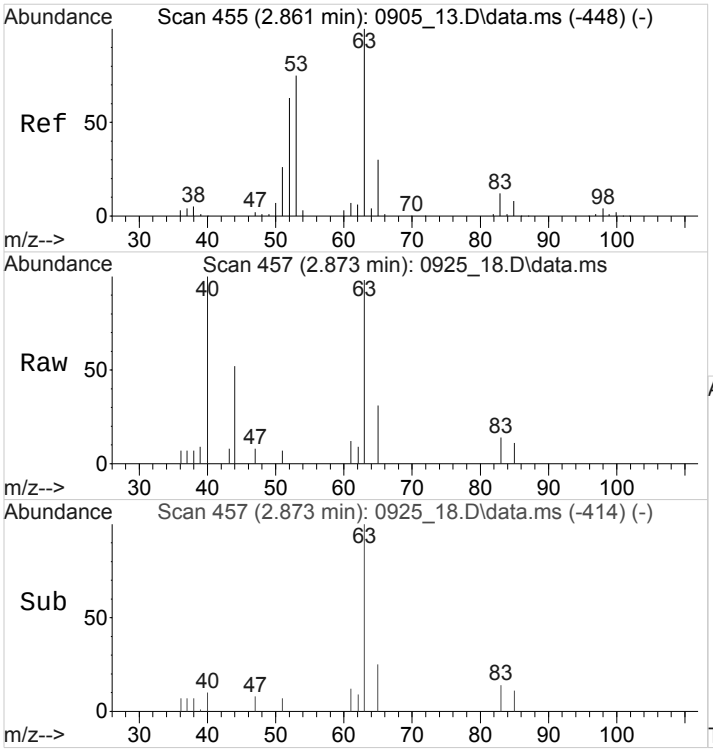


#21
METHYLENE CHLORIDE
Concen: 0.2277655 ppb
RT: 2.459 min Scan# 389
Delta R.T. 0.013 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 84 Resp: 1435

Ion	Ratio	Lower	Upper
84	100		
49	181.8	128.6	193.0
86	58.9	51.5	77.3

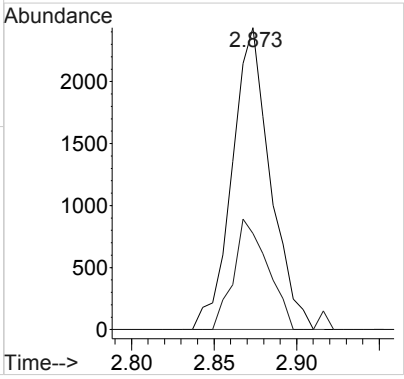


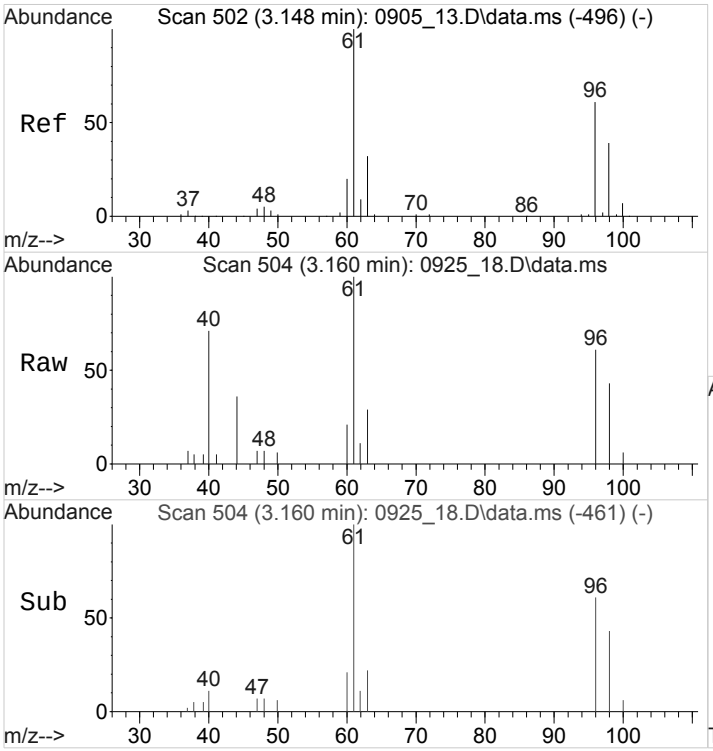


#27
1,1-DICHLOROETHANE
Concen: 0.3296883 ppb
RT: 2.873 min Scan# 457
Delta R.T. 0.012 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 63 Resp: 3933

Ion	Ratio	Lower	Upper
63	100		
65	32.8	24.7	37.1

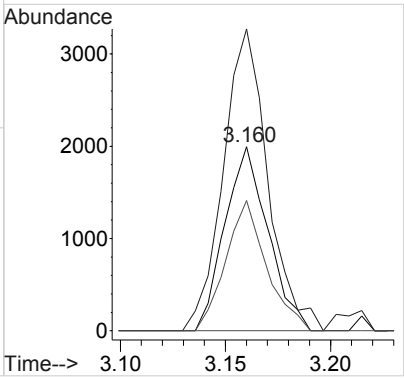


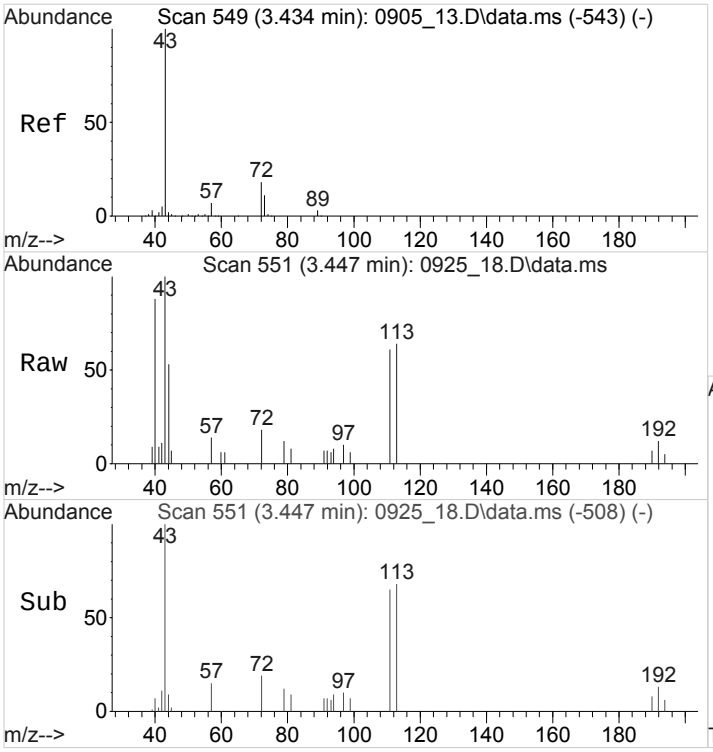


#32
CIS-1,2-DICHLOROETHENE
Concen: 0.4715659 ppb
RT: 3.160 min Scan# 504
Delta R.T. 0.012 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 96 Resp: 2851

Ion	Ratio	Lower	Upper
96	100		
61	169.0	127.4	191.0
98	66.7	51.1	76.7

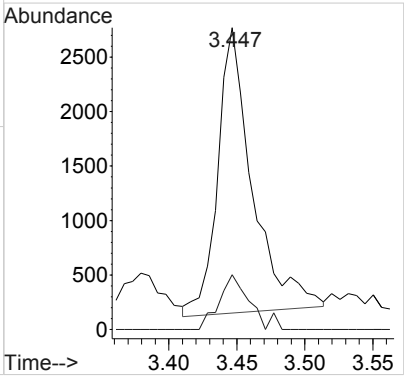


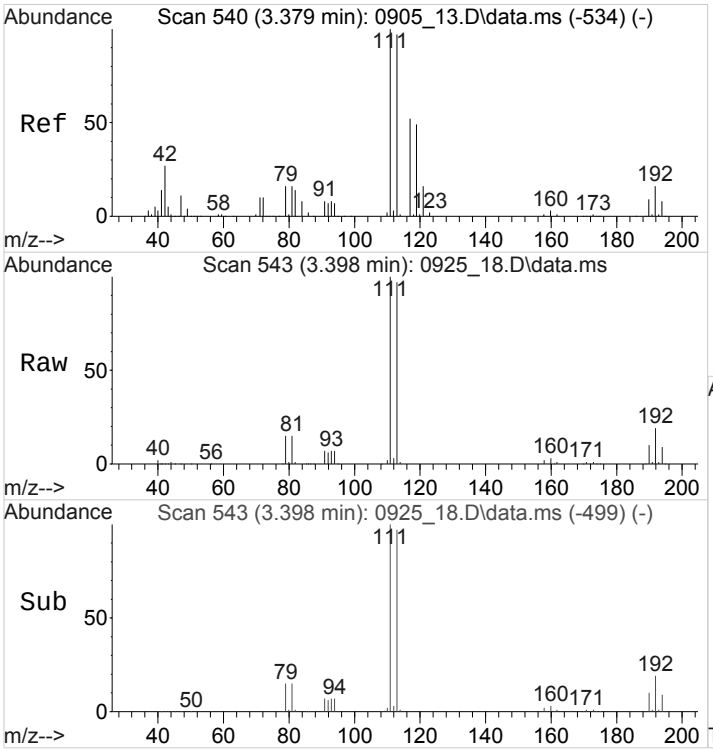


#33
2-BUTANONE (MEK)
Concen: 0.8220258 ppb
RT: 3.447 min Scan# 551
Delta R.T. 0.012 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 43 Resp: 4658

Ion	Ratio	Lower	Upper
43	100		
72	17.0	15.6	23.4

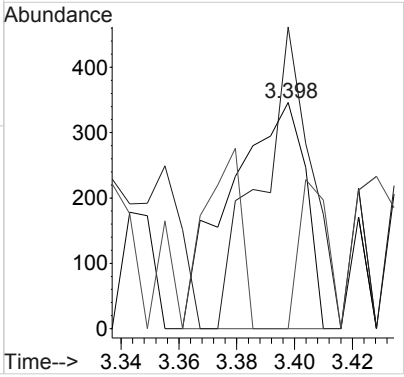


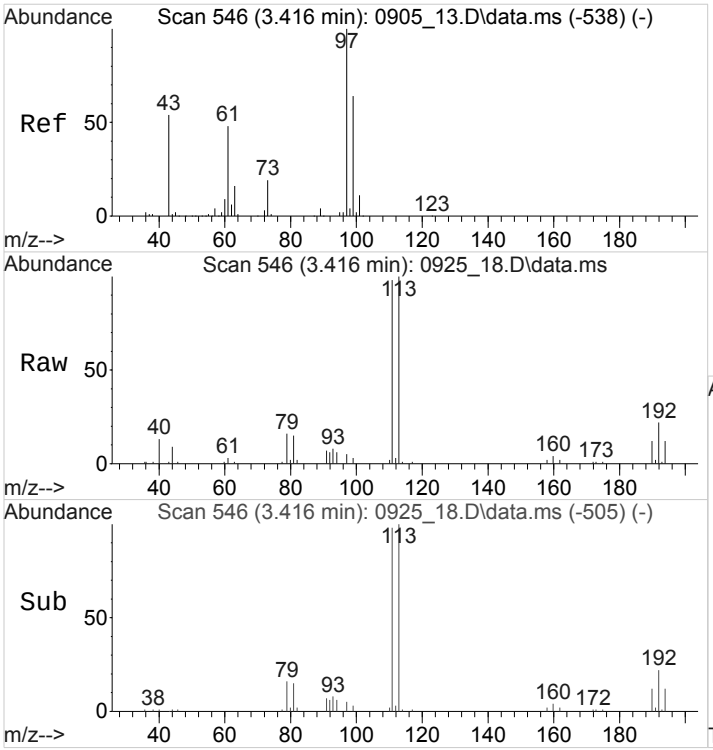


#35
TETRAHYDROFURAN
Concen: 0.2058655 ppb
RT: 3.398 min Scan# 543
Delta R.T. 0.019 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 42 Resp: 630

Ion	Ratio	Lower	Upper
42	100		
41	89.2	41.9	62.9#
39	24.6	15.8	23.8#

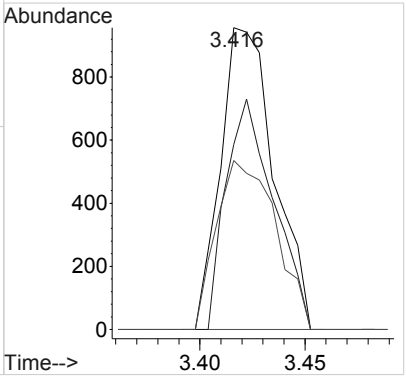


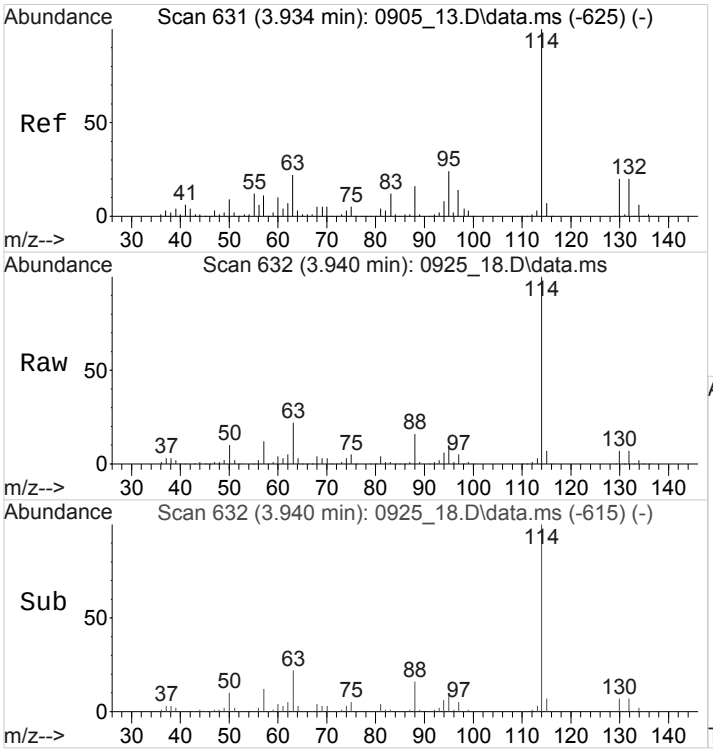


#39
1,1,1-TRICHLOROETHANE
Concen: 0.2148903 ppb
RT: 3.416 min Scan# 546
Delta R.T. 0.000 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 97 Resp: 1701

Ion	Ratio	Lower	Upper
97	100		
99	67.8	50.8	76.2
61	61.6	38.6	57.8#

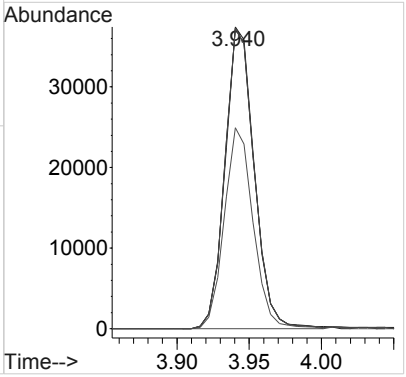


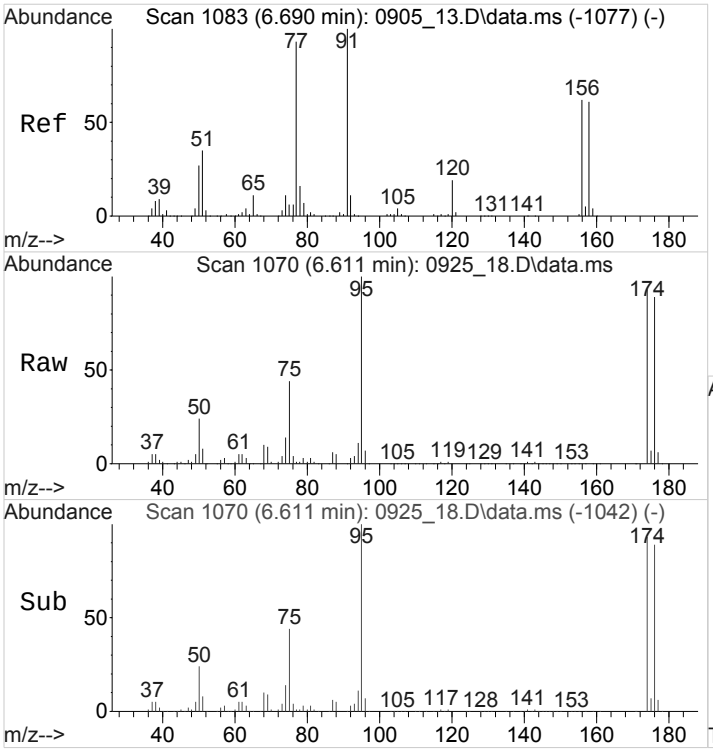


#49
TRICHLOROETHENE
Concen: 8.7350138 ppb
RT: 3.940 min Scan# 632
Delta R.T. 0.006 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion:130 Resp: 52464

Ion	Ratio	Lower	Upper
130	100		
132	100.4	78.9	118.3
97	0.0	0.0	0.0
130	100.0	80.0	120.0

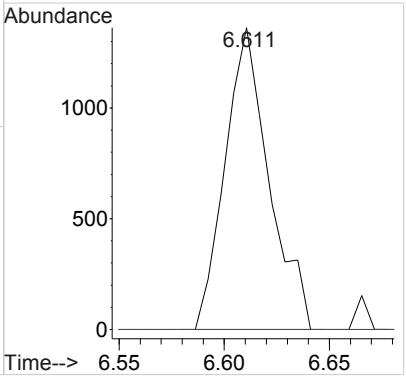


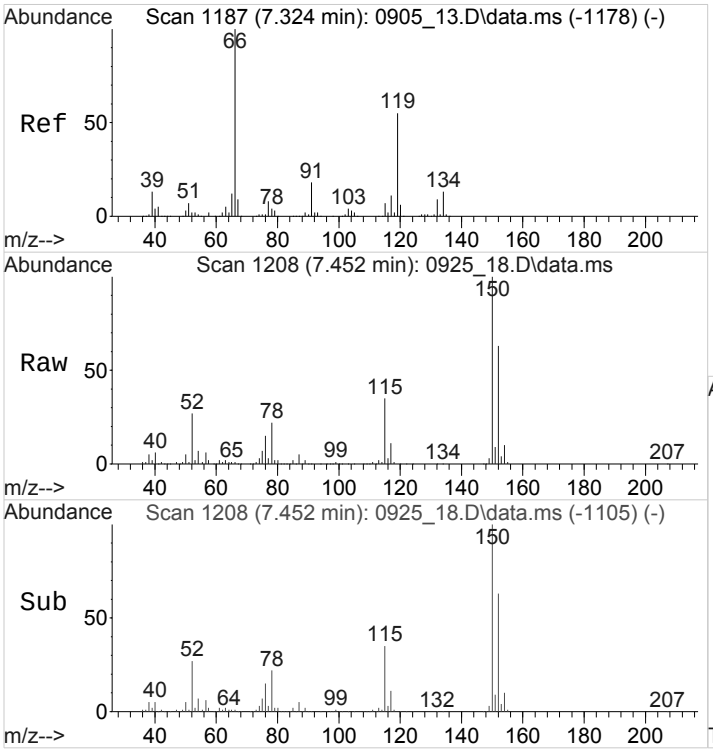


#81
BROMOBENZENE
Concen: 0.2000789 ppb
RT: 6.611 min Scan# 1070
Delta R.T. -0.079 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 77 Resp: 1983

Ion	Ratio	Lower	Upper
77	100		
156	0.0	52.7	79.1#
158	0.0	52.5	78.7#

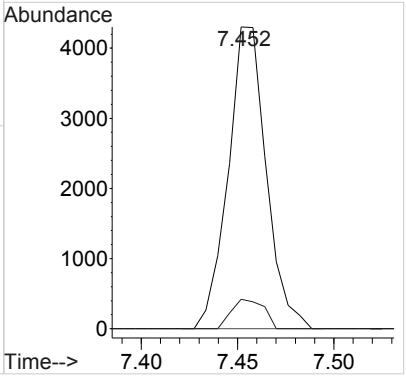




#95
DICYCLOPENTADIENE
Concen: 0.2360380 ppb
RT: 7.452 min Scan# 1208
Delta R.T. 0.128 min
Lab File: 0925_18.D
Acq: 25 Sep 2018 3:55 pm

Tgt Ion: 66 Resp: 5923

Ion	Ratio	Lower	Upper
66	100		
132	8.3	7.4	11.2



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	0925_19	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:15
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:15
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.48	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	11.6		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	2.62		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.46	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	0925_19	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:15
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:15
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**MDL**	**RDL**
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	0	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	1.53	79.2		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_19.D
Acq On : 25 Sep 2018 4:15 pm
Operator : 605
Sample : L1028256-03 1x WG1170992
Misc : water
ALS Vial : 19 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:44:51 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

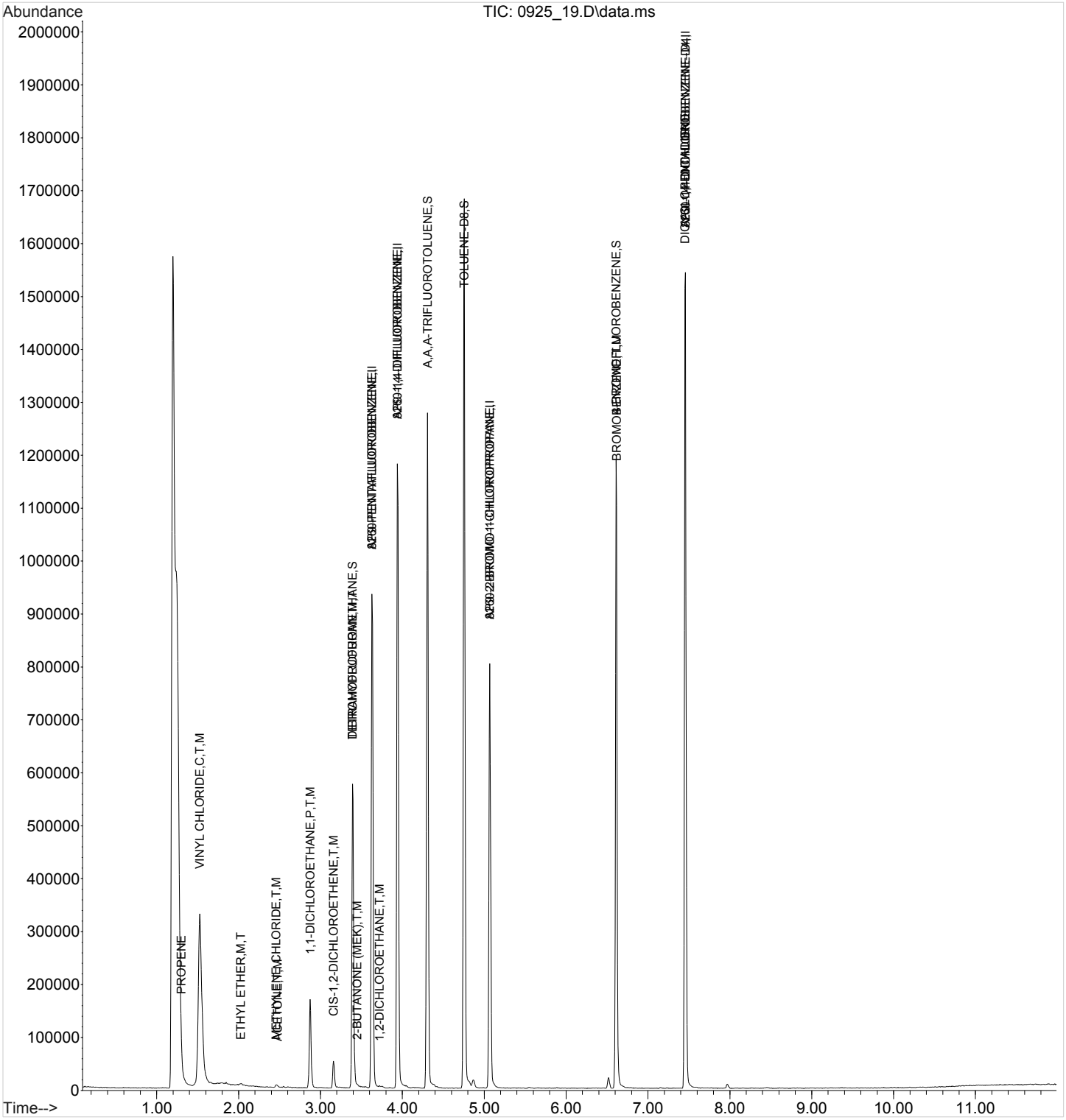
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	519316	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.941	114	728040	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	112331	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.458	152	355421	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	522053	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.941	114	728040	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	112331	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.458	152	355421	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	286907	41.8958720	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 104.74%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	401822	39.6540934	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 99.14%				
60) TOLUENE-D8	4.757	98	844580	44.0983486	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 110.25%				
80) 4-BROMOFLUOROBENZENE	6.611	95	323527	41.0317170	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 102.58%				
Target Compounds							Qvalue
4) PROPENE	1.301	41	6692	3.0307163	ppb	#	56
7) VINYL CHLORIDE	1.526	62	625629	79.1827710	ppb		99
13) ETHYL ETHER	2.026	59	1506	0.3154776	ppb	#	55
17) ACETONE	2.477	43	1986	0.8990537	ppb		95
21) METHYLENE CHLORIDE	2.459	84	1297	0.2127856	ppb		87
27) 1,1-DICHLOROETHANE	2.874	63	134236	11.6309397	ppb		100
32) CIS-1,2-DICHLOROETHENE	3.160	96	15349	2.6241669	ppb		99
33) 2-BUTANONE (MEK)	3.447	43	1769	0.3226859	ppb		94
35) TETRAHYDROFURAN	3.392	42	991	0.3347209	ppb	#	25
46) 1,2-DICHLOROETHANE	3.721	62	1085	0.1394324	ppb	#	80
81) BROMOBENZENE	6.617	77	2233	0.2262838	ppb	#	17
95) DICYCLOPENTADIENE	7.452	66	5850	0.2341436	ppb		97

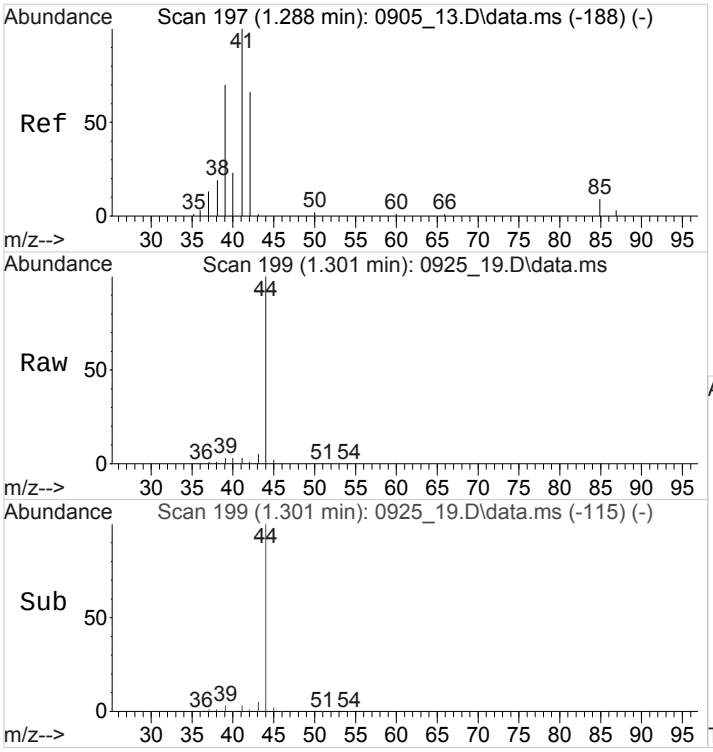
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_19.D
Acq On : 25 Sep 2018 4:15 pm
Operator : 605
Sample : L1028256-03 1x WG1170992
Misc : water
ALS Vial : 19 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:44:51 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

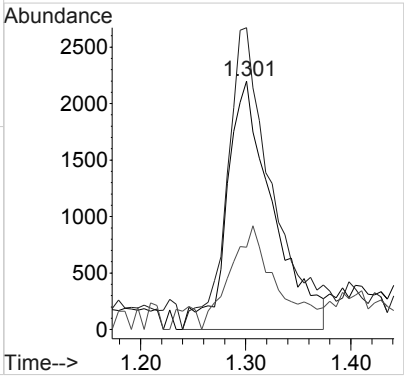


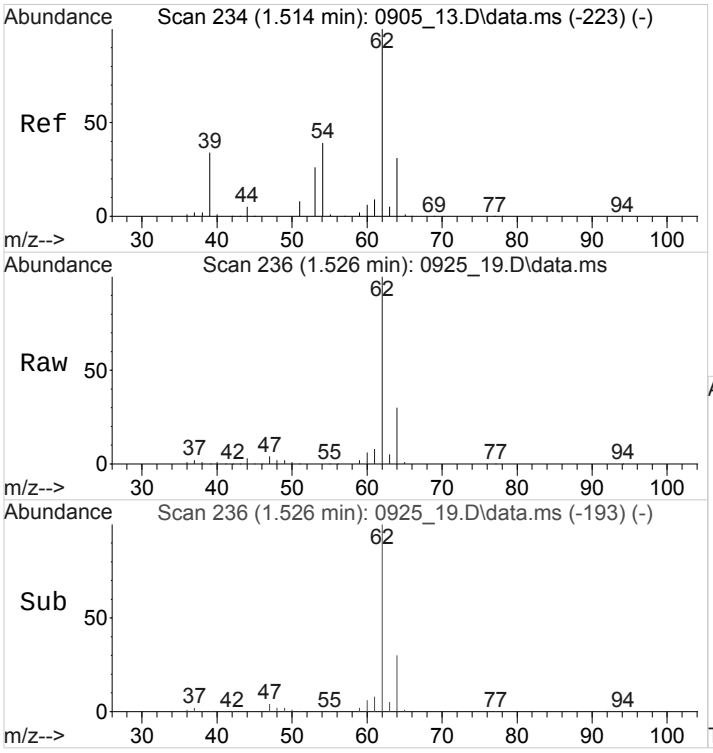


#4
PROPENE
Concen: 3.0307163 ppb
RT: 1.301 min Scan# 199
Delta R.T. 0.013 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 41 Resp: 6692

Ion	Ratio	Lower	Upper
41	100		
39	121.9	59.2	88.8#
42	41.6	52.2	78.4#

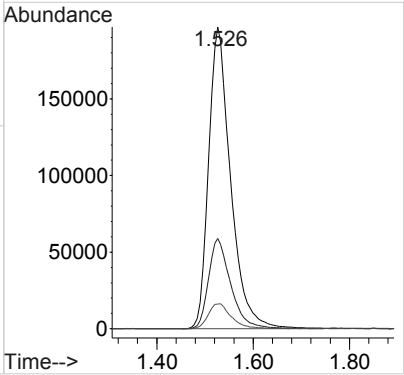


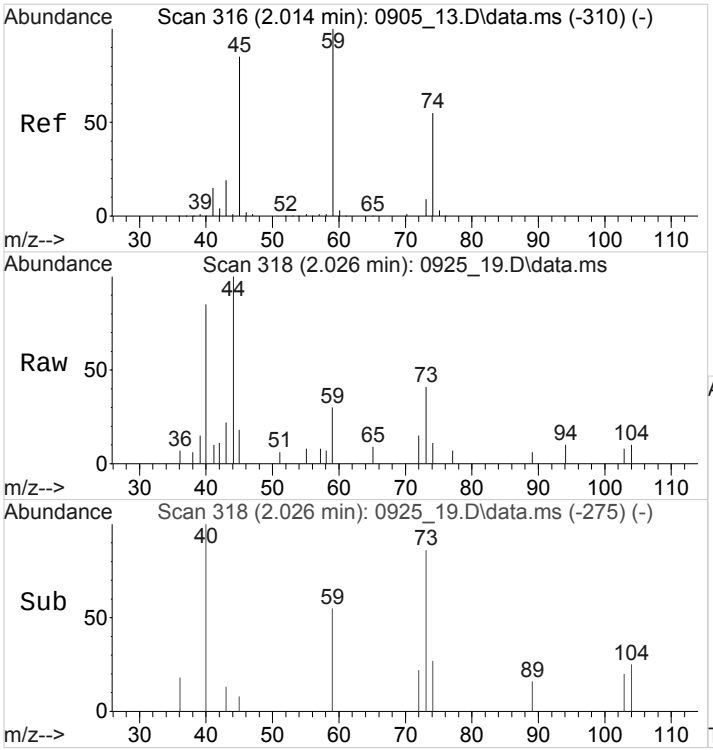


#7
VINYL CHLORIDE
Concen: 79.1827710 ppb
RT: 1.526 min Scan# 236
Delta R.T. 0.012 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 62 Resp: 625629

Ion	Ratio	Lower	Upper
62	100		
64	30.1	24.9	37.3
61	8.7	7.0	10.4

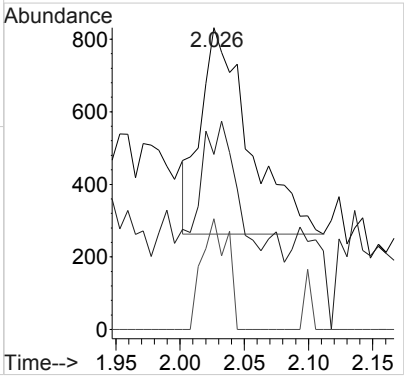


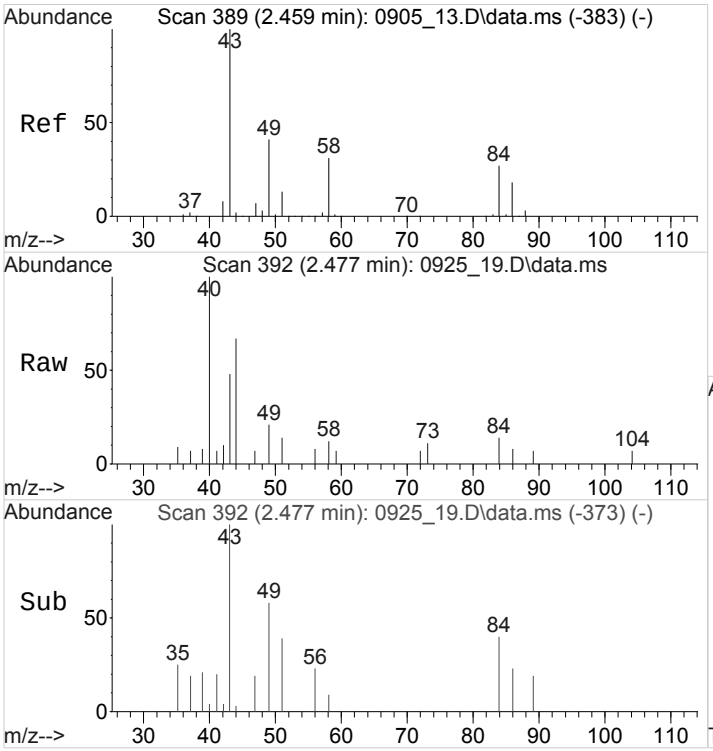


#13
ETHYL ETHER
Concen: 0.3154776 ppb
RT: 2.026 min Scan# 318
Delta R.T. 0.012 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 59 Resp: 1506

Ion	Ratio	Lower	Upper
59	100		
45	38.5	67.4	101.2#
74	28.6	45.1	67.7#

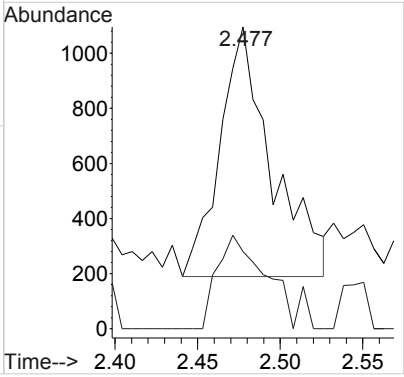


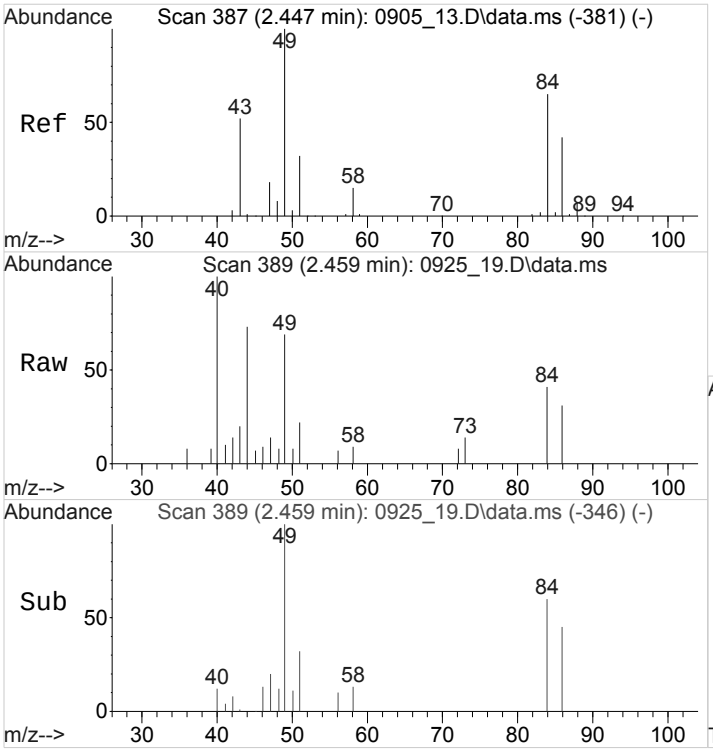


#17
ACETONE
Concen: 0.8990537 ppb
RT: 2.477 min Scan# 392
Delta R.T. 0.019 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 43 Resp: 1986

Ion	Ratio	Lower	Upper
43	100		
58	37.1	27.3	40.9

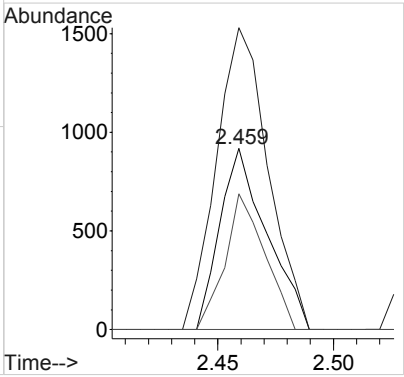


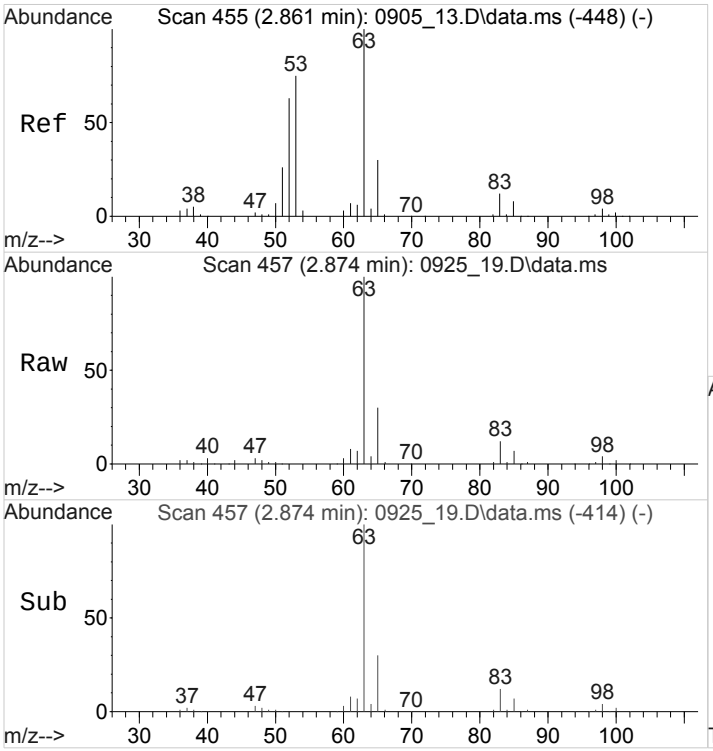


#21
METHYLENE CHLORIDE
Concen: 0.2127856 ppb
RT: 2.459 min Scan# 389
Delta R.T. 0.013 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 84 Resp: 1297

Ion	Ratio	Lower	Upper
84	100		
49	184.3	128.6	193.0
86	63.3	51.5	77.3

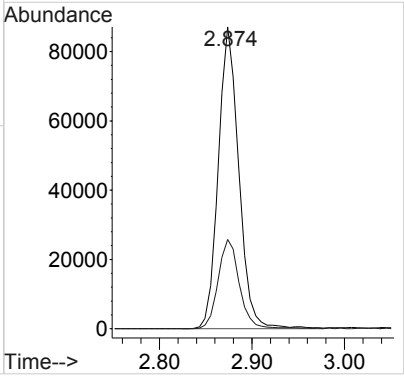


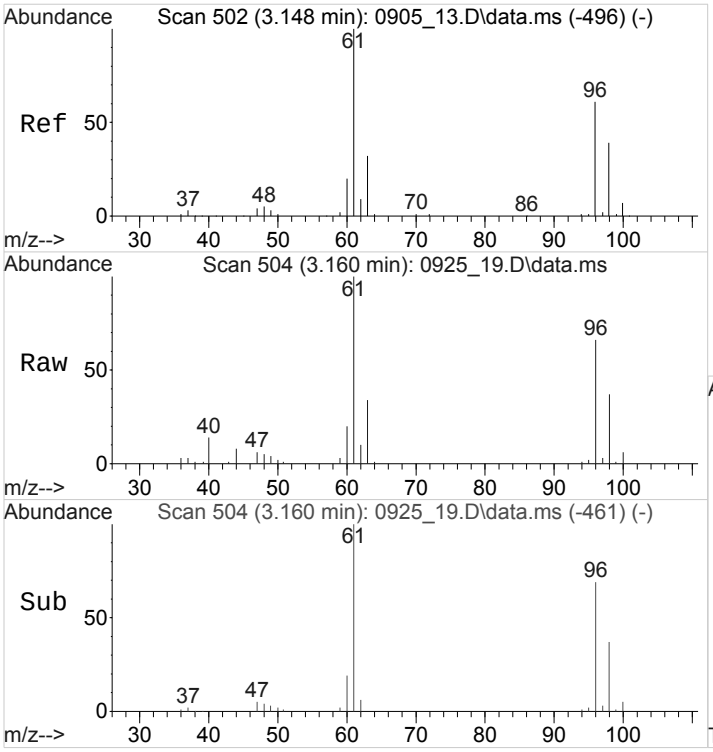


#27
1,1-DICHLOROETHANE
Concen: 11.6309397 ppb
RT: 2.874 min Scan# 457
Delta R.T. 0.012 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 63 Resp: 134236

Ion	Ratio	Lower	Upper
63	100		
65	30.7	24.7	37.1

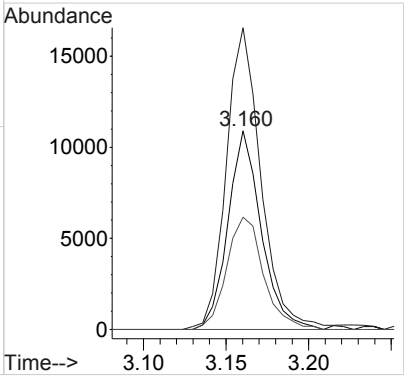


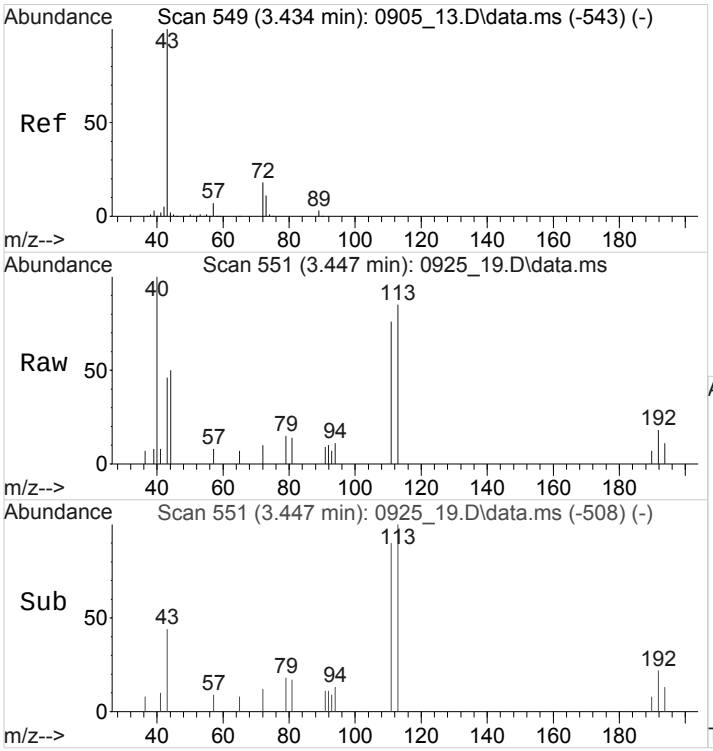


#32
CIS-1,2-DICHLOROETHENE
Concen: 2.6241669 ppb
RT: 3.160 min Scan# 504
Delta R.T. 0.012 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 96 Resp: 15349

Ion	Ratio	Lower	Upper
96	100		
61	158.2	127.4	191.0
98	62.7	51.1	76.7

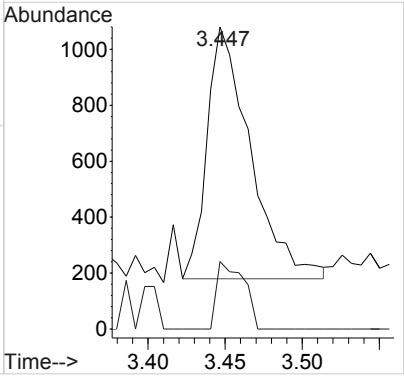


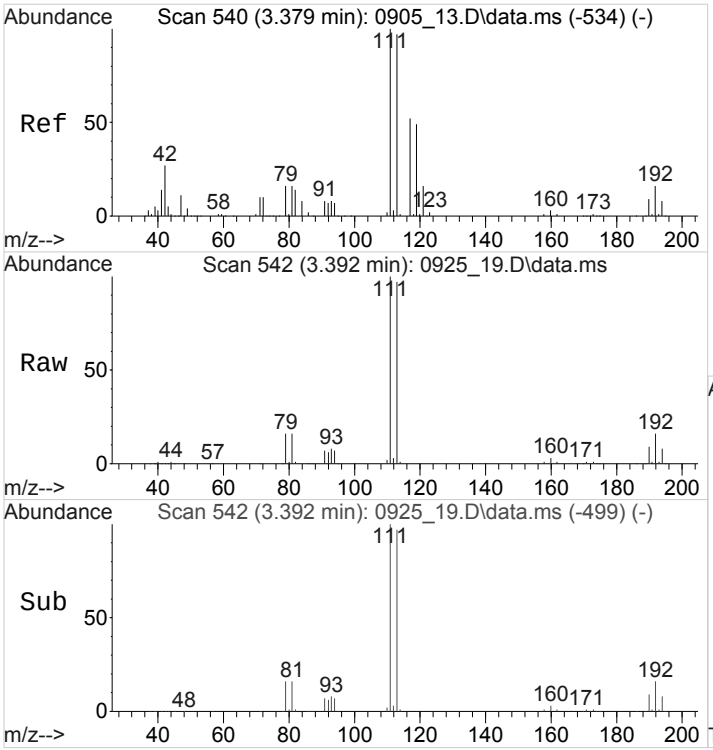


#33
2-BUTANONE (MEK)
Concen: 0.3226859 ppb
RT: 3.447 min Scan# 551
Delta R.T. 0.012 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 43 Resp: 1769

Ion	Ratio	Lower	Upper
43	100		
72	16.6	15.6	23.4

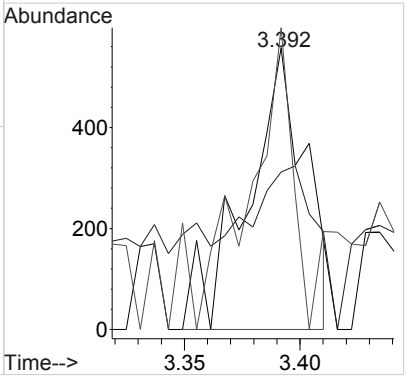


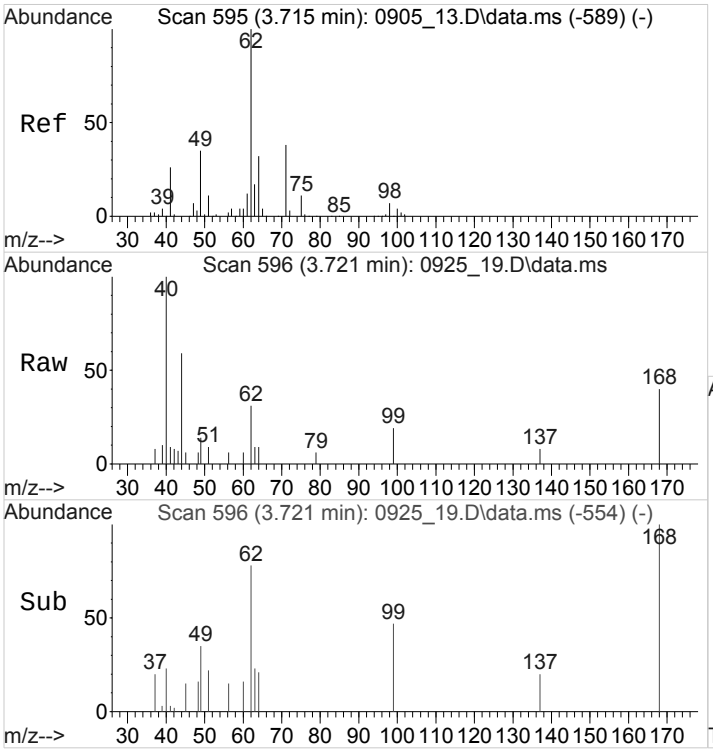


#35
TETRAHYDROFURAN
Concen: 0.3347209 ppb
RT: 3.392 min Scan# 542
Delta R.T. 0.013 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 42 Resp: 991

Ion	Ratio	Lower	Upper
42	100		
41	17.0	41.9	62.9#
39	84.9	15.8	23.8#

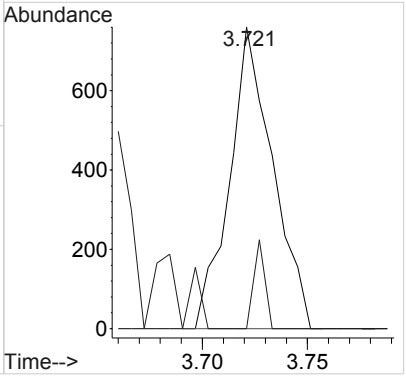


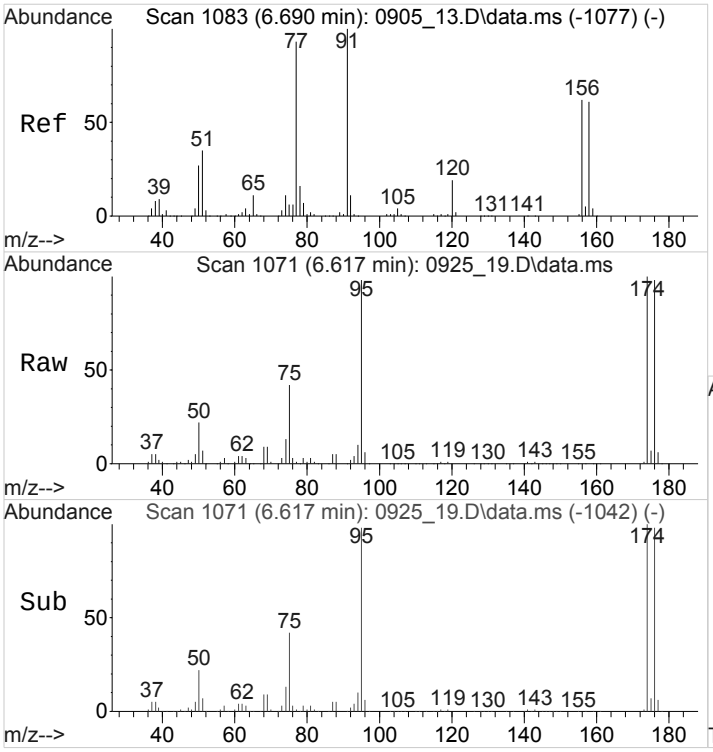


#46
1,2-DICHLOROETHANE
Concen: 0.1394324 ppb
RT: 3.721 min Scan# 596
Delta R.T. 0.006 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 62 Resp: 1085

Ion	Ratio	Lower	Upper
62	100		
98	0.0	5.4	8.2#

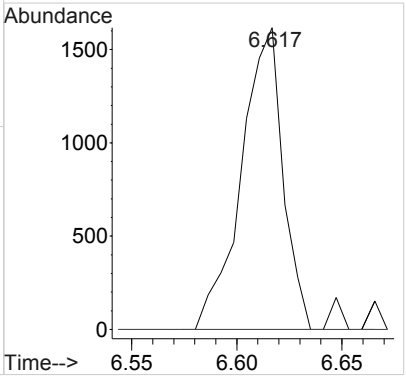


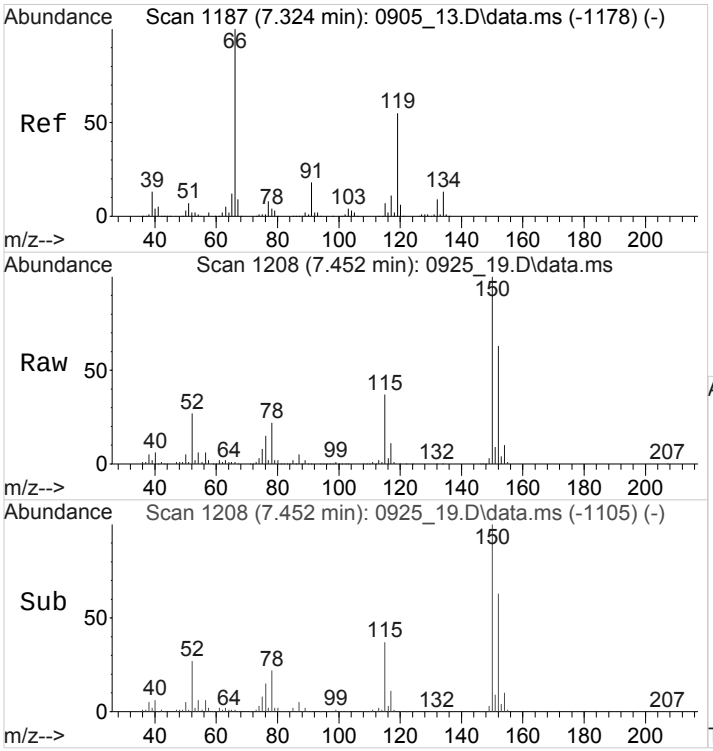


#81
BROMOBENZENE
Concen: 0.2262838 ppb
RT: 6.617 min Scan# 1071
Delta R.T. -0.073 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 77 Resp: 2233

Ion	Ratio	Lower	Upper
77	100		
156	0.0	52.7	79.1#
158	0.0	52.5	78.7#

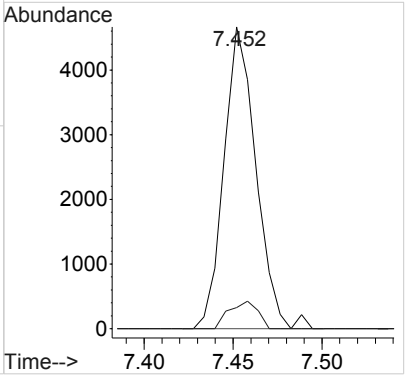




#95
DICYCLOPENTADIENE
Concen: 0.2341436 ppb
RT: 7.452 min Scan# 1208
Delta R.T. 0.128 min
Lab File: 0925_19.D
Acq: 25 Sep 2018 4:15 pm

Tgt Ion: 66 Resp: 5850

Ion	Ratio	Lower	Upper
66	100		
132	8.2	7.4	11.2



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	0925_20	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:35
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:35
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	6.57		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	1.93		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.47	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.04	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	0925_20	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:35
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:35
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**MDL**	**RDL**
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.95	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_20.D
Acq On : 25 Sep 2018 4:35 pm
Operator : 605
Sample : L1028256-04 1x WG1170992
Misc : water
ALS Vial : 20 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:45:23 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

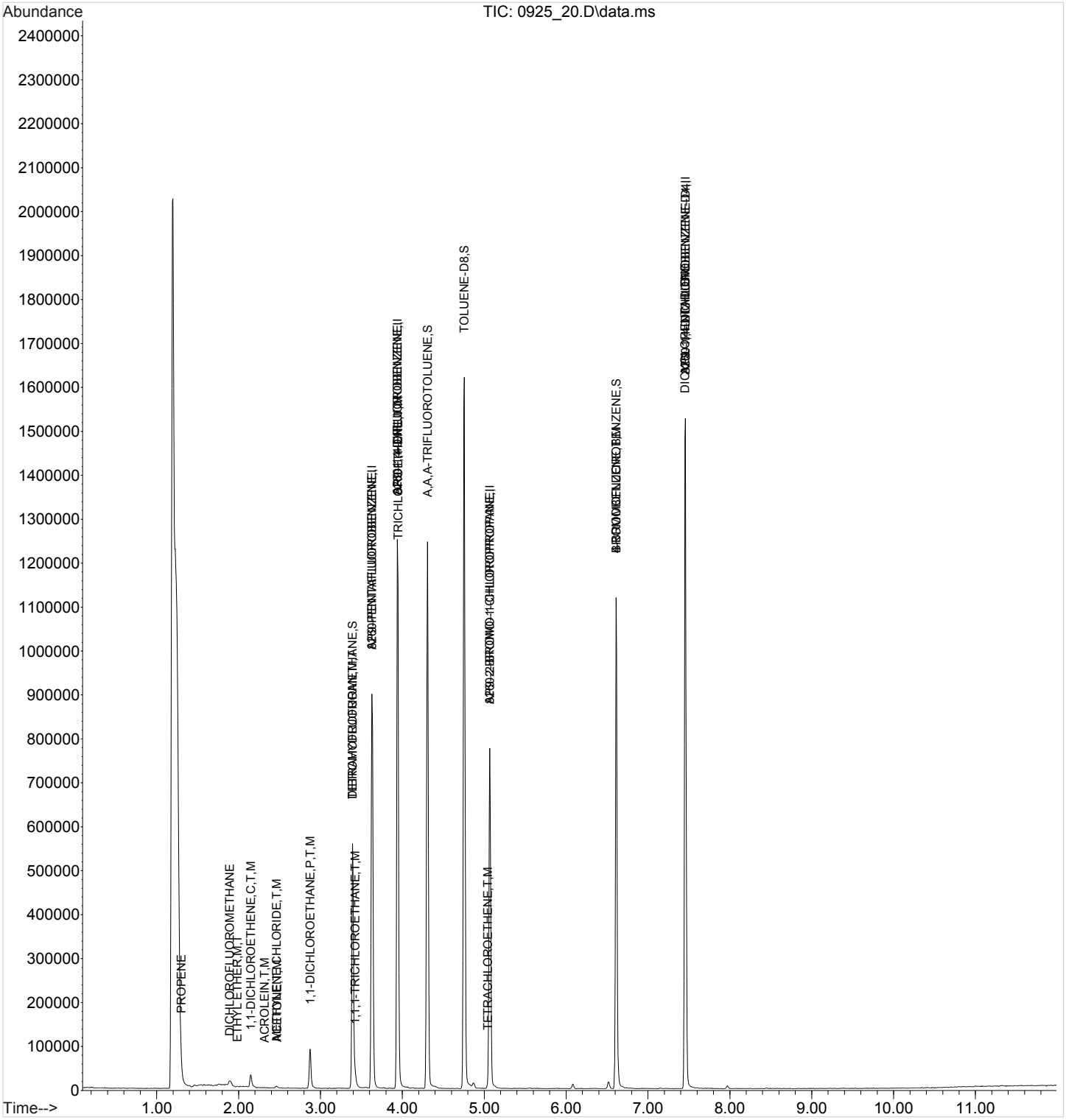
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	511179	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.941	114	739232	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	109702	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.458	152	354183	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	513412	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.941	114	739232	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	109702	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.458	152	354183	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	279265	41.4290809	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 103.57%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	405367	39.3982732	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 98.50%				
60) TOLUENE-D8	4.757	98	839188	44.8668808	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 112.17%				
80) 4-BROMOFLUOROBENZENE	6.611	95	298880	38.0383252	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 95.10%				
Target Compounds							Qvalue
4) PROPENE	1.301	41	1356	0.7370588	ppb	#	56
12) DICHLOROFLUOROMETHANE	1.892	67	10980	1.1671994	ug/l		98
13) ETHYL ETHER	1.984	59	747	0.1589728	ppb	#	14
14) ACROLEIN	2.319	56	266	0.3063322	ppb	#	1
15) 1,1-DICHLOROETHENE	2.148	96	8963	1.9261437	ppb		95
17) ACETONE	2.471	43	1346	0.6190278	ppb	#	86
21) METHYLENE CHLORIDE	2.465	84	1260	0.2100059	ppb	#	74
27) 1,1-DICHLOROETHANE	2.874	63	74608	6.5673460	ppb		99
35) TETRAHYDROFURAN	3.392	42	716	0.2456863	ppb	#	75
39) 1,1,1-TRICHLOROETHANE	3.422	97	3627	0.4811549	ppb		95
49) TRICHLOROETHENE	3.947	130	3924	0.6618839	ppb	#	93
64) TETRACHLOROETHENE	5.044	164	1077	0.2580912	ppb	#	68
81) BROMOBENZENE	6.611	77	1888	0.1919916	ppb	#	17
95) DICYCLOPENTADIENE	7.452	66	5615	0.2255234	ppb	#	95

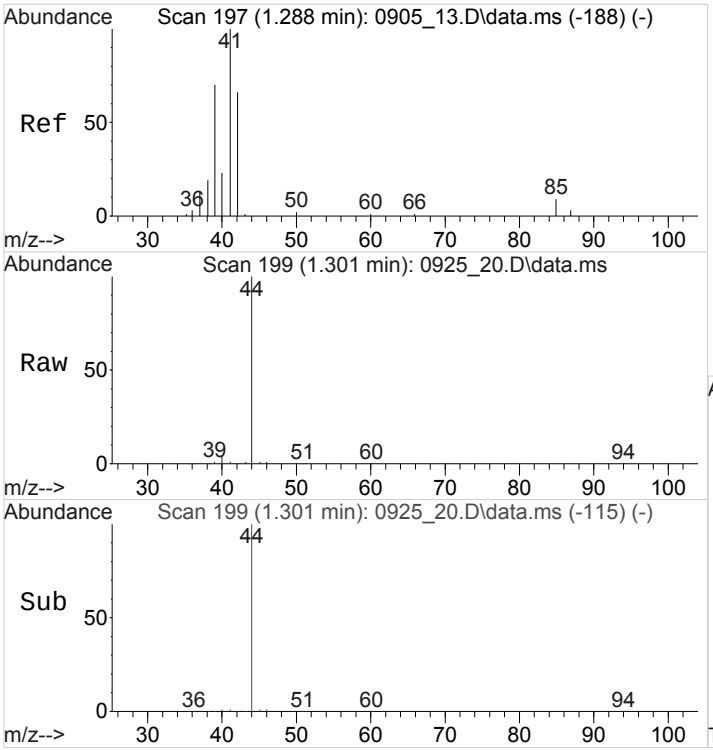
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_20.D
Acq On : 25 Sep 2018 4:35 pm
Operator : 605
Sample : L1028256-04 1x WG1170992
Misc : water
ALS Vial : 20 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:45:23 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

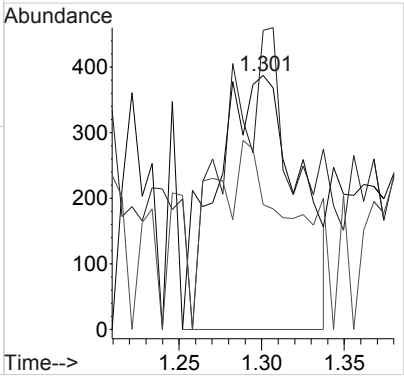


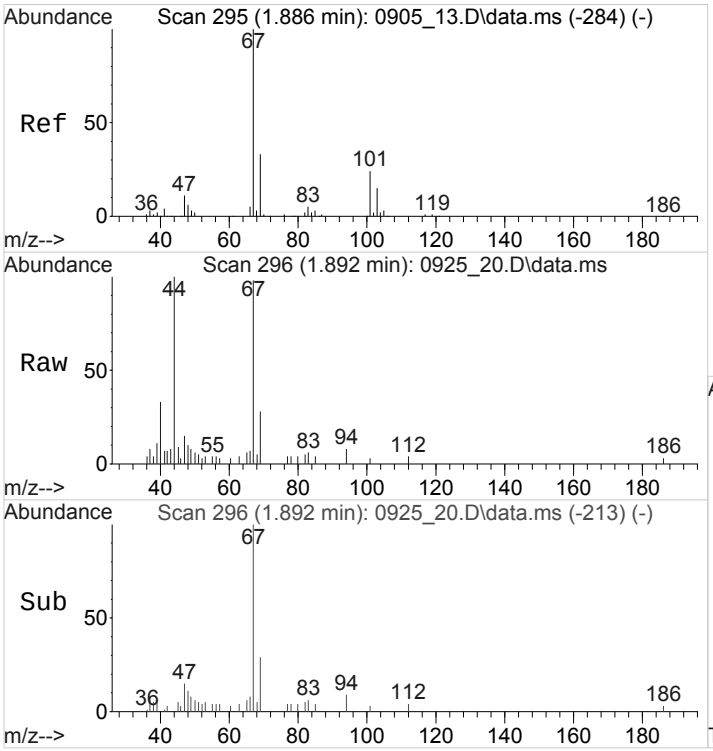


#4
PROPENE
Concen: 0.7370588 ppb
RT: 1.301 min Scan# 199
Delta R.T. 0.013 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 41 Resp: 1356

Ion	Ratio	Lower	Upper
41	100		
39	82.2	59.2	88.8
42	0.0	52.2	78.4#

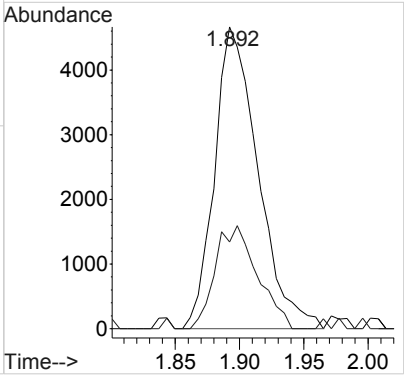


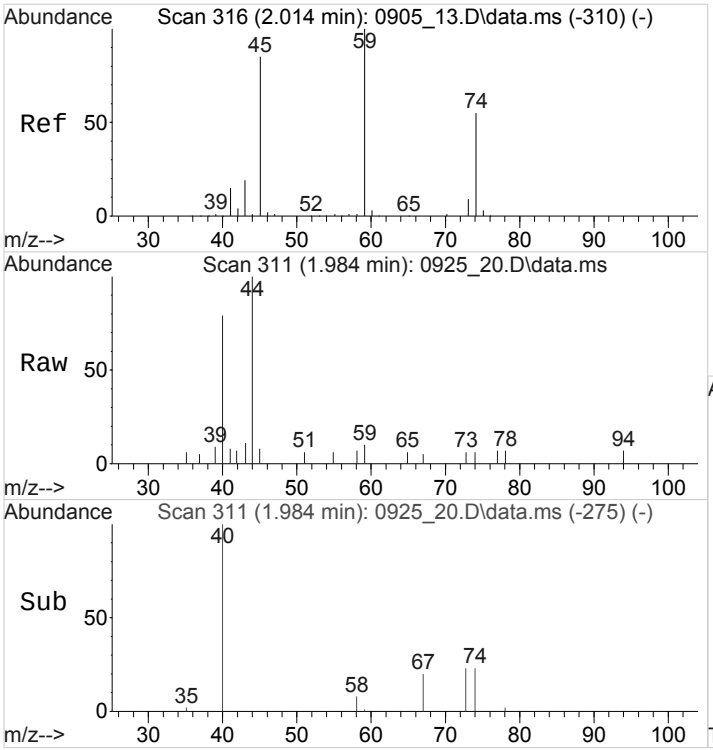


#12
DICHLOROFLUOROMETHANE
Concen: 1.1671994 ug/l
RT: 1.892 min Scan# 296
Delta R.T. 0.006 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 67 Resp: 10980

Ion	Ratio	Lower	Upper
67	100		
69	33.1	25.8	38.6

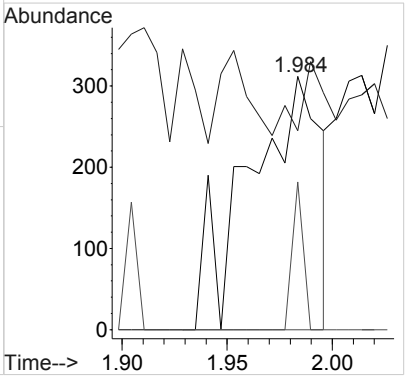


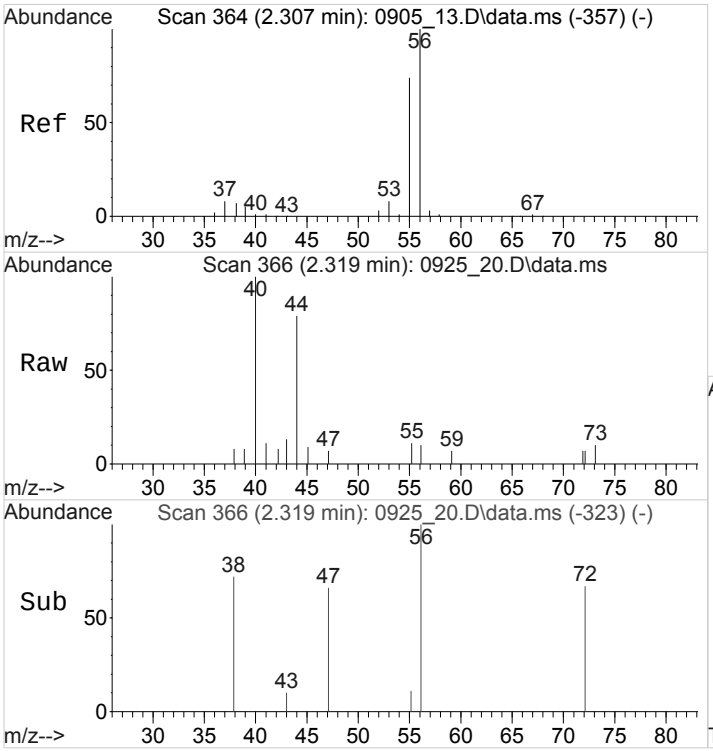


#13
ETHYL ETHER
Concen: 0.1589728 ppb
RT: 1.984 min Scan# 311
Delta R.T. -0.030 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 59 Resp: 747

Ion	Ratio	Lower	Upper
59	100		
45	0.0	67.4	101.2#
74	0.0	45.1	67.7#

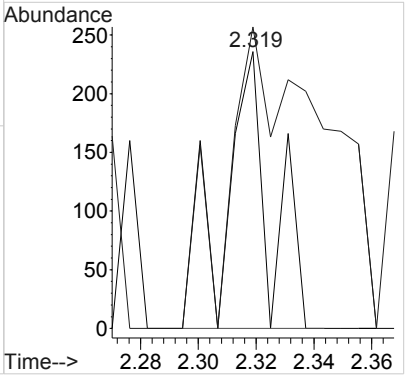


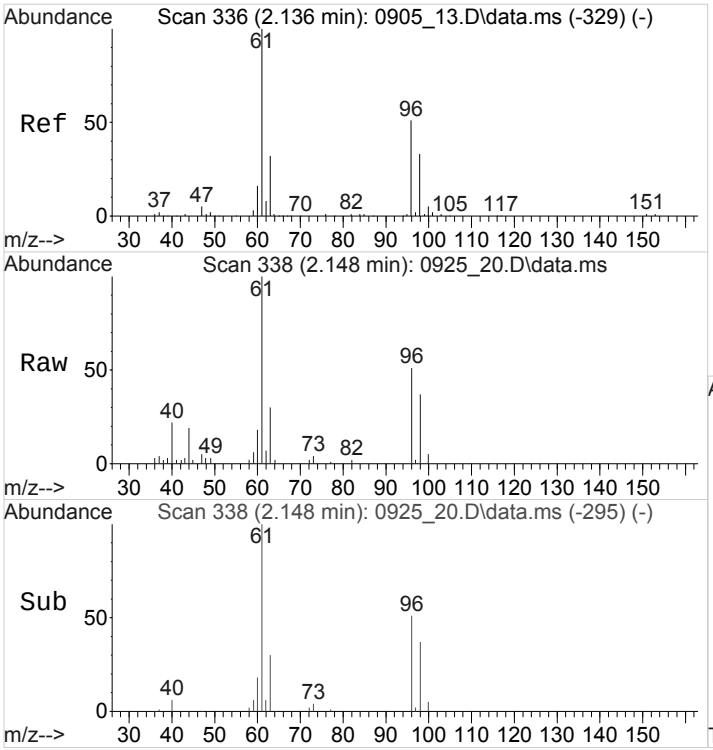


#14
ACROLEIN
Concen: 0.3063322 ppb
RT: 2.319 min Scan# 366
Delta R.T. 0.012 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 56 Resp: 266

Ion	Ratio	Lower	Upper
56	100		
55	228.2	59.8	89.6#

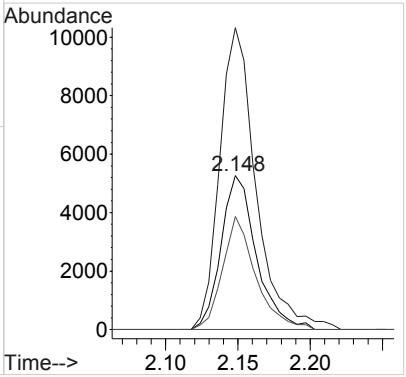


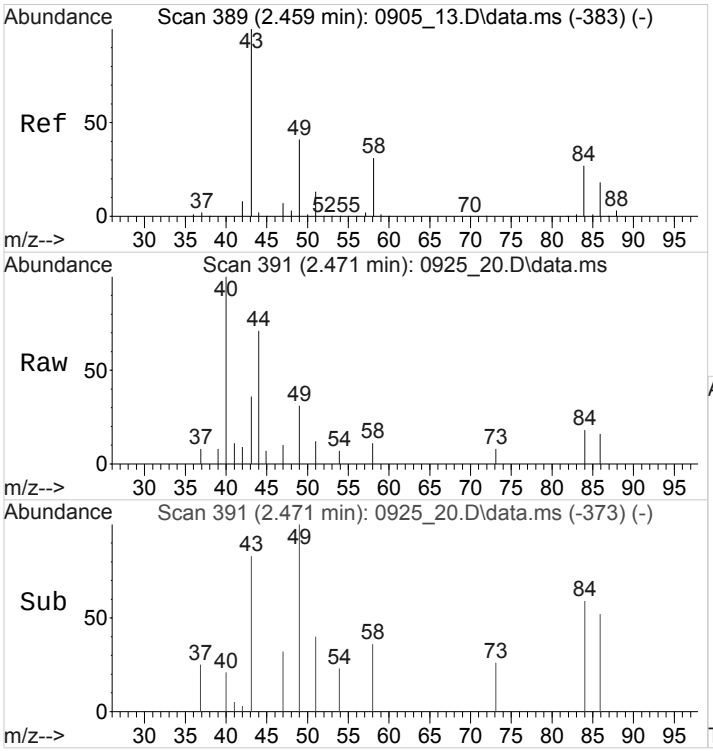


#15
1,1-DICHLOROETHENE
Concen: 1.9261437 ppb
RT: 2.148 min Scan# 338
Delta R.T. 0.012 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 96 Resp: 8963

Ion	Ratio	Lower	Upper
96	100		
61	201.3	155.9	233.9
98	68.9	51.0	76.6

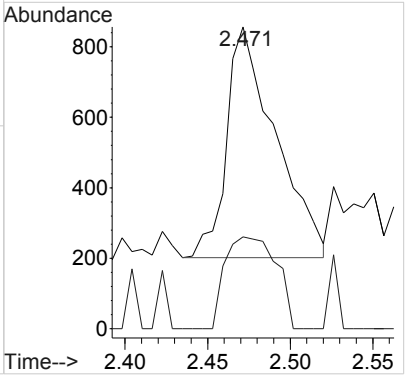


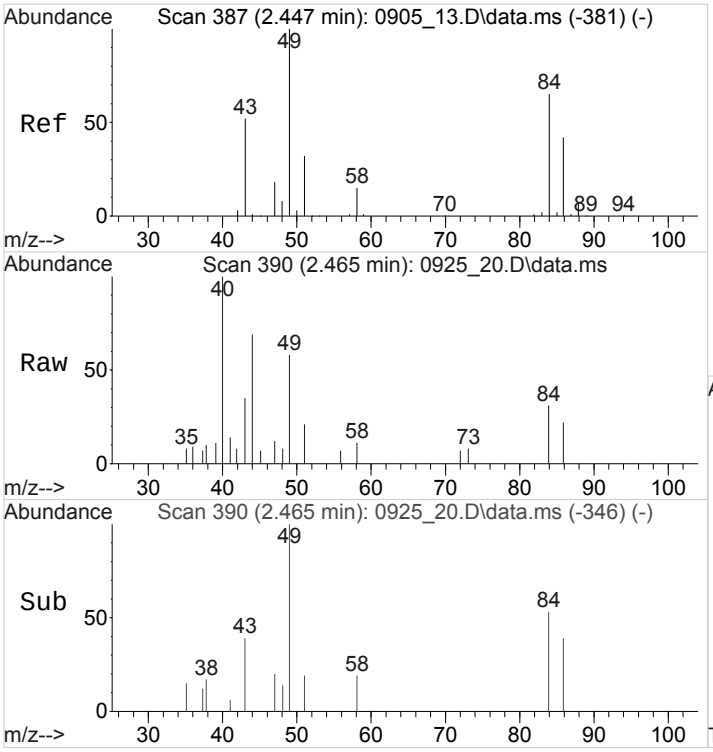


#17
ACETONE
Concen: 0.6190278 ppb
RT: 2.471 min Scan# 391
Delta R.T. 0.013 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 43 Resp: 1346

Ion	Ratio	Lower	Upper
43	100		
58	42.0	27.3	40.9#

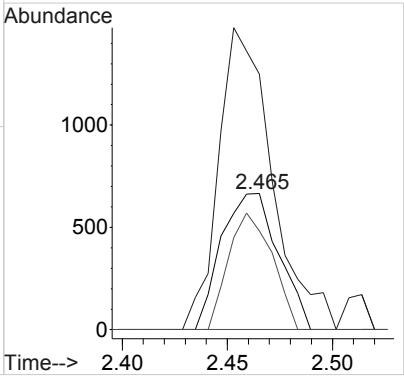


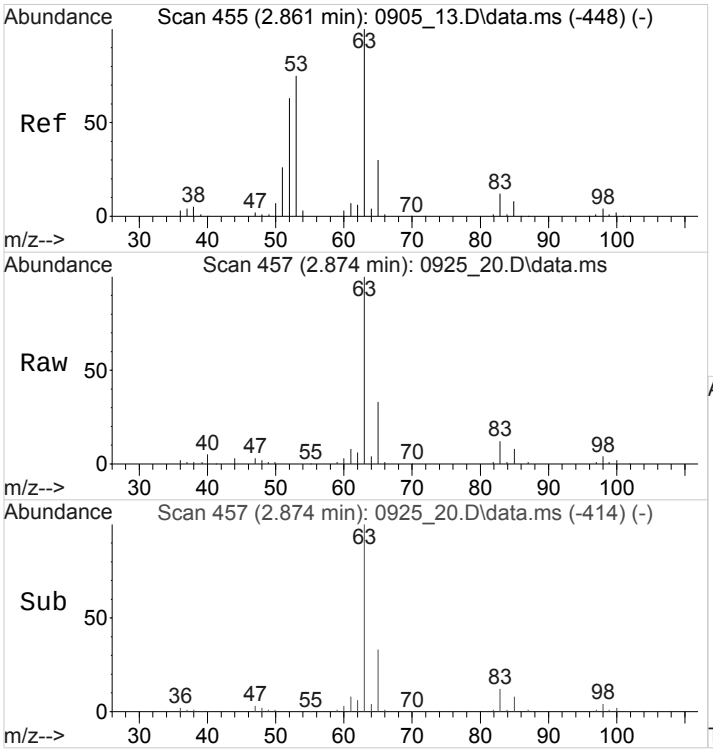


#21
METHYLENE CHLORIDE
Concen: 0.2100059 ppb
RT: 2.465 min Scan# 390
Delta R.T. 0.019 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 84 Resp: 1260

Ion	Ratio	Lower	Upper
84	100		
49	208.4	128.6	193.0#
86	65.7	51.5	77.3

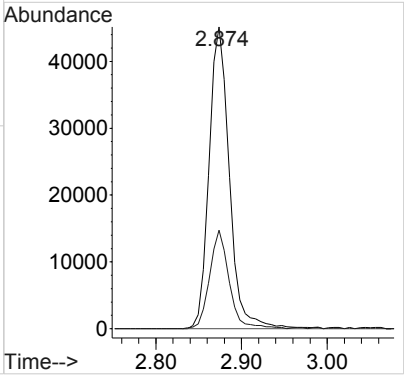


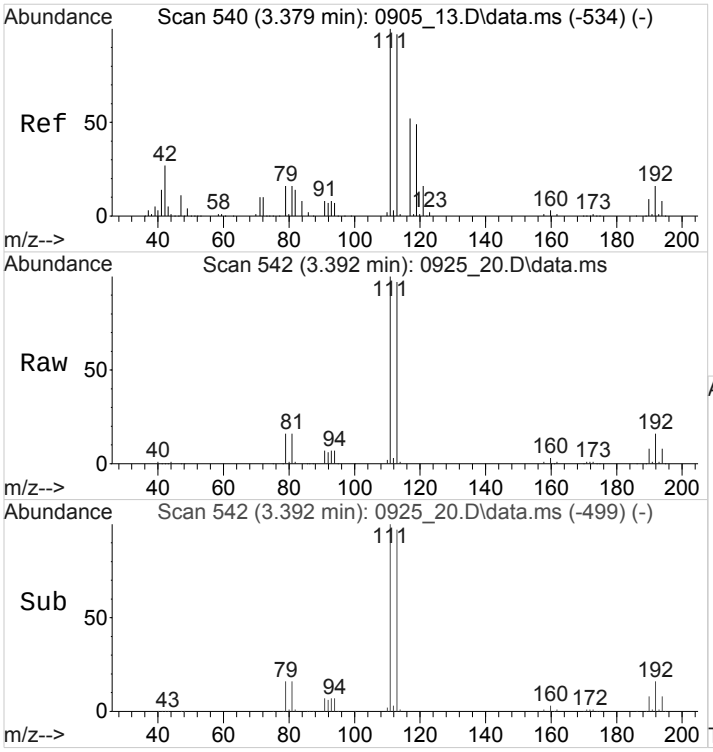


#27
1,1-DICHLOROETHANE
Concen: 6.5673460 ppb
RT: 2.874 min Scan# 457
Delta R.T. 0.012 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 63 Resp: 74608

Ion	Ratio	Lower	Upper
63	100		
65	31.4	24.7	37.1

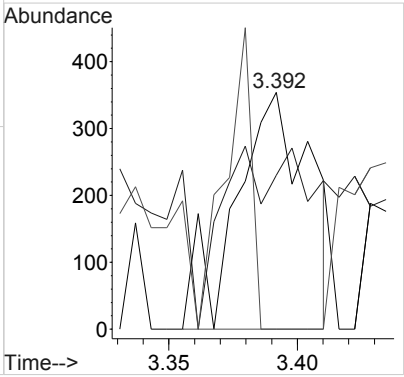


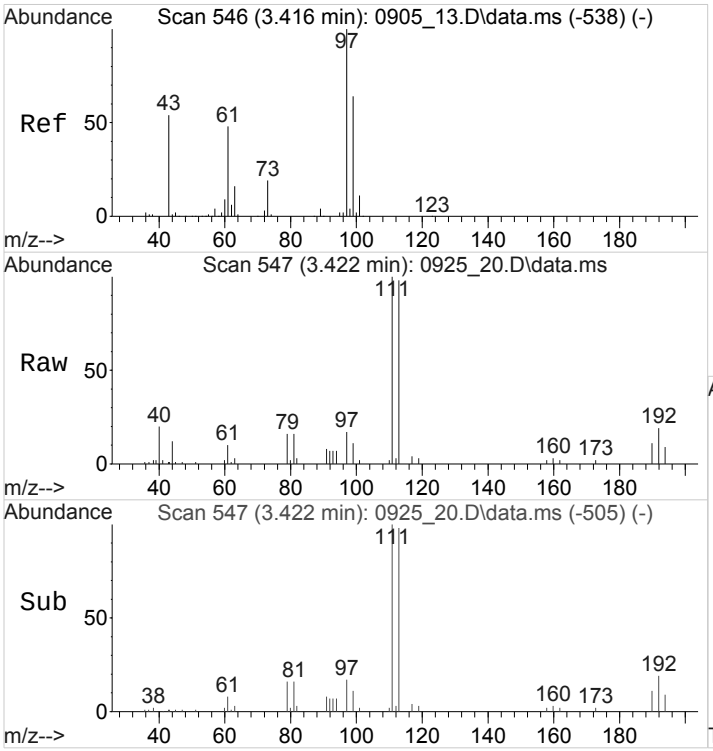


#35
TETRAHYDROFURAN
Concen: 0.2456863 ppb
RT: 3.392 min Scan# 542
Delta R.T. 0.013 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 42 Resp: 716

Ion	Ratio	Lower	Upper
42	100		
41	43.0	41.9	62.9
39	45.0	15.8	23.8#

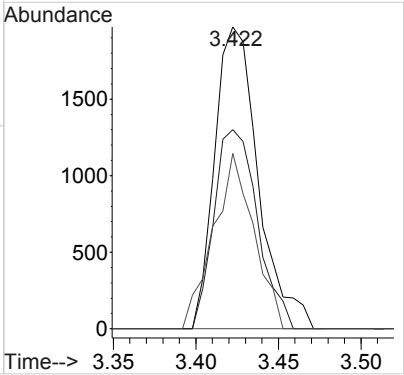


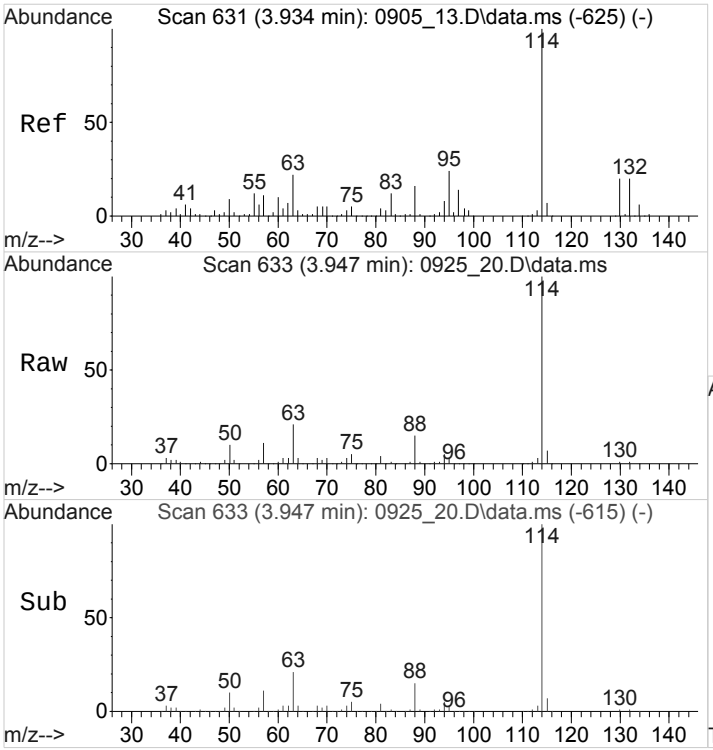


#39
1,1,1-TRICHLOROETHANE
Concen: 0.4811549 ppb
RT: 3.422 min Scan# 547
Delta R.T. 0.006 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 97 Resp: 3627

Ion	Ratio	Lower	Upper
97	100		
99	65.9	50.8	76.2
61	53.7	38.6	57.8

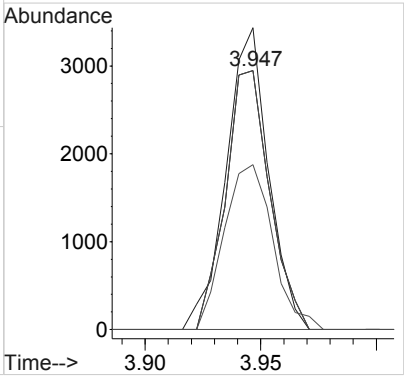


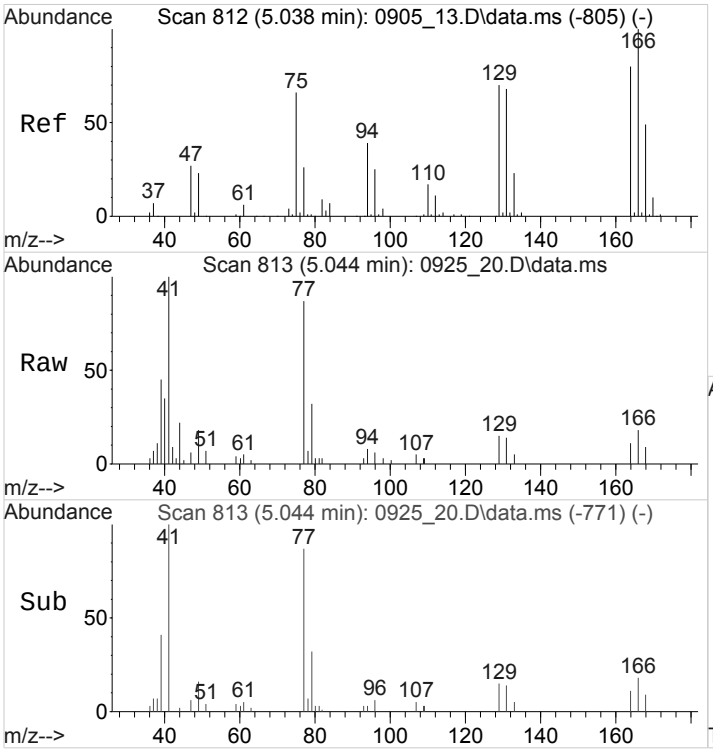


#49
TRICHLOROETHENE
Concen: 0.6618839 ppb
RT: 3.947 min Scan# 633
Delta R.T. 0.012 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion:130 Resp: 3924

Ion	Ratio	Lower	Upper
130	100		
132	112.0	78.9	118.3
97	0.0	0.0	0.0
130	100.0	80.0	120.0

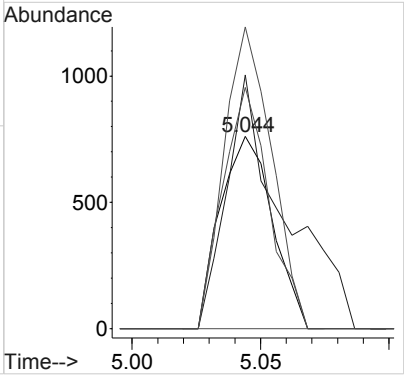


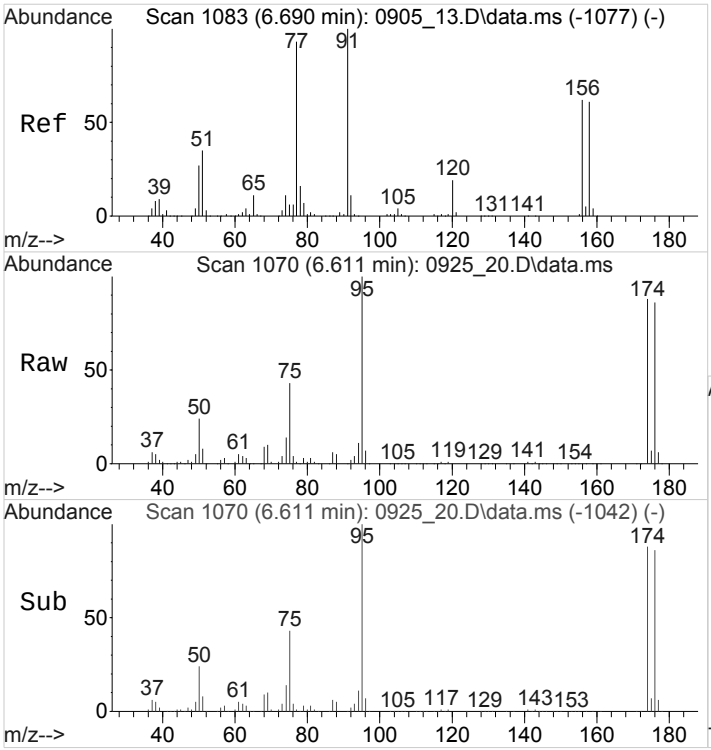


#64
TETRACHLOROETHENE
Concen: 0.2580912 ppb
RT: 5.044 min Scan# 813
Delta R.T. 0.006 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion:164 Resp: 1077

Ion	Ratio	Lower	Upper
164	100		
129	144.7	70.0	105.0#
131	111.4	68.9	103.3#
166	143.0	100.7	151.1

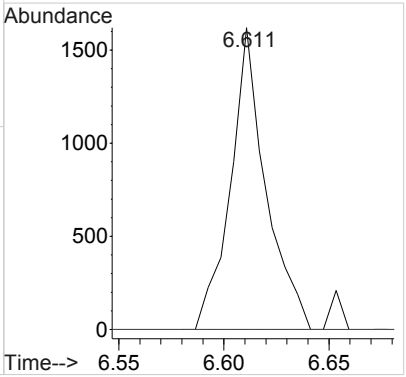


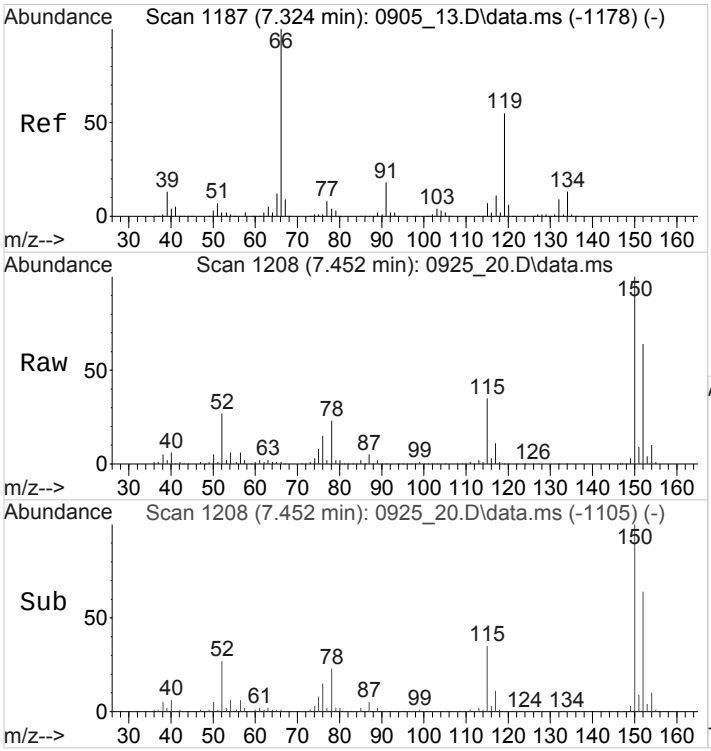


#81
BROMOBENZENE
Concen: 0.1919916 ppb
RT: 6.611 min Scan# 1070
Delta R.T. -0.079 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 77 Resp: 1888

Ion	Ratio	Lower	Upper
77	100		
156	0.0	52.7	79.1#
158	0.0	52.5	78.7#

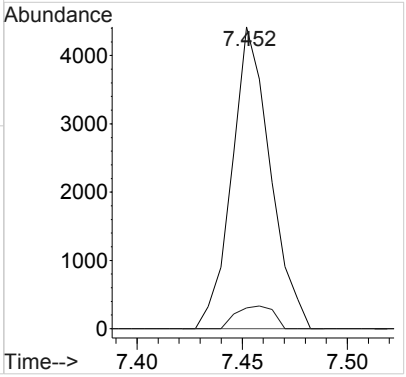




#95
DICYCLOPENTADIENE
Concen: 0.2255234 ppb
RT: 7.452 min Scan# 1208
Delta R.T. 0.128 min
Lab File: 0925_20.D
Acq: 25 Sep 2018 4:35 pm

Tgt Ion: 66 Resp: 5615

Ion	Ratio	Lower	Upper
66	100		
132	7.4	7.4	11.2#



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	0925_21	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	ND		10.0	50.0
Benzene	71-43-2	3.62	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	2.18	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	3.29	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.34	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	5.79	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	6.40	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.46	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	9.26	12.2		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	4.79	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	0925_21	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**MDL**	**RDL**
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.95	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	1.87	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	6.18	ND		0.341	1.00
m&p-Xylenes	1330-20-7	5.89	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	7.15	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_21.D
Acq On : 25 Sep 2018 4:55 pm
Operator : 605
Sample : L1028256-05 1x WG1170992
Misc : water
ALS Vial : 21 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:46:14 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

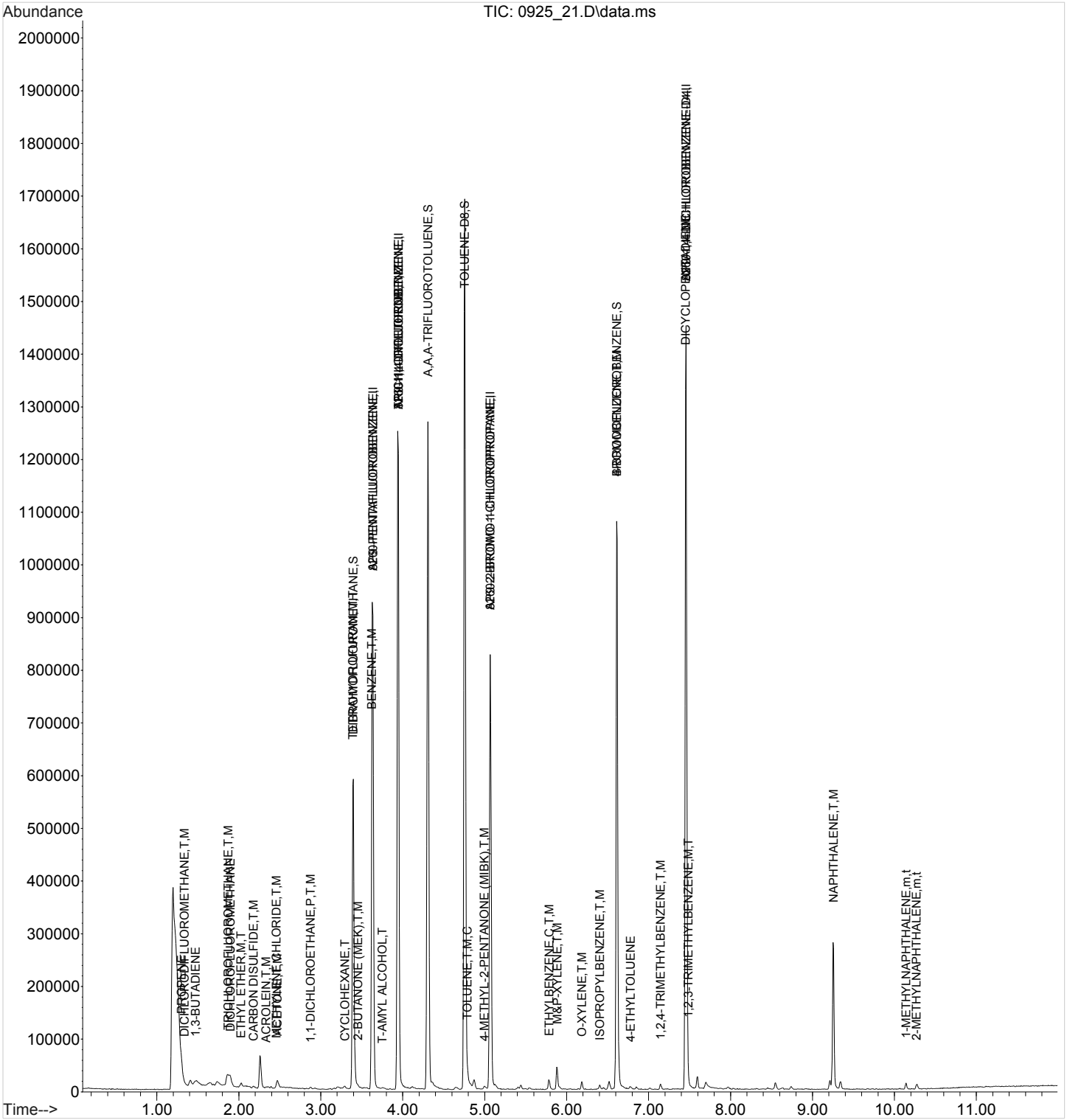
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.636	168	527913	40.0000000	ppb	0.01
48) 8260-1,4-DIFLUOROBENZENE	3.947	114	747517	40.0000000	ppb	0.01
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	115717	40.0000000	ppb	# 0.00
76) 8260-1,4-DICHLOROBENZE...	7.458	152	335267	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	3.636	168	528989	40.0000000	ppb	0.02
119) AP9-1,4-DIFLUOROBENZENE	3.947	114	747517	40.0000000	ppb	0.02
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	115717	40.0000000	ppb	# 0.00
128) AP9-1,4-DICHLOROBENZEN...	7.458	152	335267	40.0000000	ppb	0.00
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.398	111	292383	42.0002189	ppb	0.01
Spiked Amount 40.000	Range 79 - 121		Recovery = 105.00%			
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	419851	40.3537290	ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 100.88%			
60) TOLUENE-D8	4.757	98	848721	43.0178737	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 107.54%			
80) 4-BROMOFLUOROBENZENE	6.611	95	304959	41.0017970	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 102.50%			
Target Compounds						Qvalue
4) PROPENE	1.301	41	13495	5.8719862	ppb #	59
5) DICHLORODIFLUOROMETHANE	1.337	85	1588	0.2706247	ppb	92
8) 1,3-BUTADIENE	1.472	39	3357	0.6248100	ppb #	1
11) TRICHLOROFLUOROMETHANE	1.868	101	19998	2.4161487	ppb	99
12) DICHLOROFLUOROMETHANE	1.898	67	11972	1.2323103	ug/l	98
13) ETHYL ETHER	2.026	59	4375	0.9015525	ppb #	85
14) ACROLEIN	2.331	56	421	0.4694655	ppb #	63
17) ACETONE	2.471	43	16358	7.2846042	ppb	89
19) CARBON DISULFIDE	2.179	76	3323	0.1888651	ppb #	82
21) METHYLENE CHLORIDE	2.459	84	1414	0.2282028	ppb #	70
27) 1,1-DICHLOROETHANE	2.874	63	2483	0.2116371	ppb #	88
33) 2-BUTANONE (MEK)	3.453	43	5737	1.0294527	ppb	99
35) TETRAHYDROFURAN	3.392	42	2068	0.6871144	ppb #	73
37) CYCLOHEXANE	3.294	84	882	0.1414770	ppb #	1
44) BENZENE	3.624	78	6723	0.3152158	ppb #	1
47) T-AMYL ALCOHOL	3.752	59	425	0.3224560	ppb #	23
49) TRICHLOROETHENE	3.947	130	1702	0.2839044	ppb #	97
59) 4-METHYL-2-PENTANONE (...	4.995	43	5216	0.5457672	ppb #	86
61) TOLUENE	4.788	91	11021	0.5619876	ppb	93
71) ETHYLBENZENE	5.788	106	3293	0.5179752	ppb	99
72) M&P-XYLENE	5.885	106	10152	1.2920617	ppb	95
73) O-XYLENE	6.184	106	3419	0.4357630	ppb	98
79) ISOPROPYLBENZENE	6.403	105	3916	0.1999654	ppb #	89
81) BROMOBENZENE	6.611	77	2188	0.2350522	ppb #	17
86) 4-ETHYLTOLUENE	6.781	105	2980	0.1595871	ppb	90
91) 1,2,4-TRIMETHYLBENZENE	7.147	105	4452	0.2936821	ppb	98
95) DICYCLOPENTADIENE	7.452	66	5295	0.2246698	ppb	100
97) 1,2,3-TRIMETHYLBENZENE	7.483	105	2991	0.1934430	ppb #	64
103) NAPHTHALENE	9.257	128	183934	12.2264982	ppb	100
105) 1-METHYLNAPHTHALENE	10.141	142	5034	0.8472052	ppb	92
106) 2-METHYLNAPHTHALENE	10.269	142	3899	0.6793585	ppb	96

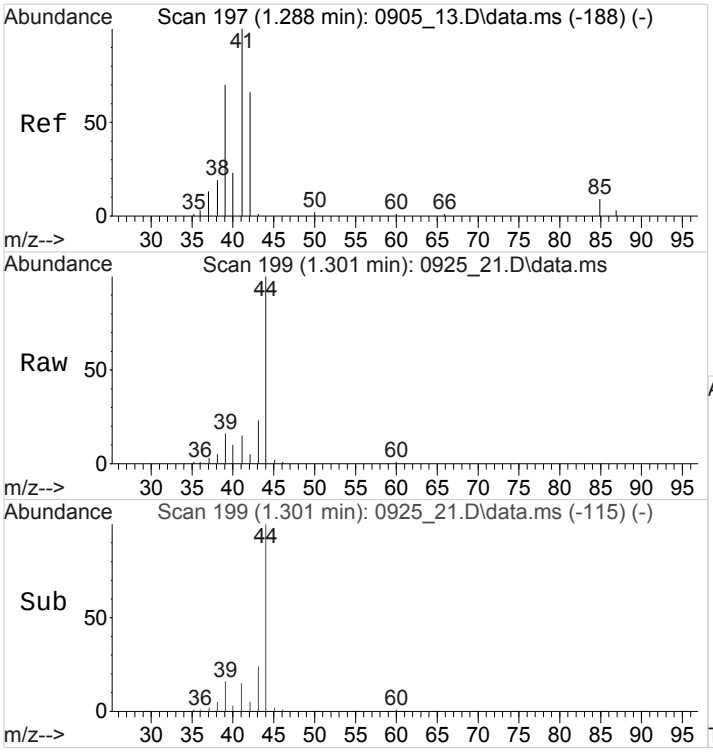
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_21.D
Acq On : 25 Sep 2018 4:55 pm
Operator : 605
Sample : L1028256-05 1x WG1170992
Misc : water
ALS Vial : 21 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:46:14 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

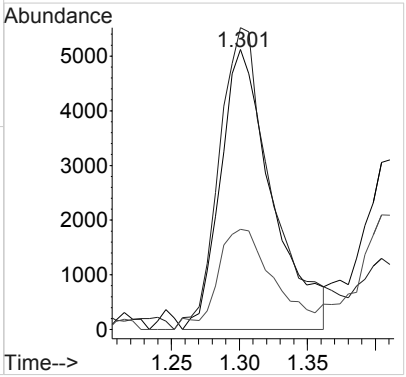


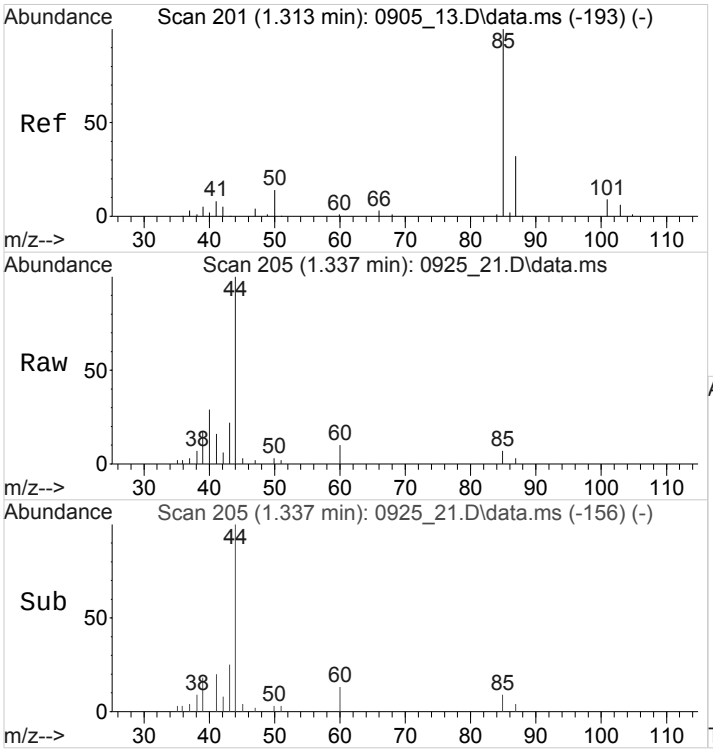


#4
PROPENE
Concen: 5.8719862 ppb
RT: 1.301 min Scan# 199
Delta R.T. 0.013 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 41 Resp: 13495

Ion	Ratio	Lower	Upper
41	100		
39	114.7	59.2	88.8#
42	39.2	52.2	78.4#

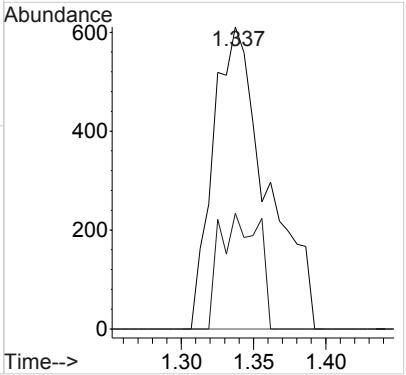


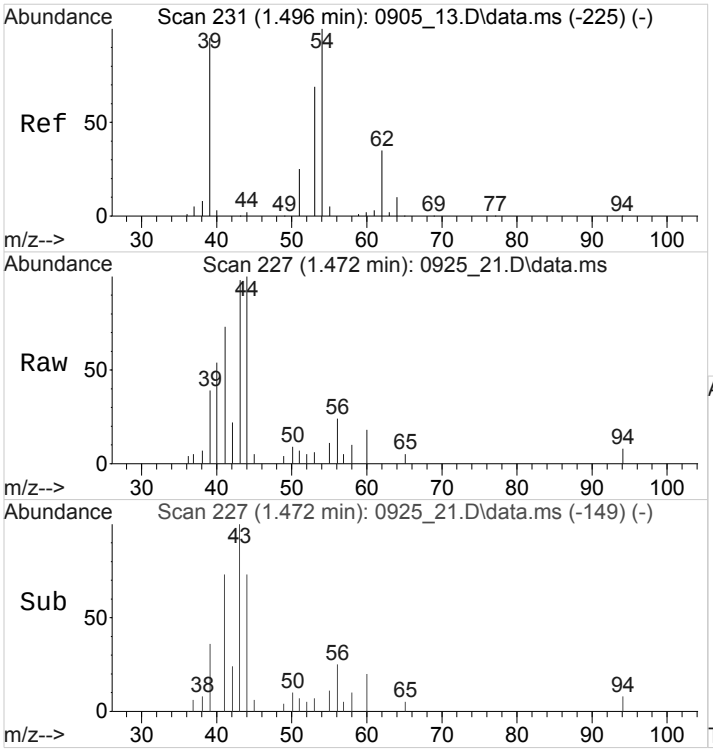


#5
DICHLORODIFLUOROMETHANE
Concen: 0.2706247 ppb
RT: 1.337 min Scan# 205
Delta R.T. 0.025 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 85 Resp: 1588

Ion	Ratio	Lower	Upper
85	100		
87	27.8	25.9	38.9

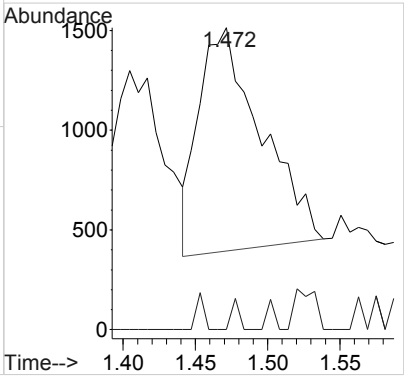


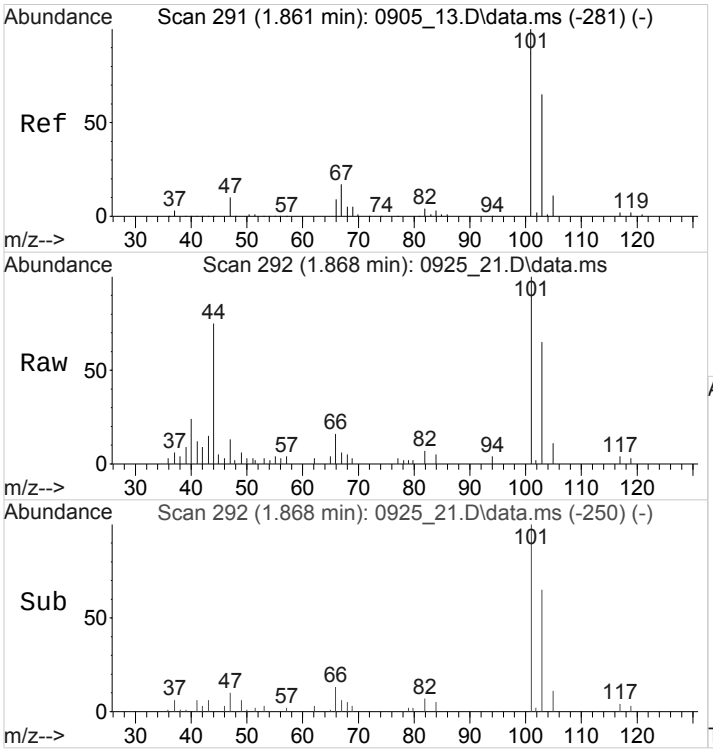


#8
1,3-BUTADIENE
Concen: 0.6248100 ppb
RT: 1.472 min Scan# 227
Delta R.T. -0.023 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 39 Resp: 3357

Ion	Ratio	Lower	Upper
39	100		
54	0.0	85.4	128.2#

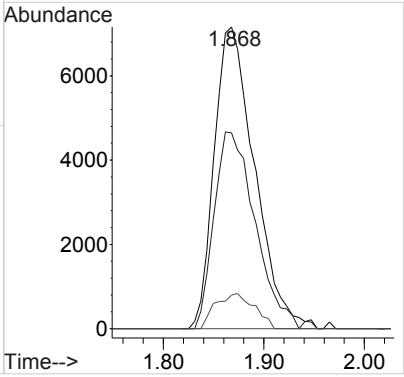


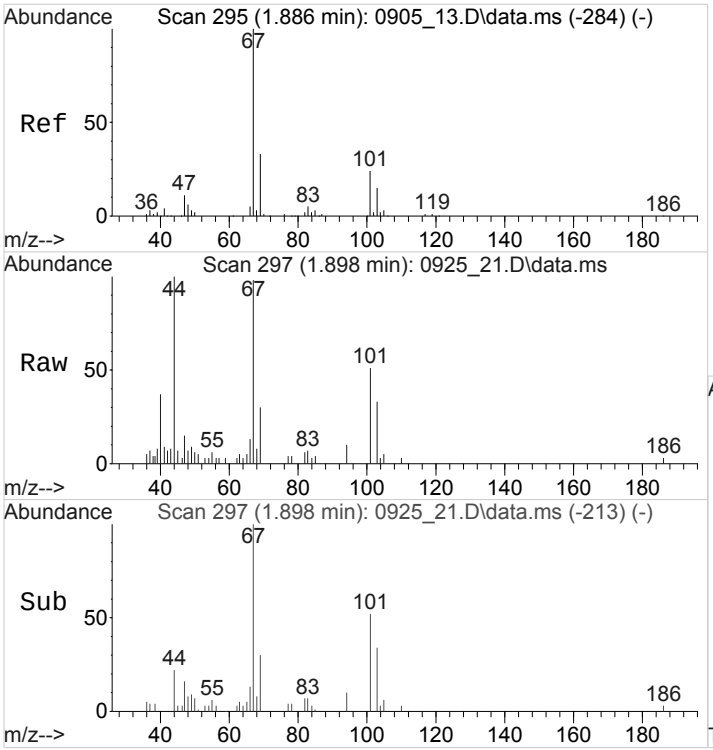


#11
TRICHLOROFLUOROMETHANE
Concen: 2.4161487 ppb
RT: 1.868 min Scan# 292
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:101 Resp: 19998

Ion	Ratio	Lower	Upper
101	100		
103	66.7	52.3	78.5
105	11.2	8.8	13.2

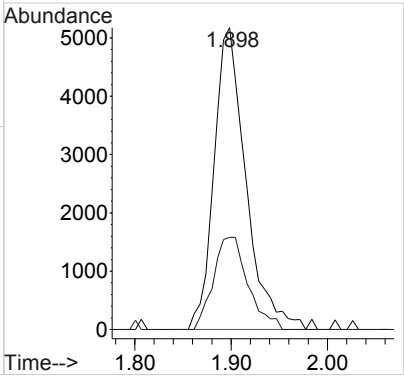


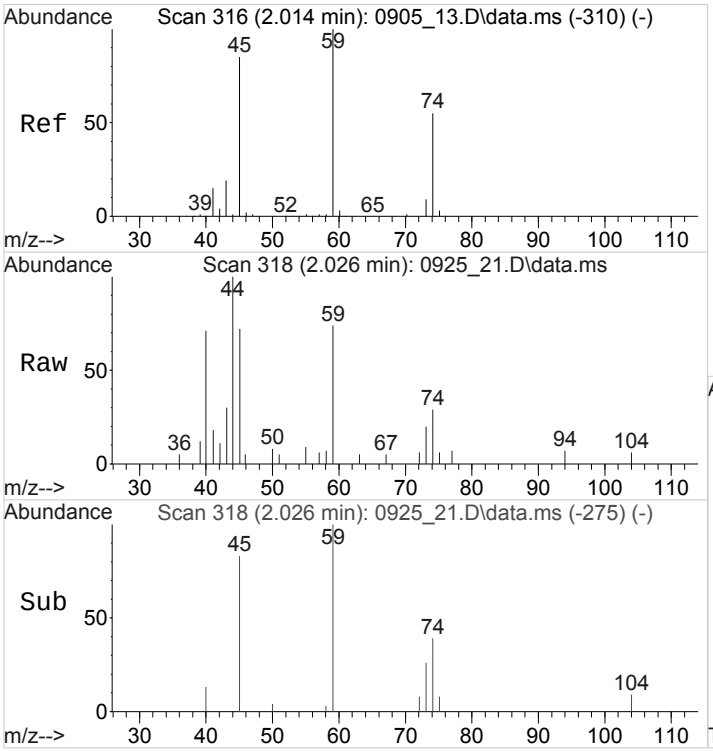


#12
DICHLOROFLUOROMETHANE
Concen: 1.2323103 ug/l
RT: 1.898 min Scan# 297
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 67 Resp: 11972

Ion	Ratio	Lower	Upper
67	100		
69	33.1	25.8	38.6

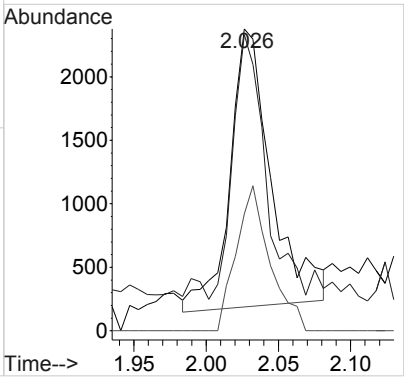


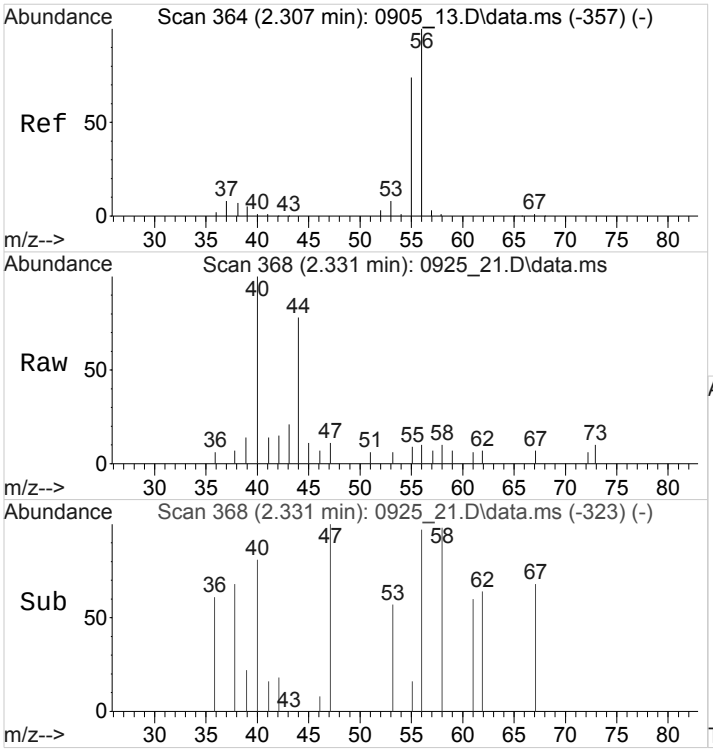


#13
ETHYL ETHER
Concen: 0.9015525 ppb
RT: 2.026 min Scan# 318
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 59 Resp: 4375

Ion	Ratio	Lower	Upper
59	100		
45	73.6	67.4	101.2
74	42.2	45.1	67.7#

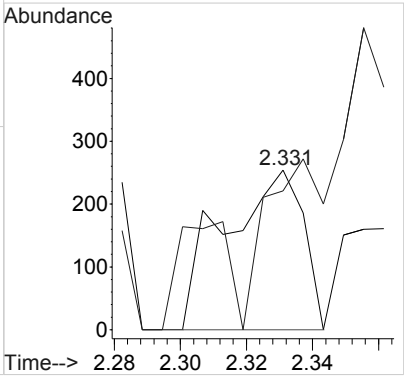


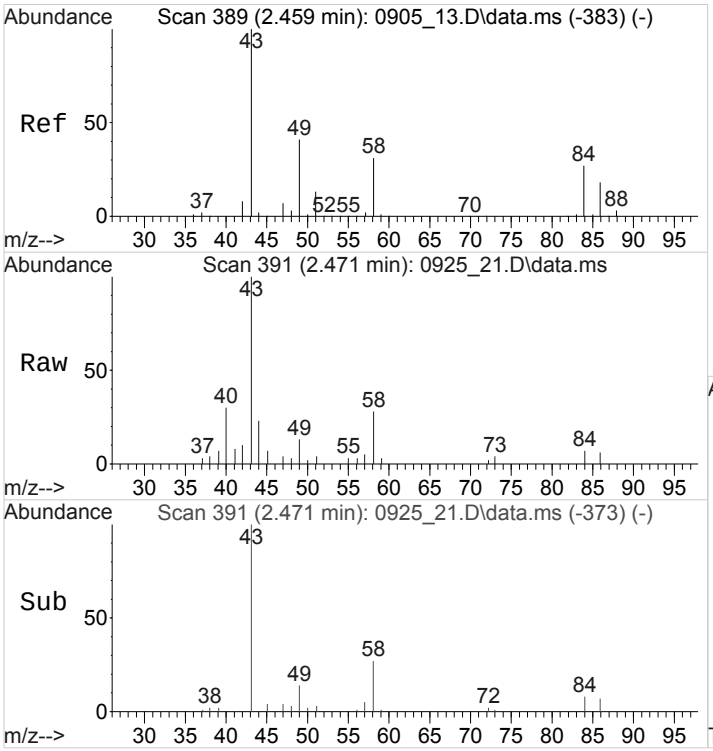


#14
ACROLEIN
Concen: 0.4694655 ppb
RT: 2.331 min Scan# 368
Delta R.T. 0.025 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 56 Resp: 421

Ion	Ratio	Lower	Upper
56	100		
55	43.2	59.8	89.6#

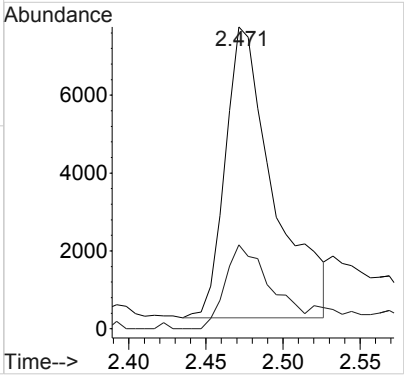


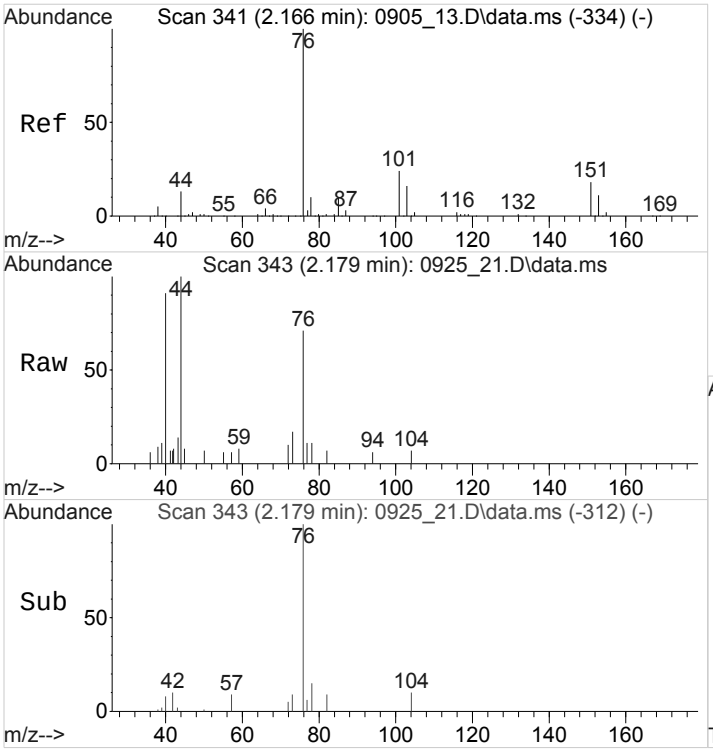


#17
ACETONE
Concen: 7.2846042 ppb
RT: 2.471 min Scan# 391
Delta R.T. 0.013 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 43 Resp: 16358

Ion	Ratio	Lower	Upper
43	100		
58	27.6	27.3	40.9

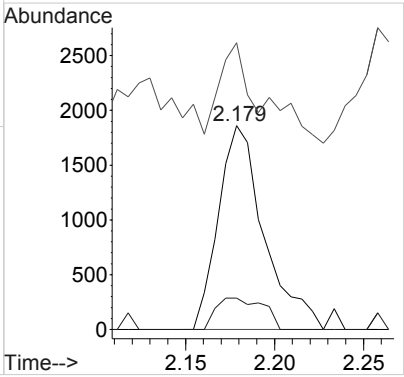


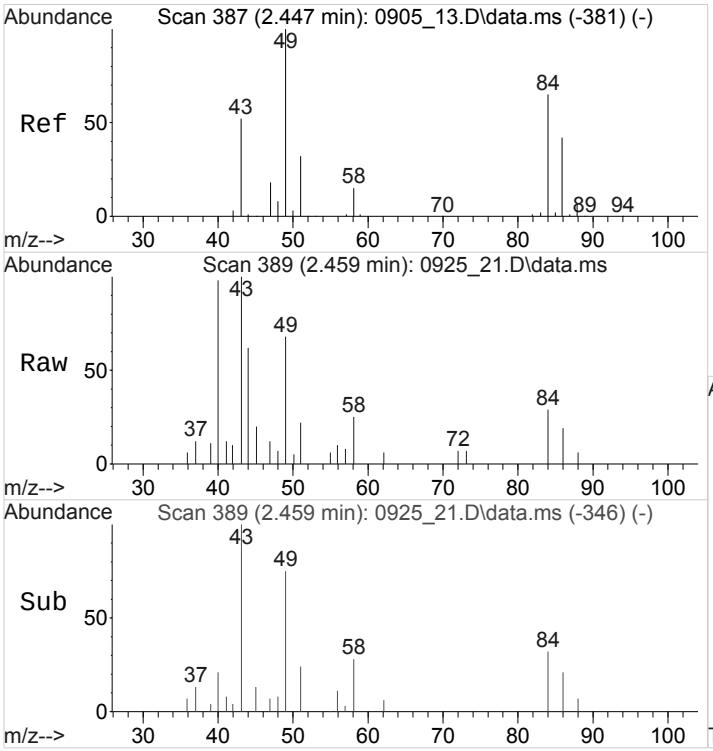


#19
CARBON DISULFIDE
Concen: 0.1888651 ppb
RT: 2.179 min Scan# 343
Delta R.T. 0.013 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 76 Resp: 3323

Ion	Ratio	Lower	Upper
76	100		
78	15.9	7.9	11.9#
44	20.9	10.6	16.0#

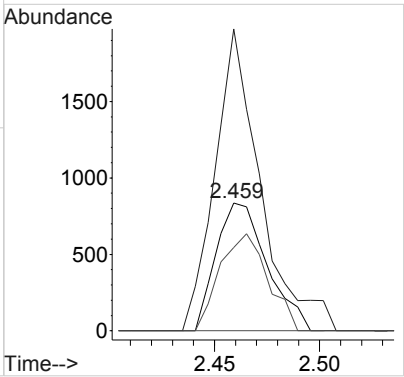


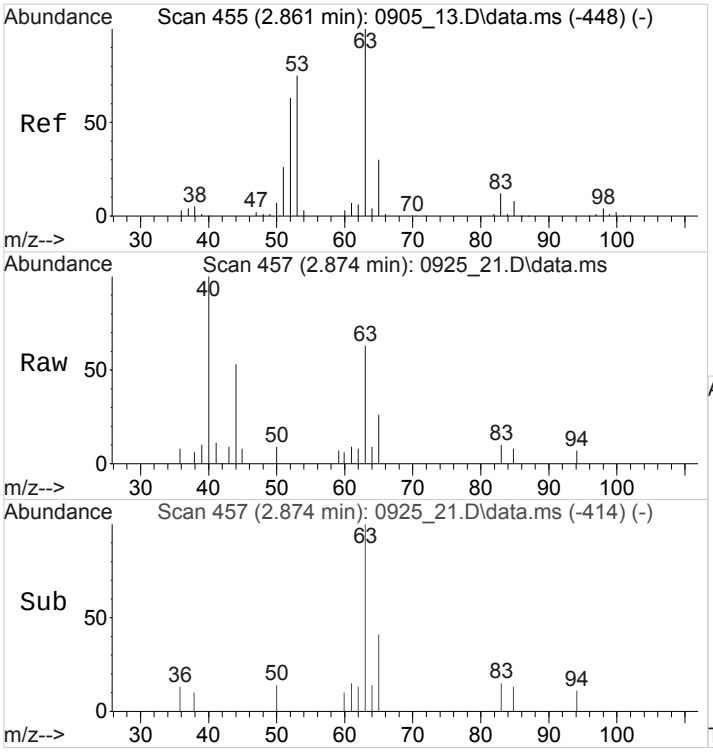


#21
METHYLENE CHLORIDE
Concen: 0.2282028 ppb
RT: 2.459 min Scan# 389
Delta R.T. 0.013 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 84 Resp: 1414

Ion	Ratio	Lower	Upper
84	100		
49	211.0	128.6	193.0#
86	71.2	51.5	77.3

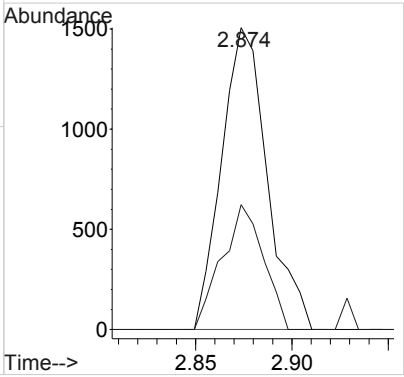


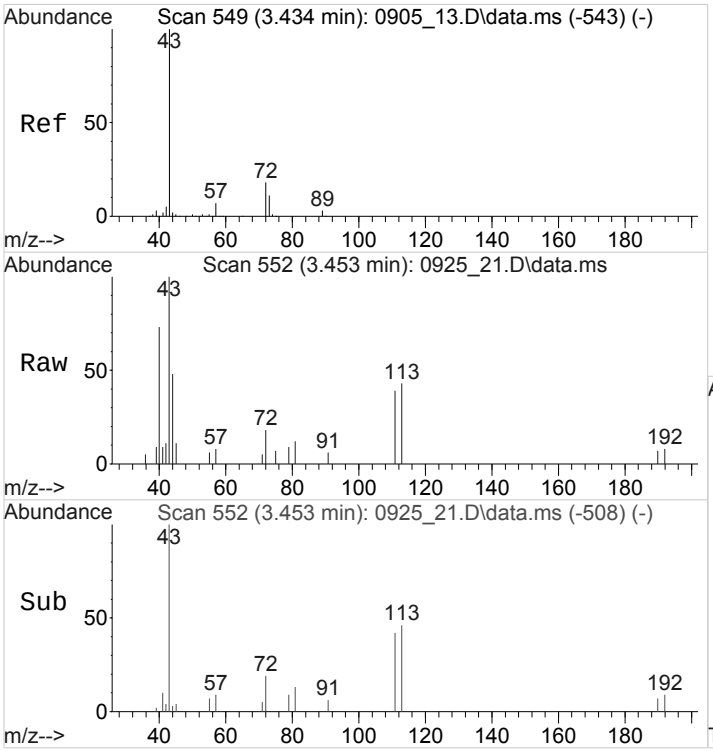


#27
1,1-DICHLOROETHANE
Concen: 0.2116371 ppb
RT: 2.874 min Scan# 457
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 63 Resp: 2483

Ion	Ratio	Lower	Upper
63	100		
65	37.7	24.7	37.1#

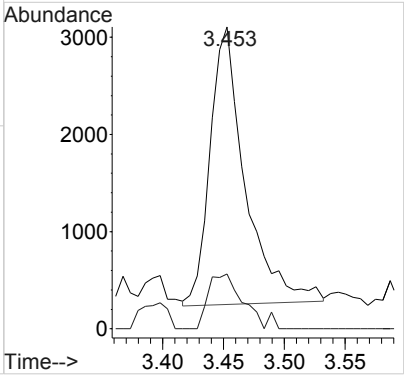


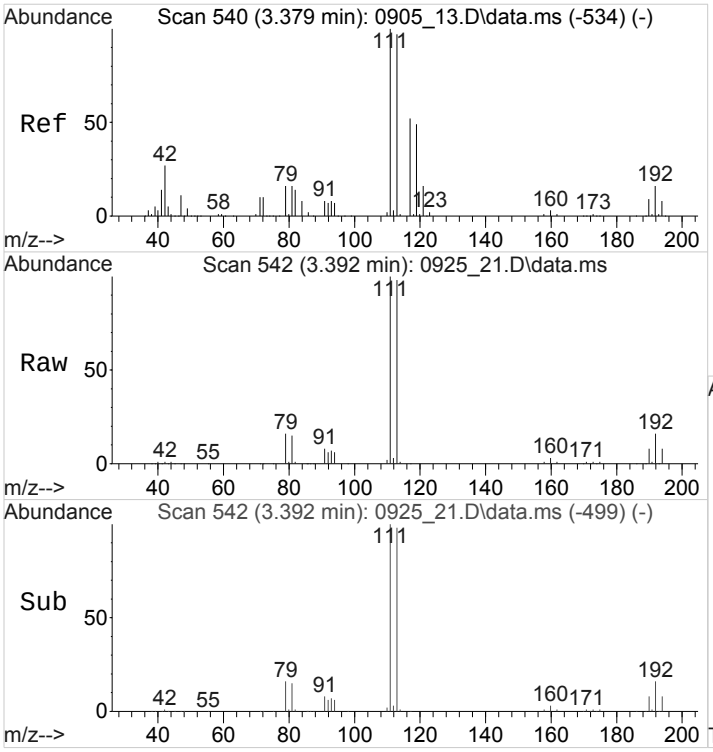


#33
2-BUTANONE (MEK)
Concen: 1.0294527 ppb
RT: 3.453 min Scan# 552
Delta R.T. 0.018 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 43 Resp: 5737

Ion	Ratio	Lower	Upper
43	100		
72	19.9	15.6	23.4

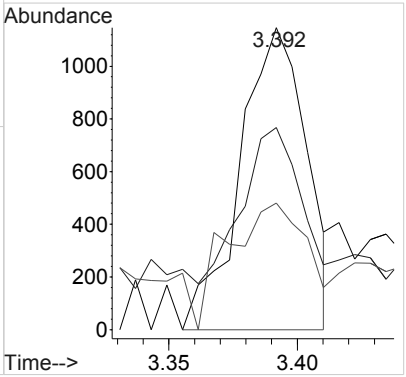


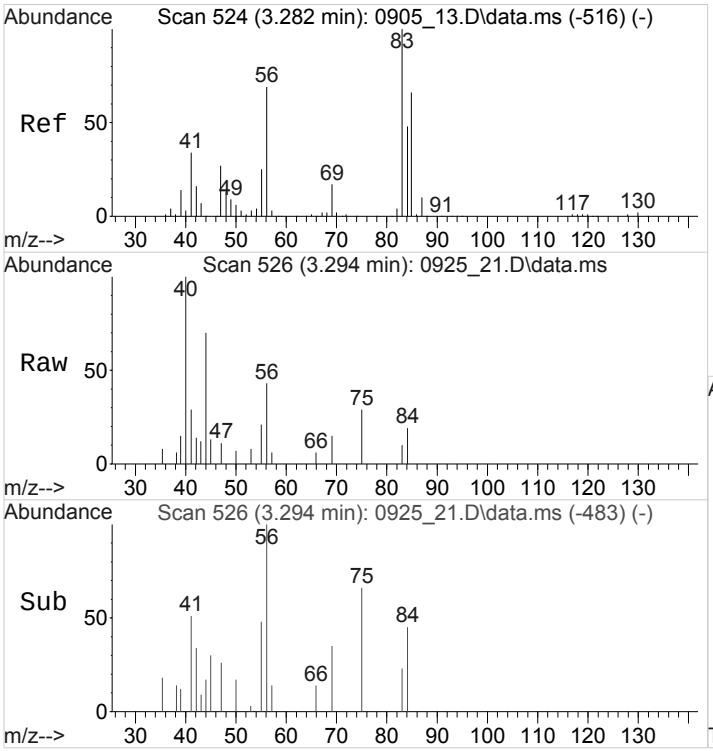


#35
TETRAHYDROFURAN
Concen: 0.6871144 ppb
RT: 3.392 min Scan# 542
Delta R.T. 0.013 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 42 Resp: 2068

Ion	Ratio	Lower	Upper
42	100		
41	44.0	41.9	62.9
39	50.4	15.8	23.8#

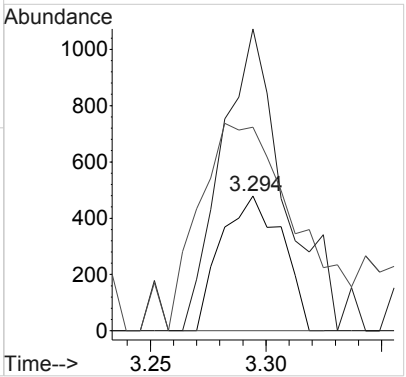


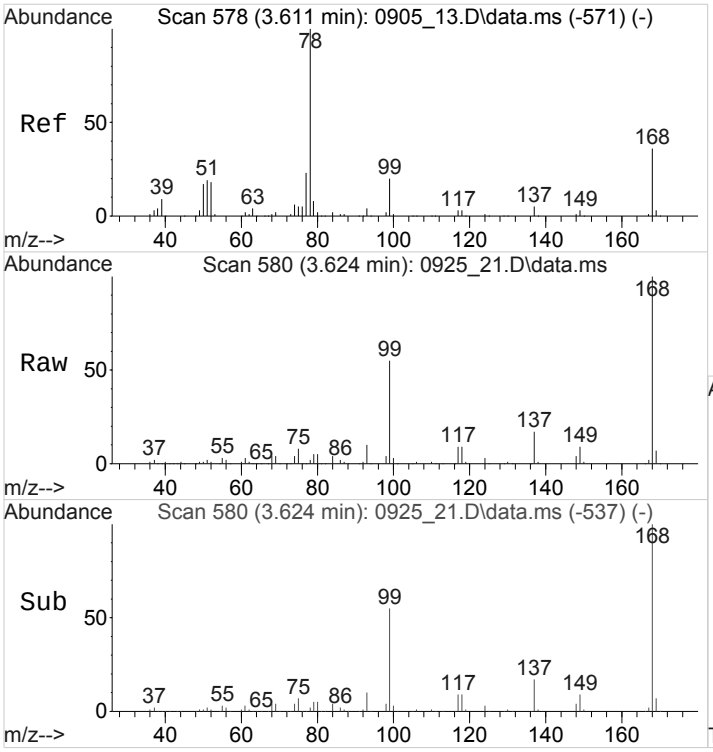


#37
CYCLOHEXANE
Concen: 0.1414770 ppb
RT: 3.294 min Scan# 526
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 84 Resp: 882

Ion	Ratio	Lower	Upper
84	100		
56	235.5	117.8	176.6#
41	250.5	62.2	93.2#

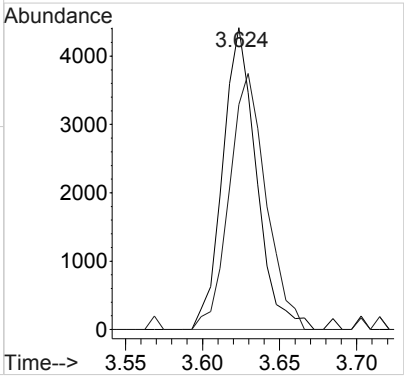


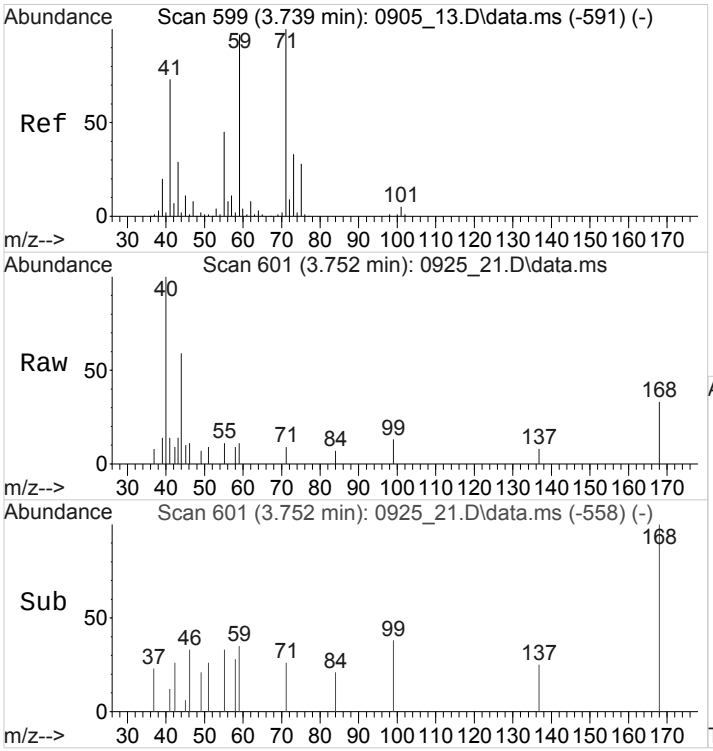


#44
BENZENE
Concen: 0.3152158 ppb
RT: 3.624 min Scan# 580
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 78 Resp: 6723

Ion	Ratio	Lower	Upper
78	100		
51	92.7	15.5	23.3#

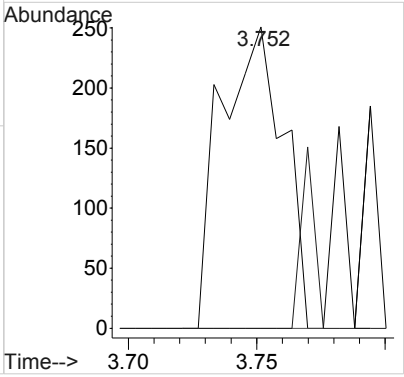


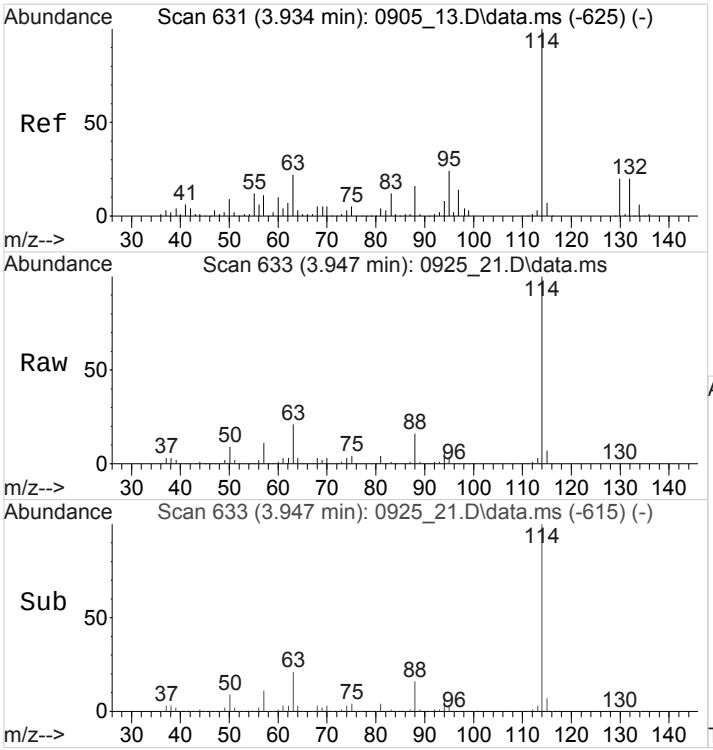


#47
T-AMYL ALCOHOL
Concen: 0.3224560 ppb
RT: 3.752 min Scan# 601
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 59 Resp: 425

Ion	Ratio	Lower	Upper
59	100		
73	0.0	45.5	68.3#

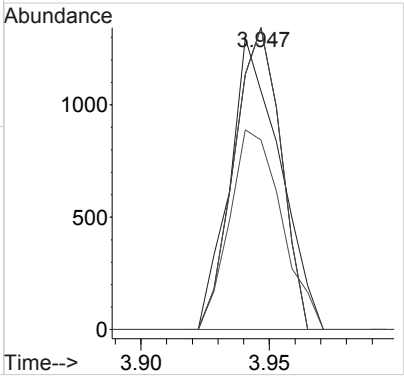


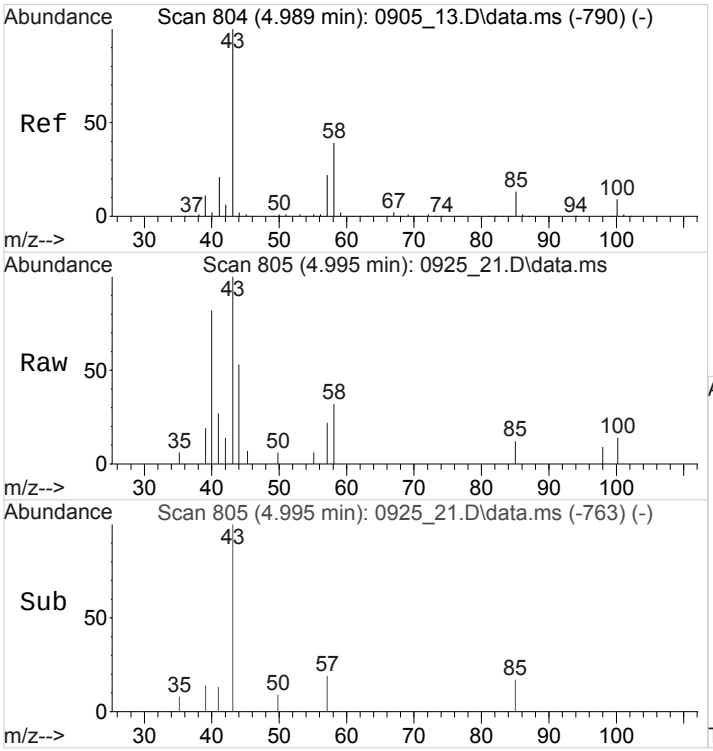


#49
TRICHLOROETHENE
Concen: 0.2839044 ppb
RT: 3.947 min Scan# 633
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:130 Resp: 1702

Ion	Ratio	Lower	Upper
130	100		
132	103.9	78.9	118.3
97	74.0	0.0	0.0#
130	100.0	80.0	120.0

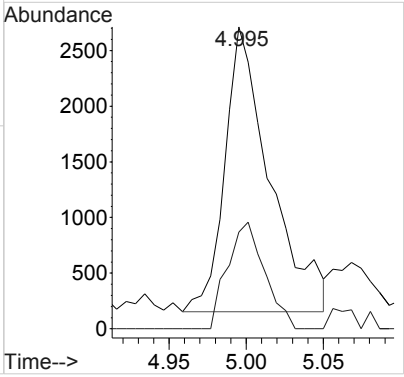


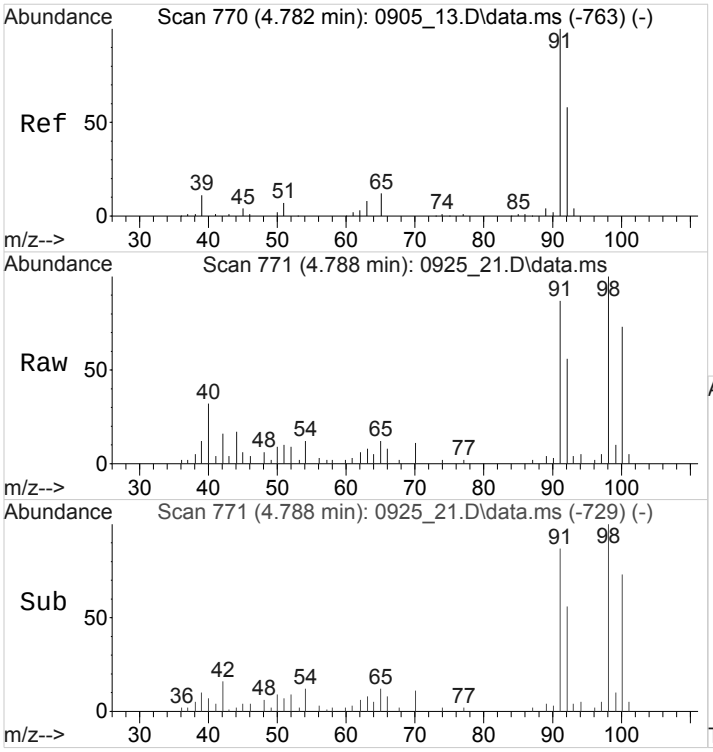


#59
4-METHYL-2-PENTANONE (MIBK)
Concen: 0.5457672 ppb
RT: 4.995 min Scan# 805
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 43 Resp: 5216

Ion	Ratio	Lower	Upper
43	100		
58	30.7	31.5	47.3#

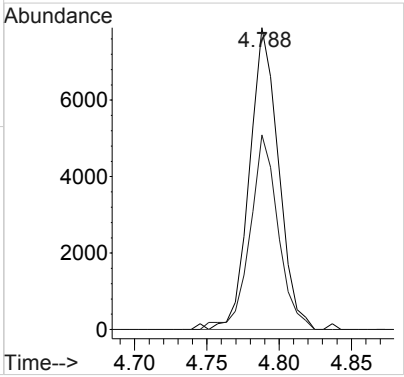


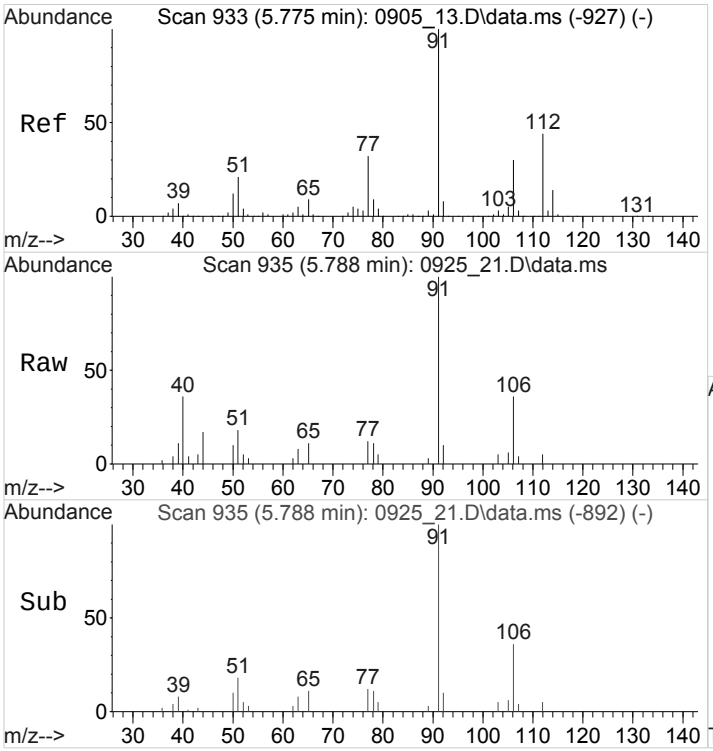


#61
TOLUENE
Concen: 0.5619876 ppb
RT: 4.788 min Scan# 771
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 91 Resp: 11021

Ion	Ratio	Lower	Upper
91	100		
92	62.7	46.0	69.0

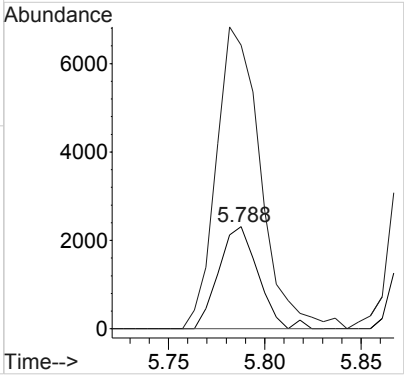


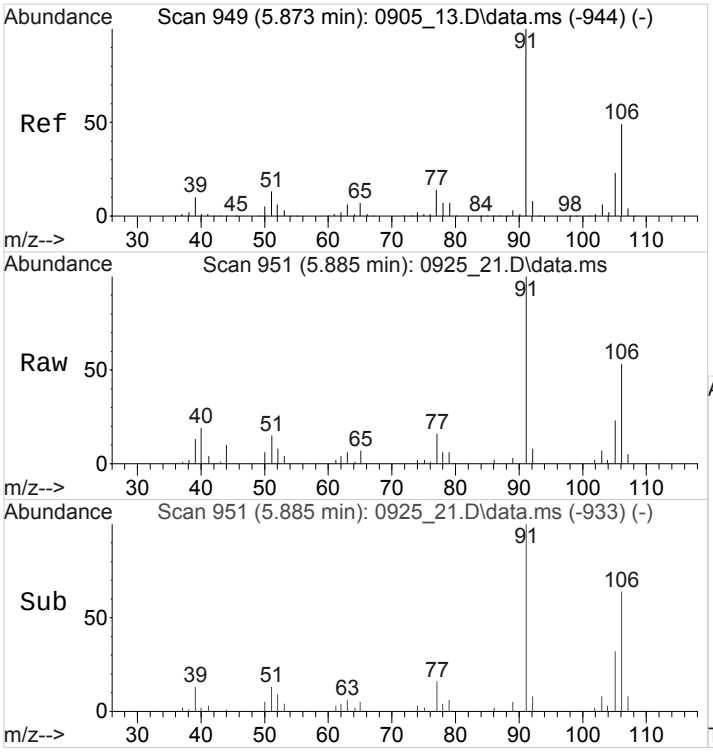


#71
ETHYLBENZENE
Concen: 0.5179752 ppb
RT: 5.788 min Scan# 935
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:106 Resp: 3293

Ion	Ratio	Lower	Upper
106	100		
91	332.4	264.3	396.5

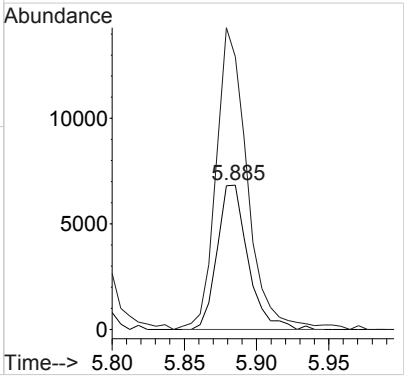


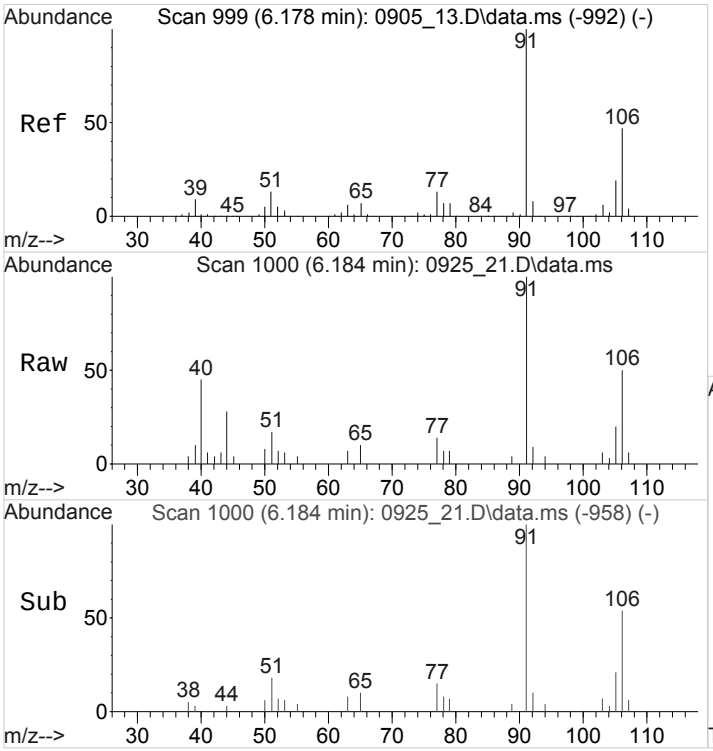


#72
M&P-XYLENE
Concen: 1.2920617 ppb
RT: 5.885 min Scan# 951
Delta R.T. 0.012 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:106 Resp: 10152

Ion	Ratio	Lower	Upper
106	100		
91	212.1	163.2	244.8

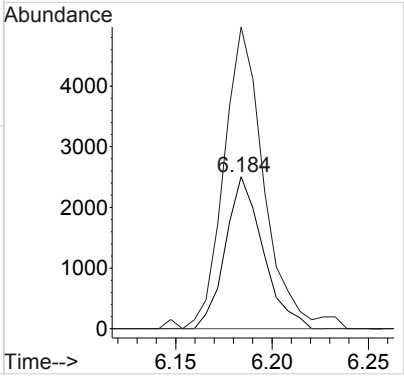


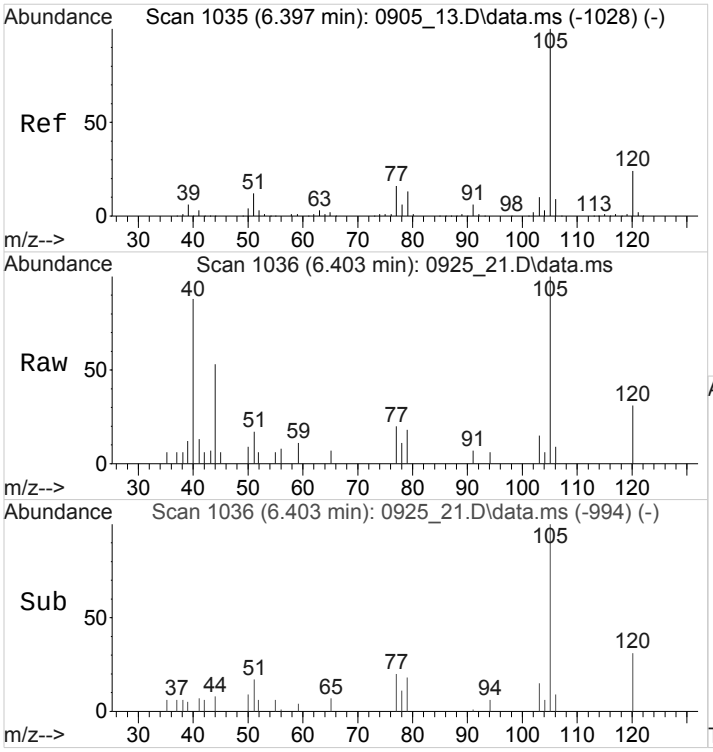


#73
O-XYLENE
Concen: 0.4357630 ppb
RT: 6.184 min Scan# 1000
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:106 Resp: 3419

Ion	Ratio	Lower	Upper
106	100		
91	213.7	168.6	253.0

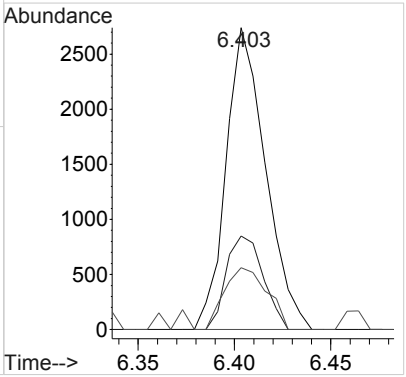


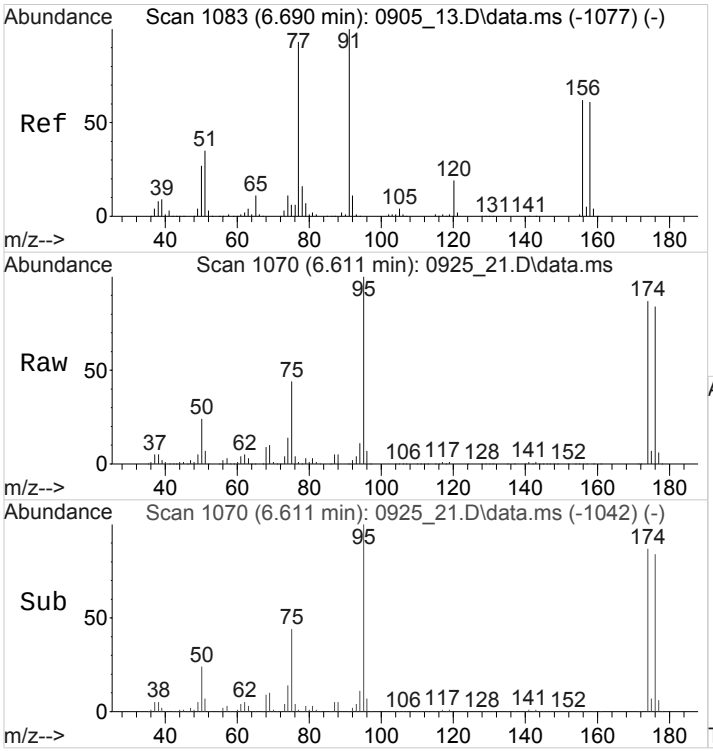


#79
ISOPROPYLBENZENE
Concen: 0.1999654 ppb
RT: 6.403 min Scan# 1036
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:105 Resp: 3916

Ion	Ratio	Lower	Upper
105	100		
120	29.0	19.7	29.5
77	22.3	12.7	19.1#

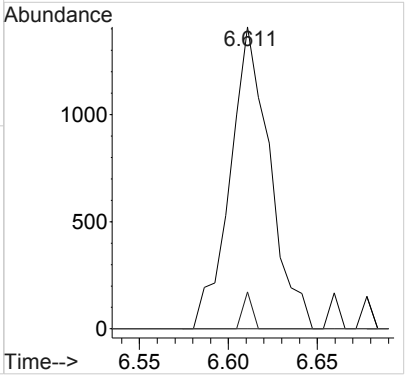


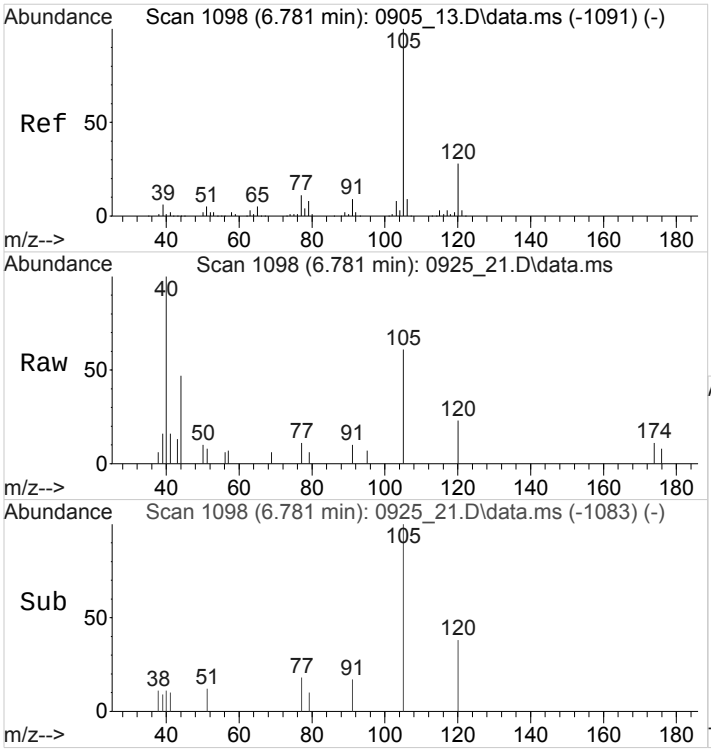


#81
BROMOBENZENE
Concen: 0.2350522 ppb
RT: 6.611 min Scan# 1070
Delta R.T. -0.079 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 77 Resp: 2188

Ion	Ratio	Lower	Upper
77	100		
156	0.0	52.7	79.1#
158	0.0	52.5	78.7#

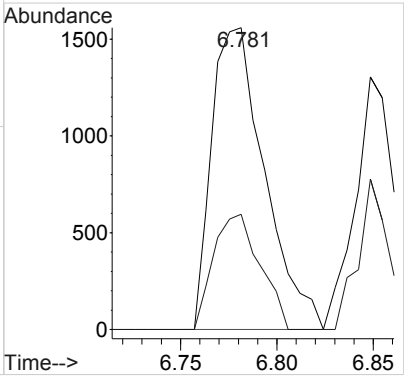


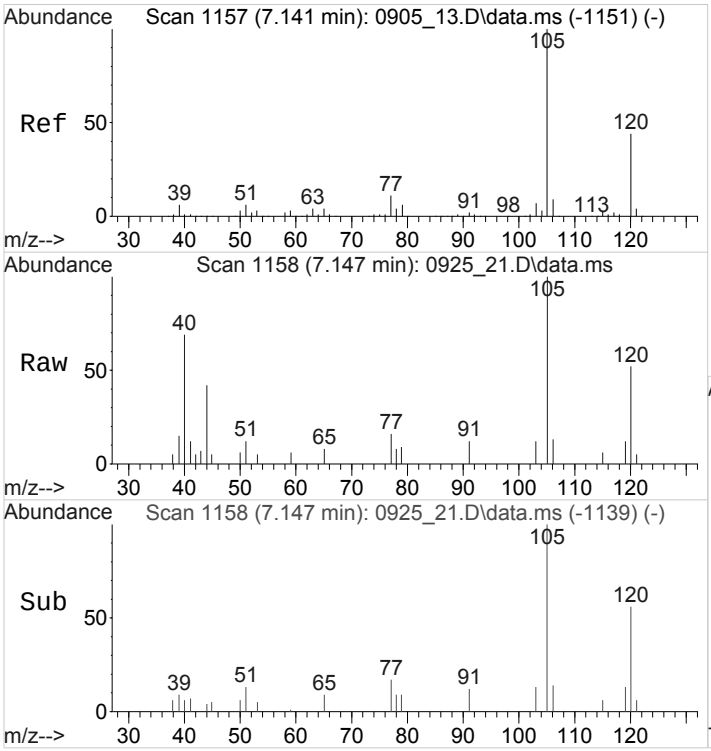


#86
4-ETHYLTOLUENE
Concen: 0.1595871 ppb
RT: 6.781 min Scan# 1098
Delta R.T. 0.000 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:105 Resp: 2980

Ion	Ratio	Lower	Upper
105	100		
120	33.7	22.7	34.1

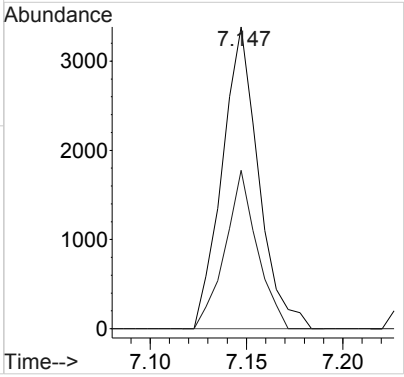


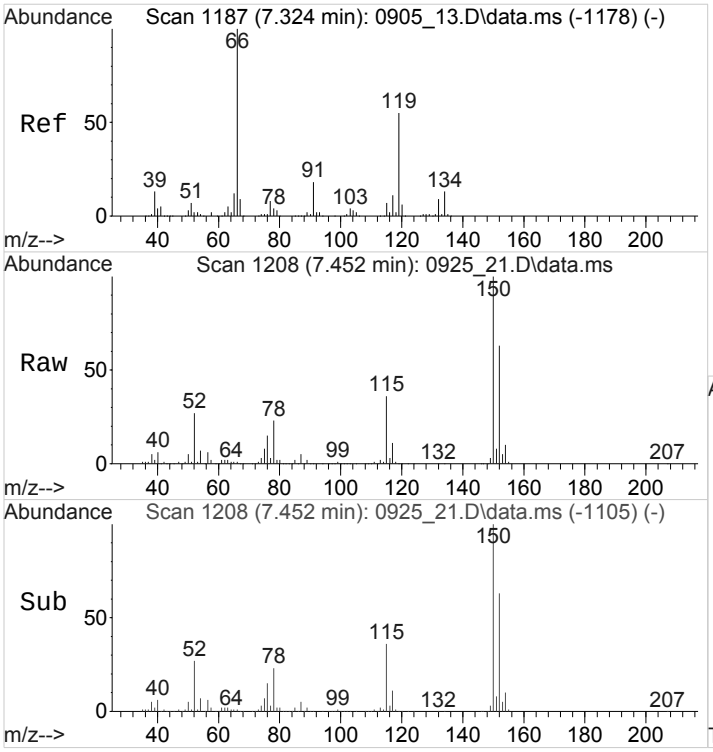


#91
1,2,4-TRIMETHYLBENZENE
Concen: 0.2936821 ppb
RT: 7.147 min Scan# 1158
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:105 Resp: 4452

Ion	Ratio	Lower	Upper
105	100		
120	46.1	35.9	53.9

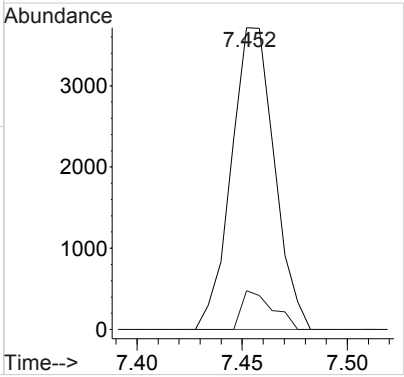


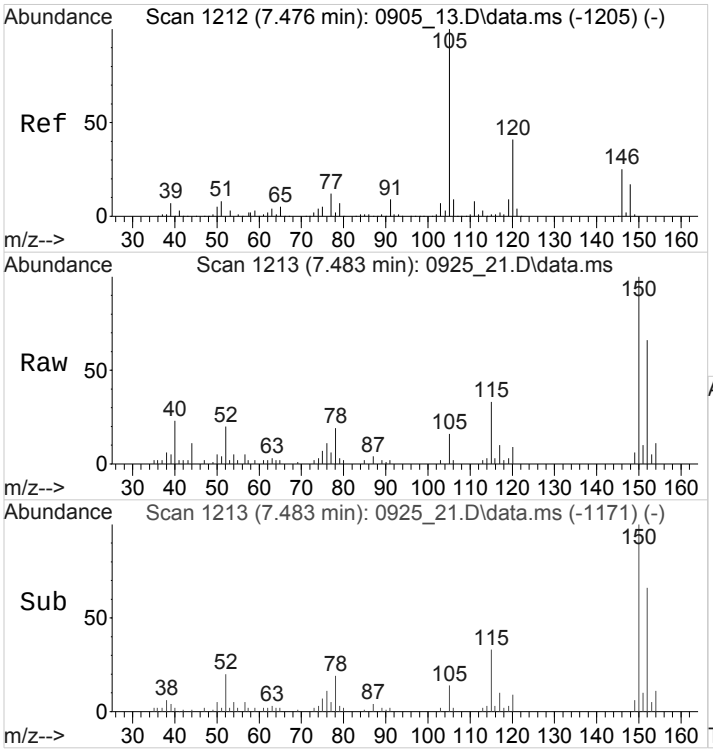


#95
DICYCLOPENTADIENE
Concen: 0.2246698 ppb
RT: 7.452 min Scan# 1208
Delta R.T. 0.128 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion: 66 Resp: 5295

Ion	Ratio	Lower	Upper
66	100		
132	9.3	7.4	11.2

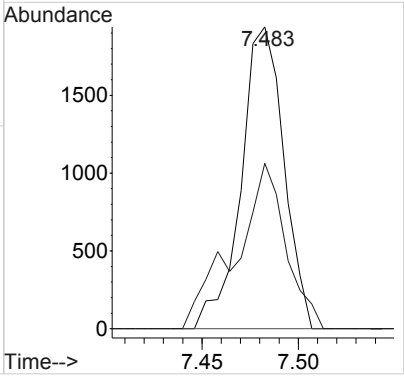


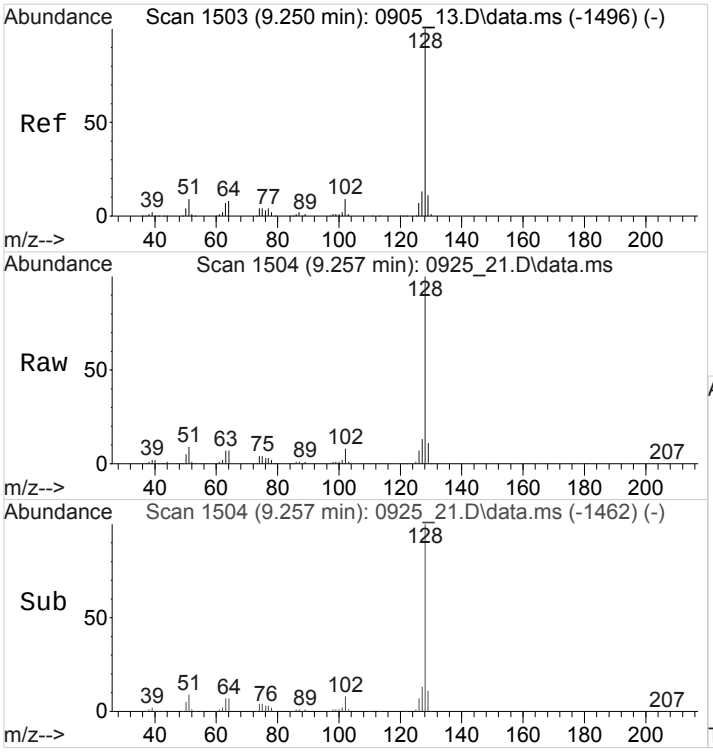


#97
1,2,3-TRIMETHYLBENZENE
Concen: 0.1934430 ppb
RT: 7.483 min Scan# 1213
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:105 Resp: 2991

Ion	Ratio	Lower	Upper
105	100		
120	65.2	33.8	50.8#

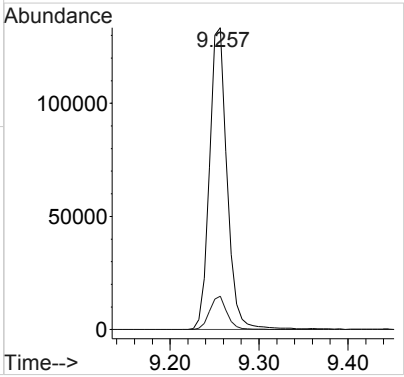


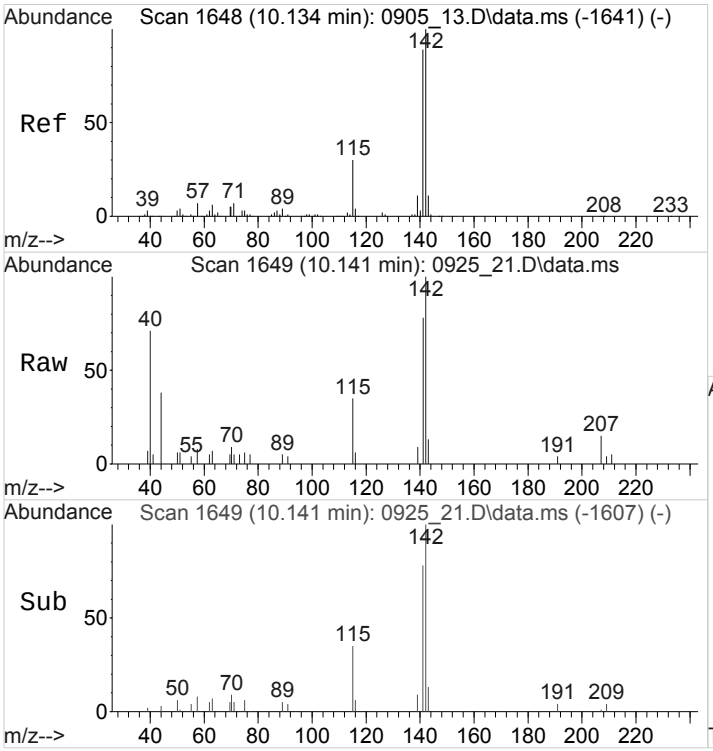


#103
NAPHTHALENE
Concen: 12.2264982 ppb
RT: 9.257 min Scan# 1504
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:128 Resp: 183934

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.6	13.0

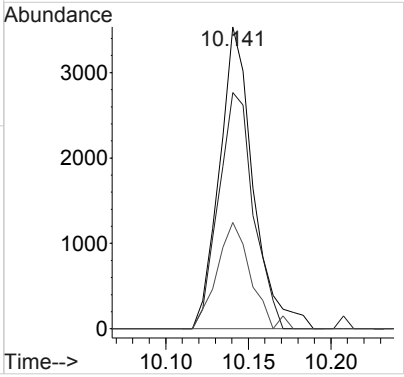


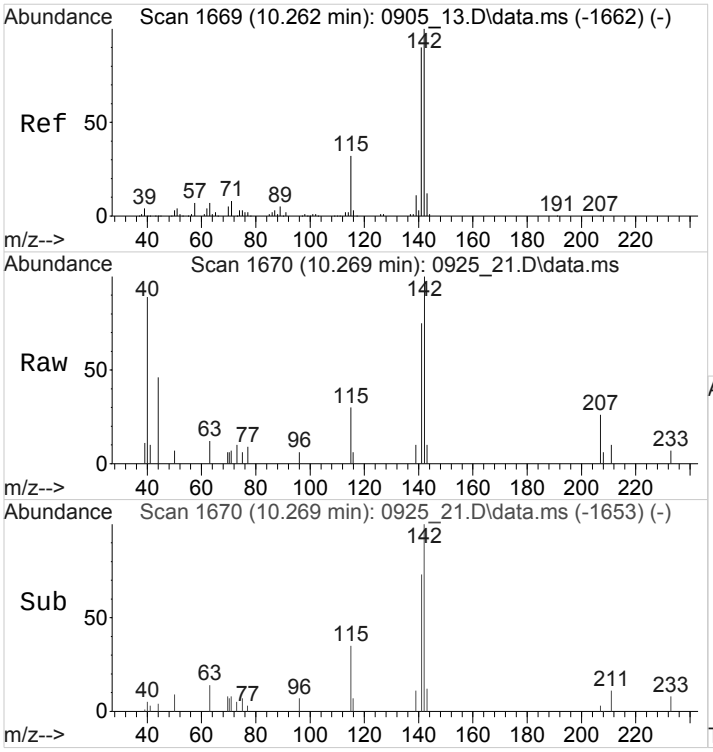


#105
1-METHYLNAPHTHALENE
Concen: 0.8472052 ppb
RT: 10.141 min Scan# 1649
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:142 Resp: 5034

Ion	Ratio	Lower	Upper
142	100		
141	80.4	69.7	104.5
115	35.3	24.5	36.7

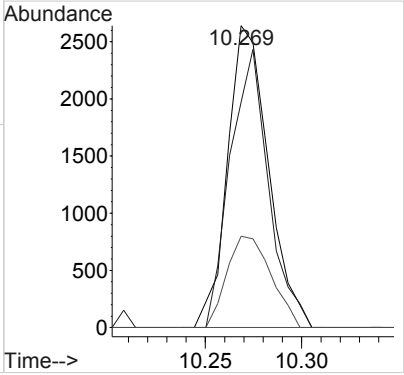




#106
2-METHYLNAPHTHALENE
Concen: 0.6793585 ppb
RT: 10.269 min Scan# 1670
Delta R.T. 0.006 min
Lab File: 0925_21.D
Acq: 25 Sep 2018 4:55 pm

Tgt Ion:142 Resp: 3899

Ion	Ratio	Lower	Upper
142	100		
141	86.4	73.0	109.6
115	32.7	26.0	39.0



6A-OR

GC/MS INITIAL CALIBRATION DATA

SDG: L1028256 **Analytical Method:** 8260C

Instrument ID: VOCMS25

Analyte	**RRF: 0.25**	**RRF: 0.5**	**RRF: 1**	**RRF: 2**	**RRF: 5.0**	**RRF: 25**	**RRF: 75**	**RRF: 100**	**RRF: 200**
Analysis date/time	09/05/18 13:52	09/05/18 14:12	09/05/18 14:32	09/05/18 14:52	09/05/18 15:12	09/05/18 15:32	09/05/18 15:52	09/05/18 16:12	09/05/18 16:33
DICHLORODIFLUOROMETHANE	0.4510	0.4770	0.4530	0.3750	0.4140	0.4350	0.4840	0.4710	0.4420
CHLOROMETHANE	0.8020	0.8480	0.6760	0.6020	0.6420	0.6440	0.70	0.65	0.60
VINYL CHLORIDE	0.6140	0.6060	0.5890	0.5970	0.5910	0.6090	0.6660	0.6180	0.5860
BROMOMETHANE	0.4860	0.45	0.4330	0.3960	0.3970	0.3930	0.3940	0.2930	0.3460
TRICHLOROFLUOROMETHANE	0.6960	0.6790	0.63	0.5680	0.57	0.6220	0.6540	0.6330	0.5930
1,1-DICHLOROETHENE	0.3930	0.38	0.3640	0.3480	0.3310	0.3520	0.3770	0.3790	0.3530
1,1,2-TRICHLOROTRIFLUOROETHANE	0.4390	0.45	0.4060	0.3590	0.3610	0.40	0.4520	0.4320	0.4110
METHYL ACETATE	0.5860	0.5740	0.5370	0.5770	0.5190	0.5930	0.5470	0.6840	0.4870
TRANS-1,2-DICHLOROETHENE	0.4480	0.4430	0.4020	0.4040	0.3730	0.40	0.4130	0.3990	0.37
METHYL TERT-BUTYL ETHER	1.0640	1.1240	1.0290	1.0280	1.0090	0.98	1.0390	1.03	0.9940
1,1-DICHLOROETHANE	0.9020	0.9070	0.8730	0.8980	0.9110	0.9030	0.8960	0.8590	0.8520
CIS-1,2-DICHLOROETHENE	0.5310	0.4750	0.4140	0.4560	0.44	0.4360	0.4560	0.4390	0.4080
2-BUTANONE (MEK)	0.3850	0.4180	0.4050	0.4180	0.4010	0.4480	0.4490	0.5060	0.3720
BROMOCHLOROMETHANE	0.3020	0.2960	0.2870	0.30	0.2970	0.2950	0.2970	0.3080	0.2780
CHLOROFORM	0.8170	0.8210	0.7960	0.7910	0.7940	0.7910	0.7990	0.8260	0.7590
CYCLOHEXANE	0.46	0.51	0.4720	0.4280	0.4390	0.4550	0.4990	0.5080	0.4810
1,1,1-TRICHLOROETHANE	0.5970	0.5870	0.5730	0.5860	0.5630	0.5820	0.6280	0.6010	0.5910
CARBON TETRACHLORIDE	0.71	0.66	0.5630	0.5270	0.5310	0.5350	0.5680	0.5270	0.5310
BENZENE	1.7070	1.7310	1.6190	1.5570	1.5730	1.6050	1.5740	1.5950	1.5830
1,2-DICHLOROETHANE	0.6910	0.6270	0.57	0.59	0.5820	0.5830	0.6080	0.5860	0.5590
TRICHLOROETHENE	0.3620	0.3290	0.3250	0.3110	0.3130	0.3190	0.31	0.3150	0.3030
1,2-DICHLOROPROPANE	0.25	0.2590	0.2480	0.2660	0.2490	0.2570	0.2360	0.2530	0.2460
BROMODICHLOROMETHANE	0.41	0.4650	0.40	0.4440	0.4170	0.4330	0.39	0.4130	0.3820
CIS-1,3-DICHLOROPROPENE	3.0120	2.9650	3.0290	2.9330	3.0140	3.1890	2.9670	3.1860	3.1120
4-METHYL-2-PENTANONE (MIBK)	3.3560	3.2880	3.2030	3.30	3.2180	3.4910	3.2110	3.6610	3.0040
TOLUENE	6.7180	6.4610	6.6660	7.0220	6.2740	6.9670	6.8210	7.1640	6.9180
TRANS-1,3-DICHLOROPROPENE	2.1960	2.1890	2.4210	2.6080	3.0130	2.8620	2.7030	3.0250	2.9250
1,1,2-TRICHLOROETHANE	1.4730	1.58	1.6130	1.58	1.6250	1.6490	1.6050	1.7840	1.5690
TETRACHLOROETHENE	1.4310	1.5320	1.4590	1.42	1.49	1.5240	1.5440	1.6490	1.6460
2-HEXANONE	1.2820	1.3570	1.3860	1.4170	1.3930	1.4460	1.4150	1.70	1.4810
CHLORODIBROMOMETHANE	1.8110	1.9380	2.0020	2.0440	1.9920	2.1410	1.9910	2.2630	2.0680
1,2-DIBROMOETHANE	1.7730	1.7970	1.9280	1.89	1.8670	2.0710	1.8730	2.1360	1.9090
CHLOROBENZENE	4.0230	4.24	4.2670	4.3680	4.3070	4.5230	4.6260	4.8170	4.5070
ETHYLBENZENE	1.9740	2.25	2.1210	2.21	2.1240	2.1850	2.3080	2.3580	2.2480
M&P-XYLENE	2.3790	2.7810	2.6370	2.6770	2.6260	2.7770	2.75	3.0620	2.7550
O-XYLENE	2.3840	2.77	2.7140	2.8820	2.5260	2.6760	2.6160	3.0430	2.7980
STYRENE	1.3050	1.5540	1.3410	1.5050	1.4250	1.6120	1.7350	1.5220	1.5480
BROMOFORM	0.5410	0.5990	0.5550	0.6110	0.5930	0.6610	0.6620	0.6230	0.6270
ISOPROPYLBENZENE	2.08	2.2720	2.2350	2.3960	2.4170	2.44	2.5490	2.2990	2.34
1,1,2,2-TETRACHLOROETHANE	0.8360	0.9560	0.9790	0.9160	0.9240	0.9860	0.9770	0.9190	0.8760
N-PROPYLBENZENE	2.5050	2.7820	2.5780	2.7350	2.6530	2.9530	2.9860	2.7750	2.8960
1,3,5-TRIMETHYLBENZENE	1.72	1.7240	1.6710	1.8080	1.7660	2.0230	1.9240	1.9390	1.9470
TERT-BUTYLBENZENE	1.3490	1.4950	1.3370	1.4210	1.4340	1.4670	1.5120	1.4120	1.4840
1,2,4-TRIMETHYLBENZENE	1.6750	1.7560	1.6690	1.9160	1.7830	1.8580	1.9680	1.7990	1.8530
SEC-BUTYLBENZENE	1.8370	2.1850	2.0720	2.0980	2.2210	2.1850	2.4060	2.1790	2.3610
1,3-DICHLOROBENZENE	1.0860	1.1120	0.97	1.0950	1.0810	1.1250	1.1480	1.1560	1.1650
P-ISOPROPYLTOLUENE	1.6430	1.7550	1.7840	1.8330	1.7860	1.8960	2.0320	1.8970	2.0130
1,4-DICHLOROBENZENE	1.1970	1.1910	1.0750	1.1070	1.0950	1.1760	1.1520	1.1640	1.1690
1,2-DICHLOROBENZENE	0.9620	1.0470	0.93	0.9540	0.9480	1.0920	1.0680	1.0650	1.0480
N-BUTYLBENZENE	1.4740	1.72	1.4780	1.54	1.6160	1.73	1.6160	1.69	1.6830

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GC/MS INITIAL CALIBRATION DATA

SDG: L1028256 **Analytical Method:** 8260C

Instrument ID: VOCMS25

Analyte	**RRF: 0.25**	**RRF: 0.5**	**RRF: 1**	**RRF: 2**	**RRF: 5.0**	**RRF: 25**	**RRF: 75**	**RRF: 100**	**RRF: 200**
Analysis date/time	09/05/18 13:52	09/05/18 14:12	09/05/18 14:32	09/05/18 14:52	09/05/18 15:12	09/05/18 15:32	09/05/18 15:52	09/05/18 16:12	09/05/18 16:33
1,2-DIBROMO-3-CHLOROPROPANE	0.1990	0.2490	0.2570	0.2590	0.2650	0.2650	0.2850	0.2590	0.27
1,2,4-TRICHLOROBENZENE	0.5080	0.4970	0.4860	0.5080	0.4980	0.50	0.5930	0.5730	0.6480
NAPHTHALENE	2.0060	1.67	1.7110	1.5890	1.7340	1.7140	1.87	1.7540	2.1050
1,2,3-TRICHLOROBENZENE	0.5030	0.48	0.4580	0.4440	0.4790	0.4620	0.5510	0.4660	0.6220
DIBROMOFLUOROMETHANE	0.5540	0.5540	0.5220	0.5510	0.52	0.5250	0.5210	0.5050	0.4950
A,A,A-TRIFLUOROTOLUENE	0.5660	0.6080	0.5830	0.58	0.5740	0.57	0.5120	0.5170	0.50
TOLUENE-D8	6.81	7.0370	7.0780	7.3620	6.40	6.9530	6.4040	6.8550	6.48
4-BROMOFLUOROBENZENE	0.9360	0.8990	0.9220	0.8930	0.9080	0.87	0.8980	0.8720	0.7880
ACETONE		0.2170	0.1790	0.1690	0.1480	0.1560	0.1510		
CARBON DISULFIDE		1.7450	1.4270	1.3360	1.2020	1.2150	1.2990	1.2580	1.1830
METHYLENE CHLORIDE			0.5820	0.5250	0.4610	0.4280	0.4520	0.4250	0.4130
METHYL CYCLOHEXANE			0.7620	0.5490	0.4450	0.3790	0.3940	0.3920	0.3850
CHLOROETHANE				0.3480	0.31	0.2910	0.2730	0.2510	0.2250
File ID:	0905_08	0905_09	0905_10	0905_11	0905_12	0905_13	0905_14	0905_15	0905_16

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GC/MS INITIAL CALIBRATION DATA

SDG: L1028256 **Analytical Method:** 8260C
Instrument ID: VOCMS25

Analyte Analysis date/time	RRF. Avg	%RSD	COD
DICHLORODIFLUOROMETHANE	0.444612	7.69	
CHLOROMETHANE	0.684788	12.57	
VINYL CHLORIDE	0.608575	4	
BROMOMETHANE	0.398786	14.13	
TRICHLOROFLUOROMETHANE	0.627134	7.18	
1,1-DICHLOROETHENE	0.364126	5.41	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.412198	8.47	
METHYL ACETATE	0.56705	9.83	
TRANS-1,2-DICHLOROETHENE	0.405882	6.55	
METHYL TERT-BUTYL ETHER	1.032893	4.08	
1,1-DICHLOROETHANE	0.888961	2.44	
CIS-1,2-DICHLOROETHENE	0.450523	8.12	
2-BUTANONE (MEK)	0.422256	9.56	
BROMOCHLOROMETHANE	0.29547	2.97	
CHLOROFORM	0.799399	2.53	
CYCLOHEXANE	0.472368	6.32	
1,1,1-TRICHLOROETHANE	0.589861	3.11	
CARBON TETRACHLORIDE	0.57246	11.71	
BENZENE	1.616042	3.8	
1,2-DICHLOROETHANE	0.599369	6.61	
TRICHLOROETHENE	0.320794	5.39	
1,2-DICHLOROPROPANE	0.251704	3.43	
BROMODICHLOROMETHANE	0.417005	6.34	
CIS-1,3-DICHLOROPROPENE	3.045198	3.12	
4-METHYL-2-PENTANONE (MIBK)	3.303642	5.68	
TOLUENE	6.778867	4.16	
TRANS-1,3-DICHLOROPROPENE	2.660229	12.38	
1,1,2-TRICHLOROETHANE	1.608725	5.12	
TETRACHLOROETHENE	1.521556	5.5	
2-HEXANONE	1.430917	8.07	
CHLORODIBROMOMETHANE	2.02786	6.25	
1,2-DIBROMOETHANE	1.915951	6.18	
CHLOROBENZENE	4.40877	5.35	
ETHYLBENZENE	2.197584	5.22	
M&P-XYLENE	2.716009	6.64	
O-XYLENE	2.712137	7.16	
STYRENE	1.50518	8.85	
BROMOFORM	0.608136	6.87	
ISOPROPYLBENZENE	2.336453	5.81	
1,1,2,2-TETRACHLOROETHANE	0.929898	5.47	
N-PROPYLBENZENE	2.76251	5.98	
1,3,5-TRIMETHYLBENZENE	1.835844	6.79	
TERT-BUTYLBENZENE	1.434545	4.31	
1,2,4-TRIMETHYLBENZENE	1.808618	5.61	
SEC-BUTYLBENZENE	2.171393	7.64	
1,3-DICHLOROBENZENE	1.104188	5.34	
P-ISOPROPYLTOLUENE	1.848761	6.75	
1,4-DICHLOROBENZENE	1.147314	3.84	
1,2-DICHLOROBENZENE	1.012747	6.21	
N-BUTYLBENZENE	1.616381	6.13	
1,2-DIBROMO-3-CHLOROPROPANE	0.256362	9.26	

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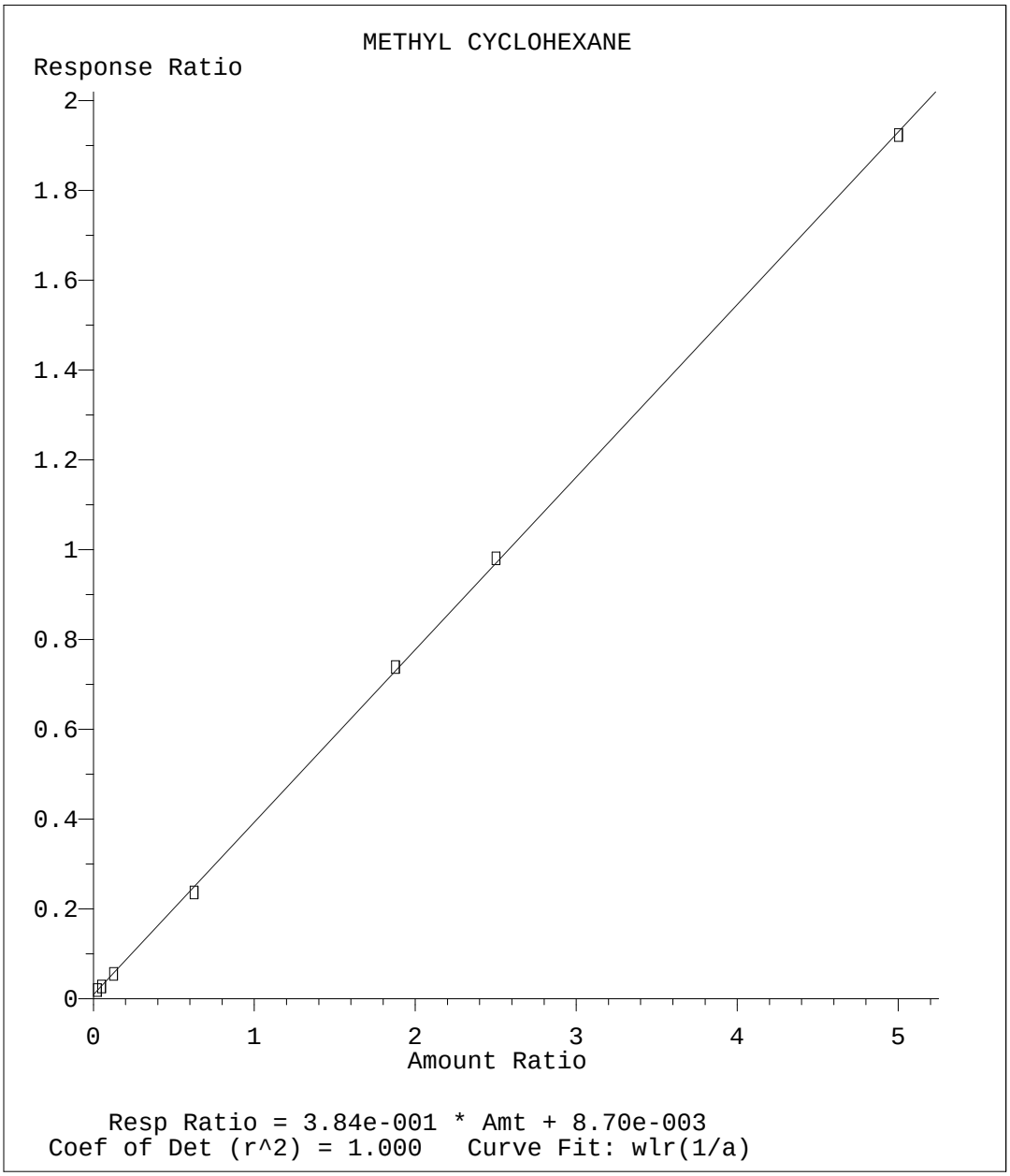
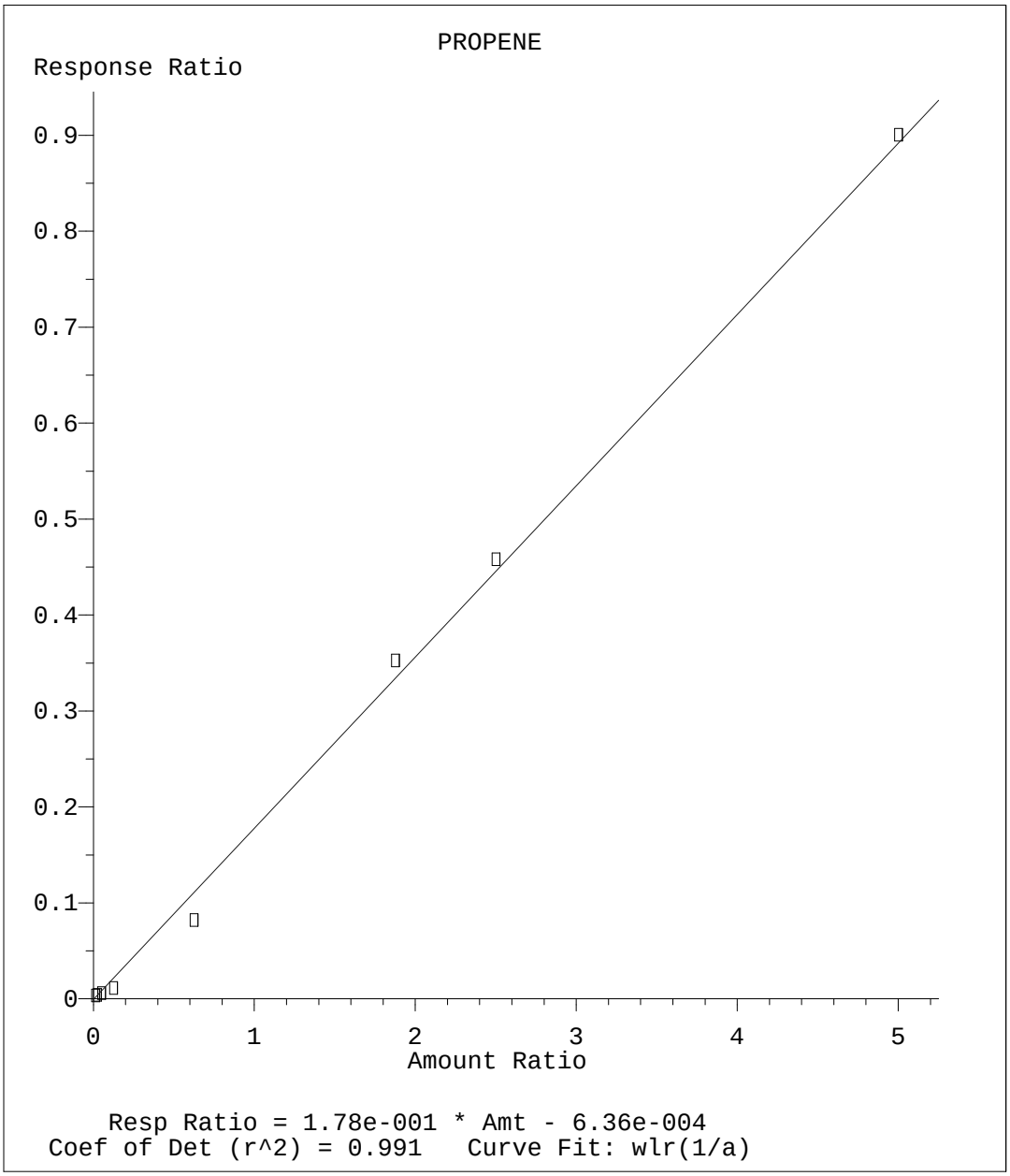
GC/MS INITIAL CALIBRATION DATA

SDG: L1028256 **Analytical Method:** 8260C
Instrument ID: VOCMS25

Analyte Analysis date/time	**RRF. Avg**	**%RSD**	**COD**
1,2,4-TRICHLOROBENZENE	0.534619	10.56	
NAPHTHALENE	1.794854	9.3	
1,2,3-TRICHLOROBENZENE	0.49625	11.41	
DIBROMOFLUOROMETHANE	0.527471	4.07	
A,A,A-TRIFLUOROTOLUENE	0.556737	6.71	
TOLUENE-D8	6.819913	4.9	
4-BROMOFLUOROBENZENE	0.887376	4.83	
ACETONE	0.170146	15.27	
CARBON DISULFIDE	1.333141	13.87	
METHYLENE CHLORIDE	0.46949	13.2	
METHYL CYCLOHEXANE	0.472269	29.9	1
CHLOROETHANE	0.283102	15.32	



Method Name: C:\msdchem\1\methods\V825I05R.M



Method Name: C:\msdchem\1\methods\V825I05R.M

Response Factor Report VOCMS25

Method Path : C:\msdchem\1\methods\
Method File : V825I05R.M
Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
Last Update : Thu Sep 06 14:18:48 2018
Response Via : Initial Calibration

Calibration Files
0.25=0905_08.D 0.5 =0905_09.D 1 =0905_10.D 2 =0905_11.D 5.0 =0905_12.D 25 =0905_13.D 75 =0905_14.D
100 =0905_15.D 200 =0905_16.D 1a =0829_67.D 5a =0829_59.D 10a =0829_60.D 15a =0829_61.D 20a =0829_62.D

	Compound	0.25	0.5	1	2	5.0	25	75	100	200	1a	5a	10a	15a	20a	Avg	%RSD
1)	I 8260-PENTAFLUOROBE...	----------ISTD----------															
2)	H TPH (GC/MS) LO...															0.000#	-1.00
3)	H LRH (C5-C8)															0.000#	-1.00
4)	PROPENE		0.280	0.161	0.119	0.089	0.131	0.188	0.183	0.180						0.166#	34.80
5)	T,M DICHLORODIFLUO...	0.451	0.477	0.453	0.375	0.414	0.435	0.484	0.471	0.442						0.445	7.69
6)	P,T,MCHLOROMETHANE	0.802	0.848	0.676	0.602	0.642	0.644	0.700	0.650	0.600						0.685	12.57
7)	C,T,MVINYL CHLORIDE	0.614	0.606	0.589	0.597	0.591	0.609	0.666	0.618	0.586						0.609	4.00#
8)	1,3-BUTADIENE			0.396	0.397	0.392	0.395	0.451	0.411							0.407	5.48
9)	T,M BROMOMETHANE	0.486	0.450	0.433	0.396	0.397	0.393	0.394	0.293	0.346						0.399	14.13
10)	T,M CHLOROETHANE				0.348	0.310	0.291	0.273	0.251	0.225						0.283#	15.32
11)	T,M TRICHLOROFLUOR...	0.696	0.679	0.630	0.568	0.570	0.622	0.654	0.633	0.593						0.627	7.18
12)	DICHLOROFLUORO...	0.939	0.865	0.755	0.723	0.702	0.694	0.686	0.660	0.600						0.736	14.24
13)	M,T ETHYL ETHER	0.422	0.366	0.374	0.370	0.363	0.368	0.358	0.361	0.328						0.368	6.63
14)	T,M ACROLEIN	0.084	0.067	0.069	0.067	0.061	0.064	0.063	0.075	0.062						0.068#	10.70
15)	C,T,M1,1-DICHLOROET...	0.393	0.380	0.364	0.348	0.331	0.352	0.377	0.379	0.353						0.364	5.41#
16)	M,T 1,1,2-TRICHLOR...	0.439	0.450	0.406	0.359	0.361	0.400	0.452	0.432	0.411						0.412	8.47
17)	T,M ACETONE		0.217	0.179	0.169	0.148	0.156	0.151								0.170#	15.27
18)	T,M IODOMETHANE	0.847	0.845	0.851	0.861	0.823	0.853	0.893	0.860	0.822						0.850	2.49
19)	T,M CARBON DISULFIDE		1.745	1.427	1.336	1.202	1.215	1.299	1.258	1.183						1.333	13.87
20)	T ALLYL CHLORIDE	0.231	0.235	0.229	0.241	0.221	0.238	0.244	0.226	0.222						0.232#	3.48
21)	T,M METHYLENE CHLO...			0.582	0.525	0.461	0.428	0.452	0.425	0.413						0.469	13.20
22)	T METHYL ACETATE	0.586	0.574	0.537	0.577	0.519	0.593	0.547	0.684	0.487						0.567	9.83
23)	T,M ACRYLONITRILE	0.287	0.276	0.295	0.278	0.311	0.305	0.274	0.324	0.266						0.291#	6.72
24)	T,M n-HEXANE	0.418	0.388	0.337	0.307	0.269	0.289	0.330	0.305	0.310						0.328	14.54
25)	T,M TRANS-1,2-DICH...	0.448	0.443	0.402	0.404	0.373	0.400	0.413	0.399	0.370						0.406	6.55
26)	T,M METHYL TERT-BU...	1.064	1.124	1.029	1.028	1.009	0.980	1.039	1.030	0.994						1.033	4.08
27)	P,T,M1,1-DICHLOROET...	0.902	0.907	0.873	0.898	0.911	0.903	0.896	0.859	0.852						0.889	2.44
28)	T,M VINYL ACETATE	1.021	0.997	1.009	0.998	0.998	0.950	0.965	0.933	0.797						0.963	7.14
29)	T,M DI-ISOPROPYL E...	1.728	1.640	1.532	1.511	1.496	1.521	1.553	1.514	1.431						1.547	5.63
30)	T ETHYL TERT-BUT...	1.348	1.389	1.281	1.319	1.295	1.252	1.356	1.321	1.259						1.313	3.50
31)	T,M 2,2-DICHLOROPR...			0.432	0.423	0.382	0.359	0.368	0.339	0.273						0.368	14.57
32)	T,M CIS-1,2-DICHLO...	0.531	0.475	0.414	0.456	0.440	0.436	0.456	0.439	0.408						0.451	8.12
33)	T,M 2-BUTANONE (MEK)	0.385	0.418	0.405	0.418	0.401	0.448	0.449	0.506	0.372						0.422	9.56
34)	T,M BROMOCHLOROMET...	0.302	0.296	0.287	0.300	0.297	0.295	0.297	0.308	0.278						0.295#	2.97
35)	M,T TETRAHYDROFURAN			0.252	0.234	0.210	0.231	0.218	0.261	0.191						0.228#	10.52
36)	C,T,MCHLOROFORM	0.817	0.821	0.796	0.791	0.794	0.791	0.799	0.826	0.759						0.799	2.53#
37)	T CYCLOHEXANE	0.460	0.510	0.472	0.428	0.439	0.455	0.499	0.508	0.481						0.472	6.32
38)	S DIBROMOFLUOROM...	0.554	0.554	0.522	0.551	0.520	0.525	0.521	0.505	0.495						0.527	4.07
39)	T,M 1,1,1-TRICHLOR...	0.597	0.587	0.573	0.586	0.563	0.582	0.628	0.601	0.591						0.590	3.11

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Response Factor Report VOCMS25

Method Path : C:\msdchem\1\methods\
Method File : V825I05R.M
Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25

40)	T,M	CARBON TETRACH...	0.710	0.660	0.563	0.527	0.531	0.535	0.568	0.527	0.531	0.572	11.71
41)	T,M	1,1-DICHLOROPR...	0.609	0.627	0.528	0.553	0.559	0.551	0.594	0.586	0.565	0.575	5.48
42)		2,2,4-TRIMETHY...	1.110	1.068	0.939	0.868	0.919	0.903	0.985	0.867	0.866	0.947	9.48
43)	T	n-Heptane	0.236	0.217	0.188	0.190	0.177	0.197	0.208	0.206	0.211	0.203#	8.75
44)	T,M	BENZENE	1.707	1.731	1.619	1.557	1.573	1.605	1.574	1.595	1.583	1.616	3.80
45)	T	TERT-AMYL METH...	1.379	1.179	1.164	1.084	0.989	1.022	1.018	1.040	0.938	1.090	12.24
46)	T,M	1,2-DICHLOROET...	0.691	0.627	0.570	0.590	0.582	0.583	0.608	0.586	0.559	0.599	6.61
47)	T	T-AMYL ALCOHOL	0.098	0.101	0.101	0.093	0.106	0.092	0.104	0.125	0.078	0.100#	12.70
48)	I	8260-1,4-DIFLUOROB...	----------ISTD----------										
49)	T,M	TRICHLOROETHENE	0.362	0.329	0.325	0.311	0.313	0.319	0.310	0.315	0.303	0.321	5.39
50)	T	METHYL CYCLOHE...			0.762	0.549	0.445	0.379	0.394	0.392	0.385	0.472	29.90
51)	T	TERT-AMYL ETHY...	0.700	0.796	0.707	0.773	0.704	0.736	0.698	0.777	0.742	0.737	5.08
52)	C,T,M	1,2-DICHLOROPR...	0.250	0.259	0.248	0.266	0.249	0.257	0.236	0.253	0.246	0.252#	3.43#
53)	T,M	DIBROMOMETHANE	0.236	0.249	0.232	0.230	0.229	0.227	0.210	0.228	0.208	0.228#	5.49
54)	T,M	BROMODICHLOROM...	0.410	0.465	0.400	0.444	0.417	0.433	0.390	0.413	0.382	0.417	6.34
55)	S	A,A,A-TRIFLUOR...	0.566	0.608	0.583	0.580	0.574	0.570	0.512	0.517	0.500	0.557	6.71
56)	I	8260-2-BROMO-1-CHL...	----------ISTD----------										
57)	T,M	2-CHLOROETHYL ...	1.520	1.558	1.602	1.718	1.510	1.848	1.722	1.773	1.728	1.664	7.23
58)	T,M	CIS-1,3-DICHLO...	3.012	2.965	3.029	2.933	3.014	3.189	2.967	3.186	3.112	3.045	3.12
59)	T,M	4-METHYL-2-PEN...	3.356	3.288	3.203	3.300	3.218	3.491	3.211	3.661	3.004	3.304	5.68
60)	S	TOLUENE-D8	6.810	7.037	7.078	7.362	6.400	6.953	6.404	6.855	6.480	6.820	4.90
61)	T,M,C	TOLUENE	6.718	6.461	6.666	7.022	6.274	6.967	6.821	7.164	6.918	6.779	4.16#
62)	T,M	TRANS-1,3-DICH...	2.196	2.189	2.421	2.608	3.013	2.862	2.703	3.025	2.925	2.660	12.38
63)	T,M	1,1,2-TRICHLOR...	1.473	1.580	1.613	1.580	1.625	1.649	1.605	1.784	1.569	1.609	5.12
64)	T,M	TETRACHLOROETHENE	1.431	1.532	1.459	1.420	1.490	1.524	1.544	1.649	1.646	1.522	5.50
65)	T,M	1,3-DICHLOROPR...	2.503	2.660	2.728	2.640	2.541	2.808	2.463	2.801	2.486	2.625	5.12
66)	T,M	2-HEXANONE	1.282	1.357	1.386	1.417	1.393	1.446	1.415	1.700	1.481	1.431	8.07
67)	T,M	CHLORODIBROMOM...	1.811	1.938	2.002	2.044	1.992	2.141	1.991	2.263	2.068	2.028	6.25
68)	T,M	1,2-DIBROMOETHANE	1.773	1.797	1.928	1.890	1.867	2.071	1.873	2.136	1.909	1.916	6.18
69)	P,T,M	CHLOROBENZENE	4.023	4.240	4.267	4.368	4.307	4.523	4.626	4.817	4.507	4.409	5.35
70)	T,M	1,1,1,2-TETRAC...	1.508	1.646	1.668	1.585	1.527	1.623	1.524	1.731	1.573	1.598	4.69
71)	C,T	METHYLBENZENE	1.974	2.250	2.121	2.210	2.124	2.185	2.308	2.358	2.248	2.198	5.22#
72)	T,M	M&P-XYLENE	2.379	2.781	2.637	2.677	2.626	2.777	2.750	3.062	2.755	2.716	6.64
73)	T,M	O-XYLENE	2.384	2.770	2.714	2.882	2.526	2.676	2.616	3.043	2.798	2.712	7.16
74)		TOTAL XYLENES										0.000#	-1.00
75)		XYLENES, TOTAL										0.000#	-1.00
76)	I	8260-1,4-DICHLOROB...	----------ISTD----------										
77)	T,M	STYRENE	1.305	1.554	1.341	1.505	1.425	1.612	1.735	1.522	1.548	1.505	8.85
78)	T,P,M	BROMOFORM	0.541	0.599	0.555	0.611	0.593	0.661	0.662	0.623	0.627	0.608	6.87
79)	T,M	ISOPROPYLBENZENE	2.080	2.272	2.235	2.396	2.417	2.440	2.549	2.299	2.340	2.336	5.81
80)	S	4-BROMOFLUOROB...	0.936	0.899	0.922	0.893	0.908	0.870	0.898	0.872	0.788	0.887	4.83
81)	T,M	BROMOBENZENE	1.193	1.171	1.094	1.111	1.004	1.130	1.142	1.057	1.094	1.111	5.20
82)	P,T,M	1,1,2,2-TETRAC...	0.836	0.956	0.979	0.916	0.924	0.986	0.977	0.919	0.876	0.930	5.47
83)	T,M	1,2,3-TRICHLOR...	0.261	0.250	0.218	0.217	0.219	0.250	0.234	0.242	0.227	0.235#	6.91
84)	T,M	TRANS-1,4-DICH...	0.262	0.280	0.346	0.315	0.310	0.342	0.359	0.330	0.333	0.320	9.97
85)	T,M	N-PROPYLBENZENE	2.505	2.782	2.578	2.735	2.653	2.953	2.986	2.775	2.896	2.763	5.98
86)		4-ETHYLTOLUENE	2.055	2.301	1.980	2.150	2.144	2.397	2.522	2.220	2.282	2.228	7.58

Method Path : C:\msdchem\1\methods\
Method File : V825I05R.M
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87)	T,M	2-CHLOROTOLUENE	1.726	1.569	1.519	1.645	1.582	1.765	1.822	1.741	1.681	1.672	6.04
88)	T,M	4-CHLOROTOLUENE	1.749	1.806	1.604	1.553	1.578	1.801	1.836	1.692	1.681	1.700	6.19
89)	T,M	1,3,5-TRIMETHY...	1.720	1.724	1.671	1.808	1.766	2.023	1.924	1.939	1.947	1.836	6.79
90)	T,M	TERT-BUTYLBENZENE	1.349	1.495	1.337	1.421	1.434	1.467	1.512	1.412	1.484	1.435	4.31
91)	T,M	1,2,4-TRIMETHY...	1.675	1.756	1.669	1.916	1.783	1.858	1.968	1.799	1.853	1.809	5.61
92)	T,M	SEC-BUTYLBENZENE	1.837	2.185	2.072	2.098	2.221	2.185	2.406	2.179	2.361	2.171	7.64
93)	T,M	1,3-DICHLOROBE...	1.086	1.112	0.970	1.095	1.081	1.125	1.148	1.156	1.165	1.104	5.34
94)	T,M	P-ISOPROPYLTOL...	1.643	1.755	1.784	1.833	1.786	1.896	2.032	1.897	2.013	1.849	6.75
95)		DICYCLOPENTADIENE	2.648	2.820	2.837	2.822	2.813	2.852	2.863	2.778	2.874	2.812	2.42
96)	T,M	1,4-DICHLOROBE...	1.197	1.191	1.075	1.107	1.095	1.176	1.152	1.164	1.169	1.147	3.84
97)	M,T	1,2,3-TRIMETHY...	1.775	1.963	1.712	1.797	1.780	1.860	1.940	1.795	1.980	1.845	5.18
98)	T,M	1,2-DICHLOROBE...	0.962	1.047	0.930	0.954	0.948	1.092	1.068	1.065	1.048	1.013	6.21
99)	T,M	N-BUTYLBENZENE	1.474	1.720	1.478	1.540	1.616	1.730	1.616	1.690	1.683	1.616	6.13
100)	T,M	1,2-DIBROMO-3-...	0.199	0.249	0.257	0.259	0.265	0.265	0.285	0.259	0.270	0.256#	9.26
101)	T,M	1,2,4-TRICHLOR...	0.508	0.497	0.486	0.508	0.498	0.500	0.593	0.573	0.648	0.535	10.56
102)	T,M	HEXACHLORO-1,3...	0.288	0.266	0.245	0.263	0.251	0.238	0.247	0.235	0.274	0.256#	6.91
103)	T,M	NAPHTHALENE	2.006	1.670	1.711	1.589	1.734	1.714	1.870	1.754	2.105	1.795	9.30
104)	T,M	1,2,3-TRICHLOR...	0.503	0.480	0.458	0.444	0.479	0.462	0.551	0.466	0.622	0.496	11.41
105)	m,t	1-METHYLNAPHTH...	0.772	0.661	0.651	0.595	0.653	0.650	0.874	0.668	0.856	0.709	14.10
106)	m,t	2-METHYLNAPHTH...	0.759	0.626	0.675	0.623	0.699	0.637	0.816	0.574	0.755	0.685	11.53
107)	I	AP9-PENTAFLUOROBEN...	----------ISTD----------										
108)	T	ETHANOL										0.000#	-1.00
109)	T	BROMOETHANE										0.000#	-1.00
110)	T	2-PROPANOL										0.000#	-1.00
111)	T	ACETONITRILE										0.000#	-1.00
112)	T	TERT-BUTYL ALC...										0.000#	-1.00
113)	T	CHLOROPRENE										0.000#	-1.00
114)	T	PROPIONITRILE										0.000#	-1.00
115)	T	ETHYL ACETATE										0.000#	-1.00
116)	T	METHACRYLONITRILE										0.000#	-1.00
117)		TERT-BUTYL FOR...										0.000#	-1.00
118)	T	ISOBUTANOL										0.000#	-1.00
119)	I	AP9-1,4-DIFLUOROBE...	----------ISTD----------										
120)	T	N-BUTANOL										0.000#	-1.00
121)	T	2-NITROPROPANE										0.000#	-1.00
122)	T	METHYL METHACR...										0.000#	-1.00
123)	T	1,4-DIOXANE										0.000#	-1.00
124)	I	AP9-2-BROMO-1-CHLO...	----------ISTD----------										
125)	T	N-OCTANE										0.000#	-1.00
126)		3,3-DIMETHYL-1...										0.000#	-1.00
127)	T	ETHYL METHACRY...										0.000#	-1.00
128)	I	AP9-1,4-DICHLOROBE...	----------ISTD----------										
129)	T	CIS-1,4-DICHLO...										0.000#	-1.00
130)	T	CYCLOHEXANONE										0.000#	-1.00
131)	T	PENTACHLOROETHANE										0.000#	-1.00
132)	T	HEXACHLOROETHANE										0.000#	-1.00

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Response Factor Report VOCMS25

Method Path : C:\msdchem\1\methods\
Method File : V825I05R.M
Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:05:13 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.624	168	434211	40.0000000	ppb	0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	648376	40.0000000	ppb	0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	105225	40.0000000	ppb	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	319919	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb	-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb	-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb	-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb	-7.45
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.386	111	240575	40.9442444	ppb	0.00
Spiked Amount 40.000	Range 79 - 121		Recovery	= 102.36%		
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	367287	38.9698968	ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery	= 97.42%		
60) TOLUENE-D8	4.746	98	716593	38.6493032	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery	= 96.62%		
80) 4-BROMOFLUOROBENZENE	6.605	95	299471	41.4131073	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery	= 103.53%		
Target Compounds						Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	-3461152m	1.2321081	ppm	
4) PROPENE	1.283	41	1301	0.5116555	ppb #	74
5) DICHLORODIFLUOROMETHANE	1.319	85	1225	0.2575198	ppb #	65
6) CHLOROMETHANE	1.453	50	2177	0.2086871	ppb #	86
7) VINYL CHLORIDE	1.521	62	1665	0.2543619	ppb #	59
8) 1,3-BUTADIENE	1.496	39	1446	0.2877485	ppb	81
9) BROMOMETHANE	1.703	94	1319	0.2814348	ppb #	94
10) CHLOROETHANE	1.777	64	1544	0.3423727	ppb	91
11) TRICHLOROFLUOROMETHANE	1.862	101	1888	0.2722489	ppb #	75
12) DICHLOROFLUOROMETHANE	1.886	67	2548	0.2951256	ug/l #	85
13) ETHYL ETHER	2.014	59	1145	0.2775983	ppb	98
14) ACROLEIN	2.319	56	1136	1.4933516	ppb #	67
15) 1,1-DICHLOROETHENE	2.148	96	1067	0.2673943	ppb	95
16) 1,1,2-TRICHLOROTRIFLUO...	2.173	101	1192	0.2672888	ppb #	82
17) ACETONE	2.459	43	3945	1.7946042	ppb	93
18) IODOMETHANE	2.222	142	11496	1.2439879	ppb	98
19) CARBON DISULFIDE	2.167	76	9708	0.4807855	ppb #	85
20) ALLYL CHLORIDE	2.392	76	3140	1.2303549	ppb	99
21) METHYLENE CHLORIDE	2.447	84	3111	0.4199480	ppb	99
22) METHYL ACETATE	2.533	43	7955	1.2782302	ppb #	93
23) ACRYLONITRILE	2.880	53	3900	1.2458012	ppb #	91
24) n-HEXANE	2.587	56	1134	0.3003701	ppb #	43
25) TRANS-1,2-DICHLOROETHENE	2.545	96	1216	0.2670492	ppb	98
26) METHYL TERT-BUTYL ETHER	2.594	73	2887	0.2545262	ppb	90
27) 1,1-DICHLOROETHANE	2.862	63	2447	0.2514376	ppb	92
28) VINYL ACETATE	2.978	43	13858	1.2829522	ppb	98
29) DI-ISOPROPYL ETHER	2.783	45	4689	0.2722943	ppb #	82
30) ETHYL TERT-BUTYL ETHER	2.978	59	3659	0.2557545	ppb	94
31) 2,2-DICHLOROPROPANE	3.209	77	1481	0.3006484	ppb #	82
32) CIS-1,2-DICHLOROETHENE	3.154	96	1441	0.2872376	ppb	97
33) 2-BUTANONE (MEK)	3.441	43	5228	1.1615166	ppb #	87
34) BROMOCHLOROMETHANE	3.258	130	819	0.2549804	ppb	80
35) TETRAHYDROFURAN	3.380	42	1148	0.3633550	ppb #	63
36) CHLOROFORM	3.289	83	2216	0.2541397	ppb	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:05:13 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
37)	CYCLOHEXANE	3.289	84	1247	0.2471181 ppb	#	81
39)	1,1,1-TRICHLOROETHANE	3.417	97	1621	0.2552217 ppb	#	88
40)	CARBON TETRACHLORIDE	3.386	117	1928	0.2963822 ppb		84
41)	1,1-DICHLOROPROPENE	3.477	75	1652	0.2652877 ppb		93
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	3011	0.2837356 ppb		98
43)	n-Heptane	3.587	71	641	0.2871668 ppb	#	55
44)	BENZENE	3.612	78	4633	0.2596520 ppb	#	1
45)	TERT-AMYL METHYL ETHER	3.660	73	3742	0.2957364 ppb	#	67
46)	1,2-DICHLOROETHANE	3.715	62	1875	0.2822437 ppb	#	80
47)	T-AMYL ALCOHOL	3.734	59	1335	1.2668994 ppb		91
49)	TRICHLOROETHENE	3.935	130	1466	0.2747988 ppb	#	97
50)	METHYL CYCLOHEXANE	3.935	83	8344	0.5187364 ppb	#	54
51)	TERT-AMYL ETHYL ETHER	4.044	59	2837	0.2357847 ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	1015	0.2443646 ppb		84
53)	DIBROMOMETHANE	4.172	93	957	0.2513304 ppb		95
54)	BROMODICHLOROMETHANE	4.258	83	1662	0.2382246 ppb	#	93
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	4999	1.1523709 ppb		92
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	1981	0.2489007 ppb	#	81
59)	4-METHYL-2-PENTANONE (...	4.989	43	11037	1.2607789 ppb		97
61)	TOLUENE	4.782	91	4418	0.2481977 ppb		97
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	1444m	0.2235649 ppb		
63)	1,1,2-TRICHLOROETHANE	5.136	97	969	0.2332743 ppb		96
64)	TETRACHLOROETHENE	5.032	164	941	0.2428582 ppb	#	75
65)	1,3-DICHLOROPROPANE	5.312	76	1646	0.2345569 ppb		93
66)	2-HEXANONE	5.532	58	4217	1.1636130 ppb		79
67)	CHLORODIBROMOMETHANE	5.258	129	1191	0.2278246 ppb		95
68)	1,2-DIBROMOETHANE	5.422	107	1166	0.2342926 ppb		95
69)	CHLOROBENZENE	5.770	112	2646	0.2347691 ppb	#	82
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	992	0.2347991 ppb	#	98
71)	ETHYLBENZENE	5.776	106	1298	0.2297083 ppb		83
72)	M&P-XYLENE	5.873	106	3129	0.4488239 ppb		88
73)	O-XYLENE	6.178	106	1568	0.2219714 ppb		81
77)	STYRENE	6.215	104	2610	0.2229998 ppb	#	83
78)	BROMOFORM	6.239	173	1082	0.2279311 ppb		88
79)	ISOPROPYLBENZENE	6.398	105	4159	0.2276322 ppb	#	93
81)	BROMOBENZENE	6.690	77	2385	0.2616395 ppb	#	85
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	1671	0.2235522 ppb	#	95
83)	1,2,3-TRICHLOROPROPANE	6.849	110	521	0.2725622 ppb	#	89
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	523	0.2116903 ppb	#	64
85)	N-PROPYLBENZENE	6.702	91	5008	0.2310132 ppb	#	95
86)	4-ETHYLTOLUENE	6.782	105	4109	0.2360532 ppb		97
87)	2-CHLOROTOLUENE	6.824	91	3452	0.2623698 ppb	#	92
88)	4-CHLOROTOLUENE	6.946	91	3498	0.2568578 ppb	#	92
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	3440	0.2403930 ppb		99
90)	TERT-BUTYLBENZENE	7.087	119	2698	0.2385792 ppb		93
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	3350	0.2359920 ppb		99
92)	SEC-BUTYLBENZENE	7.221	105	3674	0.2213462 ppb		95
93)	1,3-DICHLOROBENZENE	7.397	146	2171	0.2518776 ppb		92
94)	P-ISOPROPYLTOLUENE	7.330	119	3285	0.2304611 ppb	#	93
95)	DICYCLOPENTADIENE	7.318	66	5294	0.2367670 ppb		99
96)	1,4-DICHLOROBENZENE	7.465	146	2393	0.2603538 ppb	#	1
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	3550	0.2436706 ppb	#	84
98)	1,2-DICHLOROBENZENE	7.794	146	1924	0.2412621 ppb		98
99)	N-BUTYLBENZENE	7.660	91	2947	0.2319572 ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	398	0.2025286 ppb	#	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:05:13 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

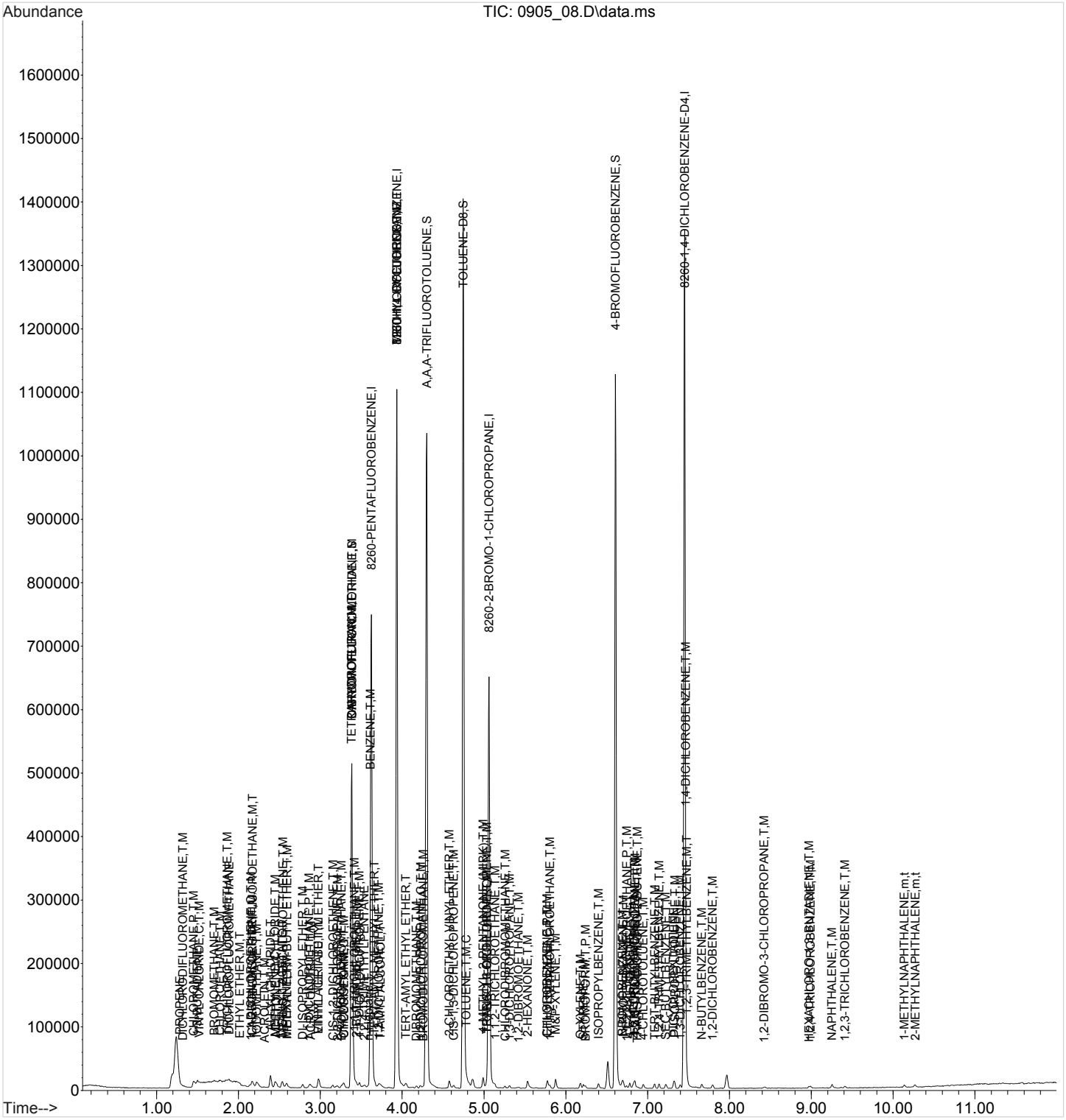
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	1016	0.2541330	ppb		94
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	576	0.2770687	ppb		99
103) NAPHTHALENE	9.251	128	4010	0.2884687	ppb	#	94
104) 1,2,3-TRICHLOROBENZENE	9.409	180	1006	0.2678853	ppb		97
105) 1-METHYLNAPHTHALENE	10.135	142	1544	0.2899789	ppb	#	91
106) 2-METHYLNAPHTHALENE	10.269	142	1517	0.2857550	ppb	#	91

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

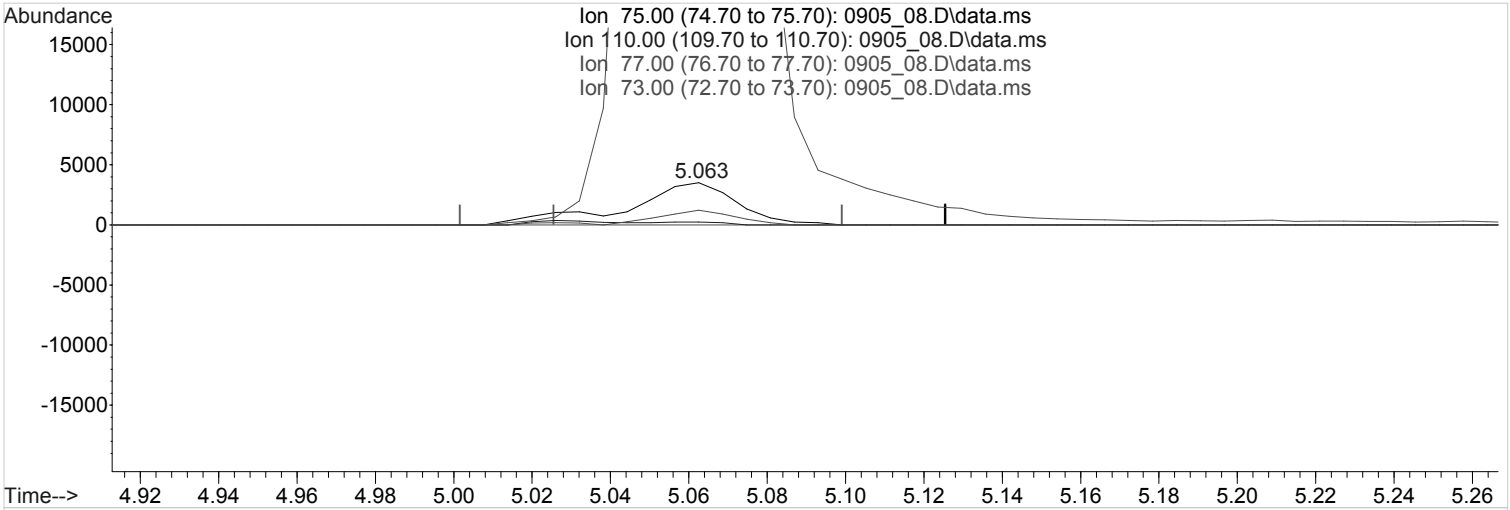
Quant Time: Sep 06 14:05:13 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

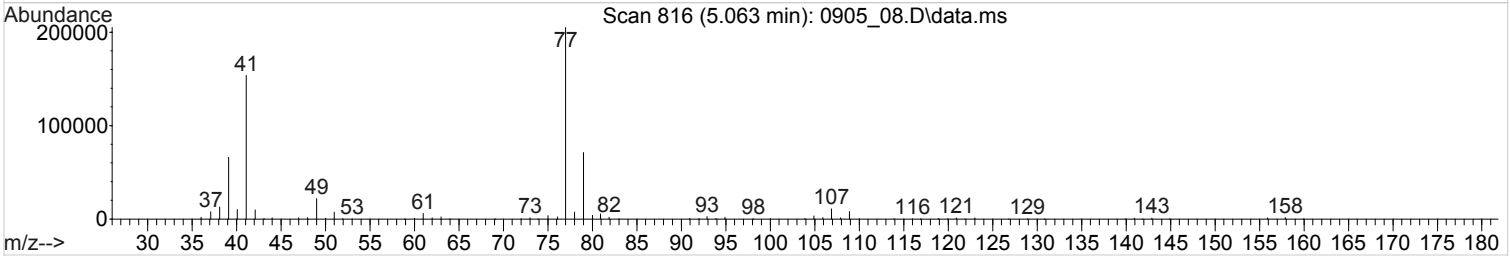


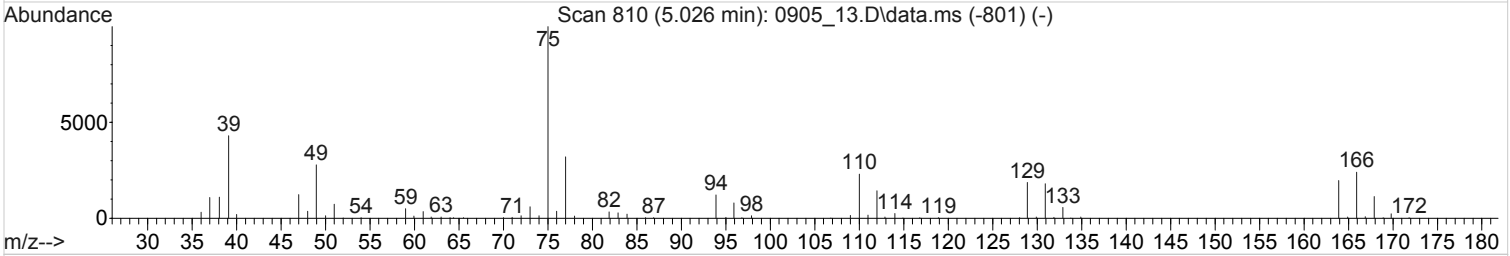
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 13:55:52 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration







TIC: 0905_08.D\data.ms

(62) TRANS-1,3-DICHLOROPROPENE (T,M)

5.063min (+0.037) 0.9156895 ppb

Qvalue = 1

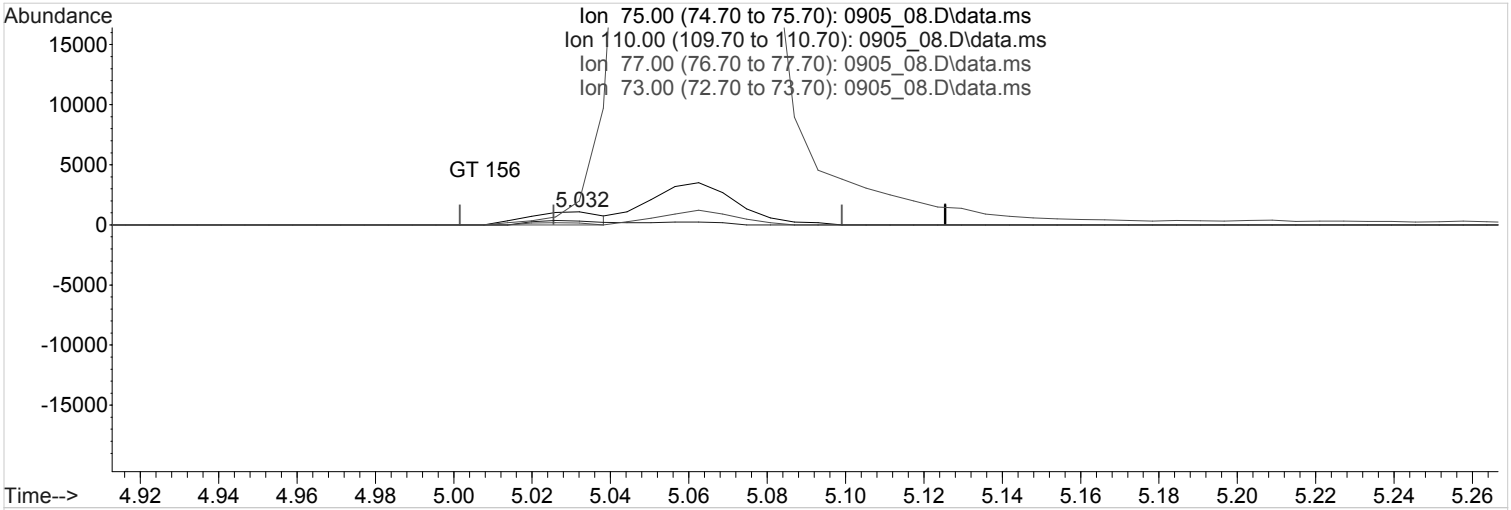
response 6894

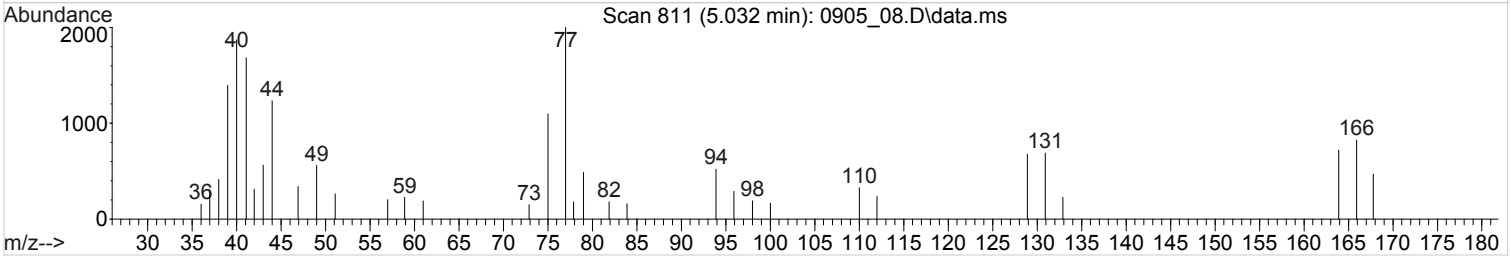
Ion	Exp%	Act%
75.00	100	100
110.00	22.90	3.45#
77.00	29.20	4341.38#
73.00	7.10	23.80#

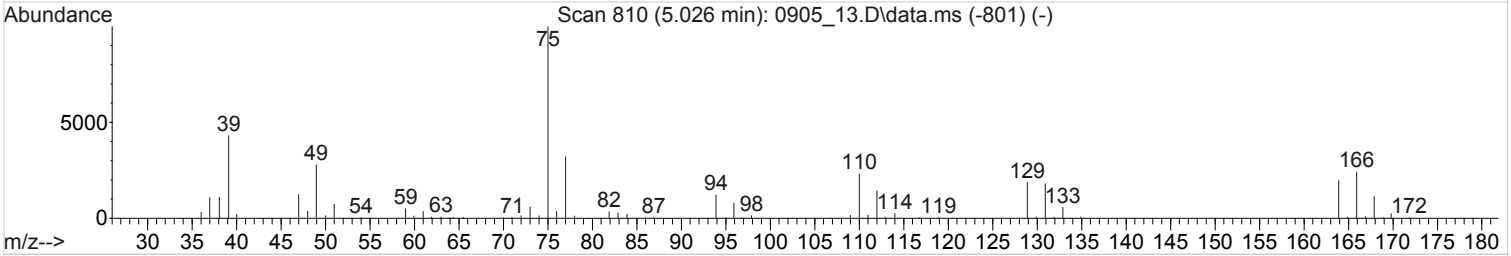
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 13:55:52 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration







TIC: 0905_08.D\data.ms

(62) TRANS-1,3-DICHLOROPROPENE (T,M)

5.032min (+0.007) 0.1917980 ppb m

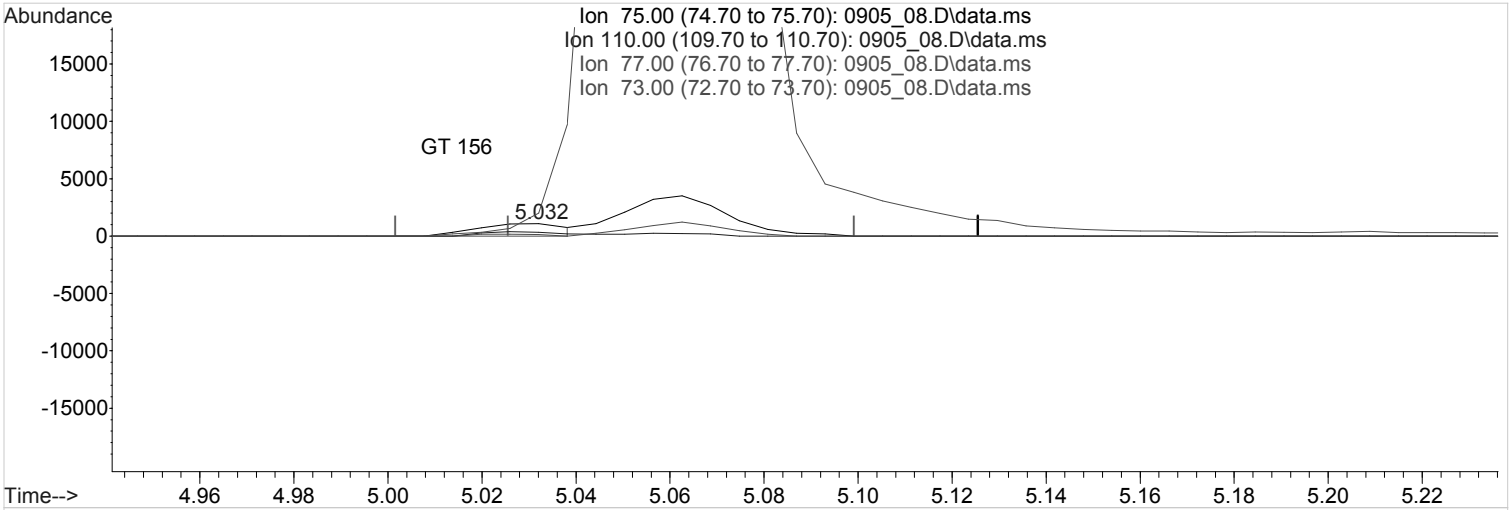
response 1444

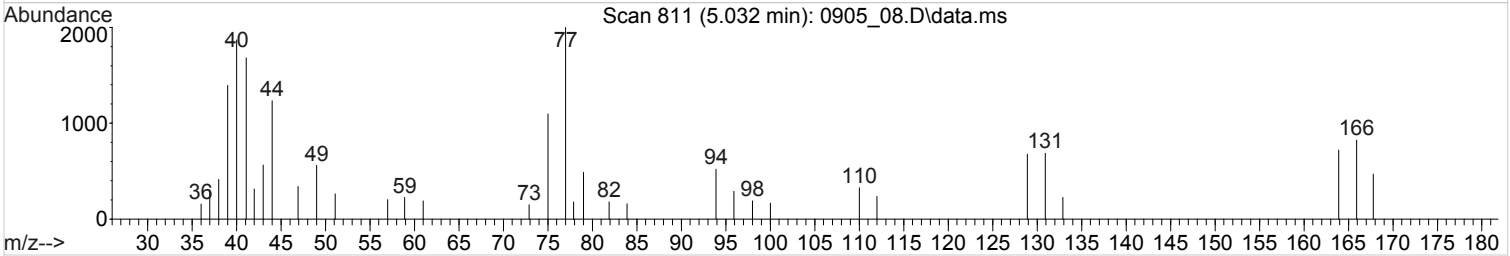
Ion	Exp%	Act%
75.00	100	100
110.00	22.90	16.48#
77.00	29.20	20726.80#
73.00	7.10	113.64#

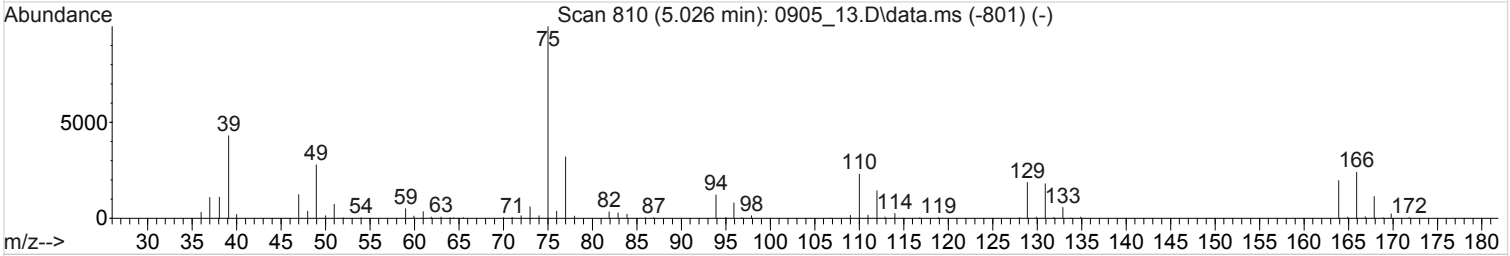
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_08.D
Acq On : 5 Sep 2018 1:52 pm
Operator : 605
Sample : STD VMS .25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 8 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:04:44 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration







TIC: 0905_08.D\data.ms

(62) TRANS-1,3-DICHLOROPROPENE (T,M)

5.032min (+0.007) 0.2235649 ppb m

response 1444

Ion	Exp%	Act%
75.00	100	100
110.00	22.90	16.48#
77.00	29.20	20726.80#
73.00	7.10	113.64#

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_09.D
Acq On : 5 Sep 2018 2:12 pm
Operator : 605
Sample : STD VMS .5 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 9 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:05:37 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.624	168	387110	40.0000000	ppb	0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	525092	40.0000000	ppb	0.00
56) 8260-2-BROMO-1-CHLOROP...	5.062	79	93031	40.0000000	ppb	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	265438	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb	-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb	-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb	-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb	-7.45
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.380	111	214460	40.9406844	ppb	0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 102.35%			
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	319001	41.7933585	ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 104.48%			
60) TOLUENE-D8	4.745	98	654668	39.9375543	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 99.84%			
80) 4-BROMOFLUOROBENZENE	6.605	95	238702	39.7846956	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 99.46%			
Target Compounds						Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	-2956923m	1.1806865	ppm	
4) PROPENE	1.264	41	1357	0.5986137	ppb #	80
5) DICHLORODIFLUOROMETHANE	1.313	85	2309	0.5444586	ppb	91
6) CHLOROMETHANE	1.453	50	4101	0.4876641	ppb #	85
7) VINYL CHLORIDE	1.514	62	2933	0.5025929	ppb #	71
8) 1,3-BUTADIENE	1.490	39	2870	0.6406092	ppb	83
9) BROMOMETHANE	1.697	94	2178	0.5212634	ppb	92
10) CHLOROETHANE	1.764	64	2501	0.6220595	ppb #	74
11) TRICHLOROFLUOROMETHANE	1.856	101	3287	0.5316555	ppb #	89
12) DICHLOROFLUOROMETHANE	1.874	67	4185	0.5437125	ug/l	90
13) ETHYL ETHER	2.014	59	1771	0.4816110	ppb	92
14) ACROLEIN	2.307	56	1631	2.4049393	ppb #	63
15) 1,1-DICHLOROETHENE	2.130	96	1839	0.5169349	ppb	99
16) 1,1,2-TRICHLOROTRIFLUO...	2.161	101	2179	0.5480601	ppb #	94
17) ACETONE	2.459	43	5261	2.6844567	ppb	98
18) IODOMETHANE	2.215	142	20439	2.4808213	ppb	98
19) CARBON DISULFIDE	2.167	76	8446	0.4691796	ppb #	88
20) ALLYL CHLORIDE	2.386	76	5697	2.5038795	ppb	96
21) METHYLENE CHLORIDE	2.447	84	3536	0.5353949	ppb	100
22) METHYL ACETATE	2.526	43	13878	2.5012795	ppb #	97
23) ACRYLONITRILE	2.874	53	6688	2.3963312	ppb	95
24) n-HEXANE	2.581	56	1879	0.5582604	ppb #	78
25) TRANS-1,2-DICHLOROETHENE	2.539	96	2144	0.5281398	ppb	96
26) METHYL TERT-BUTYL ETHER	2.587	73	5437	0.5376647	ppb	95
27) 1,1-DICHLOROETHANE	2.862	63	4387	0.5056271	ppb	92
28) VINYL ACETATE	2.977	43	24125	2.5052074	ppb	100
29) DI-ISOPROPYL ETHER	2.782	45	7937	0.5169888	ppb	100
30) ETHYL TERT-BUTYL ETHER	2.977	59	6722	0.5270184	ppb	97
31) 2,2-DICHLOROPROPANE	3.203	77	2461	0.5603790	ppb	93
32) CIS-1,2-DICHLOROETHENE	3.148	96	2297	0.5135759	ppb	93
33) 2-BUTANONE (MEK)	3.435	43	10108	2.5189614	ppb #	91
34) BROMOCHLOROMETHANE	3.258	130	1431	0.4997225	ppb	91
35) TETRAHYDROFURAN	3.380	42	1531	0.5435393	ppb #	47
36) CHLOROFORM	3.288	83	3974	0.5112072	ppb	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_09.D
Acq On : 5 Sep 2018 2:12 pm
Operator : 605
Sample : STD VMS .5 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 9 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:05:37 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	2470	0.5490369 ppb	#	82
39)	1,1,1-TRICHLOROETHANE	3.410	97	2840	0.5015558 ppb		97
40)	CARBON TETRACHLORIDE	3.386	117	3196	0.5510845 ppb		89
41)	1,1-DICHLOROPROPENE	3.477	75	3035	0.5466788 ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	5169	0.5463563 ppb	#	73
43)	n-Heptane	3.581	71	1051	0.5281354 ppb	#	53
44)	BENZENE	3.611	78	8374	0.5264155 ppb	#	9
45)	TERT-AMYL METHYL ETHER	3.660	73	5705	0.5057350 ppb	#	67
46)	1,2-DICHLOROETHANE	3.709	62	3034	0.5122771 ppb	#	91
47)	T-AMYL ALCOHOL	3.740	59	2440	2.5972701 ppb		90
49)	TRICHLOROETHENE	3.935	130	2161	0.5001810 ppb	#	99
50)	METHYL CYCLOHEXANE	3.935	83	7959	0.6109736 ppb	#	64
51)	TERT-AMYL ETHYL ETHER	4.044	59	5222	0.5359012 ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	1700	0.5053738 ppb		88
53)	DIBROMOMETHANE	4.172	93	1633	0.5295548 ppb		92
54)	BROMODICHLOROMETHANE	4.258	83	3052	0.5401715 ppb	#	99
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	9056	2.3612220 ppb		91
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	3448	0.4900045 ppb	#	86
59)	4-METHYL-2-PENTANONE (...	4.989	43	19116	2.4698816 ppb		100
61)	TOLUENE	4.782	91	7513	0.4773937 ppb		96
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	2546	0.4458473 ppb	#	60
63)	1,1,2-TRICHLOROETHANE	5.129	97	1837	0.5001998 ppb		99
64)	TETRACHLOROETHENE	5.038	164	1781	0.5198981 ppb	#	92
65)	1,3-DICHLOROPROPANE	5.312	76	3093	0.4985279 ppb		99
66)	2-HEXANONE	5.532	58	7889	2.4621707 ppb		94
67)	CHLORODIBROMOMETHANE	5.258	129	2254	0.4876789 ppb		96
68)	1,2-DIBROMOETHANE	5.422	107	2090	0.4750043 ppb		93
69)	CHLOROBENZENE	5.770	112	4931	0.4948543 ppb		89
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	1914	0.5124105 ppb	#	98
71)	ETHYLBENZENE	5.776	106	2617	0.5238379 ppb		98
72)	M&P-XYLENE	5.873	106	6467	1.0492151 ppb		97
73)	O-XYLENE	6.178	106	3221	0.5157426 ppb		100
77)	STYRENE	6.215	104	5156	0.5309502 ppb		93
78)	BROMOFORM	6.239	173	1988	0.5047422 ppb		99
79)	ISOPROPYLBENZENE	6.398	105	7537	0.4971874 ppb	#	94
81)	BROMOBENZENE	6.690	77	3887	0.5139330 ppb		91
82)	1,1,2,2-TETRACHLOROETHANE	6.739	83	3173	0.5116223 ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	828	0.5220777 ppb	#	50
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	928	0.4527142 ppb	#	85
85)	N-PROPYLBENZENE	6.702	91	9231	0.5132135 ppb		95
86)	4-ETHYLTOLUENE	6.782	105	7634	0.5285705 ppb		98
87)	2-CHLOROTOLUENE	6.824	91	5207	0.4769882 ppb	#	95
88)	4-CHLOROTOLUENE	6.946	91	5992	0.5303002 ppb	#	93
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	5719	0.4816820 ppb		95
90)	TERT-BUTYLBENZENE	7.086	119	4962	0.5288400 ppb		94
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	5825	0.4945672 ppb		99
92)	SEC-BUTYLBENZENE	7.221	105	7249	0.5263661 ppb		97
93)	1,3-DICHLOROBENZENE	7.397	146	3691	0.5161201 ppb		93
94)	P-ISOPROPYLTOLUENE	7.330	119	5824	0.4924481 ppb		97
95)	DICYCLOPENTADIENE	7.318	66	9356	0.5043179 ppb		100
96)	1,4-DICHLOROBENZENE	7.464	146	3952	0.5182212 ppb	#	1
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	6514	0.5388892 ppb		93
98)	1,2-DICHLOROBENZENE	7.794	146	3475	0.5251891 ppb		98
99)	N-BUTYLBENZENE	7.659	91	5706	0.5412981 ppb		95
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	826	0.5065943 ppb		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_09.D
Acq On : 5 Sep 2018 2:12 pm
Operator : 605
Sample : STD VMS .5 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 9 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:05:37 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.988	180	1649	0.4971243	ppb		96
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	883	0.5119207	ppb		91
103) NAPHTHALENE	9.251	128	5541	0.4804181	ppb		96
104) 1,2,3-TRICHLOROBENZENE	9.409	180	1591	0.5106202	ppb		100
105) 1-METHYLNAPHTHALENE	10.135	142	2192	0.4961769	ppb		94
106) 2-METHYLNAPHTHALENE	10.269	142	2076	0.4713164	ppb	#	88

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_09.D
Acq On : 5 Sep 2018 2:12 pm
Operator : 605
Sample : STD VMS .5 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 9 Sample Multiplier: 1
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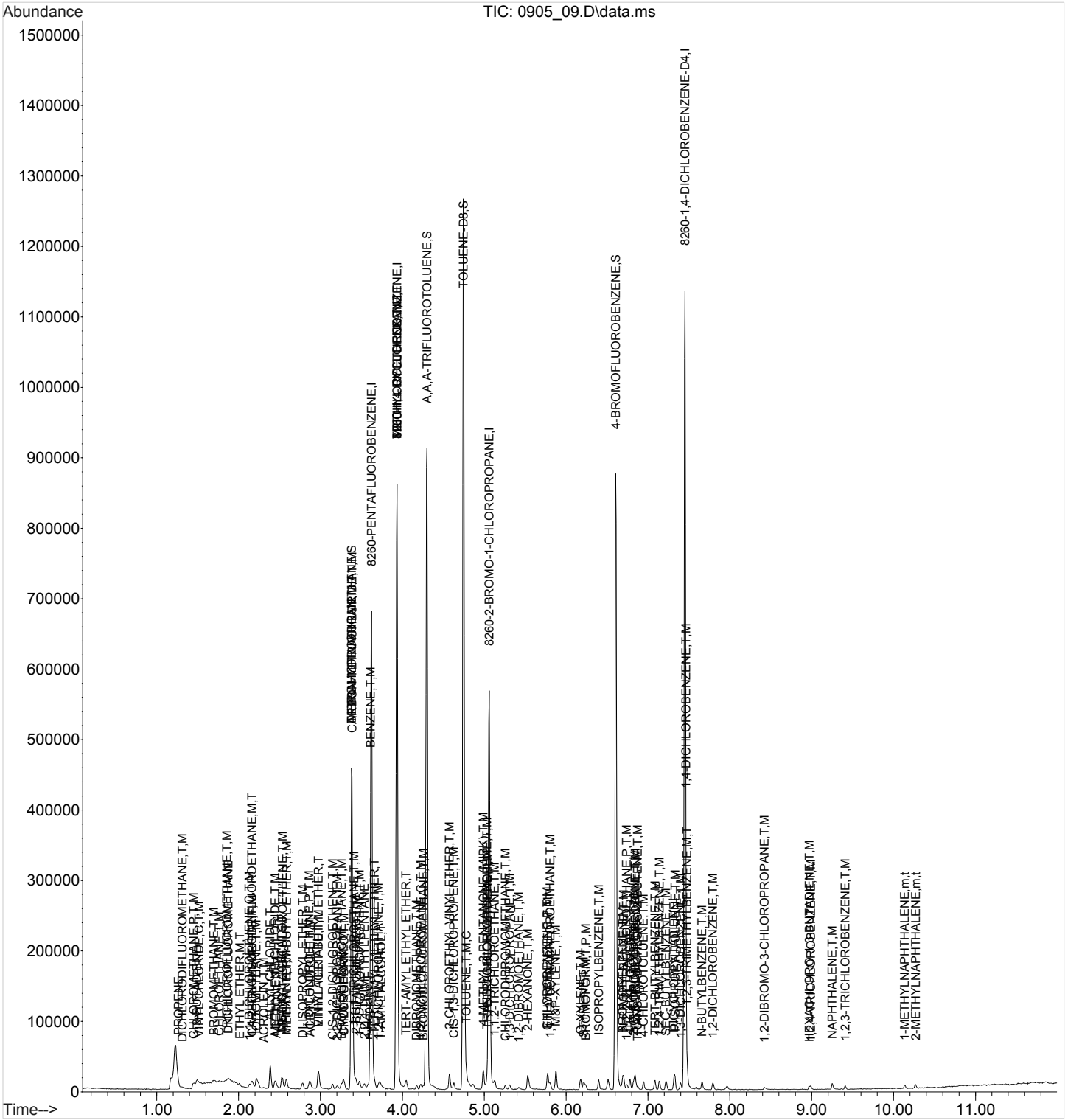
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration



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LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	235 of 332

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_10.D
Acq On : 5 Sep 2018 2:32 pm
Operator : 605
Sample : STD VMS 1 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 10 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.624	168	409182	40.0000000	ppb	0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	557235	40.0000000	ppb	0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	91514	40.0000000	ppb	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	279751	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb	-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb	-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb	-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb	-7.45
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.386	111	218818	39.5193426	ppb	0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 98.80%			
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	333239	41.1403579	ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 102.85%			
60) TOLUENE-D8	4.745	98	663944	41.1748432	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 102.94%			
80) 4-BROMOFLUOROBENZENE	6.605	95	264443	41.8199497	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 104.55%			
Target Compounds						Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	-3124995m	1.1804887	ppm	
4) PROPENE	1.289	41	1651	0.6890199	ppb	88
5) DICHLORODIFLUOROMETHANE	1.319	85	4632	1.0333023	ppb	100
6) CHLOROMETHANE	1.453	50	6912	0.8227548	ppb #	86
7) VINYL CHLORIDE	1.514	62	6029	0.9773889	ppb #	81
8) 1,3-BUTADIENE	1.496	39	4054	0.8560771	ppb	100
9) BROMOMETHANE	1.703	94	4428	1.0025934	ppb	97
10) CHLOROETHANE	1.770	64	3613	0.8501666	ppb #	90
11) TRICHLOROFLUOROMETHANE	1.856	101	6444	0.9860615	ppb #	91
12) DICHLOROFLUOROMETHANE	1.886	67	7728	0.9498583	ug/l	99
13) ETHYL ETHER	2.014	59	3830	0.9853589	ppb	91
14) ACROLEIN	2.313	56	3515	4.9033553	ppb	84
15) 1,1-DICHLOROETHENE	2.136	96	3725	0.9905999	ppb	98
16) 1,1,2-TRICHLOROTRIFLUO...	2.173	101	4155	0.9886893	ppb #	94
17) ACETONE	2.459	43	9178	4.4305131	ppb	99
18) IODOMETHANE	2.222	142	43524	4.9978418	ppb	97
19) CARBON DISULFIDE	2.167	76	14594	0.7669734	ppb #	93
20) ALLYL CHLORIDE	2.392	76	11731	4.8777563	ppb	94
21) METHYLENE CHLORIDE	2.447	84	5958	0.8534544	ppb	98
22) METHYL ACETATE	2.526	43	27443	4.6793420	ppb #	97
23) ACRYLONITRILE	2.874	53	15095	5.1168367	ppb	98
24) n-HEXANE	2.587	56	3452	0.9702836	ppb	82
25) TRANS-1,2-DICHLOROETHENE	2.539	96	4109	0.9575867	ppb	99
26) METHYL TERT-BUTYL ETHER	2.587	73	10524	0.9845797	ppb	98
27) 1,1-DICHLOROETHANE	2.862	63	8931	0.9738244	ppb	97
28) VINYL ACETATE	2.978	43	51595	5.0687614	ppb	99
29) DI-ISOPROPYL ETHER	2.782	45	15668	0.9655088	ppb	99
30) ETHYL TERT-BUTYL ETHER	2.978	59	13105	0.9720356	ppb	96
31) 2,2-DICHLOROPROPANE	3.209	77	4423	0.9528072	ppb	95
32) CIS-1,2-DICHLOROETHENE	3.148	96	4230	0.8947504	ppb	94
33) 2-BUTANONE (MEK)	3.435	43	20692	4.8783911	ppb #	90
34) BROMOCHLOROMETHANE	3.258	130	2935	0.9696505	ppb	88
35) TETRAHYDROFURAN	3.386	42	2573	0.8641983	ppb #	86
36) CHLOROFORM	3.288	83	8143	0.9909949	ppb	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_10.D
Acq On : 5 Sep 2018 2:32 pm
Operator : 605
Sample : STD VMS 1 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 10 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	4828	1.0152891	ppb		94
39)	1,1,1-TRICHLOROETHANE	3.417	97	5864	0.9797444	ppb		98
40)	CARBON TETRACHLORIDE	3.386	117	5763	0.9401084	ppb		91
41)	1,1-DICHLOROPROPENE	3.477	75	5404	0.9208879	ppb	#	92
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	9604	0.9603720	ppb		99
43)	n-Heptane	3.587	71	1923	0.9141969	ppb	#	64
44)	BENZENE	3.612	78	16565	0.9851561	ppb	#	53
45)	TERT-AMYL METHYL ETHER	3.660	73	11909	0.9987586	ppb	#	92
46)	1,2-DICHLOROETHANE	3.715	62	5830	0.9312705	ppb	#	94
47)	T-AMYL ALCOHOL	3.746	59	5189	5.2255118	ppb	#	68
49)	TRICHLOROETHENE	3.935	130	4528	0.9875880	ppb	#	97
50)	METHYL CYCLOHEXANE	3.935	83	10617	0.7680027	ppb	#	75
51)	TERT-AMYL ETHYL ETHER	4.051	59	9850	0.9525353	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	3457	0.9684120	ppb		90
53)	DIBROMOMETHANE	4.179	93	3232	0.9876272	ppb		93
54)	BROMODICHLOROMETHANE	4.258	83	5575	0.9297989	ppb		97
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	18324	4.8569187	ppb		98
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	6929	1.0010218	ppb		91
59)	4-METHYL-2-PENTANONE (...	4.989	43	36645	4.8132010	ppb		99
61)	TOLUENE	4.782	91	15250	0.9850840	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	5539	0.9860508	ppb	#	65
63)	1,1,2-TRICHLOROETHANE	5.130	97	3690	1.0214119	ppb		98
64)	TETRACHLOROETHENE	5.038	164	3337	0.9902633	ppb		89
65)	1,3-DICHLOROPROPANE	5.312	76	6241	1.0225955	ppb		99
66)	2-HEXANONE	5.532	58	15852	5.0294491	ppb		92
67)	CHLORODIBROMOMETHANE	5.258	129	4580	1.0073623	ppb		99
68)	1,2-DIBROMOETHANE	5.422	107	4411	1.0191274	ppb		95
69)	CHLOROBENZENE	5.770	112	9763	0.9960149	ppb		94
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	3816	1.0385433	ppb	#	98
71)	ETHYLBENZENE	5.782	106	4852	0.9873115	ppb		96
72)	M&P-XYLENE	5.879	106	12065	1.9898903	ppb		91
73)	O-XYLENE	6.178	106	6209	1.0106577	ppb		95
77)	STYRENE	6.215	104	9376	0.9161148	ppb		96
78)	BROMOFORM	6.239	173	3883	0.9354317	ppb		98
79)	ISOPROPYLBENZENE	6.398	105	15629	0.9782374	ppb		97
81)	BROMOBENZENE	6.690	77	7650	0.9597206	ppb		91
82)	1,1,2,2-TETRACHLOROETHANE	6.739	83	6848	1.0476943	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	1524	0.9117614	ppb		97
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	2418	1.1192416	ppb	#	85
85)	N-PROPYLBENZENE	6.702	91	18028	0.9510171	ppb		98
86)	4-ETHYLTOLUENE	6.782	105	13846	0.9096336	ppb		99
87)	2-CHLOROTOLUENE	6.824	91	10622	0.9232468	ppb	#	95
88)	4-CHLOROTOLUENE	6.946	91	11216	0.9418449	ppb		99
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	11687	0.9339741	ppb		99
90)	TERT-BUTYLBENZENE	7.087	119	9351	0.9456208	ppb		95
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	11670	0.9401382	ppb		99
92)	SEC-BUTYLBENZENE	7.221	105	14491	0.9983887	ppb		98
93)	1,3-DICHLOROBENZENE	7.404	146	6783	0.8999534	ppb		97
94)	P-ISOPROPYLTOLUENE	7.330	119	12477	1.0010153	ppb		97
95)	DICYCLOPENTADIENE	7.324	66	19840	1.0147225	ppb		99
96)	1,4-DICHLOROBENZENE	7.464	146	7516	0.9351396	ppb	#	1
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	11970	0.9395876	ppb		95
98)	1,2-DICHLOROBENZENE	7.794	146	6501	0.9322503	ppb		98
99)	N-BUTYLBENZENE	7.660	91	10340	0.9307150	ppb		98
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	1797	1.0457304	ppb		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_10.D
Acq On : 5 Sep 2018 2:32 pm
Operator : 605
Sample : STD VMS 1 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 10 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

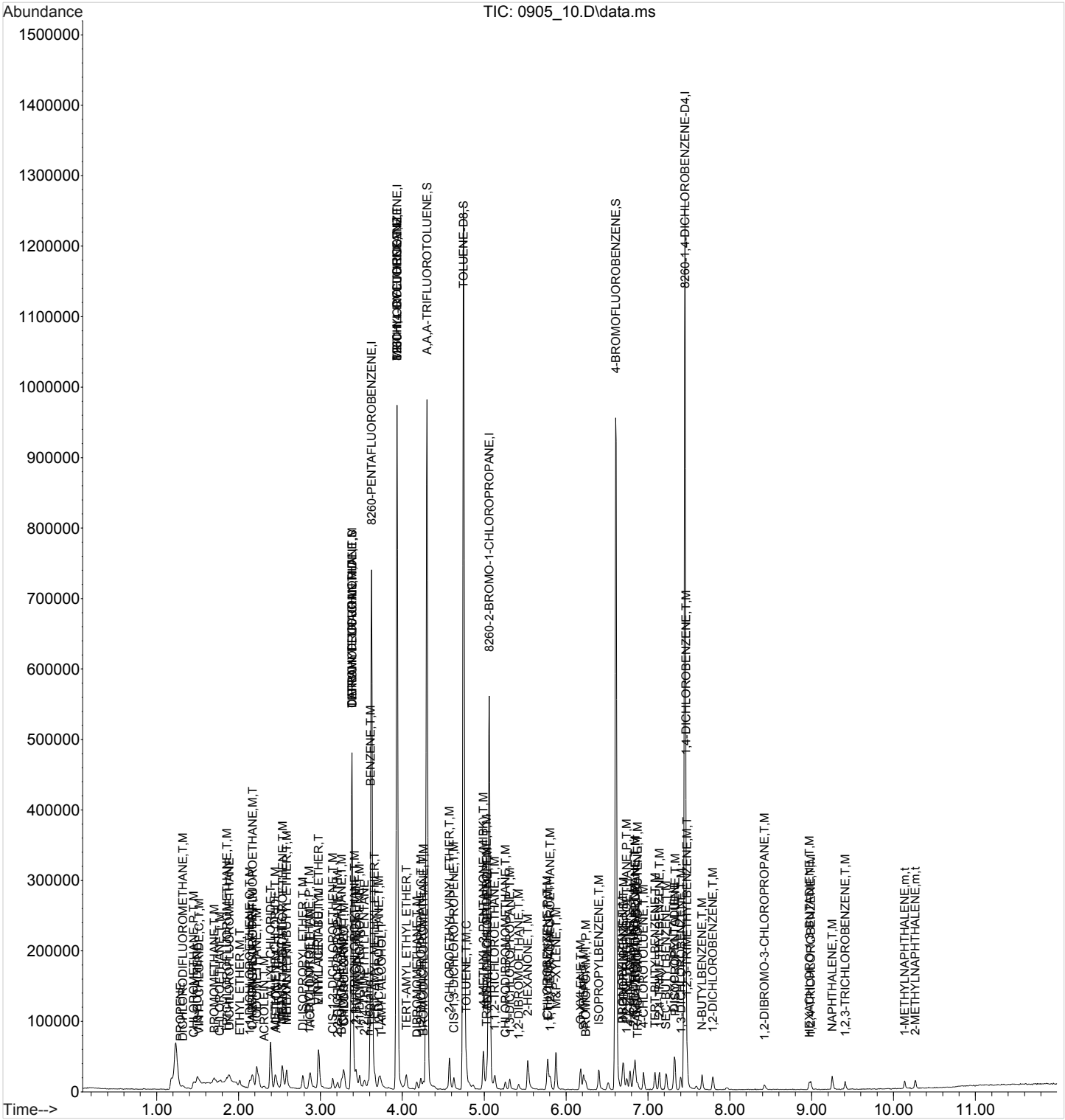
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	3400	0.9725562	ppb	97
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	1710	0.9406532	ppb	95
103) NAPHTHALENE	9.251	128	11967	0.9844825	ppb	99
104) 1,2,3-TRICHLOROBENZENE	9.409	180	3206	0.9762988	ppb	98
105) 1-METHYLNAPHTHALENE	10.135	142	4555	0.9783085	ppb	97
106) 2-METHYLNAPHTHALENE	10.263	142	4718	1.0163297	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_10.D
Acq On : 5 Sep 2018 2:32 pm
Operator : 605
Sample : STD VMS 1 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 10 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_11.D
Acq On : 5 Sep 2018 2:52 pm
Operator : 605
Sample : STD VMS 2 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 11 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:48 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.624	168	413168	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	561728	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	95613	40.0000000	ppb		0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	282106	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb		-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb		-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb		-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb		-7.45
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.386	111	239222	42.7875704	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 106.97%				
55) A,A,A-TRIFLUOROTOLUENE	4.301	146	342247	41.9144920	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 104.79%				
60) TOLUENE-D8	4.752	98	739081	43.8695454	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 109.67%				
80) 4-BROMOFLUOROBENZENE	6.605	95	264601	41.4956180	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 103.74%				
Target Compounds							Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	-3005364m	1.1243445	ppm		
4) PROPENE	1.289	41	2456	1.0150861	ppb	#	90
5) DICHLORODIFLUOROMETHANE	1.319	85	7740	1.7099745	ppb		99
6) CHLOROMETHANE	1.466	50	12443	1.5580054	ppb	#	86
7) VINYL CHLORIDE	1.527	62	12343	1.9816762	ppb		93
8) 1,3-BUTADIENE	1.502	39	8209	1.7167586	ppb		98
9) BROMOMETHANE	1.710	94	8191	1.8367244	ppb		92
10) CHLOROETHANE	1.783	64	7181	1.6734427	ppb		99
11) TRICHLOROFLUOROMETHANE	1.874	101	11724	1.7767001	ppb		96
12) DICHLOROFLUOROMETHANE	1.886	67	14938	1.8183354	ug/l		100
13) ETHYL ETHER	2.021	59	7640	1.9466097	ppb		89
14) ACROLEIN	2.313	56	6903	9.5366479	ppb		99
15) 1,1-DICHLOROETHENE	2.142	96	7192	1.8941376	ppb		99
16) 1,1,2-TRICHLOROTRIFLUO...	2.185	101	7412	1.7466828	ppb	#	96
17) ACETONE	2.466	43	17427	8.3314089	ppb		100
18) IODOMETHANE	2.222	142	88908	10.1107736	ppb		99
19) CARBON DISULFIDE	2.173	76	27597	1.4363413	ppb		98
20) ALLYL CHLORIDE	2.398	76	24893	10.2506675	ppb		96
21) METHYLENE CHLORIDE	2.453	84	10838	1.5375130	ppb		98
22) METHYL ACETATE	2.533	43	59627	10.0689923	ppb	#	99
23) ACRYLONITRILE	2.880	53	28682	9.6287013	ppb		93
24) n-HEXANE	2.587	56	6334	1.7631765	ppb		78
25) TRANS-1,2-DICHLOROETHENE	2.545	96	8350	1.9271622	ppb		98
26) METHYL TERT-BUTYL ETHER	2.594	73	21243	1.9682294	ppb		97
27) 1,1-DICHLOROETHANE	2.868	63	18555	2.0036939	ppb		100
28) VINYL ACETATE	2.978	43	103100	10.0309655	ppb		100
29) DI-ISOPROPYL ETHER	2.789	45	31222	1.9054310	ppb		100
30) ETHYL TERT-BUTYL ETHER	2.978	59	27246	2.0014178	ppb		99
31) 2,2-DICHLOROPROPANE	3.215	77	8739	1.8644025	ppb		99
32) CIS-1,2-DICHLOROETHENE	3.154	96	9417	1.9727132	ppb		99
33) 2-BUTANONE (MEK)	3.435	43	43138	10.0721919	ppb		96
34) BROMOCHLOROMETHANE	3.258	130	6196	2.0272550	ppb		96
35) TETRAHYDROFURAN	3.386	42	4829	1.6062778	ppb	#	90
36) CHLOROFORM	3.289	83	16344	1.9698592	ppb		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_11.D
Acq On : 5 Sep 2018 2:52 pm
Operator : 605
Sample : STD VMS 2 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 11 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:48 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.289	84	8834	1.8397961	ppb		97
39)	1,1,1-TRICHLOROETHANE	3.417	97	12109	2.0036273	ppb		99
40)	CARBON TETRACHLORIDE	3.386	117	10882	1.7580365	ppb		96
41)	1,1-DICHLOROPROPENE	3.484	75	11430	1.9289789	ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.539	57	17939	1.7765417	ppb		99
43)	n-Heptane	3.587	71	3919	1.8451240	ppb		77
44)	BENZENE	3.618	78	32157	1.8939956	ppb	#	75
45)	TERT-AMYL METHYL ETHER	3.660	73	22404	1.8608041	ppb		94
46)	1,2-DICHLOROETHANE	3.715	62	12179	1.9266763	ppb		99
47)	T-AMYL ALCOHOL	3.740	59	9574	9.5483521	ppb		92
49)	TRICHLOROETHENE	3.941	130	8724	1.8875453	ppb	#	100
50)	METHYL CYCLOHEXANE	3.941	83	15424	1.1068029	ppb	#	83
51)	TERT-AMYL ETHYL ETHER	4.051	59	21710	2.0826533	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	7478	2.0780623	ppb		99
53)	DIBROMOMETHANE	4.179	93	6473	1.9621835	ppb		100
54)	BROMODICHLOROMETHANE	4.258	83	12476	2.0641052	ppb		97
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	41061	10.4169520	ppb		98
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	14021	1.9387533	ppb	#	95
59)	4-METHYL-2-PENTANONE (...	4.989	43	78876	9.9159595	ppb		99
61)	TOLUENE	4.782	91	33570	2.0755126	ppb		99
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	12470	2.1247359	ppb	#	70
63)	1,1,2-TRICHLOROETHANE	5.130	97	7554	2.0013457	ppb		99
64)	TETRACHLOROETHENE	5.038	164	6789	1.9282835	ppb		96
65)	1,3-DICHLOROPROPANE	5.313	76	12619	1.9789975	ppb		100
66)	2-HEXANONE	5.532	58	33869	10.2851191	ppb		97
67)	CHLORODIBROMOMETHANE	5.258	129	9772	2.0571893	ppb		98
68)	1,2-DIBROMOETHANE	5.422	107	9034	1.9977543	ppb		100
69)	CHLOROBENZENE	5.770	112	20881	2.0389399	ppb		99
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	7575	1.9731925	ppb	#	98
71)	ETHYLBENZENE	5.776	106	10565	2.0576594	ppb		93
72)	M&P-XYLENE	5.880	106	25600	4.0412189	ppb		96
73)	O-XYLENE	6.178	106	13780	2.1468528	ppb		98
77)	STYRENE	6.215	104	21230	2.0570346	ppb		100
78)	BROMOFORM	6.239	173	8618	2.0587826	ppb		100
79)	ISOPROPYLBENZENE	6.398	105	33791	2.0973622	ppb		98
81)	BROMOBENZENE	6.690	77	15671	1.9495726	ppb		93
82)	1,1,2,2-TETRACHLOROETHANE	6.739	83	12920	1.9601651	ppb		98
83)	1,2,3-TRICHLOROPROPANE	6.849	110	3055	1.8124531	ppb		90
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	4444	2.0398627	ppb		96
85)	N-PROPYLBENZENE	6.703	91	38574	2.0178775	ppb		99
86)	4-ETHYLTOLUENE	6.782	105	30323	1.9754847	ppb		99
87)	2-CHLOROTOLUENE	6.824	91	23208	2.0003617	ppb		100
88)	4-CHLOROTOLUENE	6.946	91	21912	1.8246633	ppb		98
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	25503	2.0210747	ppb		98
90)	TERT-BUTYLBENZENE	7.087	119	20046	2.0102311	ppb		97
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	27031	2.1594458	ppb		99
92)	SEC-BUTYLBENZENE	7.221	105	29591	2.0217165	ppb		99
93)	1,3-DICHLOROBENZENE	7.398	146	15449	2.0326279	ppb		99
94)	P-ISOPROPYLTOLUENE	7.330	119	25853	2.0568415	ppb		99
95)	DICYCLOPENTADIENE	7.318	66	39803	2.0187418	ppb		100
96)	1,4-DICHLOROBENZENE	7.465	146	15618	1.9269675	ppb	#	1
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	25349	1.9731645	ppb		97
98)	1,2-DICHLOROBENZENE	7.794	146	13460	1.9140653	ppb		99
99)	N-BUTYLBENZENE	7.660	91	21729	1.9395244	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	3648	2.1051635	ppb		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_11.D
Acq On : 5 Sep 2018 2:52 pm
Operator : 605
Sample : STD VMS 2 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 11 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:48 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

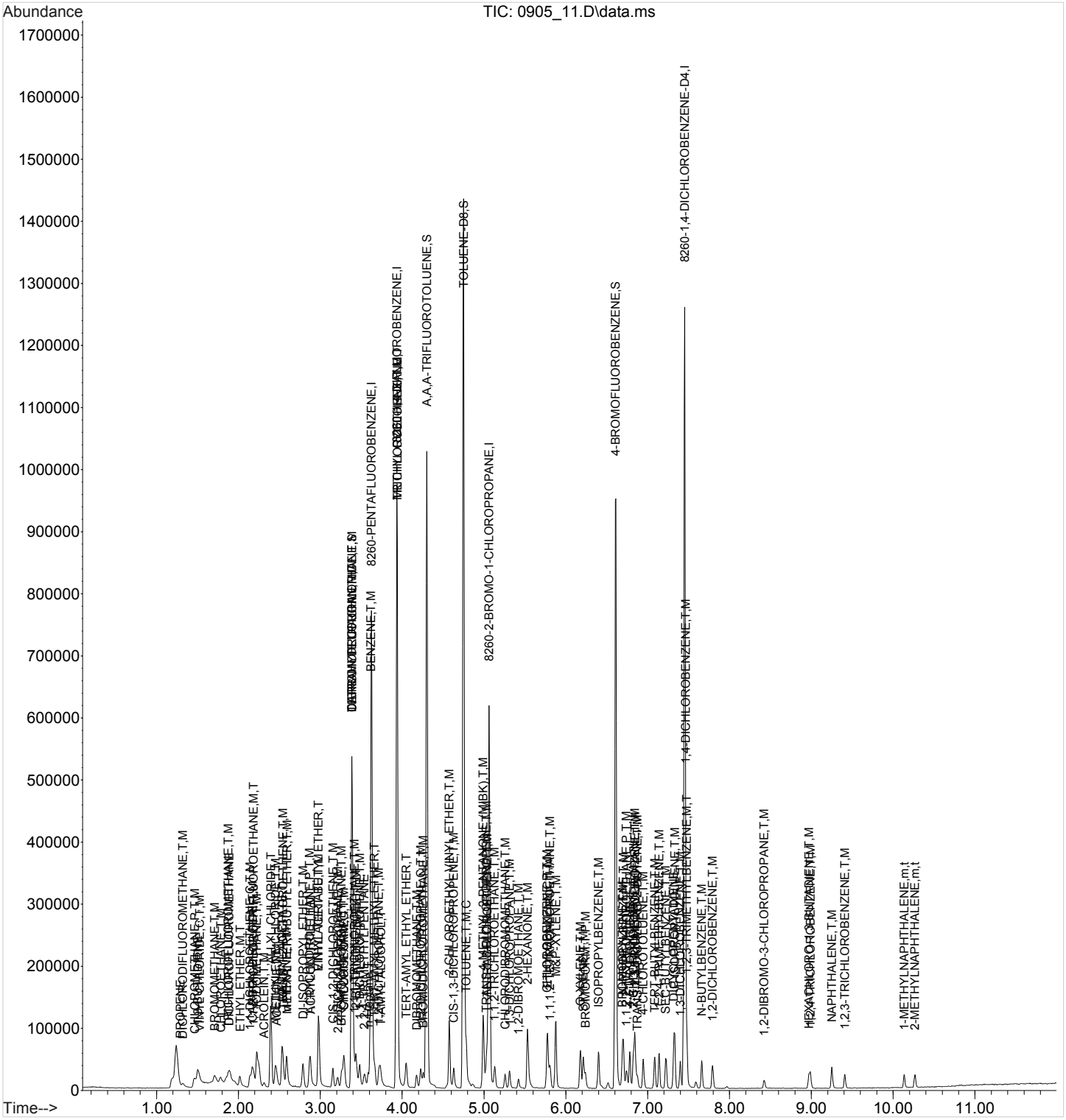
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	7172	2.0343955	ppb	96
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	3707	2.0221592	ppb	96
103) NAPHTHALENE	9.251	128	22420	1.8290165	ppb	99
104) 1,2,3-TRICHLOROBENZENE	9.409	180	6266	1.8922084	ppb	96
105) 1-METHYLNAPHTHALENE	10.135	142	8393	1.7875738	ppb	94
106) 2-METHYLNAPHTHALENE	10.263	142	8792	1.8781215	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_11.D
Acq On : 5 Sep 2018 2:52 pm
Operator : 605
Sample : STD VMS 2 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 11 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:06:48 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_12.D
Acq On : 5 Sep 2018 3:12 pm
Operator : 605
Sample : STD VMS 5.0 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 12 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:08:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.624	168	389487	40.0000000	ppb	0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	536904	40.0000000	ppb	0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	93536	40.0000000	ppb	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	264392	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb	-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb	-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb	-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb	-7.45
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.380	111	217741	41.3133521	ppb	0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 103.28%			
55) A,A,A-TRIFLUOROTOLUENE	4.301	146	331247	42.4429873	ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 106.11%			
60) TOLUENE-D8	4.746	98	643485	39.0434041	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 97.61%			
80) 4-BROMOFLUOROBENZENE	6.605	95	257993	43.1700638	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 107.93%			
Target Compounds						Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	-2200244m	0.8731861	ppm	
4) PROPENE	1.283	41	4323	1.8953676	ppb #	87
5) DICHLORODIFLUOROMETHANE	1.313	85	20144	4.7209358	ppb	97
6) CHLOROMETHANE	1.454	50	31248	4.4927452	ppb #	87
7) VINYL CHLORIDE	1.508	62	28795	4.9041389	ppb	97
8) 1,3-BUTADIENE	1.490	39	19082	4.2332760	ppb	96
9) BROMOMETHANE	1.697	94	19337	4.5997040	ppb	98
10) CHLOROETHANE	1.771	64	15116	3.7367713	ppb	94
11) TRICHLOROFLUOROMETHANE	1.862	101	27728	4.4574920	ppb	98
12) DICHLOROFLUOROMETHANE	1.880	67	34183	4.4139298	ug/l	96
13) ETHYL ETHER	2.008	59	17650	4.7705005	ppb	97
14) ACROLEIN	2.307	56	14912	21.8538261	ppb	92
15) 1,1-DICHLOROETHENE	2.130	96	16093	4.4960648	ppb	99
16) 1,1,2-TRICHLOROTRIFLUO...	2.173	101	17597	4.3989698	ppb	99
17) ACETONE	2.459	43	36032	18.2733385	ppb	96
18) IODOMETHANE	2.216	142	200242	24.1564120	ppb	100
19) CARBON DISULFIDE	2.161	76	58497	3.2297067	ppb	98
20) ALLYL CHLORIDE	2.386	76	53853	23.5243982	ppb	99
21) METHYLENE CHLORIDE	2.447	84	22437	3.3765108	ppb	98
22) METHYL ACETATE	2.527	43	126415	22.6451587	ppb #	99
23) ACRYLONITRILE	2.868	53	75723	26.9662035	ppb	99
24) n-HEXANE	2.581	56	13073	3.8603501	ppb	98
25) TRANS-1,2-DICHLOROETHENE	2.539	96	18183	4.4517528	ppb	100
26) METHYL TERT-BUTYL ETHER	2.587	73	49141	4.8298937	ppb	97
27) 1,1-DICHLOROETHANE	2.862	63	44340	5.0792526	ppb	99
28) VINYL ACETATE	2.972	43	243064	25.0864047	ppb	100
29) DI-ISOPROPYL ETHER	2.783	45	72817	4.7141023	ppb	98
30) ETHYL TERT-BUTYL ETHER	2.978	59	63026	4.9112094	ppb	99
31) 2,2-DICHLOROPROPANE	3.203	77	18581	4.2051426	ppb	98
32) CIS-1,2-DICHLOROETHENE	3.148	96	21433	4.7628627	ppb	99
33) 2-BUTANONE (MEK)	3.435	43	97595	24.1727058	ppb	99
34) BROMOCHLOROMETHANE	3.258	130	14459	5.0184423	ppb	99
35) TETRAHYDROFURAN	3.380	42	10229	3.6093612	ppb	99
36) CHLOROFORM	3.289	83	38669	4.9439434	ppb	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_12.D
Acq On : 5 Sep 2018 3:12 pm
Operator : 605
Sample : STD VMS 5.0 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 12 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:08:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	21355	4.7178658	ppb		99
39)	1,1,1-TRICHLOROETHANE	3.410	97	27425	4.8138108	ppb		99
40)	CARBON TETRACHLORIDE	3.380	117	25840	4.4283851	ppb		100
41)	1,1-DICHLOROPROPENE	3.478	75	27225	4.8739700	ppb		99
42)	2,2,4-TRIMETHYLPENTANE	3.539	57	44723	4.6983116	ppb		99
43)	n-Heptane	3.581	71	8594	4.2921941	ppb		89
44)	BENZENE	3.612	78	76605	4.7862378	ppb		93
45)	TERT-AMYL METHYL ETHER	3.660	73	48157	4.2429530	ppb		97
46)	1,2-DICHLOROETHANE	3.715	62	28318	4.7521858	ppb		100
47)	T-AMYL ALCOHOL	3.740	59	25802	27.2974504	ppb		100
49)	TRICHLOROETHENE	3.935	130	20986	4.7505163	ppb	#	99
50)	METHYL CYCLOHEXANE	3.941	83	29878	2.2431288	ppb		91
51)	TERT-AMYL ETHYL ETHER	4.045	59	47275	4.7448024	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	16709	4.8579496	ppb		98
53)	DIBROMOMETHANE	4.173	93	15360	4.8714098	ppb		98
54)	BROMODICHLOROMETHANE	4.258	83	27960	4.8397515	ppb		97
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	88262	22.8888018	ppb		99
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	35244	4.9815777	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	188150	24.1786606	ppb		100
61)	TOLUENE	4.782	91	73352	4.6357941	ppb		99
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	35225	6.1351848	ppb	#	70
63)	1,1,2-TRICHLOROETHANE	5.130	97	18999	5.1453393	ppb		99
64)	TETRACHLOROETHENE	5.038	164	17420	5.0576802	ppb		99
65)	1,3-DICHLOROPROPANE	5.313	76	29708	4.7624657	ppb		100
66)	2-HEXANONE	5.532	58	81462	25.2871666	ppb		99
67)	CHLORODIBROMOMETHANE	5.258	129	23293	5.0124998	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	21831	4.9348480	ppb		100
69)	CHLOROBENZENE	5.770	112	50363	5.0269304	ppb		99
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	17850	4.7529494	ppb		98
71)	ETHYLBENZENE	5.776	106	24831	4.9435205	ppb		98
72)	M&P-XYLENE	5.873	106	61404	9.9084843	ppb		99
73)	O-XYLENE	6.178	106	29535	4.7035760	ppb		97
77)	STYRENE	6.215	104	47092	4.8685850	ppb		100
78)	BROMOFORM	6.239	173	19592	4.9939798	ppb		98
79)	ISOPROPYLBENZENE	6.398	105	79888	5.2907588	ppb		99
81)	BROMOBENZENE	6.690	77	33167	4.4026373	ppb		99
82)	1,1,2,2-TETRACHLOROETHANE	6.739	83	30535	4.9430167	ppb		100
83)	1,2,3-TRICHLOROPROPANE	6.849	110	7232	4.5780232	ppb		99
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	10235	5.0127812	ppb		98
85)	N-PROPYLBENZENE	6.703	91	87679	4.8939522	ppb		100
86)	4-ETHYLTOLUENE	6.782	105	70858	4.9255464	ppb		99
87)	2-CHLOROTOLUENE	6.824	91	52295	4.8094454	ppb		99
88)	4-CHLOROTOLUENE	6.946	91	52137	4.6324503	ppb		100
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	58377	4.9362469	ppb		100
90)	TERT-BUTYLBENZENE	7.087	119	47380	5.0696425	ppb		99
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	58938	5.0238839	ppb		100
92)	SEC-BUTYLBENZENE	7.221	105	73401	5.3508972	ppb		100
93)	1,3-DICHLOROBENZENE	7.398	146	35714	5.0137193	ppb		99
94)	P-ISOPROPYLTOLUENE	7.330	119	59028	5.0108564	ppb		98
95)	DICYCLOPENTADIENE	7.318	66	92952	5.0302286	ppb		100
96)	1,4-DICHLOROBENZENE	7.465	146	36200	4.7656436	ppb	#	1
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	58819	4.8852199	ppb		98
98)	1,2-DICHLOROBENZENE	7.794	146	31330	4.7537473	ppb		100
99)	N-BUTYLBENZENE	7.660	91	53402	5.0860081	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	8743	5.3833856	ppb		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_12.D
Acq On : 5 Sep 2018 3:12 pm
Operator : 605
Sample : STD VMS 5.0 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 12 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:08:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	16466	4.9836466	ppb	99
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	8290	4.8251554	ppb	99
103) NAPHTHALENE	9.251	128	57311	4.9886613	ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	15843	5.1048150	ppb	96
105) 1-METHYLNAPHTHALENE	10.135	142	21580	4.9041327	ppb	98
106) 2-METHYLNAPHTHALENE	10.263	142	23086	5.2619741	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_12.D
Acq On : 5 Sep 2018 3:12 pm
Operator : 605
Sample : STD VMS 5.0 ppb 18I04497
Misc : water IS/SURR 18G31464
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QLast Update : Thu Sep 06 13:54:41 2018
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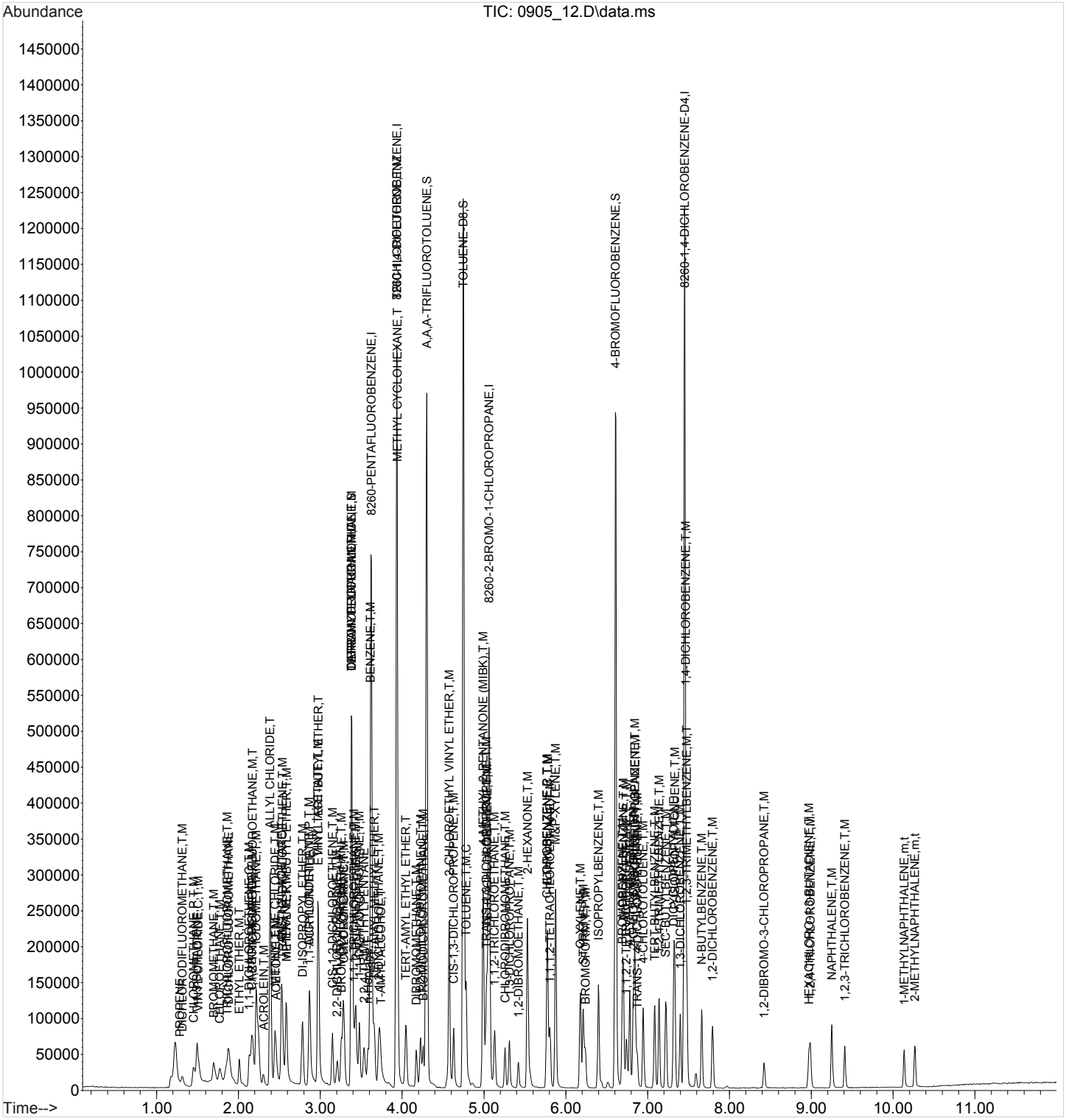

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_13.D
Acq On : 5 Sep 2018 3:32 pm
Operator : 605
Sample : MSTD VMS 25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 13 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:04:16 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:03:56 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 8260-PENTAFLUOROBENZENE	3.623	168	384836	40.0000000 ppb	0.00
48) 8260-1,4-DIFLUOROBENZENE	3.934	114	535163	40.0000000 ppb	0.00
56) 8260-2-BROMO-1-CHLOROP...	5.062	79	88071	40.0000000 ppb	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	245737	40.0000000 ppb	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000 ppb	-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000 ppb	-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000 ppb	-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000 ppb	-7.45
System Monitoring Compounds					
38) DIBROMOFLUOROMETHANE	3.386	111	227365	43.6607415 ppb	0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 109.15%		
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	342899	44.0789021 ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 110.20%		
60) TOLUENE-D8	4.751	98	688933	44.3947998 ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 110.99%		
80) 4-BROMOFLUOROBENZENE	6.611	95	240472	43.2929362 ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 108.23%		
Target Compounds					Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	2590133m	Below Cal	
4) PROPENE	1.288	41	31527	13.9896916 ppb	100
5) DICHLORODIFLUOROMETHANE	1.313	85	104632	24.8178515 ppb	100
6) CHLOROMETHANE	1.453	50	154839	16.0742886 ppb #	86
7) VINYL CHLORIDE	1.514	62	146362	25.2284917 ppb	100
8) 1,3-BUTADIENE	1.496	39	95014	21.3332767 ppb	100
9) BROMOMETHANE	1.703	94	94579	22.7694627 ppb	100
10) CHLOROETHANE	1.776	64	69896	17.4875607 ppb	100
11) TRICHLOROFLUOROMETHANE	1.861	101	149551	24.3320455 ppb	100
12) DICHLOROFLUOROMETHANE	1.886	67	167011	21.8261731 ug/l	100
13) ETHYL ETHER	2.014	59	88441	24.1930237 ppb	100
14) ACROLEIN	2.307	56	76607	113.6258950 ppb	100
15) 1,1-DICHLOROETHENE	2.136	96	84780	23.9721089 ppb	100
16) 1,1,2-TRICHLOROTRIFLUO...	2.179	101	96114	24.3173514 ppb	100
17) ACETONE	2.459	43	187837	96.4113021 ppb	99
18) IODOMETHANE	2.221	142	1025680	125.2294337 ppb	100
19) CARBON DISULFIDE	2.166	76	292309	16.3338645 ppb	100
20) ALLYL CHLORIDE	2.392	76	286568	126.6932822 ppb	100
21) METHYLENE CHLORIDE	2.447	84	102951	15.6801858 ppb	100
22) METHYL ACETATE	2.526	43	713007	129.2670472 ppb #	100
23) ACRYLONITRILE	2.873	53	367137	132.3236358 ppb	100
24) n-HEXANE	2.581	56	69441	20.7531812 ppb	100
25) TRANS-1,2-DICHLOROETHENE	2.538	96	96287	23.8589011 ppb	100
26) METHYL TERT-BUTYL ETHER	2.587	73	235707	23.4467868 ppb	100
27) 1,1-DICHLOROETHANE	2.861	63	217214	25.1831011 ppb	100
28) VINYL ACETATE	2.971	43	1142470	119.3383045 ppb	100
29) DI-ISOPROPYL ETHER	2.782	45	365766	23.9655182 ppb	100
30) ETHYL TERT-BUTYL ETHER	2.977	59	301210	23.7550182 ppb	100
31) 2,2-DICHLOROPROPANE	3.209	77	86405	19.7910027 ppb	100
32) CIS-1,2-DICHLOROETHENE	3.148	96	104798	23.5697713 ppb	100
33) 2-BUTANONE (MEK)	3.434	43	538693	135.0380955 ppb	100
34) BROMOCHLOROMETHANE	3.258	130	70981	24.9338913 ppb	100
35) TETRAHYDROFURAN	3.379	42	55455	19.8041018 ppb	100
36) CHLOROFORM	3.288	83	190324	24.6275595 ppb	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_13.D
Acq On : 5 Sep 2018 3:32 pm
Operator : 605
Sample : MSTD VMS 25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 13 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:04:16 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:03:56 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	109379	24.4566646	ppb		100
39)	1,1,1-TRICHLOROETHANE	3.416	97	139946	24.8610889	ppb		100
40)	CARBON TETRACHLORIDE	3.386	117	128738	22.3293923	ppb		100
41)	1,1-DICHLOROPROPENE	3.477	75	132474	24.0028543	ppb		100
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	217192	23.0925548	ppb		100
43)	n-Heptane	3.587	71	47396	23.9575811	ppb		100
44)	BENZENE	3.611	78	386026	24.4101804	ppb		100
45)	TERT-AMYL METHYL ETHER	3.660	73	245713	21.9105968	ppb		100
46)	1,2-DICHLOROETHANE	3.715	62	140109	23.7965578	ppb		100
47)	T-AMYL ALCOHOL	3.739	59	110628	118.4543599	ppb		100
49)	TRICHLOROETHENE	3.934	130	106679	24.2270560	ppb	#	100
50)	METHYL CYCLOHEXANE	3.946	83	126693	9.5425813	ppb		100
51)	TERT-AMYL ETHYL ETHER	4.044	59	246095	24.7799224	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	86082	25.1087708	ppb		100
53)	DIBROMOMETHANE	4.172	93	75967	24.1712431	ppb		100
54)	BROMODICHLOROMETHANE	4.257	83	144667	25.1226778	ppb		100
57)	2-CHLOROETHYL VINYL ETHER	4.574	63	508558	140.0669431	ppb		100
58)	CIS-1,3-DICHLOROPROPENE	4.629	75	175529	26.3497475	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	960925	131.1485141	ppb		100
61)	TOLUENE	4.782	91	383480	25.7395387	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	157535	29.1406727	ppb		100
63)	1,1,2-TRICHLOROETHANE	5.129	97	90779	26.1104607	ppb		100
64)	TETRACHLOROETHENE	5.038	164	83862	25.8591531	ppb		100
65)	1,3-DICHLOROPROPANE	5.312	76	154564	26.3155628	ppb		100
66)	2-HEXANONE	5.532	58	398054	131.2299488	ppb		100
67)	CHLORODIBROMOMETHANE	5.257	129	117852	26.9346765	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	114008	27.3704125	ppb		100
69)	CHLOROBENZENE	5.769	112	248975	26.3932507	ppb		100
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	89362	25.2710748	ppb		100
71)	ETHYLBENZENE	5.775	106	120288	25.4337443	ppb		100
72)	M&P-XYLENE	5.873	106	305723	52.3943601	ppb		100
73)	O-XYLENE	6.178	106	147299	24.9136213	ppb		100
77)	STYRENE	6.214	104	247559	27.5367133	ppb		100
78)	BROMOFORM	6.239	173	101547	27.8492091	ppb		100
79)	ISOPROPYLBENZENE	6.397	105	374774	26.7044493	ppb		100
81)	BROMOBENZENE	6.690	77	173484	24.7767252	ppb		100
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	151400	26.3692503	ppb		100
83)	1,2,3-TRICHLOROPROPANE	6.848	110	38454	26.1902020	ppb		100
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	52597	27.7159412	ppb		100
85)	N-PROPYLBENZENE	6.702	91	453577	27.2391100	ppb		100
86)	4-ETHYLTOLUENE	6.781	105	368121	27.5317537	ppb		100
87)	2-CHLOROTOLUENE	6.824	91	271128	26.8279173	ppb		100
88)	4-CHLOROTOLUENE	6.946	91	276629	26.4447947	ppb		100
89)	1,3,5-TRIMETHYLBENZENE	6.842	105	310669	28.2638150	ppb		100
90)	TERT-BUTYLBENZENE	7.086	119	225253	25.9316782	ppb		100
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	285417	26.1759103	ppb		100
92)	SEC-BUTYLBENZENE	7.226	105	335518	26.3158993	ppb		100
93)	1,3-DICHLOROBENZENE	7.397	146	172796	26.0995469	ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	291191	26.5955879	ppb		100
95)	DICYCLOPENTADIENE	7.324	66	438046	25.5050663	ppb		100
96)	1,4-DICHLOROBENZENE	7.464	146	180653	25.5879758	ppb		100
97)	1,2,3-TRIMETHYLBENZENE	7.476	105	285745	25.5342364	ppb		100
98)	1,2-DICHLOROBENZENE	7.793	146	167732	27.3822654	ppb		100
99)	N-BUTYLBENZENE	7.659	91	265711	27.2274403	ppb		100
100)	1,2-DIBROMO-3-CHLOROPR...	8.421	157	40695	26.9596231	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_13.D
Acq On : 5 Sep 2018 3:32 pm
Operator : 605
Sample : MSTD VMS 25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 13 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:04:16 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:03:56 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.988	180	76731	24.9866332 ppb	100
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	36574	22.9037708 ppb	100
103) NAPHTHALENE	9.250	128	263284	24.6574556 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	71019	24.6203881 ppb	100
105) 1-METHYLNAPHTHALENE	10.134	142	99756	24.3908848 ppb	100
106) 2-METHYLNAPHTHALENE	10.262	142	97760	23.9739153 ppb	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_13.D
Acq On : 5 Sep 2018 3:32 pm
Operator : 605
Sample : MSTD VMS 25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 13 Sample Multiplier: 1
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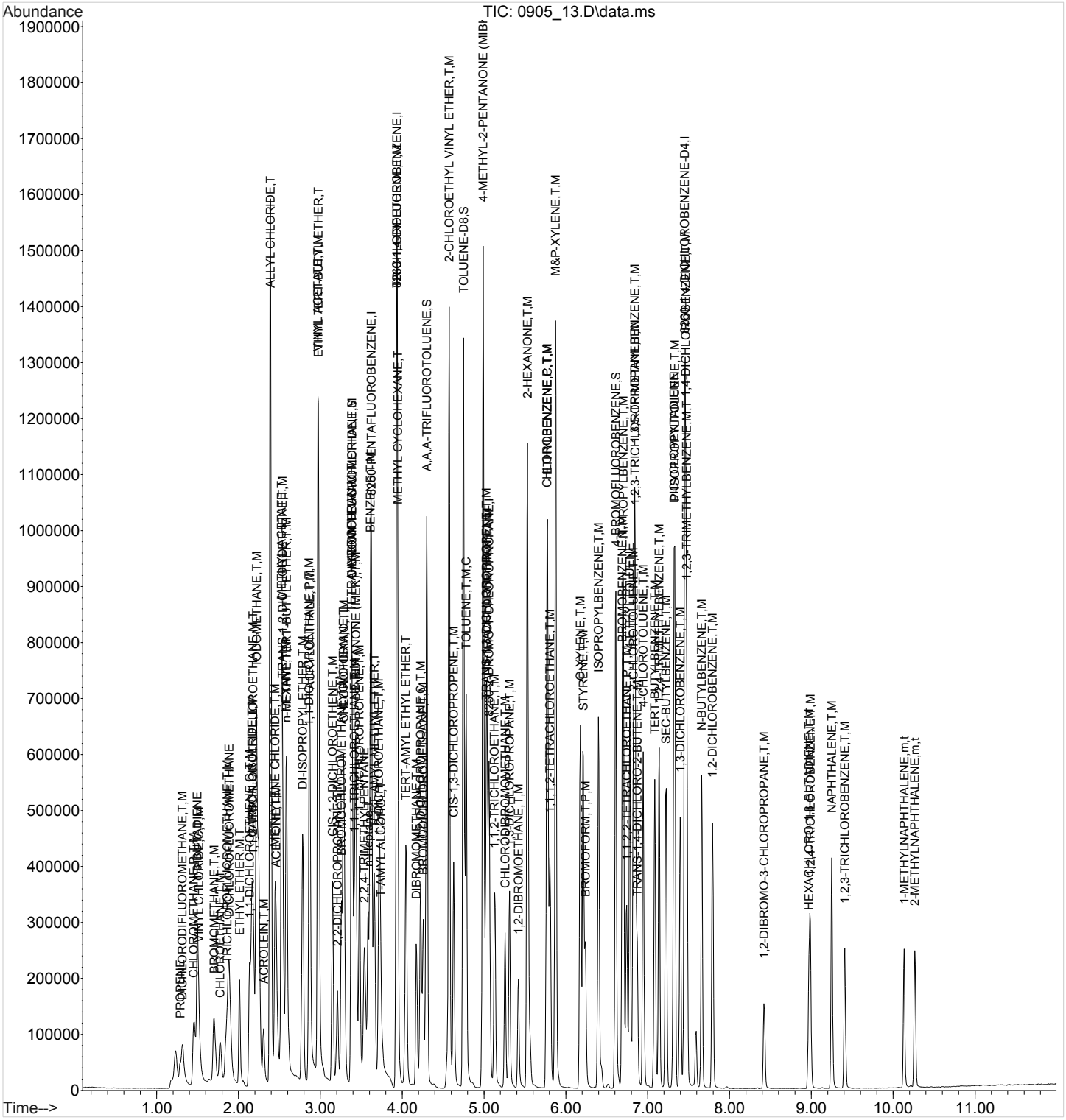
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:03:56 2018
Response via : Initial Calibration



Quantitation Report (Qedit)

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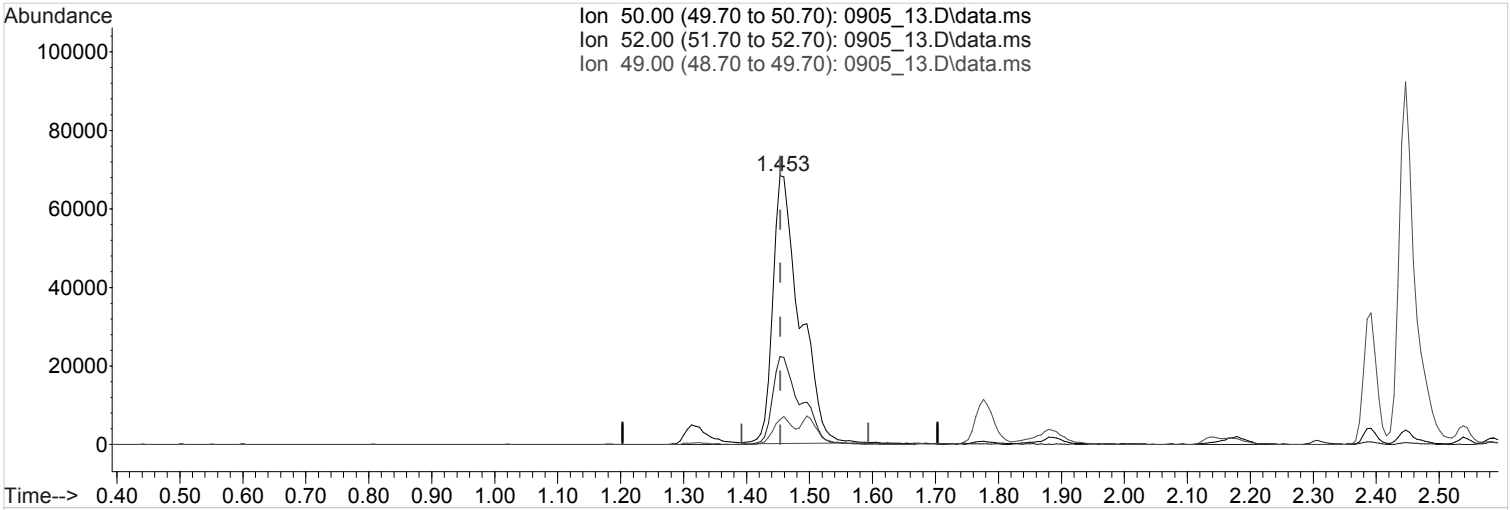
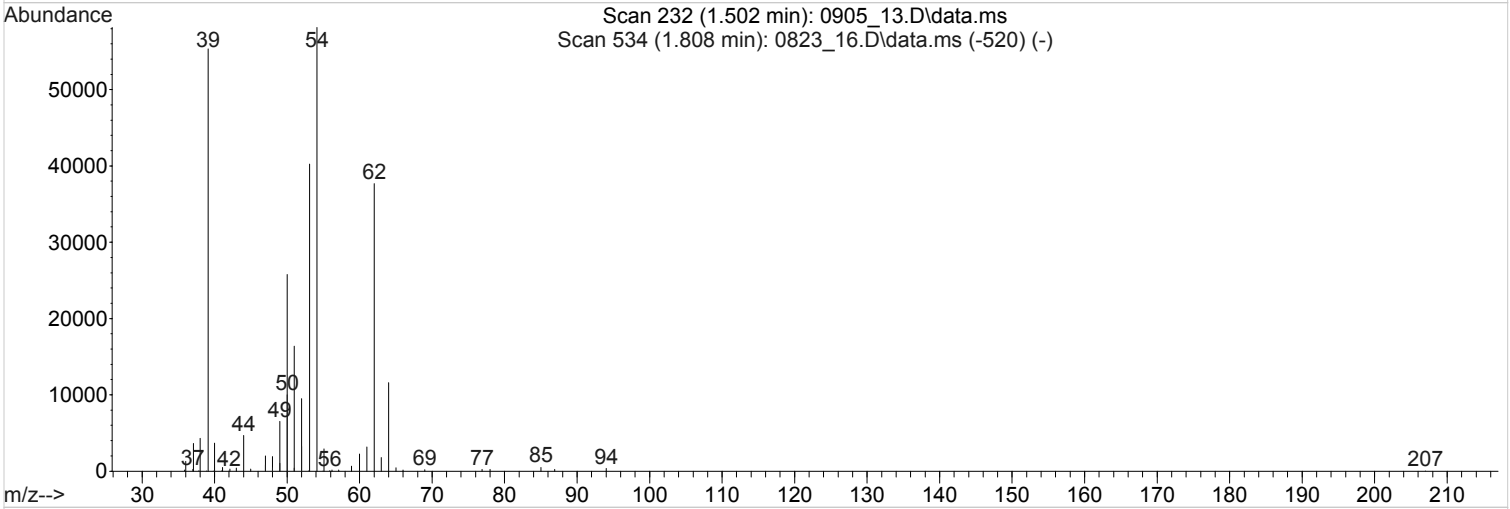
Operator : 605
Sample : MSTD VMS 25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 13 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 13:49:52 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:49:46 2018
Response via : Initial Calibration





TIC: 0905_13.D\data.ms

(6) CHLOROMETHANE (P,T,M)

1.453min (-0.000) 0.0000000 ppb

Qvalue = 1

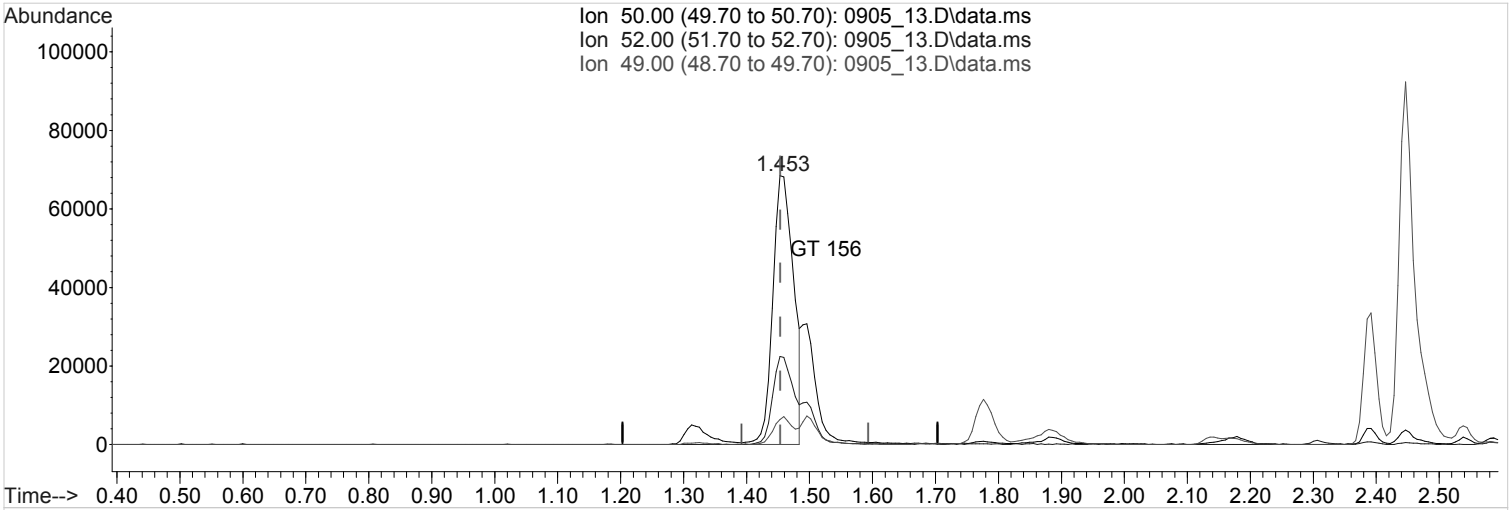
response 203221

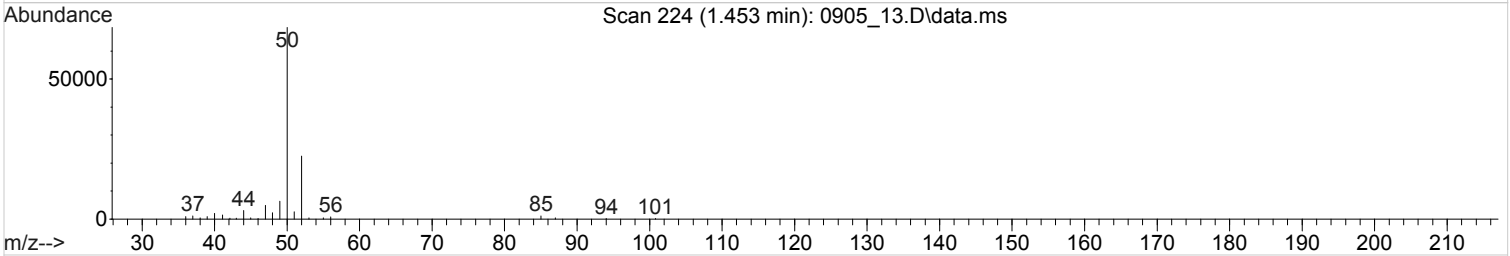
Ion	Exp%	Act%
50.00	100	100
52.00	48.60	34.12#
49.00	1799.00	7.18#
0.00	0.00	0.00

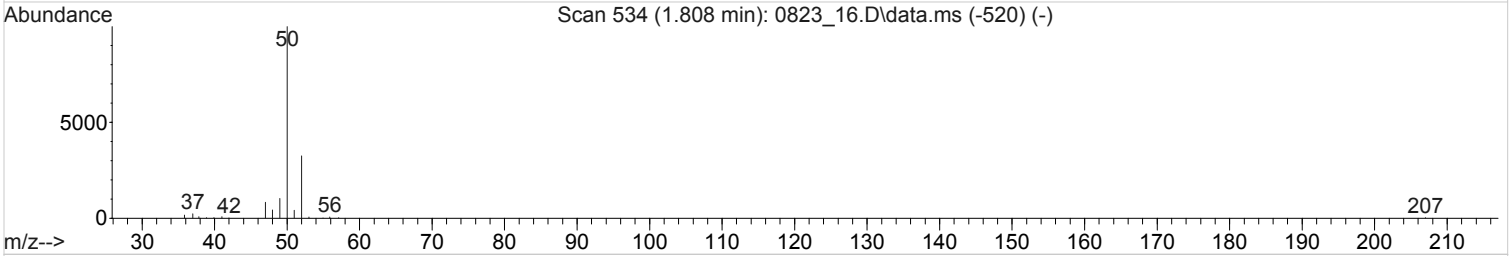
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_13.D
Acq On : 5 Sep 2018 3:32 pm
Operator : 605
Sample : MSTD VMS 25 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 13 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 13:49:52 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:49:46 2018
Response via : Initial Calibration







TIC: 0905_13.D\data.ms

(6) CHLOROMETHANE (P,T,M)

1.453min (-0.000) 0.0000000 ppb m

response 157346

Ion	Exp%	Act%
50.00	100	100
52.00	48.60	44.07
49.00	1799.00	9.28#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_14.D
Acq On : 5 Sep 2018 3:52 pm
Operator : 605
Sample : STD VMS 75 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 14 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:09:41 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 8260-PENTAFLUOROBENZENE	3.624	168	357270	40.0000000	ppb	0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	544153	40.0000000	ppb	0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	89969	40.0000000	ppb	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	223655	40.0000000	ppb	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb	-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb	-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb	-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb	-7.45
System Monitoring Compounds						
38) DIBROMOFLUOROMETHANE	3.386	111	218657	45.5258956	ppb	0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 113.81%			
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	327660	41.5137216	ppb	0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 103.78%			
60) TOLUENE-D8	4.752	98	677026	43.3722825	ppb	0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 108.43%			
80) 4-BROMOFLUOROBENZENE	6.611	95	235975	46.6470609	ppb	0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 116.62%			
Target Compounds						Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	27059239m	Below Cal		
4) PROPENE	1.283	41	125948	67.1490204	ppb	98
5) DICHLORODIFLUOROMETHANE	1.313	85	324310	83.6368972	ppb	100
6) CHLOROMETHANE	1.453	50	468635	74.7182611	ppb #	87
7) VINYL CHLORIDE	1.508	62	446292	83.1287307	ppb	100
8) 1,3-BUTADIENE	1.490	39	301793	74.9034871	ppb	97
9) BROMOMETHANE	1.697	94	263827	69.3410371	ppb	99
10) CHLOROETHANE	1.770	64	183057	51.5021879	ppb	98
11) TRICHLOROFLUOROMETHANE	1.856	101	437967	78.1691366	ppb	99
12) DICHLOROFLUOROMETHANE	1.880	67	459709	66.0028777	ug/l	99
13) ETHYL ETHER	2.008	59	239999	71.2623598	ppb	99
14) ACROLEIN	2.301	56	212373	346.5718615	ppb	95
15) 1,1-DICHLOROETHENE	2.136	96	252259	78.1440322	ppb	100
16) 1,1,2-TRICHLOROTRIFLUO...	2.167	101	302565	84.1427289	ppb	99
17) ACETONE	2.453	43	505972	292.8723077	ppb	100
18) IODOMETHANE	2.216	142	2990276	395.4888807	ppb	100
19) CARBON DISULFIDE	2.161	76	869899	55.6428831	ppb	100
20) ALLYL CHLORIDE	2.386	76	815985	392.4466895	ppb	99
21) METHYLENE CHLORIDE	2.447	84	302944	52.5441527	ppb	98
22) METHYL ACETATE	2.520	43	1832362	363.5435982	ppb #	100
23) ACRYLONITRILE	2.868	53	917784	351.7006249	ppb	92
24) n-HEXANE	2.581	56	221034	73.9650569	ppb	90
25) TRANS-1,2-DICHLOROETHENE	2.539	96	276819	75.2606432	ppb	99
26) METHYL TERT-BUTYL ETHER	2.587	73	695983	74.9994671	ppb	95
27) 1,1-DICHLOROETHANE	2.862	63	600129	74.7479637	ppb	99
28) VINYL ACETATE	2.971	43	3232898	363.5432687	ppb	99
29) DI-ISOPROPYL ETHER	2.782	45	1040449	74.1382058	ppb	99
30) ETHYL TERT-BUTYL ETHER	2.978	59	908356	77.3942140	ppb	99
31) 2,2-DICHLOROPROPANE	3.209	77	246786	62.5446990	ppb	99
32) CIS-1,2-DICHLOROETHENE	3.148	96	305381	74.5710197	ppb	99
33) 2-BUTANONE (MEK)	3.435	43	1503271	408.1626729	ppb	95
34) BROMOCHLOROMETHANE	3.252	130	198994	75.2489034	ppb	98
35) TETRAHYDROFURAN	3.374	42	145868	58.8391925	ppb	99
36) CHLOROFORM	3.282	83	535031	74.7133432	ppb	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_14.D
Acq On : 5 Sep 2018 3:52 pm
Operator : 605
Sample : STD VMS 75 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 14 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:09:41 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	334025	81.2129024	ppb		99
39)	1,1,1-TRICHLOROETHANE	3.410	97	420461	80.9595865	ppb		99
40)	CARBON TETRACHLORIDE	3.386	117	380238	72.4201849	ppb		99
41)	1,1-DICHLOROPROPENE	3.477	75	397816	77.9689958	ppb		99
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	659710	76.3220214	ppb		99
43)	n-Heptane	3.581	71	139042	77.5346401	ppb		95
44)	BENZENE	3.612	78	1054235	72.3230290	ppb		97
45)	TERT-AMYL METHYL ETHER	3.660	73	682000	67.2031480	ppb		99
46)	1,2-DICHLOROETHANE	3.715	62	407080	75.0947182	ppb		100
47)	T-AMYL ALCOHOL	3.740	59	348468	395.8463641	ppb		97
49)	TRICHLOROETHENE	3.935	130	316506	71.2845568	ppb	#	100
50)	METHYL CYCLOHEXANE	3.947	83	401885	32.7826734	ppb		100
51)	TERT-AMYL ETHYL ETHER	4.044	59	711929	71.1064594	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	240919	69.4401231	ppb		99
53)	DIBROMOMETHANE	4.172	93	214690	67.4708859	ppb		97
54)	BROMODICHLOROMETHANE	4.258	83	397733	68.2934706	ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	1452779	397.2745244	ppb		99
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	500537	73.5987728	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	2708614	363.8694469	ppb		99
61)	TOLUENE	4.782	91	1150715	76.5368416	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	455963	79.5539886	ppb		96
63)	1,1,2-TRICHLOROETHANE	5.130	97	270760	75.8673228	ppb		98
64)	TETRACHLOROETHENE	5.038	164	260484	78.4758384	ppb		99
65)	1,3-DICHLOROPROPANE	5.312	76	415452	69.7939131	ppb		99
66)	2-HEXANONE	5.532	58	1193750	384.5154089	ppb		99
67)	CHLORODIBROMOMETHANE	5.258	129	335906	75.1193267	ppb		100
68)	1,2-DIBROMOETHANE	5.416	107	315912	74.4040147	ppb		100
69)	CHLOROBENZENE	5.770	112	780412	80.9117200	ppb		100
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	257085	71.7594062	ppb		100
71)	ETHYLBENZENE	5.776	106	389319	80.7331736	ppb		96
72)	M&P-XYLENE	5.873	106	927952	155.9139207	ppb		100
73)	O-XYLENE	6.178	106	441333	73.7999408	ppb		99
77)	STYRENE	6.209	104	727490	89.3015419	ppb		99
78)	BROMOFORM	6.239	173	277802	83.7259794	ppb		100
79)	ISOPROPYLBENZENE	6.398	105	1068942	82.8841249	ppb		100
81)	BROMOBENZENE	6.690	77	479060	76.7010475	ppb		100
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	409856	78.5815966	ppb		100
83)	1,2,3-TRICHLOROPROPANE	6.849	110	98149	74.4950225	ppb		88
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	150534	87.1184647	ppb	#	96
85)	N-PROPYLBENZENE	6.702	91	1252374	82.9288786	ppb		100
86)	4-ETHYLTOLUENE	6.782	105	1057755	87.1363724	ppb		100
87)	2-CHLOROTOLUENE	6.824	91	763919	83.5832396	ppb		99
88)	4-CHLOROTOLUENE	6.946	91	769906	81.8701953	ppb		100
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	806960	80.8352364	ppb		100
90)	TERT-BUTYLBENZENE	7.087	119	633963	80.0034806	ppb		99
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	825240	83.0899601	ppb		100
92)	SEC-BUTYLBENZENE	7.227	105	1008797	85.9305981	ppb		99
93)	1,3-DICHLOROBENZENE	7.397	146	481605	79.8883861	ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	852096	85.4781236	ppb		99
95)	DICYCLOPENTADIENE	7.324	66	1200805	76.7421184	ppb		99
96)	1,4-DICHLOROBENZENE	7.464	146	482887	75.7415491	ppb	#	34
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	813491	80.1777248	ppb		100
98)	1,2-DICHLOROBENZENE	7.794	146	448064	81.0335803	ppb		100
99)	N-BUTYLBENZENE	7.660	91	677602	76.0712560	ppb		100
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	119474	85.8663889	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_14.D
Acq On : 5 Sep 2018 3:52 pm
Operator : 605
Sample : STD VMS 75 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 14 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:09:41 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

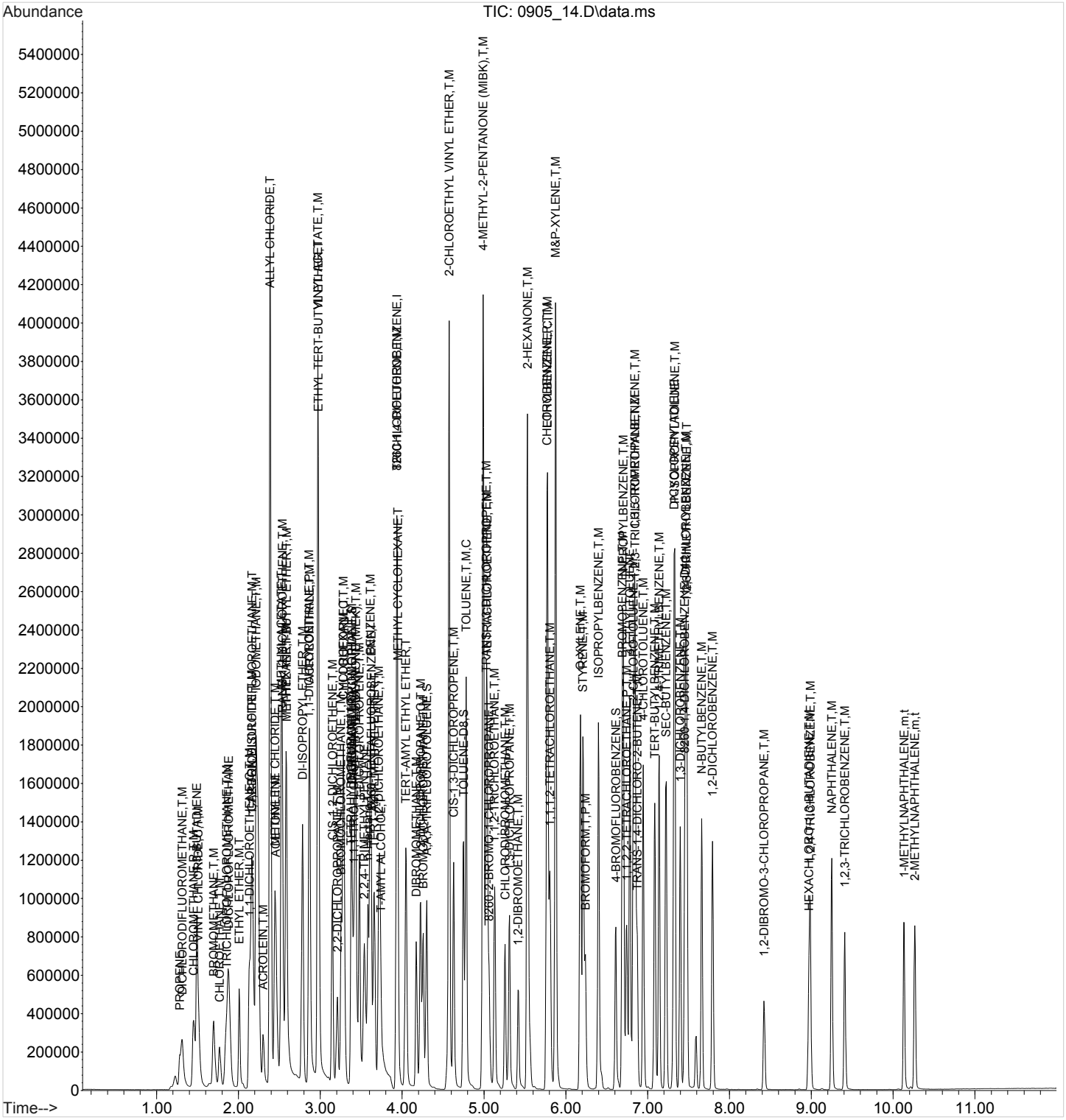
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	248684	89.0253054	ppb	100
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	103670	71.7493726	ppb	100
103) NAPHTHALENE	9.251	128	784094	80.7138454	ppb	99
104) 1,2,3-TRICHLOROBENZENE	9.409	180	231140	87.7349603	ppb	99
105) 1-METHYLNAPHTHALENE	10.135	142	366648	98.8143079	ppb	100
106) 2-METHYLNAPHTHALENE	10.263	142	342204	91.4068610	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_14.D
Acq On : 5 Sep 2018 3:52 pm
Operator : 605
Sample : STD VMS 75 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 14 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:09:41 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	257 of 332

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_15.D
Acq On : 5 Sep 2018 4:12 pm
Operator : 605
Sample : STD VMS 100 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 15 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:11:07 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.624	168	369545	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	520307	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.062	79	84092	40.0000000	ppb		0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	270304	40.0000000	ppb	#	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb		-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb		-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb		-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb		-7.45
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.386	111	223938	45.2795793	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 113.20%				
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	322947	43.5175110	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 108.79%				
60) TOLUENE-D8	4.752	98	691748	47.9411446	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 119.85%#				
80) 4-BROMOFLUOROBENZENE	6.611	95	282830	46.3101352	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 115.78%				
Target Compounds							Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	44214198m	Below Cal			
4) PROPENE	1.289	41	169239	88.5567506	ppb		97
5) DICHLORODIFLUOROMETHANE	1.313	85	434745	106.6386997	ppb		99
6) CHLOROMETHANE	1.453	50	600786	92.6561356	ppb	#	86
7) VINYL CHLORIDE	1.514	62	571406	101.3288885	ppb		100
8) 1,3-BUTADIENE	1.496	39	380112	91.2249259	ppb		99
9) BROMOMETHANE	1.691	94	270642	69.5187844	ppb		99
10) CHLOROETHANE	1.764	64	232183	66.1127842	ppb		98
11) TRICHLOROFLUOROMETHANE	1.856	101	584995	100.3371091	ppb		99
12) DICHLOROFLUOROMETHANE	1.880	67	609373	86.0596294	ug/l		100
13) ETHYL ETHER	2.008	59	333369	96.3847082	ppb		99
14) ACROLEIN	2.307	56	345978	551.8240973	ppb		97
15) 1,1-DICHLOROETHENE	2.130	96	350003	104.1974426	ppb		99
16) 1,1,2-TRICHLOROTRIFLUO...	2.173	101	398678	105.3540844	ppb		99
17) ACETONE	2.459	43	1107775	639.9372047	ppb		96
18) IODOMETHANE	2.215	142	3971233	503.8496461	ppb		100
19) CARBON DISULFIDE	2.161	76	1162566	74.6453974	ppb		100
20) ALLYL CHLORIDE	2.386	76	1043212	481.8627574	ppb		99
21) METHYLENE CHLORIDE	2.447	84	393081	68.8586317	ppb		99
22) METHYL ACETATE	2.526	43	3158569	608.5053085	ppb	#	100
23) ACRYLONITRILE	2.868	53	1498046	559.9625891	ppb		99
24) n-HEXANE	2.581	56	281801	91.3474105	ppb	#	70
25) TRANS-1,2-DICHLOROETHENE	2.539	96	368521	96.8161777	ppb		99
26) METHYL TERT-BUTYL ETHER	2.587	73	951311	99.1086874	ppb		99
27) 1,1-DICHLOROETHANE	2.862	63	793924	95.6470201	ppb		100
28) VINYL ACETATE	2.971	43	4311365	470.7688620	ppb		99
29) DI-ISOPROPYL ETHER	2.782	45	1398976	96.5326533	ppb		93
30) ETHYL TERT-BUTYL ETHER	2.977	59	1220300	100.0626910	ppb		99
31) 2,2-DICHLOROPROPANE	3.209	77	313648	78.7171364	ppb		99
32) CIS-1,2-DICHLOROETHENE	3.148	96	405994	95.9250233	ppb		100
33) 2-BUTANONE (MEK)	3.435	43	2335483	605.4101366	ppb		97
34) BROMOCHLOROMETHANE	3.258	130	284630	104.0073987	ppb		99
35) TETRAHYDROFURAN	3.380	42	241269	97.0769601	ppb		99
36) CHLOROFORM	3.288	83	763132	103.0825857	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_15.D
Acq On : 5 Sep 2018 4:12 pm
Operator : 605
Sample : STD VMS 100 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 15 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:11:07 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	469608	109.0941477	ppb		99
39)	1,1,1-TRICHLOROETHANE	3.416	97	555581	102.2626409	ppb		99
40)	CARBON TETRACHLORIDE	3.386	117	486807	90.0802330	ppb		100
41)	1,1-DICHLOROPROPENE	3.477	75	541621	102.0505365	ppb		100
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	800543	89.3137743	ppb		100
43)	n-Heptane	3.581	71	190371	102.1381767	ppb	#	52
44)	BENZENE	3.612	78	1473853	98.2522930	ppb		97
45)	TERT-AMYL METHYL ETHER	3.660	73	960532	92.8847558	ppb		97
46)	1,2-DICHLOROETHANE	3.715	62	541351	96.5293635	ppb		100
47)	T-AMYL ALCOHOL	3.740	59	578417	630.2294751	ppb		94
49)	TRICHLOROETHENE	3.935	130	410191	97.3073034	ppb	#	100
50)	METHYL CYCLOHEXANE	3.947	83	510021	47.3150840	ppb		98
51)	TERT-AMYL ETHYL ETHER	4.044	59	1010474	106.3387913	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	329033	100.2453086	ppb		99
53)	DIBROMOMETHANE	4.172	93	296348	98.8192013	ppb		99
54)	BROMODICHLOROMETHANE	4.258	83	536606	97.6085827	ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	1863674	540.6667332	ppb		100
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	669768	105.6471232	ppb		99
59)	4-METHYL-2-PENTANONE (...	4.989	43	3847820	555.3884535	ppb		98
61)	TOLUENE	4.782	91	1505998	106.8552607	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	636012	117.7022969	ppb		96
63)	1,1,2-TRICHLOROETHANE	5.130	97	375130	112.2724968	ppb		98
64)	TETRACHLOROETHENE	5.038	164	346728	111.0238300	ppb		100
65)	1,3-DICHLOROPROPANE	5.312	76	588950	106.9156907	ppb		99
66)	2-HEXANONE	5.532	58	1787381	613.7397853	ppb		97
67)	CHLORODIBROMOMETHANE	5.258	129	475855	113.8277299	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	449031	113.2760454	ppb		100
69)	CHLOROBENZENE	5.770	112	1012609	111.0719715	ppb		100
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	363909	109.3508399	ppb		100
71)	ETHYLBENZENE	5.776	106	495767	108.8041153	ppb		98
72)	M&P-XYLENE	5.873	106	1287637	230.1716460	ppb		99
73)	O-XYLENE	6.178	106	639732	114.7148803	ppb		99
77)	STYRENE	6.209	104	1028557	101.6983892	ppb		99
78)	BROMOFORM	6.239	173	421260	103.3337503	ppb		99
79)	ISOPROPYLBENZENE	6.398	105	1553900	98.2184196	ppb		99
81)	BROMOBENZENE	6.690	77	714322	94.3249690	ppb		99
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	621252	97.8882930	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	163601	102.8422103	ppb		99
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	223285	104.5082366	ppb	#	97
85)	N-PROPYLBENZENE	6.702	91	1874916	101.1974929	ppb		100
86)	4-ETHYLTOLUENE	6.782	105	1499973	99.9306498	ppb		100
87)	2-CHLOROTOLUENE	6.824	91	1176626	104.8077969	ppb		99
88)	4-CHLOROTOLUENE	6.946	91	1143638	99.3245230	ppb		99
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	1310577	107.4328127	ppb		99
90)	TERT-BUTYLBENZENE	7.086	119	954159	98.6898393	ppb		99
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	1215367	99.7150380	ppb		100
92)	SEC-BUTYLBENZENE	7.227	105	1472275	101.6505844	ppb		100
93)	1,3-DICHLOROBENZENE	7.397	146	780874	106.1878103	ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	1281604	104.2951271	ppb		100
95)	DICYCLOPENTADIENE	7.324	66	1877552	98.9556660	ppb		99
96)	1,4-DICHLOROBENZENE	7.464	146	786738	101.9604959	ppb	#	25
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	1213176	97.9690171	ppb		100
98)	1,2-DICHLOROBENZENE	7.794	146	719434	106.4337569	ppb		100
99)	N-BUTYLBENZENE	7.660	91	1142228	105.8862528	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	174902	101.8998384	ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_15.D
Acq On : 5 Sep 2018 4:12 pm
Operator : 605
Sample : STD VMS 100 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 15 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:11:07 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

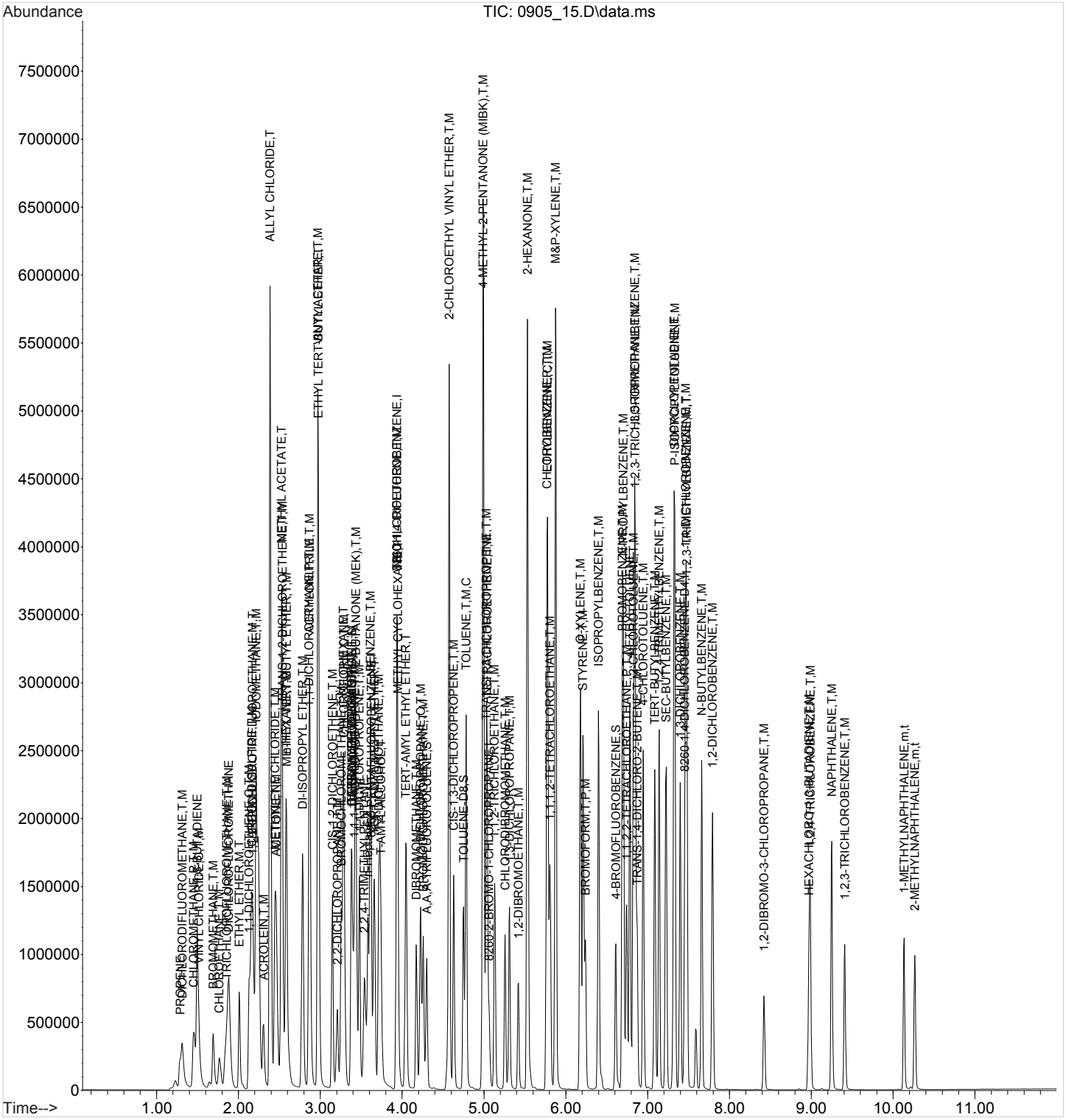
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	387056	111.6646529 ppb	100
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	158797	91.5020470 ppb	99
103) NAPHTHALENE	9.251	128	1185469	99.8838179 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	314851	96.5427847 ppb	100
105) 1-METHYLNAPHTHALENE	10.135	142	451548	96.3239876 ppb	99
106) 2-METHYLNAPHTHALENE	10.263	142	387798	83.1114704 ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_15.D
Acq On : 5 Sep 2018 4:12 pm
Operator : 605
Sample : STD VMS 100 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 15 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:11:07 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_16.D
Acq On : 5 Sep 2018 4:33 pm
Operator : 605
Sample : STD VMS 200 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 16 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:12:28 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.624	168	375969	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	531438	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	81670	40.0000000	ppb		0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	236950	40.0000000	ppb	#	0.00
107) AP9-PENTAFLUOROBENZENE	0.000	168	0m	40.0000000	ppb		-3.62
119) AP9-1,4-DIFLUOROBENZENE	0.000	114	0m	40.0000000	ppb		-3.93
124) AP9-2-BROMO-1-CHLOROPR...	0.000	79	0m	40.0000000	ppb		-5.06
128) AP9-1,4-DICHLOROBENZEN...	0.000	152	0m	40.0000000	ppb		-7.45
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.386	111	227964	45.6293023	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 114.07%				
55) A,A,A-TRIFLUOROTOLUENE	4.301	146	325369	43.4325606	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 108.58%				
60) TOLUENE-D8	4.752	98	648270	46.2674012	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 115.67%#				
80) 4-BROMOFLUOROBENZENE	6.611	95	228745	42.9154190	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 107.29%				
Target Compounds							Qvalue
2) TPH (GC/MS) LOW FRACTION	4.767	TIC	74946253m	Below Cal			
4) PROPENE	1.289	41	338558	176.6552827	ppb		97
5) DICHLORODIFLUOROMETHANE	1.313	85	830861	198.6711681	ppb		99
6) CHLOROMETHANE	1.454	50	1127734	172.5367083	ppb	#	87
7) VINYL CHLORIDE	1.515	62	1101560	191.6863203	ppb		100
8) 1,3-BUTADIENE	1.496	39	721256	172.0270326	ppb		99
9) BROMOMETHANE	1.697	94	651157	170.9144350	ppb		100
10) CHLOROETHANE	1.771	64	423604	123.8019975	ppb		98
11) TRICHLOROFLUOROMETHANE	1.856	101	1115603	187.9972210	ppb		99
12) DICHLOROFLUOROMETHANE	1.880	67	1128589	159.4416812	ug/l		100
13) ETHYL ETHER	2.008	59	616113	175.8837292	ppb		97
14) ACROLEIN	2.307	56	578840	895.8502398	ppb		97
15) 1,1-DICHLOROETHENE	2.142	96	663930	193.2636505	ppb		99
16) 1,1,2-TRICHLOROTRIFLUO...	2.173	101	772661	199.3593059	ppb		99
17) ACETONE	2.459	43	1185809	650.5520852	ppb		99
18) IODOMETHANE	2.240	142	7729914	963.0476496	ppb		99
19) CARBON DISULFIDE	2.173	76	2224552	144.9874175	ppb		100
20) ALLYL CHLORIDE	2.386	76	2090686	953.5173416	ppb		92
21) METHYLENE CHLORIDE	2.447	84	775951	139.0174824	ppb		97
22) METHYL ACETATE	2.527	43	4575003	843.4450971	ppb	#	100
23) ACRYLONITRILE	2.874	53	2498217	904.3098803	ppb		100
24) n-HEXANE	2.581	56	583086	187.8124679	ppb		88
25) TRANS-1,2-DICHLOROETHENE	2.539	96	695506	180.3157697	ppb		99
26) METHYL TERT-BUTYL ETHER	2.587	73	1867678	191.4655473	ppb		97
27) 1,1-DICHLOROETHANE	2.862	63	1601725	190.7064173	ppb		100
28) VINYL ACETATE	2.972	43	7489611	809.7535797	ppb		98
29) DI-ISOPROPYL ETHER	2.783	45	2690050	183.2424239	ppb		96
30) ETHYL TERT-BUTYL ETHER	2.978	59	2367366	190.7885180	ppb		99
31) 2,2-DICHLOROPROPANE	3.209	77	513249	130.0709837	ppb		99
32) CIS-1,2-DICHLOROETHENE	3.148	96	767739	179.2086722	ppb		99
33) 2-BUTANONE (MEK)	3.435	43	3494537	867.5237143	ppb		95
34) BROMOCHLOROMETHANE	3.258	130	521899	186.5156429	ppb		98
35) TETRAHYDROFURAN	3.380	42	359918	142.8641413	ppb		100
36) CHLOROFORM	3.289	83	1427387	188.7871575	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_16.D
Acq On : 5 Sep 2018 4:33 pm
Operator : 605
Sample : STD VMS 200 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 16 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:12:28 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	CYCLOHEXANE	3.282	84	905042	204.3341339	ppb		99
39)	1,1,1-TRICHLOROETHANE	3.417	97	1110890	200.4146146	ppb		99
40)	CARBON TETRACHLORIDE	3.386	117	997363	183.6792186	ppb		100
41)	1,1-DICHLOROPROPENE	3.478	75	1062056	196.1872416	ppb		99
42)	2,2,4-TRIMETHYLPENTANE	3.545	57	1628840	181.0371912	ppb		99
43)	n-Heptane	3.581	71	396152	208.3556378	ppb	#	62
44)	BENZENE	3.612	78	2976185	195.4400450	ppb		95
45)	TERT-AMYL METHYL ETHER	3.660	73	1763271	169.1012752	ppb		98
46)	1,2-DICHLOROETHANE	3.715	62	1051069	185.0185258	ppb		100
47)	T-AMYL ALCOHOL	3.740	59	734798	762.1259171	ppb		94
49)	TRICHLOROETHENE	3.935	130	805927	187.8132916	ppb	#	100
50)	METHYL CYCLOHEXANE	3.947	83	1022079	99.3777878	ppb		100
51)	TERT-AMYL ETHYL ETHER	4.051	59	1972579	201.6417598	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	653787	194.9551871	ppb		100
53)	DIBROMOMETHANE	4.173	93	551562	180.3359167	ppb		98
54)	BROMODICHLOROMETHANE	4.258	83	1015183	181.3360082	ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	3528451	1043.3808899	ppb		98
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	1270696	204.9331411	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	6132590	898.9710091	ppb		98
61)	TOLUENE	4.782	91	2825069	204.6383620	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	1194249	222.6390857	ppb		97
63)	1,1,2-TRICHLOROETHANE	5.130	97	640638	194.4395664	ppb		98
64)	TETRACHLOROETHENE	5.038	164	672183	218.6066219	ppb		99
65)	1,3-DICHLOROPROPANE	5.313	76	1014973	188.0924926	ppb		99
66)	2-HEXANONE	5.532	58	3023573	1039.4483136	ppb		96
67)	CHLORODIBROMOMETHANE	5.258	129	844281	204.4137394	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	779392	199.1415258	ppb		100
69)	CHLOROBENZENE	5.770	112	1840242	205.0030655	ppb		100
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	642170	196.3923789	ppb		100
71)	ETHYLBENZENE	5.782	106	918093	205.2074594	ppb		97
72)	M&P-XYLENE	5.880	106	2249636	406.3959794	ppb		99
73)	O-XYLENE	6.178	106	1142364	207.1107561	ppb		99
77)	STYRENE	6.215	104	1833938	206.4168256	ppb		100
78)	BROMOFORM	6.239	173	742729	206.9722317	ppb		99
79)	ISOPROPYLBENZENE	6.398	105	2772581	200.3632738	ppb		100
81)	BROMOBENZENE	6.690	77	1295607	196.5592395	ppb		100
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	1037307	186.9450273	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	268829	192.0954655	ppb		94
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	394282	209.3404598	ppb	#	97
85)	N-PROPYLBENZENE	6.703	91	3431240	210.9527537	ppb		100
86)	4-ETHYLTOLUENE	6.782	105	2704170	205.5335243	ppb		99
87)	2-CHLOROTOLUENE	6.824	91	1991925	201.1970945	ppb		98
88)	4-CHLOROTOLUENE	6.946	91	1991555	197.4798663	ppb		100
89)	1,3,5-TRIMETHYLBENZENE	6.849	105	2306188	213.6724177	ppb		100
90)	TERT-BUTYLBENZENE	7.087	119	1757999	207.7676374	ppb		99
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	2195854	205.5924509	ppb		99
92)	SEC-BUTYLBENZENE	7.227	105	2796739	219.8231939	ppb		100
93)	1,3-DICHLOROBENZENE	7.398	146	1379826	212.4063742	ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	2385236	220.2479261	ppb		100
95)	DICYCLOPENTADIENE	7.324	66	3404797	204.9759846	ppb		99
96)	1,4-DICHLOROBENZENE	7.465	146	1384635	204.2066532	ppb	#	12
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	2345597	216.6297286	ppb		100
98)	1,2-DICHLOROBENZENE	7.794	146	1241819	207.9044484	ppb		100
99)	N-BUTYLBENZENE	7.660	91	1993795	209.3048437	ppb		100
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	320420	212.4535323	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_16.D
Acq On : 5 Sep 2018 4:33 pm
Operator : 605
Sample : STD VMS 200 ppb 18I04497
Misc : water IS/SURR 18G31464
ALS Vial : 16 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:12:28 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 13:54:41 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-TRICHLOROBENZENE	8.989	180	767987	249.1178792	ppb	100
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	325138	216.0180047	ppb	100
103) NAPHTHALENE	9.251	128	2494136	239.7639579	ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	737021	258.9233668	ppb	100
105) 1-METHYLNAPHTHALENE	10.135	142	1014220	247.9468807	ppb	100
106) 2-METHYLNAPHTHALENE	10.263	142	894944	223.5184735	ppb	100

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

Quantitation Report (QT Reviewed)

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Data File : 0905_16.D
Acq On : 5 Sep 2018 4:33 pm
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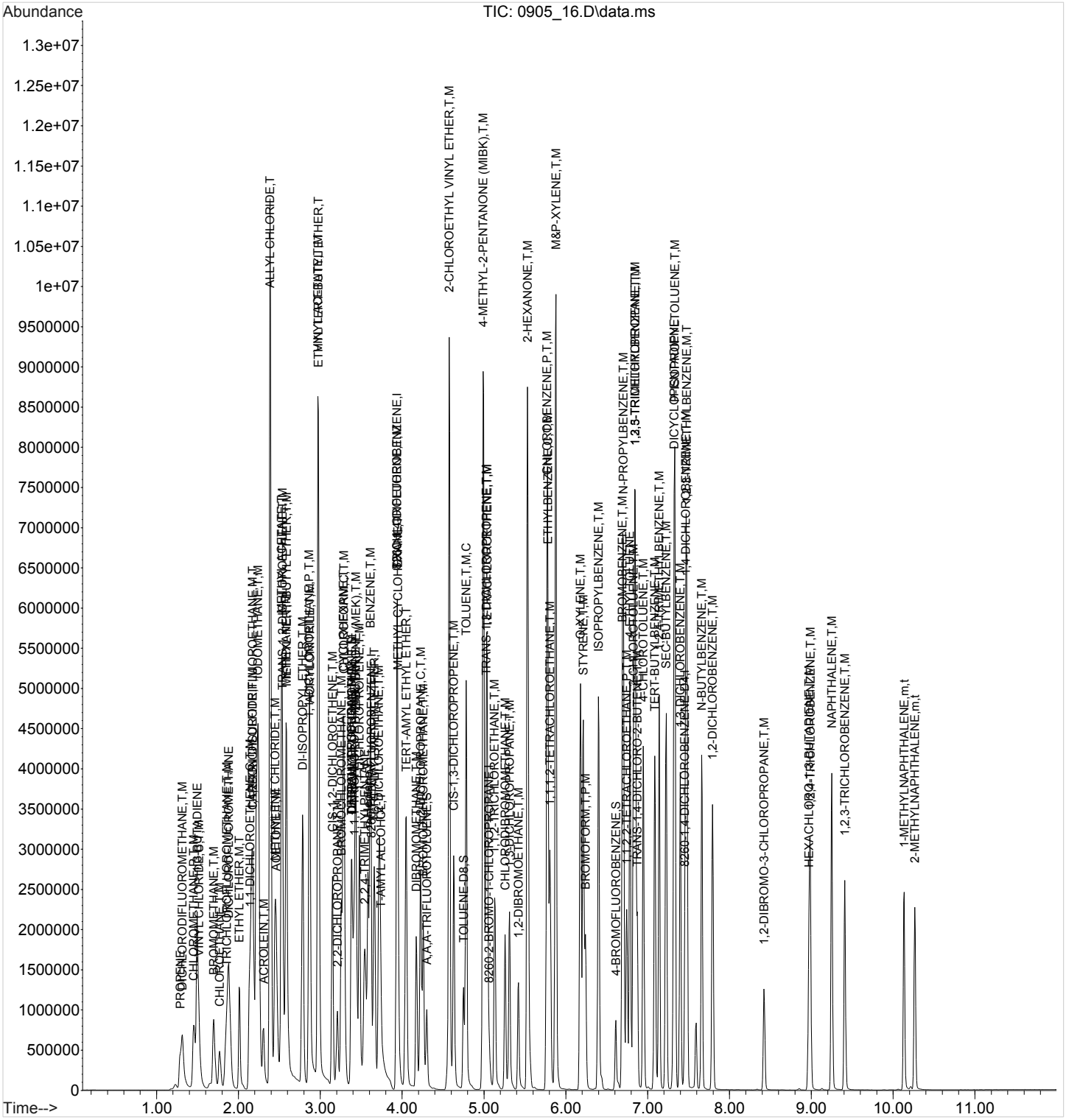


ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	265 of 332

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/05/18 13:52
Instrument ID:	VOCMS25	**Calibration (end) date/time:**	09/05/18 16:33
Lab File ID:	0905_19-1	**Analysis date/time:**	09/05/18 17:33
Analytical Method:	8260C	**Sample ID:**	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
1,1,1-TRICHLOROETHANE	0.589861	0.64238380		8.90	40	0.0250	0.02722607	109	70 - 130
1,1,2,2-TETRACHLOROETHANE	0.929898	0.95754270		2.97	40	0.0250	0.02574322	103	70 - 130
1,1,2-TRICHLOROETHANE	1.608725	1.685754		4.79	40	0.0250	0.02619705	105	70 - 130
1,1,2-TRICHLOROTRIFLUOROETHANE	0.412198	0.44755360		8.58	40	0.0250	0.02714434	109	70 - 130
1,1-DICHLOROETHANE	0.888961	0.91625410		3.07	40	0.0250	0.02576757	103	70 - 130
1,1-DICHLOROETHENE	0.364126	0.40221840		10.50	20.49	0.0250	0.02761533	110	70 - 130
1,2,3-TRICHLOROBENZENE	0.496250	0.50836620		2.44	40	0.0250	0.02561037	102	70 - 130
1,2,4-TRICHLOROBENZENE	0.534619	0.55215310		3.28	40	0.0250	0.02581994	103	70 - 130
1,2,4-TRIMETHYLBENZENE	1.808618	1.990695		10.10	40	0.0250	0.0275168	110	70 - 130
1,2-DIBROMO-3-CHLOROPROPANE	0.256362	0.28246430		10.20	40	0.0250	0.02754547	110	64 - 127
1,2-DIBROMOETHANE	1.915951	2.067623		7.92	40	0.0250	0.02697907	108	70 - 130
1,2-DICHLOROBENZENE	1.012747	1.125375		11.10	40	0.0250	0.02778029	111	70 - 130
1,2-DICHLOROETHANE	0.599369	0.64012770		6.80	40	0.0250	0.02670007	107	70 - 130
1,2-DICHLOROPROPANE	0.251704	0.27295490		8.44	20.49	0.0250	0.02711072	108	70 - 130
1,3,5-TRIMETHYLBENZENE	1.835844	1.879290		2.37	40	0.0250	0.02559163	102	70 - 130
1,3-DICHLOROBENZENE	1.104188	1.191635		7.92	40	0.0250	0.0269799	108	70 - 130
1,4-DICHLOROBENZENE	1.147314	1.187649		3.52	40	0.0250	0.0258789	104	70 - 130
2-BUTANONE (MEK)	0.422256	0.54297180		28.60	40	0.1250	0.1607353	129	37 - 158
2-HEXANONE	1.430917	1.249911		12.60	40	0.1250	0.109188	87.40	58 - 147
4-METHYL-2-PENTANONE (MIBK)	3.303642	3.371719		2.06	40	0.1250	0.1275758	102	59 - 143
ACETONE	0.170146	0.13929960		18.10	40	0.1250	0.1023382	81.90	10 - 160
BENZENE	1.616042	1.608058		0.4940	40	0.0250	0.02487649	99.50	70 - 130
BROMOCHLOROMETHANE	0.295470	0.32763910		10.90	40	0.0250	0.02772186	111	70 - 130
BROMODICHLOROMETHANE	0.417005	0.45549990		9.23	40	0.0250	0.02730784	109	70 - 130
BROMOFORM	0.608136	0.66986910		10.20	40	0.0250	0.02753781	110	70 - 130
BROMOMETHANE	0.398786	0.40855130		2.45	40	0.0250	0.02561218	102	18 - 160
CARBON DISULFIDE	1.333141	1.436532		7.76	40	0.0250	0.02693885	108	55 - 127
CARBON TETRACHLORIDE	0.572460	0.57937880		1.21	40	0.0250	0.02530214	101	70 - 130
CHLOROBENZENE	4.408770	4.864351		10.30	40	0.0250	0.02758338	110	70 - 130
CHLORODIBROMOMETHANE	2.027860	2.145492		5.80	40	0.0250	0.0264502	106	70 - 130
CHLOROETHANE	0.283102	0.31923550		12.80	40	0.0250	0.02819084	113	47 - 152
CHLOROFORM	0.799399	0.84345640		5.51	20.49	0.0250	0.02637784	106	70 - 130
CHLOROMETHANE	0.684788	0.71843850		4.91	40	0.0250	0.02622852	105	70 - 130
CIS-1,2-DICHLOROETHENE	0.450523	0.44905480		0.3260	40	0.0250	0.02491853	99.70	70 - 130
CIS-1,3-DICHLOROPROPENE	3.045198	3.099119		1.77	40	0.0250	0.02544268	102	70 - 130
CYCLOHEXANE	0.472368	0.58135890		23.10	40	0.0250	0.03076834	123	70 - 130
DICHLORODIFLUOROMETHANE	0.444612	0.52516560		18.10	40	0.0250	0.02952946	118	49 - 155
ETHYLBENZENE	2.197584	2.386858		8.61	20.49	0.0250	0.0271532	109	70 - 130
ISOPROPYLBENZENE	2.336453	2.522153		7.95	40	0.0250	0.02698698	108	70 - 130
M&P-XYLENE	2.716009	2.822860		3.93	40	0.05	0.05196706	104	70 - 130
METHYL ACETATE	0.567050	0.58290850		2.80	40	0.1250	0.1284958	103	70 - 130
METHYL CYCLOHEXANE	0.472269	0.45322940		4.03	40	0.0250	0.02857719	114	50 - 150
METHYL TERT-BUTYL ETHER	1.032893	1.128387		9.25	40	0.0250	0.02731134	109	70 - 130
METHYLENE CHLORIDE	0.469490	0.46322180		1.34	40	0.0250	0.02466624	98.70	70 - 130
N-BUTYLBENZENE	1.616381	1.694522		4.83	40	0.0250	0.02620858	105	70 - 130
N-PROPYLBENZENE	2.762510	2.819363		2.06	40	0.0250	0.02551451	102	70 - 130
NAPHTHALENE	1.794854	1.967404		9.61	40	0.0250	0.02740341	110	62 - 128
O-XYLENE	2.712137	2.894980		6.74	40	0.0250	0.02668542	107	70 - 130

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/05/18 13:52
Instrument ID:	VOCMS25	**Calibration (end) date/time:**	09/05/18 16:33
Lab File ID:	0905_19-1	**Analysis date/time:**	09/05/18 17:33
Analytical Method:	8260C	**Sample ID:**	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
P-ISOPROPYLTOLUENE	1.848761	1.864537		0.8530	40	0.0250	0.02521333	101	70 - 130
SEC-BUTYLBENZENE	2.171393	2.329374		7.28	40	0.0250	0.0268189	107	70 - 130
STYRENE	1.505180	1.654940		9.95	40	0.0250	0.02748741	110	70 - 130
TERT-BUTYLBENZENE	1.434545	1.618481		12.80	40	0.0250	0.02820547	113	70 - 130
TETRACHLOROETHENE	1.521556	1.559197		2.47	40	0.0250	0.02561847	102	70 - 130
TOLUENE	6.778867	6.952626		2.56	20.49	0.0250	0.02564081	103	70 - 130
TRANS-1,2-DICHLOROETHENE	0.405882	0.40753750		0.4080	40	0.0250	0.02510198	100	70 - 130
TRANS-1,3-DICHLOROPROPENE	2.660229	2.856484		7.38	40	0.0250	0.02684434	107	70 - 130
TRICHLOROETHENE	0.320794	0.31571920		1.58	40	0.0250	0.02460451	98.40	70 - 130
TRICHLOROFLUOROMETHANE	0.627134	0.71124720		13.40	40	0.0250	0.02835307	113	70 - 130
VINYL CHLORIDE	0.608575	0.69506130		14.20	20.49	0.0250	0.0285528	114	70 - 130
4-BROMOFLUOROBENZENE	0.887376	0.95271580		7.36	40	0.04	0.04294529	107	70 - 130
A,A,A-TRIFLUOROTOLUENE	0.556737	0.59330270		6.57	40	0.04	0.04262711	107	70 - 130
DIBROMOFLUOROMETHANE	0.527471	0.55329190		4.90	40	0.04	0.04195813	105	70 - 130
TOLUENE-D8	6.819913	6.964731		2.12	40	0.04	0.04084938	102	70 - 130

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_19.D
Acq On : 5 Sep 2018 5:33 pm
Operator : 605
Sample : SSCV VMS 25 ppb 18I04480
Misc : water IS/SURR 18G31464
ALS Vial : 19 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:18:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.624	168	370891	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.935	114	522155	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.063	79	89484	40.0000000	ppb		0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	248476	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.624	168	373792	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.935	114	522155	40.0000000	ppb		0.00
124) AP9-2-BROMO-1-CHLOROPR...	5.063	79	89484	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.452	152	248476	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.386	111	205211	41.9581310	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 104.90%				
55) A,A,A-TRIFLUOROTOLUENE	4.300	146	309796	42.6271130	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 106.57%				
60) TOLUENE-D8	4.752	98	623232	40.8493841	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 102.12%				
80) 4-BROMOFLUOROBENZENE	6.605	95	236727	42.9452952	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 107.36%				
Target Compounds							Qvalue
4) PROPENE	1.283	41	75635	45.8493576	ppb		98
5) DICHLORODIFLUOROMETHANE	1.313	85	121737	29.5294624	ppb		100
6) CHLOROMETHANE	1.453	50	166539	26.2285207	ppb	#	87
7) VINYL CHLORIDE	1.508	62	161120	28.5527989	ppb		99
8) 1,3-BUTADIENE	1.490	39	118490	31.3902236	ppb		98
9) BROMOMETHANE	1.697	94	94705	25.6121837	ppb		100
10) CHLOROETHANE	1.770	64	74001	28.1908441	ppb		99
11) TRICHLOROFLUOROMETHANE	1.856	101	164872	28.3530687	ppb		100
12) DICHLOROFLUOROMETHANE	1.880	67	203038	29.7472450	ug/l		99
13) ETHYL ETHER	2.008	59	89743	26.3226492	ppb		98
14) ACROLEIN	2.307	56	8498	13.4882124	ppb		86
15) 1,1-DICHLOROETHENE	2.136	96	93237	27.6153326	ppb		99
16) 1,1,2-TRICHLOROTRIFLUO...	2.167	101	103746	27.1443368	ppb		96
17) ACETONE	2.459	43	161453	102.3382381	ppb		97
18) IODOMETHANE	2.222	142	1035745	131.3465003	ppb		100
19) CARBON DISULFIDE	2.167	76	332998	26.9388541	ppb		99
20) ALLYL CHLORIDE	2.386	76	284723	132.3173848	ppb		98
21) METHYLENE CHLORIDE	2.447	84	107378	24.6662424	ppb		99
22) METHYL ACETATE	2.526	43	675611	128.4957947	ppb	#	99
23) ACRYLONITRILE	2.868	53	341908	126.8073321	ppb		99
24) n-HEXANE	2.581	56	82387	27.0836243	ppb		95
25) TRANS-1,2-DICHLOROETHENE	2.539	96	94470	25.1019785	ppb		99
26) METHYL TERT-BUTYL ETHER	2.587	73	261568	27.3113415	ppb		94
27) 1,1-DICHLOROETHANE	2.862	63	212394	25.7675694	ppb		99
28) VINYL ACETATE	2.971	43	1115399	124.8844475	ppb		99
29) DI-ISOPROPYL ETHER	2.782	45	384940	26.8303648	ppb		98
30) ETHYL TERT-BUTYL ETHER	2.978	59	312305	25.6448234	ppb		97
31) 2,2-DICHLOROPROPANE	3.209	77	93695	27.4459050	ppb		99
32) CIS-1,2-DICHLOROETHENE	3.148	96	104094	24.9185334	ppb		97
33) 2-BUTANONE (MEK)	3.429	43	629323	160.7352795	ppb		100
34) BROMOCHLOROMETHANE	3.258	130	75949	27.7218546	ppb		95
35) TETRAHYDROFURAN	3.374	42	57029	26.9705847	ppb		99
36) CHLOROFORM	3.282	83	195519	26.3778417	ppb		99
37) CYCLOHEXANE	3.282	84	134763	30.7683453	ppb		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_19.D
Acq On : 5 Sep 2018 5:33 pm
Operator : 605
Sample : SSCV VMS 25 ppb 18I04480
Misc : water IS/SURR 18G31464
ALS Vial : 19 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:18:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.416	97	148909	27.2260724	ppb		99
40)	CARBON TETRACHLORIDE	3.386	117	134304	25.3021376	ppb		100
41)	1,1-DICHLOROPROPENE	3.477	75	139582	26.1926477	ppb		100
42)	2,2,4-TRIMETHYLPENTANE	3.538	57	266424	30.3366751	ppb		97
43)	n-Heptane	3.581	71	51070	27.1021450	ppb		99
44)	BENZENE	3.612	78	372759	24.8764903	ppb		99
45)	TERT-AMYL METHYL ETHER	3.660	73	238392	23.5800677	ppb		99
46)	1,2-DICHLOROETHANE	3.709	62	148386	26.7000722	ppb		100
47)	T-AMYL ALCOHOL	3.733	59	144697	156.2633224	ppb		89
49)	TRICHLOROETHENE	3.935	130	103034	24.6045081	ppb	#	100
50)	METHYL CYCLOHEXANE	3.947	83	147910	28.5771944	ppb		99
51)	TERT-AMYL ETHYL ETHER	4.044	59	255305	26.5376599	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.221	62	89078	27.1107187	ppb		100
53)	DIBROMOMETHANE	4.172	93	77848	26.1914215	ppb		98
54)	BROMODICHLOROMETHANE	4.258	83	148651	27.3078414	ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.575	63	433744	116.4987111	ppb	#	84
58)	CIS-1,3-DICHLOROPROPENE	4.630	75	173326	25.4426768	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	942859	127.5758266	ppb		99
61)	TOLUENE	4.782	91	388843	25.6408113	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.026	75	159756	26.8443377	ppb		100
63)	1,1,2-TRICHLOROETHANE	5.130	97	94280	26.1970481	ppb		97
64)	TETRACHLOROETHENE	5.038	164	87202	25.6184670	ppb		97
65)	1,3-DICHLOROPROPANE	5.312	76	148875	25.3476930	ppb		99
66)	2-HEXANONE	5.532	58	349522	109.1879488	ppb		100
67)	CHLORODIBROMOMETHANE	5.258	129	119992	26.4501967	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	115637	26.9790745	ppb		100
69)	CHLOROBENZENE	5.770	112	272051	27.5833793	ppb		100
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	94095	26.3165911	ppb		99
71)	ETHYLBENZENE	5.776	106	133491	27.1531992	ppb		99
72)	M&P-XYLENE	5.873	106	315751	51.9670592	ppb		99
73)	O-XYLENE	6.178	106	161909	26.6854196	ppb		98
77)	STYRENE	6.209	104	257008	27.4874143	ppb		99
78)	BROMOFORM	6.239	173	104029	27.5378111	ppb		100
79)	ISOPROPYLBENZENE	6.398	105	391684	26.9869829	ppb		99
81)	BROMOBENZENE	6.690	77	166126	24.0802513	ppb		100
82)	1,1,2,2-TETRACHLOROETHANE	6.739	83	148704	25.7432182	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	34963	23.9294831	ppb		88
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	53162	26.7776222	ppb	#	98
85)	N-PROPYLBENZENE	6.702	91	437840	25.5145074	ppb		99
86)	4-ETHYLTOLUENE	6.782	105	376288	27.1899408	ppb		100
87)	2-CHLOROTOLUENE	6.824	91	265266	25.5337055	ppb		99
88)	4-CHLOROTOLUENE	6.946	91	266796	25.2633286	ppb		100
89)	1,3,5-TRIMETHYLBENZENE	6.843	105	291849	25.5916265	ppb		100
90)	TERT-BUTYLBENZENE	7.087	119	251346	28.2054751	ppb		99
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	309150	27.5168043	ppb		99
92)	SEC-BUTYLBENZENE	7.221	105	361746	26.8188955	ppb		99
93)	1,3-DICHLOROBENZENE	7.397	146	185058	26.9798963	ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	289558	25.2133334	ppb		99
95)	DICYCLOPENTADIENE	7.318	66	378553	21.6726388	ppb		99
96)	1,4-DICHLOROBENZENE	7.464	146	184439	25.8789012	ppb		99
97)	1,2,3-TRIMETHYLBENZENE	7.477	105	283656	24.7534072	ppb		100
98)	1,2-DICHLOROBENZENE	7.794	146	174768	27.7802849	ppb		100
99)	N-BUTYLBENZENE	7.660	91	263155	26.2085762	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.422	157	43866	27.5454749	ppb		99
101)	1,2,4-TRICHLOROBENZENE	8.989	180	85748	25.8199384	ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_19.D
Acq On : 5 Sep 2018 5:33 pm
Operator : 605
Sample : SSCV VMS 25 ppb 18I04480
Misc : water IS/SURR 18G31464
ALS Vial : 19 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:18:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

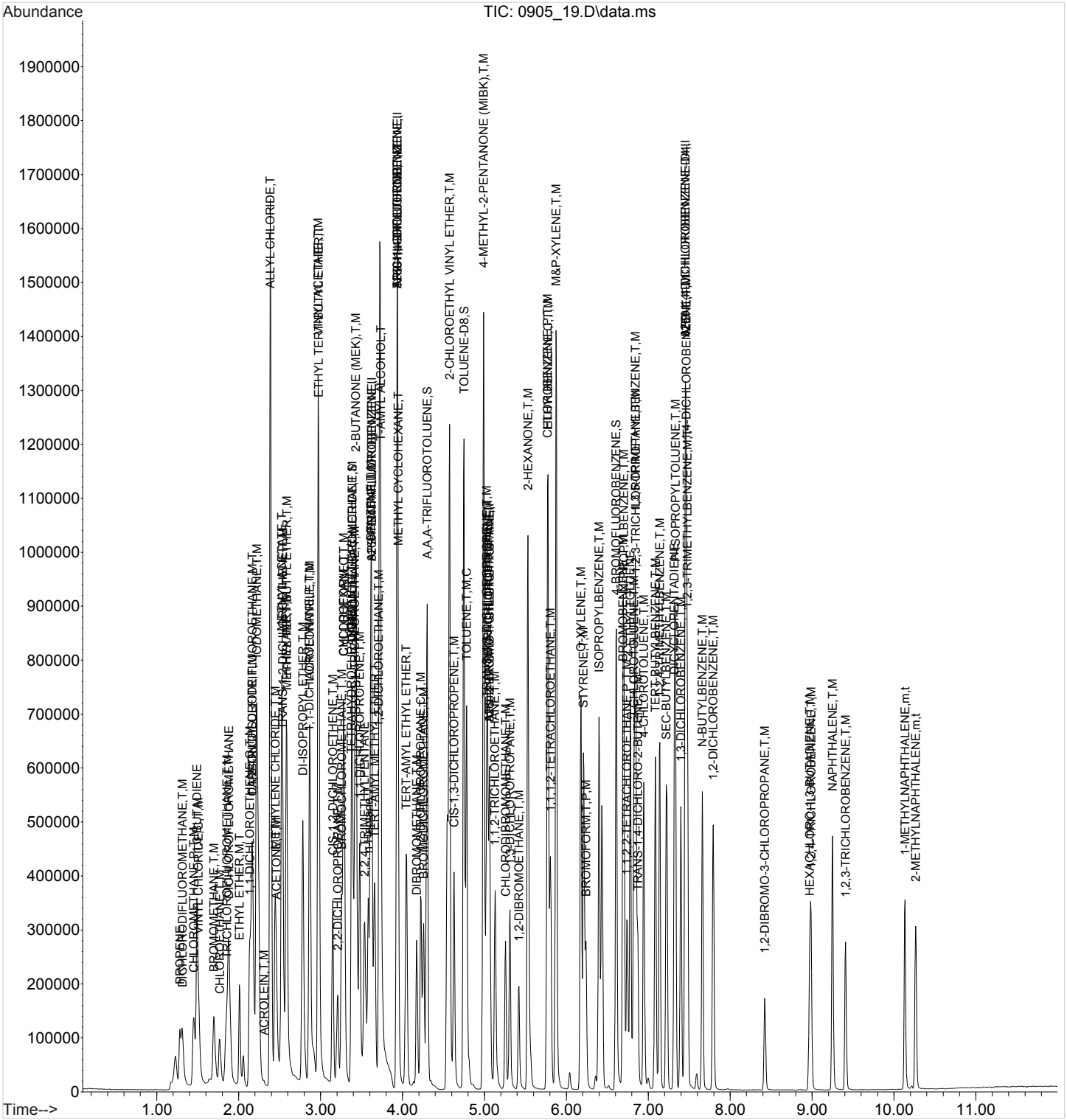
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	41528	26.0788152 ppb	99
103) NAPHTHALENE	9.251	128	305533	27.4034068 ppb	99
104) 1,2,3-TRICHLOROBENZENE	9.409	180	78948	25.6103669 ppb	99
105) 1-METHYLNAPHTHALENE	10.135	142	141529	32.1386185 ppb	99
106) 2-METHYLNAPHTHALENE	10.263	142	121960	28.6727654 ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090518\
Data File : 0905_19.D
Acq On : 5 Sep 2018 5:33 pm
Operator : 605
Sample : SSCV VMS 25 ppb 18I04480
Misc : water IS/SURR 18G31464
ALS Vial : 19 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 06 14:18:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	271 of 332

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/05/18 13:52
Instrument ID:	VOCMS25	**Calibration (end) date/time:**	09/05/18 16:33
Lab File ID:	0925_02-1	**Analysis date/time:**	09/25/18 09:09
Analytical Method:	8260C	**Sample ID:**	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
1,1,1-TRICHLOROETHANE	0.589861	0.60200970	0.10	2.06	20	0.0250	0.0255149	102	
1,1,2,2-TETRACHLOROETHANE	0.929898	0.75026620	0.30	19.30	20	0.0250	0.02017066	80.70	
1,1,2-TRICHLOROETHANE	1.608725	1.663340	0.10	3.39	20	0.0250	0.02584873	103	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.412198	0.41349320	0.10	0.3140	20	0.0250	0.02507856	100	
1,1-DICHLOROETHANE	0.888961	0.84870650	0.20	4.53	20	0.0250	0.02386795	95.50	
1,1-DICHLOROETHENE	0.364126	0.36668830	0.10	0.7040	20	0.0250	0.02517592	101	
1,2,3-TRICHLOROBENZENE	0.496250	0.40716050		18	20	0.0250	0.02051185	82	
1,2,4-TRICHLOROBENZENE	0.534619	0.45303720	0.20	15.30	20	0.0250	0.02118505	84.70	
1,2,4-TRIMETHYLBENZENE	1.808618	1.669758		7.68	20	0.0250	0.02308059	92.30	
1,2-DIBROMO-3-CHLOROPROPANE	0.256362	0.23276240	0.05	9.21	20	0.0250	0.02269863	90.80	
1,2-DIBROMOETHANE	1.915951	2.021088	0.10	5.49	20	0.0250	0.02637187	105	
1,2-DICHLOROBENZENE	1.012747	0.99073390	0.40	2.17	20	0.0250	0.02445661	97.80	
1,2-DICHLOROETHANE	0.599369	0.58262040	0.10	2.79	20	0.0250	0.02430142	97.20	
1,2-DICHLOROPROPANE	0.251704	0.23588560	0.10	6.28	20	0.0250	0.02342887	93.70	
1,3,5-TRIMETHYLBENZENE	1.835844	1.743688		5.02	20	0.0250	0.02374504	95	
1,3-DICHLOROBENZENE	1.104188	1.049484	0.60	4.95	20	0.0250	0.02376143	95	
1,4-DICHLOROBENZENE	1.147314	1.098708	0.50	4.24	20	0.0250	0.02394086	95.80	
2-BUTANONE (MEK)	0.422256	0.50417440	0.10	19.40	20	0.1250	0.1492501	119	
2-HEXANONE	1.430917	1.715034	0.10	19.90	20	0.1250	0.1498195	120	
4-METHYL-2-PENTANONE (MIBK)	3.303642	4.077305	0.10	23.40	20	0.1250	0.1542731	123	
ACETONE	0.170146	0.15255630	0.10	10.30	20	0.1250	0.1120775	89.70	80 - 200
BENZENE	1.616042	1.414193	0.50	12.50	20	0.0250	0.02187742	87.50	
BROMOCHLOROMETHANE	0.295470	0.28528730		3.45	20	0.0250	0.02413843	96.60	
BROMODICHLOROMETHANE	0.417005	0.371299	0.20	11	20	0.0250	0.02225988	89	
BROMOFORM	0.608136	0.53652310	0.10	11.80	20	0.0250	0.02205606	88.20	
BROMOMETHANE	0.398786	0.33824820	0.10	15.20	20	0.0250	0.02120487	84.80	
CARBON DISULFIDE	1.333141	1.139855	0.10	14.50	20	0.0250	0.02137537	85.50	
CARBON TETRACHLORIDE	0.572460	0.55802120	0.10	2.52	20	0.0250	0.02436943	97.50	
CHLOROBENZENE	4.408770	4.820062	0.50	9.33	20	0.0250	0.02733224	109	
CHLORODIBROMOMETHANE	2.027860	2.147645	0.10	5.91	20	0.0250	0.02647673	106	
CHLOROETHANE	0.283102	0.25279330	0.10	10.70	20	0.0250	0.02232351	89.30	
CHLOROFORM	0.799399	0.74379030	0.20	6.96	20	0.0250	0.02326093	93	
CHLOROMETHANE	0.684788	0.58564360	0.10	14.50	20	0.0250	0.02138049	85.50	
CIS-1,2-DICHLOROETHENE	0.450523	0.41050450	0.10	8.88	20	0.0250	0.02277933	91.10	
CIS-1,3-DICHLOROPROPENE	3.045198	2.877516	0.20	5.51	20	0.0250	0.02362339	94.50	
CYCLOHEXANE	0.472368	0.45305180	0.10	4.09	20	0.0250	0.02397771	95.90	
DICHLORODIFLUOROMETHANE	0.444612	0.44492830	0.10	0.0711	20	0.0250	0.02501781	100	
ETHYLBENZENE	2.197584	2.451815	0.10	11.60	20	0.0250	0.02789216	112	
ISOPROPYLBENZENE	2.336453	2.211502	0.10	5.35	20	0.0250	0.02366303	94.70	
M&P-XYLENE	2.716009	3.007756	0.10	10.70	20	0.05	0.05537087	111	
METHYL ACETATE	0.567050	0.55556950	0.10	2.02	20	0.1250	0.1224692	98	
METHYL CYCLOHEXANE	0.472269	0.36642380	0.10	22.40	20	0.0250	0.02293037	91.70	80 - 120
METHYL TERT-BUTYL ETHER	1.032893	0.91105970	0.10	11.80	20	0.0250	0.02205117	88.20	
METHYLENE CHLORIDE	0.469490	0.41663230	0.10	11.30	20	0.0250	0.02218539	88.70	
N-BUTYLBENZENE	1.616381	1.415045		12.50	20	0.0250	0.02188601	87.50	
N-PROPYLBENZENE	2.762510	2.495522		9.66	20	0.0250	0.02258383	90.30	
NAPHTHALENE	1.794854	1.657753		7.64	20	0.0250	0.02309036	92.40	
O-XYLENE	2.712137	2.647550	0.30	2.38	20	0.0250	0.02440465	97.60	

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/05/18 13:52
Instrument ID:	VOCMS25	**Calibration (end) date/time:**	09/05/18 16:33
Lab File ID:	0925_02-1	**Analysis date/time:**	09/25/18 09:09
Analytical Method:	8260C	**Sample ID:**	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
P-ISOPROPYLTOLUENE	1.848761	1.777352		3.86	20	0.0250	0.02403436	96.10	
SEC-BUTYLBENZENE	2.171393	2.082122		4.11	20	0.0250	0.02397219	95.90	
STYRENE	1.505180	1.383808	0.30	8.06	20	0.0250	0.0229841	91.90	
TERT-BUTYLBENZENE	1.434545	1.3575		5.37	20	0.0250	0.02365733	94.60	
TETRACHLOROETHENE	1.521556	1.548075	0.20	1.74	20	0.0250	0.02543572	102	
TOLUENE	6.778867	6.336894	0.40	6.52	20	0.0250	0.02337003	93.50	
TRANS-1,2-DICHLOROETHENE	0.405882	0.37975540	0.10	6.44	20	0.0250	0.02339076	93.60	
TRANS-1,3-DICHLOROPROPENE	2.660229	2.579087	0.10	3.05	20	0.0250	0.02423745	96.90	
TRICHLOROETHENE	0.320794	0.33365310	0.20	4.01	20	0.0250	0.02600212	104	
TRICHLOROFLUOROMETHANE	0.627134	0.59880790	0.10	4.52	20	0.0250	0.0238708	95.50	
VINYL CHLORIDE	0.608575	0.55522360	0.10	8.77	20	0.0250	0.02280833	91.20	
4-BROMOFLUOROBENZENE	0.887376	0.91007040		2.56	20	0.04	0.04102298	103	80 - 120
A,A,A-TRIFLUOROTOLUENE	0.556737	0.55083850		1.06	20	0.04	0.03957618	98.90	90 - 116
DIBROMOFLUOROMETHANE	0.527471	0.55731370		5.66	20	0.04	0.04226311	106	79 - 121
TOLUENE-D8	6.819913	6.799446		0.30	20	0.04	0.03987996	99.70	90 - 115

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	510716	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.940	114	751890	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	116198	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	361316	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	513501	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.940	114	751890	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	116198	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.452	152	361316	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	284629	42.2631123	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 105.66%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	414170	39.5761811	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 98.94%				
60) TOLUENE-D8	4.751	98	790082	39.8799562	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 99.70%				
80) 4-BROMOFLUOROBENZENE	6.611	95	328823	41.0229831	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 102.56%				
Target Compounds							Qvalue
4) PROPENE	1.301	41	100450	44.2259248	ppb		98
5) DICHLORODIFLUOROMETHANE	1.331	85	142020	25.0178097	ppb		98
6) CHLOROMETHANE	1.471	50	186936	21.3804883	ppb	#	85
7) VINYL CHLORIDE	1.526	62	177226	22.8083306	ppb		98
8) 1,3-BUTADIENE	1.508	39	162668	31.2954837	ppb		93
9) BROMOMETHANE	1.709	94	107968	21.2048687	ppb		99
10) CHLOROETHANE	1.788	64	80691	22.3235069	ppb	#	93
11) TRICHLOROFLUOROMETHANE	1.868	101	191138	23.8708032	ppb		99
12) DICHLOROFLUOROMETHANE	1.892	67	178495	18.9916330	ug/l		99
13) ETHYL ETHER	2.026	59	115440	24.5896395	ppb		91
14) ACROLEIN	2.319	56	79901	92.0993816	ppb		98
15) 1,1-DICHLOROETHENE	2.148	96	117046	25.1759226	ppb		100
16) 1,1,2-TRICHLOROTRIFLUO...	2.185	101	131986	25.0785586	ppb		97
17) ACETONE	2.465	43	243478	112.0774841	ppb		99
18) IODOMETHANE	2.233	142	1303453	120.0405197	ppb		98
19) CARBON DISULFIDE	2.172	76	363839	21.3753666	ppb	#	96
20) ALLYL CHLORIDE	2.398	76	324619	109.5557368	ppb	#	55
21) METHYLENE CHLORIDE	2.459	84	132988	22.1853850	ppb		85
22) METHYL ACETATE	2.532	43	886682	122.4692127	ppb	#	94
23) ACRYLONITRILE	2.880	53	498310	134.2151485	ppb		98
24) n-HEXANE	2.593	56	102758	24.5318649	ppb		95
25) TRANS-1,2-DICHLOROETHENE	2.550	96	121217	23.3907636	ppb		99
26) METHYL TERT-BUTYL ETHER	2.599	73	290808	22.0511682	ppb		85
27) 1,1-DICHLOROETHANE	2.867	63	270905	23.8679469	ppb		99
28) VINYL ACETATE	2.983	43	744023	60.4966461	ppb		98
29) DI-ISOPROPYL ETHER	2.788	45	563621	28.5290646	ppb		97
30) ETHYL TERT-BUTYL ETHER	2.983	59	432392	25.7848884	ppb		97
31) 2,2-DICHLOROPROPANE	3.215	77	97012	20.6373263	ppb		95
32) CIS-1,2-DICHLOROETHENE	3.154	96	131032	22.7793318	ppb		99
33) 2-BUTANONE (MEK)	3.441	43	804656	149.2501205	ppb		92
34) BROMOCHLOROMETHANE	3.264	130	91063	24.1384292	ppb		89
35) TETRAHYDROFURAN	3.386	42	78284	26.8865108	ppb		100
36) CHLOROFORM	3.294	83	237416	23.2609316	ppb		99
37) CYCLOHEXANE	3.288	84	144613	23.9777063	ppb		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	192160	25.5148999 ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	178119	24.3694285 ppb		96
41)	1,1-DICHLOROPROPENE	3.483	75	169649	23.1189507 ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	285340	23.5952250 ppb		98
43)	n-Heptane	3.593	71	47900	18.4603594 ppb	#	54
44)	BENZENE	3.617	78	451407	21.8774193 ppb	#	90
45)	TERT-AMYL METHYL ETHER	3.666	73	295960	21.2595085 ppb	#	89
46)	1,2-DICHLOROETHANE	3.721	62	185971	24.3014152 ppb		100
47)	T-AMYL ALCOHOL	3.739	59	126579	99.2718278 ppb	#	81
49)	TRICHLOROETHENE	3.940	130	156794	26.0021164 ppb	#	100
50)	METHYL CYCLOHEXANE	3.947	83	172194	22.9303736 ppb		87
51)	TERT-AMYL ETHYL ETHER	4.050	59	347364	25.0745555 ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	110850	23.4288732 ppb		98
53)	DIBROMOMETHANE	4.178	93	89403	20.8885760 ppb		94
54)	BROMODICHLOROMETHANE	4.264	83	174485	22.2598773 ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.574	63	600261	124.1579416 ppb	#	87
58)	CIS-1,3-DICHLOROPROPENE	4.629	75	208976	23.6233908 ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	1480546	154.2731266 ppb		95
61)	TOLUENE	4.788	91	460209	23.3700328 ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	187303	24.2374533 ppb	#	94
63)	1,1,2-TRICHLOROETHANE	5.135	97	120798	25.8487332 ppb		96
64)	TETRACHLOROETHENE	5.038	164	112427	25.4357209 ppb		95
65)	1,3-DICHLOROPROPANE	5.312	76	179588	23.5472782 ppb		100
66)	2-HEXANONE	5.532	58	622761	149.8194968 ppb		90
67)	CHLORODIBROMOMETHANE	5.257	129	155970	26.4767346 ppb		99
68)	1,2-DIBROMOETHANE	5.422	107	146779	26.3718679 ppb		100
69)	CHLOROBENZENE	5.769	112	350051	27.3322386 ppb		96
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	128068	27.5835684 ppb		96
71)	ETHYLBENZENE	5.782	106	178060	27.8921585 ppb		94
72)	M&P-XYLENE	5.879	106	436869	55.3708730 ppb		97
73)	O-XYLENE	6.178	106	192275	24.4046511 ppb		99
77)	STYRENE	6.214	104	312495	22.9841037 ppb		98
78)	BROMOFORM	6.239	173	121159	22.0560596 ppb		100
79)	ISOPROPYLBENZENE	6.403	105	499407	23.6630315 ppb		97
81)	BROMOBENZENE	6.690	77	208331	20.7670380 ppb		96
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	169427	20.1706578 ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.848	110	52025	24.4869091 ppb		76
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	72588	25.1439082 ppb		90
85)	N-PROPYLBENZENE	6.702	91	563545	22.5838306 ppb		98
86)	4-ETHYLTOLUENE	6.781	105	483990	24.0503574 ppb		97
87)	2-CHLOROTOLUENE	6.824	91	354453	23.4632499 ppb		98
88)	4-CHLOROTOLUENE	6.946	91	352032	22.9240134 ppb		97
89)	1,3,5-TRIMETHYLBENZENE	6.842	105	393764	23.7450419 ppb		96
90)	TERT-BUTYLBENZENE	7.086	119	306554	23.6573275 ppb		96
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	377069	23.0805857 ppb		97
92)	SEC-BUTYLBENZENE	7.226	105	470190	23.9721945 ppb		97
93)	1,3-DICHLOROBENZENE	7.397	146	236997	23.7614267 ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	401366	24.0343583 ppb		98
95)	DICYCLOPENTADIENE	7.324	66	563048	22.1680644 ppb		97
96)	1,4-DICHLOROBENZENE	7.464	146	248113	23.9408655 ppb		92
97)	1,2,3-TRIMETHYLBENZENE	7.476	105	398334	23.9049392 ppb		96
98)	1,2-DICHLOROBENZENE	7.793	146	223730	24.4566098 ppb		99
99)	N-BUTYLBENZENE	7.659	91	319549	21.8860062 ppb		98
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	52563	22.6986291 ppb		98
101)	1,2,4-TRICHLOROBENZENE	8.988	180	102306	21.1850533 ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

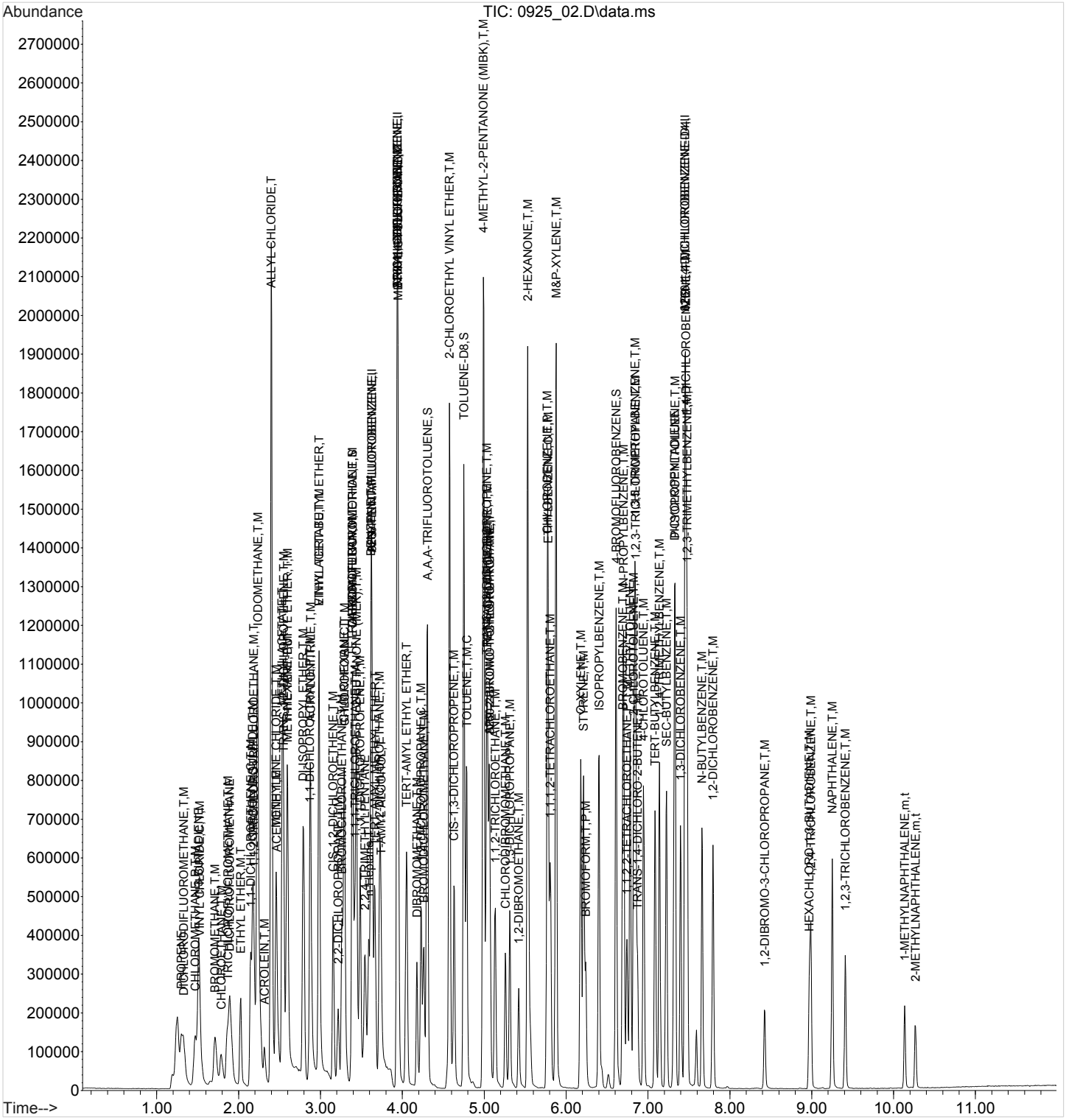
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	45433	19.6207457 ppb	100
103) NAPHTHALENE	9.250	128	374358	23.0903653 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	91946	20.5118467 ppb	100
105) 1-METHYLNAPHTHALENE	10.134	142	87520	13.6674133 ppb	100
106) 2-METHYLNAPHTHALENE	10.268	142	67344	10.8880054 ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



7E-OR

REPORTING LEVEL VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1028256	**Calibration (begin) date/time:**	09/05/18 13:52
Instrument ID:	VOCMS25	**Calibration (end) date/time:**	09/05/18 16:33
Lab File ID:	0925_06-1	**Analysis date/time:**	09/25/18 11:32
Analytical Method:	8260C	**Sample ID:**	RL

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,1,1-TRICHLOROETHANE	0.0010	0.00106793	107	50 - 150
1,1,2,2-TETRACHLOROETHANE	0.0010	0.0008874756	88.70	50 - 150
1,1,2-TRICHLOROETHANE	0.0010	0.001119513	112	50 - 150
1,1,2-TRICHLOROTRIFLUOROETHANE	0.0010	0.001024917	102	50 - 150
1,1-DICHLOROETHANE	0.0010	0.00100917	101	50 - 150
1,1-DICHLOROETHENE	0.0010	0.001092335	109	50 - 150
1,2,3-TRICHLOROBENZENE	0.0010	0.0008676195	86.80	50 - 150
1,2,4-TRICHLOROBENZENE	0.0010	0.0009306683	93.10	50 - 150
1,2,4-TRIMETHYLBENZENE	0.0010	0.001009382	101	50 - 150
1,2-DIBROMO-3-CHLOROPROPANE	0.0010	0.0008807965	88.10	50 - 150
1,2-DIBROMOETHANE	0.0010	0.001084563	108	50 - 150
1,2-DICHLOROBENZENE	0.0010	0.00091364	91.40	50 - 150
1,2-DICHLOROETHANE	0.0010	0.0009947653	99.50	50 - 150
1,2-DICHLOROPROPANE	0.0010	0.0009743907	97.40	50 - 150
1,3,5-TRIMETHYLBENZENE	0.0010	0.0009689651	96.90	50 - 150
1,3-DICHLOROBENZENE	0.0010	0.0009587079	95.90	50 - 150
1,4-DICHLOROBENZENE	0.0010	0.0009877771	98.80	50 - 150
2-BUTANONE (MEK)	0.0050	0.006506815	130	50 - 150
2-HEXANONE	0.0050	0.006267119	125	50 - 150
4-METHYL-2-PENTANONE (MIBK)	0.0050	0.006337859	127	50 - 150
ACETONE	0.0050	0.006992789	140	50 - 150
BENZENE	0.0010	0.0009311594	93.10	50 - 150
BROMOCHLOROMETHANE	0.0010	0.001116069	112	50 - 150
BROMODICHLOROMETHANE	0.0010	0.0009331781	93.30	50 - 150
BROMOFORM	0.0010	0.000753721	75.40	50 - 150
BROMOMETHANE	0.0010	0.000804736	80.50	50 - 150
CARBON DISULFIDE	0.0010	0.0009566938	95.70	50 - 150
CARBON TETRACHLORIDE	0.0010	0.001012091	101	50 - 150
CHLOROBENZENE	0.0010	0.001129744	113	50 - 150
CHLORODIBROMOMETHANE	0.0010	0.001113011	111	50 - 150
CHLOROETHANE	0.0010	0.0009292879	92.90	50 - 150
CHLOROFORM	0.0010	0.0009504397	95	50 - 150
CHLOROMETHANE	0.0010	0.0007137397	71.40	50 - 150
CIS-1,2-DICHLOROETHENE	0.0010	0.001002132	100	50 - 150
CIS-1,3-DICHLOROPROPENE	0.0010	0.001018054	102	50 - 150
CYCLOHEXANE	0.0010	0.0009921464	99.20	50 - 150
DICHLORODIFLUOROMETHANE	0.0010	0.0009364435	93.60	50 - 150
ETHYLBENZENE	0.0010	0.001163501	116	50 - 150
ISOPROPYLBENZENE	0.0010	0.0008993799	89.90	50 - 150
M&P-XYLENE	0.0020	0.002305579	115	50 - 150
METHYL ACETATE	0.0050	0.006338941	127	50 - 150
METHYL CYCLOHEXANE	0.0010	0.001125949	113	70 - 130
METHYL TERT-BUTYL ETHER	0.0010	0.0009276216	92.80	50 - 150
METHYLENE CHLORIDE	0.0010	0.001136379	114	50 - 150
N-BUTYLBENZENE	0.0010	0.000874439	87.40	50 - 150
N-PROPYLBENZENE	0.0010	0.0009217617	92.20	50 - 150
NAPHTHALENE	0.0010	0.0009321719	93.20	50 - 150
O-XYLENE	0.0010	0.001112145	111	50 - 150

7E-OR

REPORTING LEVEL VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1028256	**Calibration (begin) date/time:**	09/05/18 13:52
Instrument ID:	VOCMS25	**Calibration (end) date/time:**	09/05/18 16:33
Lab File ID:	0925_06-1	**Analysis date/time:**	09/25/18 11:32
Analytical Method:	8260C	**Sample ID:**	RL

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
P-ISOPROPYLTOLUENE	0.0010	0.0009448858	94.50	50 - 150
SEC-BUTYLBENZENE	0.0010	0.0009413456	94.10	50 - 150
STYRENE	0.0010	0.0008611627	86.10	50 - 150
TERT-BUTYLBENZENE	0.0010	0.001005439	101	50 - 150
TETRACHLOROETHENE	0.0010	0.001087618	109	50 - 150
TOLUENE	0.0010	0.001170031	117	50 - 150
TRANS-1,2-DICHLOROETHENE	0.0010	0.001030448	103	50 - 150
TRANS-1,3-DICHLOROPROPENE	0.0010	0.0009838588	98.40	50 - 150
TRICHLOROETHENE	0.0010	0.0009887244	98.90	50 - 150
TRICHLOROFLUOROMETHANE	0.0010	0.0009457444	94.60	50 - 150
VINYL CHLORIDE	0.0010	0.0009057432	90.60	50 - 150

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_06.D
Acq On : 25 Sep 2018 11:32 am
Operator : 605
Sample : RL VMS 1 ppb
Misc : water
ALS Vial : 6 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	614862	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.940	114	916586	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.062	79	131128	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	467488	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	617105	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.940	114	916586	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.062	79	131128	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.452	152	467488	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	337777	41.6595154	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 104.15%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	503365	39.4565719	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 98.64%				
60) TOLUENE-D8	4.751	98	1023984	45.8014146	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 114.50%				
80) 4-BROMOFLUOROBENZENE	6.611	95	380513	36.6903011	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 91.73%				
Target Compounds							Qvalue
4) PROPENE	1.307	41	2027	0.8813964	ppb	#	59
5) DICHLORODIFLUOROMETHANE	1.337	85	6400	0.9364435	ppb		95
6) CHLOROMETHANE	1.484	50	7513	0.7137397	ppb	#	81
7) VINYL CHLORIDE	1.539	62	8473	0.9057432	ppb	#	92
8) 1,3-BUTADIENE	1.520	39	7752	1.2387827	ppb		96
9) BROMOMETHANE	1.709	94	4933	0.8047360	ppb		98
10) CHLOROETHANE	1.788	64	4044	0.9292879	ppb	#	77
11) TRICHLOROFLUOROMETHANE	1.874	101	9117	0.9457444	ppb		99
12) DICHLOROFLUOROMETHANE	1.904	67	8991	0.7945954	ug/l	#	88
13) ETHYL ETHER	2.032	59	7425	1.3136937	ppb	#	83
14) ACROLEIN	2.325	56	7471	7.1529476	ppb		94
15) 1,1-DICHLOROETHENE	2.154	96	6114	1.0923355	ppb		95
16) 1,1,2-TRICHLOROTRIFLUO...	2.185	101	6494	1.0249172	ppb	#	93
17) ACETONE	2.471	43	18289	6.9927889	ppb		98
18) IODOMETHANE	2.233	142	63940	4.8911044	ppb		98
19) CARBON DISULFIDE	2.179	76	19605	0.9566938	ppb	#	95
20) ALLYL CHLORIDE	2.404	76	16079	4.5073578	ppb	#	55
21) METHYLENE CHLORIDE	2.459	84	8201	1.1363788	ppb	#	78
22) METHYL ACETATE	2.538	43	55253	6.3389410	ppb	#	95
23) ACRYLONITRILE	2.886	53	27099	6.0625734	ppb		97
24) n-HEXANE	2.599	56	6394	1.2679127	ppb	#	69
25) TRANS-1,2-DICHLOROETHENE	2.551	96	6429	1.0304481	ppb		97
26) METHYL TERT-BUTYL ETHER	2.599	73	14728	0.9276216	ppb	#	77
27) 1,1-DICHLOROETHANE	2.874	63	13790	1.0091695	ppb		100
28) VINYL ACETATE	2.983	43	91696	6.1929438	ppb		98
29) DI-ISOPROPYL ETHER	2.794	45	28453	1.1962728	ppb		91
30) ETHYL TERT-BUTYL ETHER	2.983	59	20303	1.0056564	ppb		96
31) 2,2-DICHLOROPROPANE	3.221	77	6608	1.1676154	ppb		99
32) CIS-1,2-DICHLOROETHENE	3.160	96	6940	1.0021319	ppb		95
33) 2-BUTANONE (MEK)	3.441	43	42234	6.5068151	ppb		96
34) BROMOCHLOROMETHANE	3.264	130	5069	1.1160693	ppb		92
35) TETRAHYDROFURAN	3.386	42	4756	1.3567664	ppb		89
36) CHLOROFORM	3.294	83	11679	0.9504397	ppb		95
37) CYCLOHEXANE	3.288	84	7204	0.9921465	ppb	#	68

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_06.D
Acq On : 25 Sep 2018 11:32 am
Operator : 605
Sample : RL VMS 1 ppb
Misc : water
ALS Vial : 6 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	9683	1.0679296 ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	8906	1.0120911 ppb		100
41)	1,1-DICHLOROPROPENE	3.483	75	8790	0.9949643 ppb		93
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	18804	1.2915568 ppb		98
43)	n-Heptane	3.593	71	3405	1.0899926 ppb		85
44)	BENZENE	3.617	78	23131	0.9311594 ppb	#	44
45)	TERT-AMYL METHYL ETHER	3.666	73	16252	0.9696809 ppb		92
46)	1,2-DICHLOROETHANE	3.721	62	9165	0.9947653 ppb	#	95
47)	T-AMYL ALCOHOL	3.745	59	9646	6.2836708 ppb	#	84
49)	TRICHLOROETHENE	3.940	130	7268	0.9887244 ppb	#	94
50)	METHYL CYCLOHEXANE	3.940	83	17894	1.1259494 ppb	#	82
51)	TERT-AMYL ETHYL ETHER	4.050	59	16976	1.0052287 ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	5620	0.9743907 ppb		99
53)	DIBROMOMETHANE	4.178	93	4945	0.9477726 ppb		95
54)	BROMODICHLOROMETHANE	4.264	83	8917	0.9331781 ppb		97
57)	2-CHLOROETHYL VINYL ETHER	4.581	63	29299	5.3701991 ppb	#	87
58)	CIS-1,3-DICHLOROPROPENE	4.635	75	10163	1.0180543 ppb		94
59)	4-METHYL-2-PENTANONE (...	4.989	43	68639	6.3378585 ppb		95
61)	TOLUENE	4.782	91	26001	1.1700313 ppb		98
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	8580	0.9838588 ppb	#	63
63)	1,1,2-TRICHLOROETHANE	5.135	97	5904	1.1195129 ppb		96
64)	TETRACHLOROETHENE	5.038	164	5425	1.0876180 ppb	#	85
65)	1,3-DICHLOROPROPANE	5.312	76	8871	1.0307164 ppb		99
66)	2-HEXANONE	5.532	58	29398	6.2671188 ppb		87
67)	CHLORODIBROMOMETHANE	5.257	129	7399	1.1130113 ppb		97
68)	1,2-DIBROMOETHANE	5.422	107	6812	1.0845631 ppb		99
69)	CHLOROBENZENE	5.769	112	16328	1.1297441 ppb		99
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	5766	1.1004940 ppb	#	97
71)	ETHYLBENZENE	5.782	106	8382	1.1635006 ppb		97
72)	M&P-XYLENE	5.879	106	20528	2.3055789 ppb		98
73)	O-XYLENE	6.178	106	9888	1.1121451 ppb		100
77)	STYRENE	6.214	104	15149	0.8611627 ppb		98
78)	BROMOFORM	6.245	173	5357	0.7537210 ppb		96
79)	ISOPROPYLBENZENE	6.397	105	24559	0.8993799 ppb		96
81)	BROMOBENZENE	6.690	77	11265	0.8678978 ppb		98
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	9645	0.8874756 ppb		95
83)	1,2,3-TRICHLOROPROPANE	6.848	110	2507	0.9119960 ppb		86
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	3147	0.8425223 ppb	#	92
85)	N-PROPYLBENZENE	6.702	91	29760	0.9217617 ppb		95
86)	4-ETHYLTOLUENE	6.781	105	25907	0.9949906 ppb		95
87)	2-CHLOROTOLUENE	6.824	91	17817	0.9115507 ppb		97
88)	4-CHLOROTOLUENE	6.946	91	17502	0.8808722 ppb		96
89)	1,3,5-TRIMETHYLBENZENE	6.842	105	20790	0.9689651 ppb		98
90)	TERT-BUTYLBENZENE	7.086	119	16857	1.0054390 ppb		95
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	21336	1.0093824 ppb		97
92)	SEC-BUTYLBENZENE	7.226	105	23889	0.9413456 ppb		95
93)	1,3-DICHLOROBENZENE	7.403	146	12372	0.9587079 ppb		97
94)	P-ISOPROPYLTOLUENE	7.330	119	20416	0.9448858 ppb		99
95)	DICYCLOPENTADIENE	7.324	66	28899	0.8793908 ppb		97
96)	1,4-DICHLOROBENZENE	7.464	146	13245	0.9877772 ppb	#	1
97)	1,2,3-TRIMETHYLBENZENE	7.476	105	20463	0.9491313 ppb		92
98)	1,2-DICHLOROBENZENE	7.793	146	10814	0.9136400 ppb		100
99)	N-BUTYLBENZENE	7.659	91	16519	0.8744390 ppb		98
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	2639	0.8807965 ppb		98
101)	1,2,4-TRICHLOROBENZENE	8.994	180	5815	0.9306683 ppb		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_06.D
Acq On : 25 Sep 2018 11:32 am
Operator : 605
Sample : RL VMS 1 ppb
Misc : water
ALS Vial : 6 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:58 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	3224	1.0761080 ppb	98
103) NAPHTHALENE	9.257	128	19554	0.9321719 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	5032	0.8676195 ppb	92
105) 1-METHYLNAPHTHALENE	10.140	142	5944	0.7174218 ppb	98
106) 2-METHYLNAPHTHALENE	10.269	142	4784	0.5978019 ppb	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_06.D
Acq On : 25 Sep 2018 11:32 am
Operator : 605
Sample : RL VMS 1 ppb
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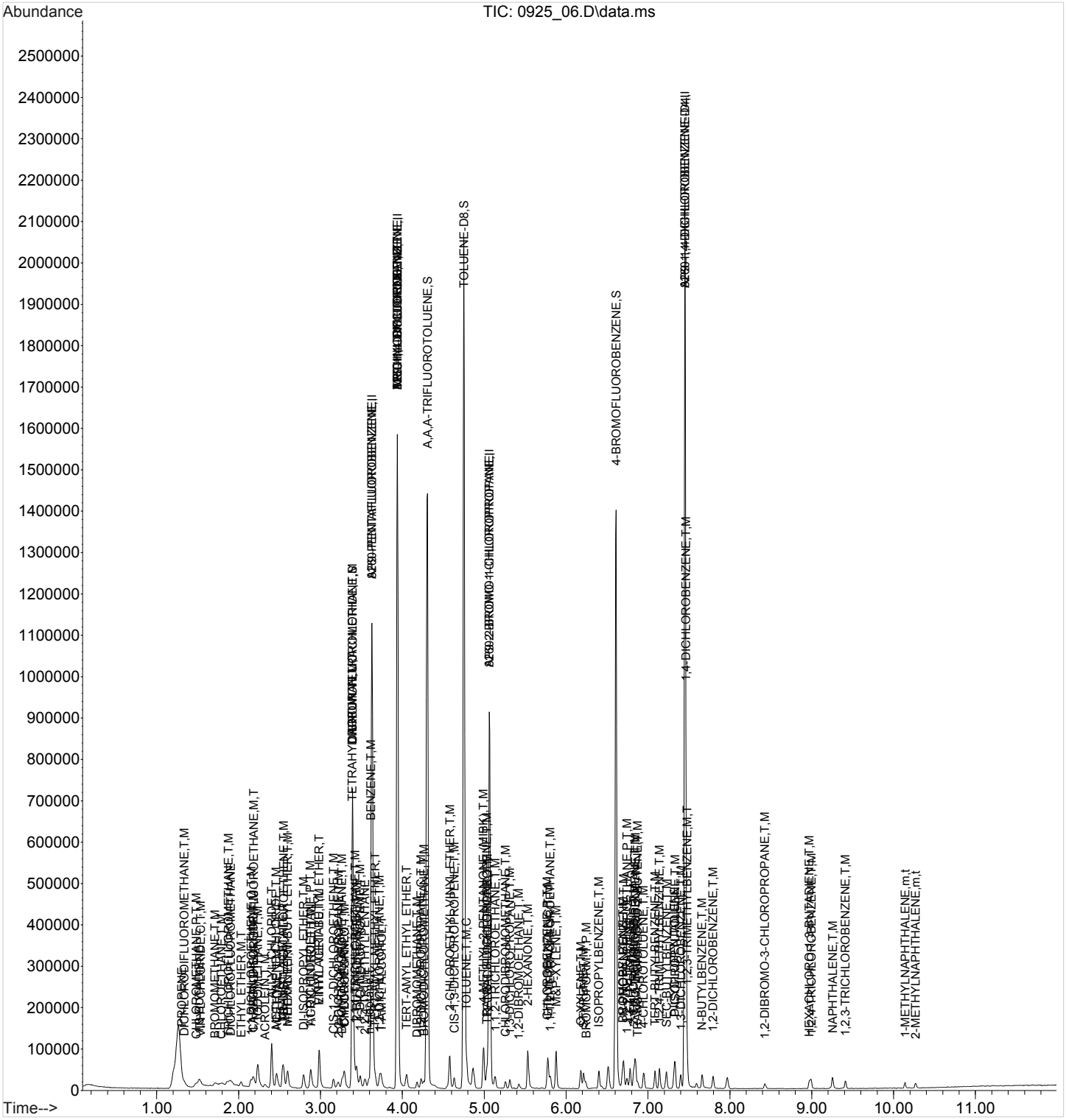
Response via : Initial Calibration



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-3

ESC Sample ID:	R3344826-3	**SDG:**	L1028256
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	0925_05	**Received Date/Time:**	
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 10:09
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 10:09
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	U		10.0	50.0
Benzene	71-43-2	0	U		0.331	1.00
Bromodichloromethane	75-27-4	0	U		0.380	1.00
Bromochloromethane	74-97-5	0	U		0.520	1.00
Bromoform	75-25-2	0	U		0.469	1.00
Bromomethane	74-83-9	0	U		0.866	5.00
n-Butylbenzene	104-51-8	0	U		0.361	1.00
sec-Butylbenzene	135-98-8	0	U		0.365	1.00
tert-Butylbenzene	98-06-6	0	U		0.399	1.00
Carbon disulfide	75-15-0	0	U		0.275	1.00
Carbon tetrachloride	56-23-5	0	U		0.379	1.00
Chlorobenzene	108-90-7	0	U		0.348	1.00
Chlorodibromomethane	124-48-1	0	U		0.327	1.00
Chloroethane	75-00-3	0	U		0.453	5.00
Chloroform	67-66-3	0	U		0.324	5.00
Chloromethane	74-87-3	0	U		0.276	2.50
Cyclohexane	110-82-7	0	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	U		1.33	5.00
1,2-Dibromoethane	106-93-4	0	U		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	U		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	U		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	U		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	U		0.551	5.00
1,1-Dichloroethane	75-34-3	0	U		0.259	1.00
1,2-Dichloroethane	107-06-2	0	U		0.361	1.00
1,1-Dichloroethene	75-35-4	0	U		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	U		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	U		0.396	1.00
1,2-Dichloropropane	78-87-5	0	U		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	U		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	U		0.419	1.00
Ethylbenzene	100-41-4	0	U		0.384	1.00
2-Hexanone	591-78-6	0	U		3.82	10.0
Isopropylbenzene	98-82-8	0	U		0.326	1.00
p-Isopropyltoluene	99-87-6	0	U		0.350	1.00
2-Butanone (MEK)	78-93-3	0	U		3.93	10.0
Methyl Acetate	79-20-9	0	U		4.30	20.0
Methyl Cyclohexane	108-87-2	0	U		0.380	1.00
Methylene Chloride	75-09-2	2.46	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	U		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	U		0.367	1.00
Naphthalene	91-20-3	0	U		1.00	5.00
n-Propylbenzene	103-65-1	0	U		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-3

ESC Sample ID:	R3344826-3	**SDG:**	L1028256
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0925_05	**Received Date/Time:**	_____
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 10:09
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 10:09
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	0	U		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	U		0.130	1.00
Tetrachloroethene	127-18-4	0	U		0.372	1.00
Toluene	108-88-3	0	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	U		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	0	U		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	0	U		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	U		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	U		0.383	1.00
Trichloroethene	79-01-6	0	U		0.398	1.00
Trichlorofluoromethane	75-69-4	0	U		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	0	U		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	U		0.387	1.00
Vinyl chloride	75-01-4	0	U		0.259	1.00
o-Xylene	95-47-6	0	U		0.341	1.00
m&p-Xylenes	1330-20-7	0	U		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_05.D
Acq On : 25 Sep 2018 10:09 am
Operator : 605
Sample : BLANK 1x WG1170992
Misc : water
ALS Vial : 5 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:21:31 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

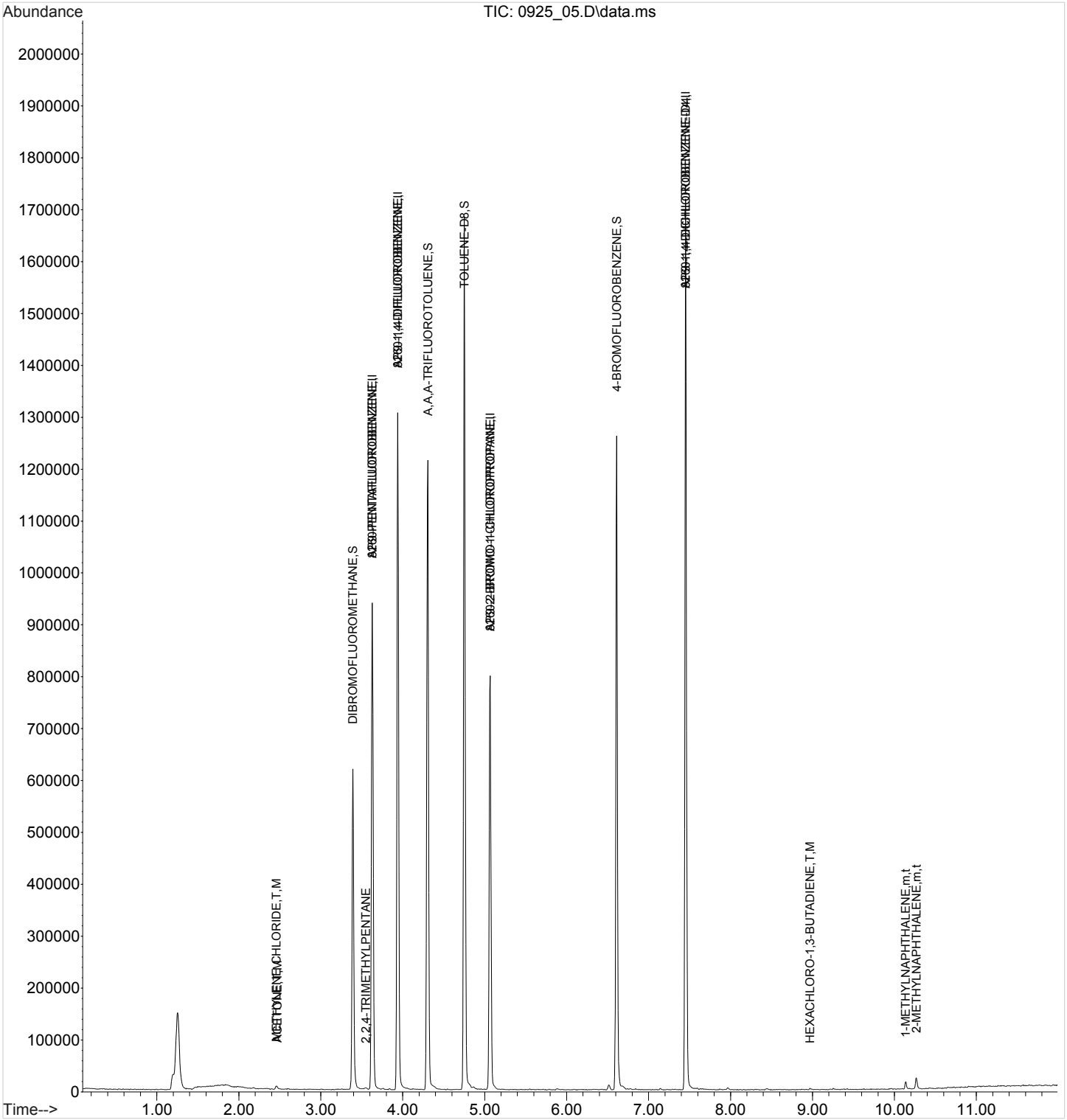
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	515878	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.941	114	769959	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	118500	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	375337	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	517936	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.941	114	769959	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	118500	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.452	152	375337	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	296088	43.5246805	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 108.81%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	407837	38.0564767	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 95.14%				
60) TOLUENE-D8	4.751	98	826094	40.8876618	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 102.22%				
80) 4-BROMOFLUOROBENZENE	6.611	95	342535	41.1373035	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 102.84%				
Target Compounds							Qvalue
17) ACETONE	2.471	43	2052	0.9351224	ppb	#	88
21) METHYLENE CHLORIDE	2.459	84	1551	0.2561526	ppb		83
42) 2,2,4-TRIMETHYLPENTANE	3.550	57	1779	0.1456364	ppb	#	48
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	557	0.2315608	ppb	#	85
105) 1-METHYLNAPHTHALENE	10.134	142	5936	0.8923572	ppb	#	93
106) 2-METHYLNAPHTHALENE	10.269	142	9009	1.4021414	ppb		97

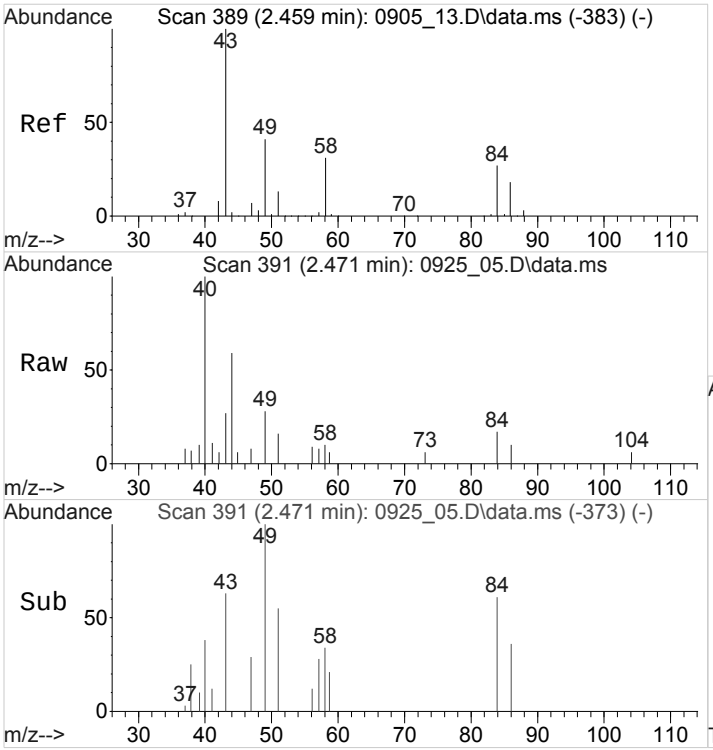
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_05.D
Acq On : 25 Sep 2018 10:09 am
Operator : 605
Sample : BLANK 1x WG1170992
Misc : water
ALS Vial : 5 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:21:31 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

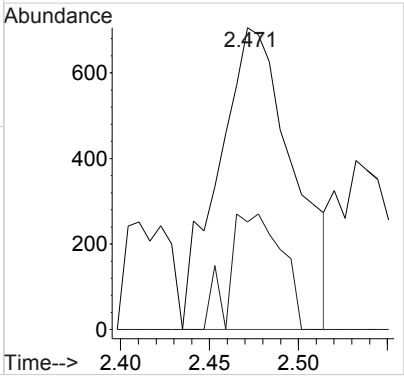


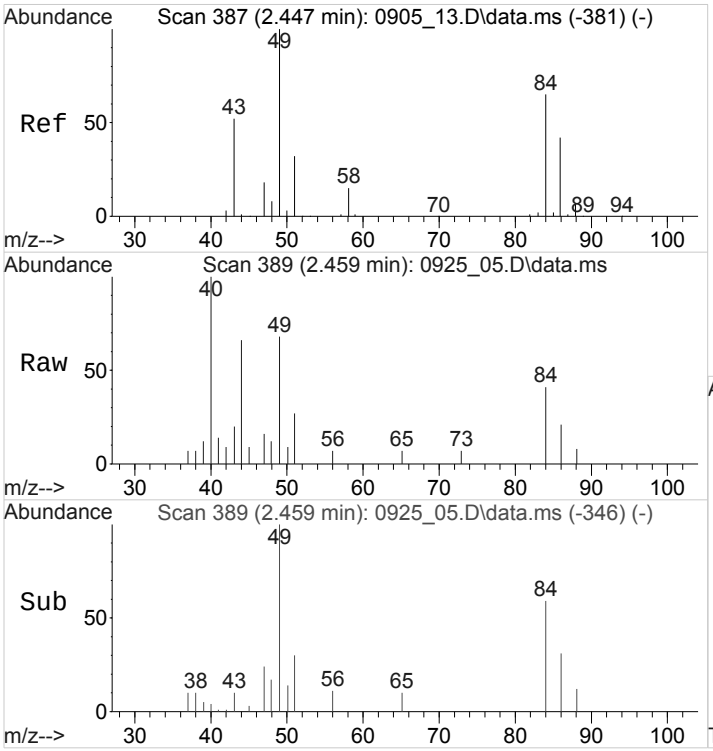


#17
ACETONE
Concen: 0.9351224 ppb
RT: 2.471 min Scan# 391
Delta R.T. 0.013 min
Lab File: 0925_05.D
Acq: 25 Sep 2018 10:09 am

Tgt Ion: 43 Resp: 2052

Ion	Ratio	Lower	Upper
43	100		
58	27.0	27.3	40.9#

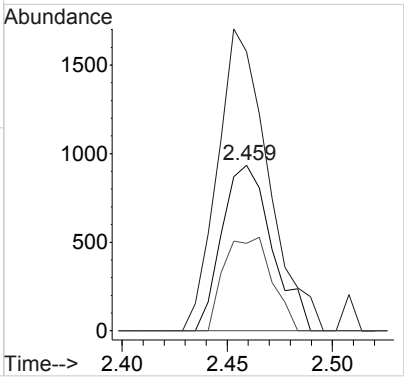


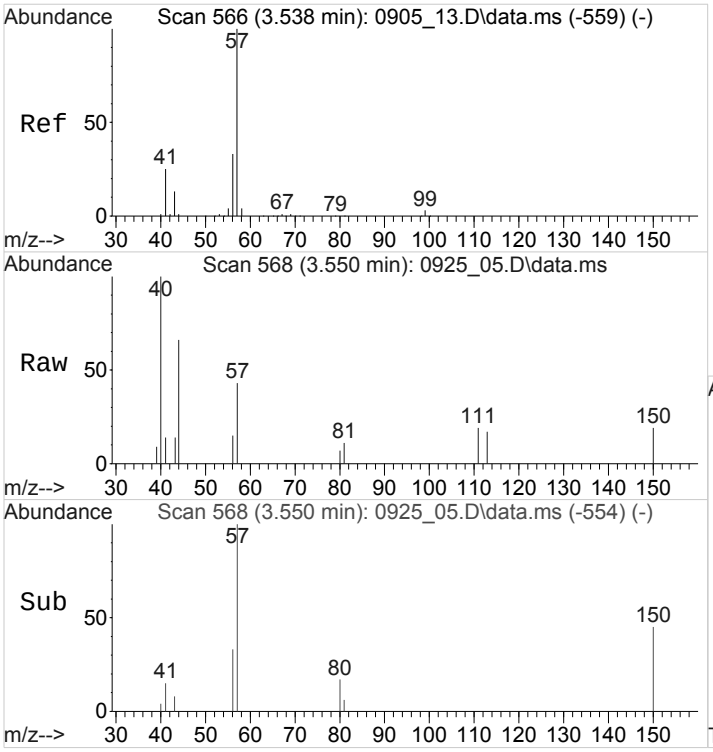


#21
METHYLENE CHLORIDE
Concen: 0.2561526 ppb
RT: 2.459 min Scan# 389
Delta R.T. 0.013 min
Lab File: 0925_05.D
Acq: 25 Sep 2018 10:09 am

Tgt Ion: 84 Resp: 1551

Ion	Ratio	Lower	Upper
84	100		
49	184.4	128.6	193.0
86	53.9	51.5	77.3

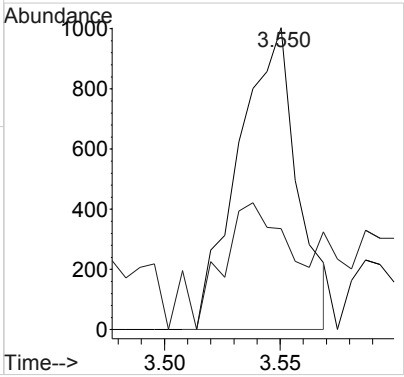


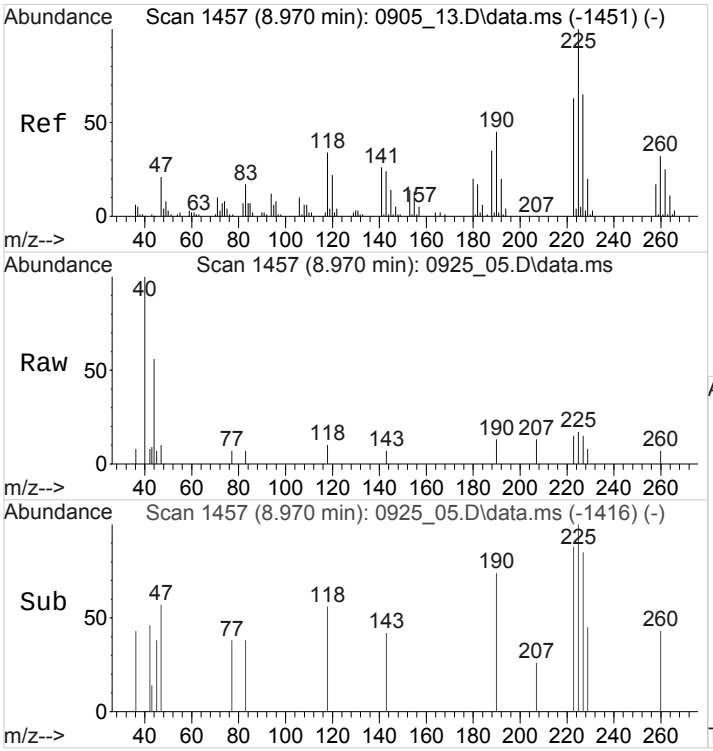


#42
2,2,4-TRIMETHYLPENTANE
Concen: 0.1456364 ppb
RT: 3.550 min Scan# 568
Delta R.T. 0.012 min
Lab File: 0925_05.D
Acq: 25 Sep 2018 10:09 am

Tgt Ion: 57 Resp: 1779

Ion	Ratio	Lower	Upper
57	100		
41	51.8	20.3	30.5#

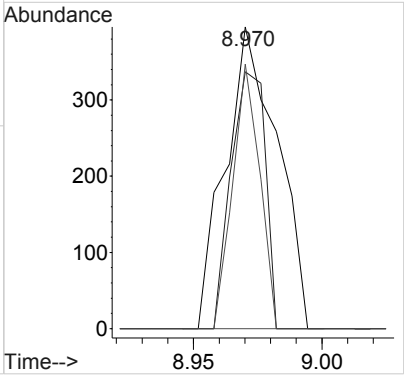


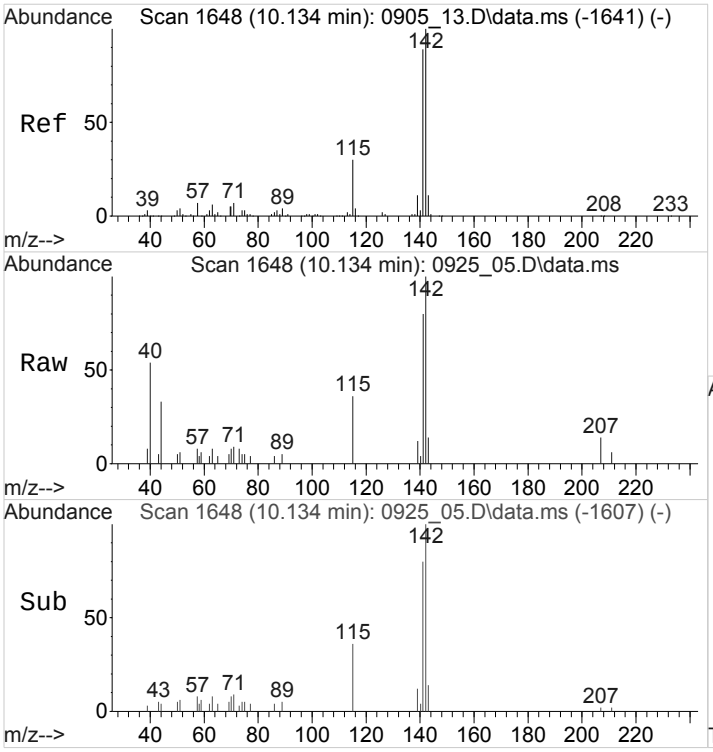


#102
HEXACHLORO-1,3-BUTADIENE
Concen: 0.2315608 ppb
RT: 8.970 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 0925_05.D
Acq: 25 Sep 2018 10:09 am

Tgt Ion:225 Resp: 557

Ion	Ratio	Lower	Upper
225	100		
227	56.4	51.2	76.8
223	45.6	49.6	74.4#

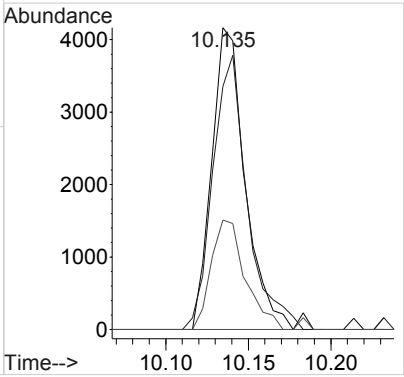


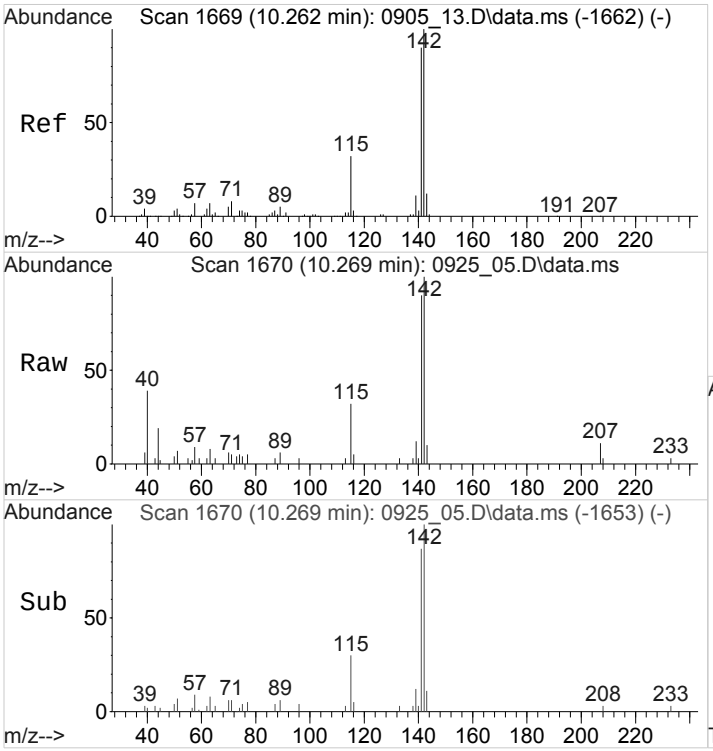


#105
1-METHYLNAPHTHALENE
Concen: 0.8923572 ppb
RT: 10.134 min Scan# 1648
Delta R.T. 0.000 min
Lab File: 0925_05.D
Acq: 25 Sep 2018 10:09 am

Tgt Ion:142 Resp: 5936

Ion	Ratio	Lower	Upper
142	100		
141	92.8	69.7	104.5
115	36.7	24.5	36.7#

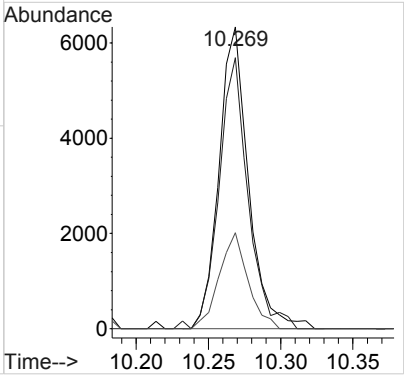




#106
2-METHYLNAPHTHALENE
Concen: 1.4021414 ppb
RT: 10.269 min Scan# 1670
Delta R.T. 0.006 min
Lab File: 0925_05.D
Acq: 25 Sep 2018 10:09 am

Tgt Ion:142 Resp: 9009

Ion	Ratio	Lower	Upper
142	100		
141	88.7	73.0	109.6
115	31.0	26.0	39.0



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-1

ESC Sample ID:	R3344826-1	**SDG:**	L1028256
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	0925_02LCS	**Received Date/Time:**	
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 09:09
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 09:09
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	112		10.0	50.0
Benzene	71-43-2	3.62	21.9		0.331	1.00
Bromodichloromethane	75-27-4	4.26	22.3		0.380	1.00
Bromochloromethane	74-97-5	3.26	24.1		0.520	1.00
Bromoform	75-25-2	6.24	22.1		0.469	1.00
Bromomethane	74-83-9	1.71	21.2		0.866	5.00
n-Butylbenzene	104-51-8	7.66	21.9		0.361	1.00
sec-Butylbenzene	135-98-8	7.23	24.0		0.365	1.00
tert-Butylbenzene	98-06-6	7.09	23.7		0.399	1.00
Carbon disulfide	75-15-0	2.17	21.4		0.275	1.00
Carbon tetrachloride	56-23-5	3.39	24.4		0.379	1.00
Chlorobenzene	108-90-7	5.77	27.3		0.348	1.00
Chlorodibromomethane	124-48-1	5.26	26.5		0.327	1.00
Chloroethane	75-00-3	1.79	22.3		0.453	5.00
Chloroform	67-66-3	3.29	23.3		0.324	5.00
Chloromethane	74-87-3	1.47	21.4		0.276	2.50
Cyclohexane	110-82-7	3.29	24.0		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	8.43	22.7		1.33	5.00
1,2-Dibromoethane	106-93-4	5.42	26.4		0.381	1.00
1,2-Dichlorobenzene	95-50-1	7.79	24.5		0.349	1.00
1,3-Dichlorobenzene	541-73-1	7.40	23.8		0.220	1.00
1,4-Dichlorobenzene	106-46-7	7.46	23.9		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.33	25.0		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	23.9		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	24.3		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	25.2		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.15	22.8		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	2.55	23.4		0.396	1.00
1,2-Dichloropropane	78-87-5	4.23	23.4		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	4.63	23.6		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	5.03	24.2		0.419	1.00
Ethylbenzene	100-41-4	5.78	27.9		0.384	1.00
2-Hexanone	591-78-6	5.53	150		3.82	10.0
Isopropylbenzene	98-82-8	6.40	23.7		0.326	1.00
p-Isopropyltoluene	99-87-6	7.33	24.0		0.350	1.00
2-Butanone (MEK)	78-93-3	3.44	149		3.93	10.0
Methyl Acetate	79-20-9	2.53	122		4.30	20.0
Methyl Cyclohexane	108-87-2	3.95	22.9		0.380	1.00
Methylene Chloride	75-09-2	2.46	22.2		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	4.99	154		2.14	10.0
Methyl tert-butyl ether	1634-04-4	2.60	22.1		0.367	1.00
Naphthalene	91-20-3	9.25	23.1		1.00	5.00
n-Propylbenzene	103-65-1	6.70	22.6		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-1

ESC Sample ID:	R3344826-1	**SDG:**	L1028256
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0925_02LCS	**Received Date/Time:**	_____
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 09:09
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 09:09
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**MDL**	**RDL**
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	6.21	23.0		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	6.74	20.2		0.130	1.00
Tetrachloroethene	127-18-4	5.04	25.4		0.372	1.00
Toluene	108-88-3	4.79	23.4		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	2.18	25.1		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	9.41	20.5		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	8.99	21.2		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	25.5		0.319	1.00
1,1,2-Trichloroethane	79-00-5	5.14	25.8		0.383	1.00
Trichloroethene	79-01-6	3.94	26.0		0.398	1.00
Trichlorofluoromethane	75-69-4	1.87	23.9		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	7.14	23.1		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	6.84	23.7		0.387	1.00
Vinyl chloride	75-01-4	1.53	22.8		0.259	1.00
o-Xylene	95-47-6	6.18	24.4		0.341	1.00
m&p-Xylenes	1330-20-7	5.88	55.4		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	510716	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.940	114	751890	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	116198	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	361316	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	513501	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.940	114	751890	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	116198	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.452	152	361316	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	284629	42.2631123	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 105.66%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	414170	39.5761811	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 98.94%				
60) TOLUENE-D8	4.751	98	790082	39.8799562	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 99.70%				
80) 4-BROMOFLUOROBENZENE	6.611	95	328823	41.0229831	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 102.56%				
Target Compounds							Qvalue
4) PROPENE	1.301	41	100450	44.2259248	ppb		98
5) DICHLORODIFLUOROMETHANE	1.331	85	142020	25.0178097	ppb		98
6) CHLOROMETHANE	1.471	50	186936	21.3804883	ppb	#	85
7) VINYL CHLORIDE	1.526	62	177226	22.8083306	ppb		98
8) 1,3-BUTADIENE	1.508	39	162668	31.2954837	ppb		93
9) BROMOMETHANE	1.709	94	107968	21.2048687	ppb		99
10) CHLOROETHANE	1.788	64	80691	22.3235069	ppb	#	93
11) TRICHLOROFLUOROMETHANE	1.868	101	191138	23.8708032	ppb		99
12) DICHLOROFLUOROMETHANE	1.892	67	178495	18.9916330	ug/l		99
13) ETHYL ETHER	2.026	59	115440	24.5896395	ppb		91
14) ACROLEIN	2.319	56	79901	92.0993816	ppb		98
15) 1,1-DICHLOROETHENE	2.148	96	117046	25.1759226	ppb		100
16) 1,1,2-TRICHLOROTRIFLUO...	2.185	101	131986	25.0785586	ppb		97
17) ACETONE	2.465	43	243478	112.0774841	ppb		99
18) IODOMETHANE	2.233	142	1303453	120.0405197	ppb		98
19) CARBON DISULFIDE	2.172	76	363839	21.3753666	ppb	#	96
20) ALLYL CHLORIDE	2.398	76	324619	109.5557368	ppb	#	55
21) METHYLENE CHLORIDE	2.459	84	132988	22.1853850	ppb		85
22) METHYL ACETATE	2.532	43	886682	122.4692127	ppb	#	94
23) ACRYLONITRILE	2.880	53	498310	134.2151485	ppb		98
24) n-HEXANE	2.593	56	102758	24.5318649	ppb		95
25) TRANS-1,2-DICHLOROETHENE	2.550	96	121217	23.3907636	ppb		99
26) METHYL TERT-BUTYL ETHER	2.599	73	290808	22.0511682	ppb		85
27) 1,1-DICHLOROETHANE	2.867	63	270905	23.8679469	ppb		99
28) VINYL ACETATE	2.983	43	744023	60.4966461	ppb		98
29) DI-ISOPROPYL ETHER	2.788	45	563621	28.5290646	ppb		97
30) ETHYL TERT-BUTYL ETHER	2.983	59	432392	25.7848884	ppb		97
31) 2,2-DICHLOROPROPANE	3.215	77	97012	20.6373263	ppb		95
32) CIS-1,2-DICHLOROETHENE	3.154	96	131032	22.7793318	ppb		99
33) 2-BUTANONE (MEK)	3.441	43	804656	149.2501205	ppb		92
34) BROMOCHLOROMETHANE	3.264	130	91063	24.1384292	ppb		89
35) TETRAHYDROFURAN	3.386	42	78284	26.8865108	ppb		100
36) CHLOROFORM	3.294	83	237416	23.2609316	ppb		99
37) CYCLOHEXANE	3.288	84	144613	23.9777063	ppb		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	192160	25.5148999 ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	178119	24.3694285 ppb		96
41)	1,1-DICHLOROPROPENE	3.483	75	169649	23.1189507 ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	285340	23.5952250 ppb		98
43)	n-Heptane	3.593	71	47900	18.4603594 ppb	#	54
44)	BENZENE	3.617	78	451407	21.8774193 ppb	#	90
45)	TERT-AMYL METHYL ETHER	3.666	73	295960	21.2595085 ppb	#	89
46)	1,2-DICHLOROETHANE	3.721	62	185971	24.3014152 ppb		100
47)	T-AMYL ALCOHOL	3.739	59	126579	99.2718278 ppb	#	81
49)	TRICHLOROETHENE	3.940	130	156794	26.0021164 ppb	#	100
50)	METHYL CYCLOHEXANE	3.947	83	172194	22.9303736 ppb		87
51)	TERT-AMYL ETHYL ETHER	4.050	59	347364	25.0745555 ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	110850	23.4288732 ppb		98
53)	DIBROMOMETHANE	4.178	93	89403	20.8885760 ppb		94
54)	BROMODICHLOROMETHANE	4.264	83	174485	22.2598773 ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.574	63	600261	124.1579416 ppb	#	87
58)	CIS-1,3-DICHLOROPROPENE	4.629	75	208976	23.6233908 ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	1480546	154.2731266 ppb		95
61)	TOLUENE	4.788	91	460209	23.3700328 ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	187303	24.2374533 ppb	#	94
63)	1,1,2-TRICHLOROETHANE	5.135	97	120798	25.8487332 ppb		96
64)	TETRACHLOROETHENE	5.038	164	112427	25.4357209 ppb		95
65)	1,3-DICHLOROPROPANE	5.312	76	179588	23.5472782 ppb		100
66)	2-HEXANONE	5.532	58	622761	149.8194968 ppb		90
67)	CHLORODIBROMOMETHANE	5.257	129	155970	26.4767346 ppb		99
68)	1,2-DIBROMOETHANE	5.422	107	146779	26.3718679 ppb		100
69)	CHLOROBENZENE	5.769	112	350051	27.3322386 ppb		96
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	128068	27.5835684 ppb		96
71)	ETHYLBENZENE	5.782	106	178060	27.8921585 ppb		94
72)	M&P-XYLENE	5.879	106	436869	55.3708730 ppb		97
73)	O-XYLENE	6.178	106	192275	24.4046511 ppb		99
77)	STYRENE	6.214	104	312495	22.9841037 ppb		98
78)	BROMOFORM	6.239	173	121159	22.0560596 ppb		100
79)	ISOPROPYLBENZENE	6.403	105	499407	23.6630315 ppb		97
81)	BROMOBENZENE	6.690	77	208331	20.7670380 ppb		96
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	169427	20.1706578 ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.848	110	52025	24.4869091 ppb		76
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	72588	25.1439082 ppb		90
85)	N-PROPYLBENZENE	6.702	91	563545	22.5838306 ppb		98
86)	4-ETHYLTOLUENE	6.781	105	483990	24.0503574 ppb		97
87)	2-CHLOROTOLUENE	6.824	91	354453	23.4632499 ppb		98
88)	4-CHLOROTOLUENE	6.946	91	352032	22.9240134 ppb		97
89)	1,3,5-TRIMETHYLBENZENE	6.842	105	393764	23.7450419 ppb		96
90)	TERT-BUTYLBENZENE	7.086	119	306554	23.6573275 ppb		96
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	377069	23.0805857 ppb		97
92)	SEC-BUTYLBENZENE	7.226	105	470190	23.9721945 ppb		97
93)	1,3-DICHLOROBENZENE	7.397	146	236997	23.7614267 ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	401366	24.0343583 ppb		98
95)	DICYCLOPENTADIENE	7.324	66	563048	22.1680644 ppb		97
96)	1,4-DICHLOROBENZENE	7.464	146	248113	23.9408655 ppb		92
97)	1,2,3-TRIMETHYLBENZENE	7.476	105	398334	23.9049392 ppb		96
98)	1,2-DICHLOROBENZENE	7.793	146	223730	24.4566098 ppb		99
99)	N-BUTYLBENZENE	7.659	91	319549	21.8860062 ppb		98
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	52563	22.6986291 ppb		98
101)	1,2,4-TRICHLOROBENZENE	8.988	180	102306	21.1850533 ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:40 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102)	HEXACHLORO-1,3-BUTADIENE	8.970	225	45433	19.6207457 ppb	100
103)	NAPHTHALENE	9.250	128	374358	23.0903653 ppb	100
104)	1,2,3-TRICHLOROBENZENE	9.409	180	91946	20.5118467 ppb	100
105)	1-METHYLNAPHTHALENE	10.134	142	87520	13.6674133 ppb	100
106)	2-METHYLNAPHTHALENE	10.268	142	67344	10.8880054 ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_02.D
Acq On : 25 Sep 2018 9:09 am
Operator : 605
Sample : ICVLCS VMS 25 ppb
Misc : water
ALS Vial : 2 Sample Multiplier: 1
InstName : VOCMS25

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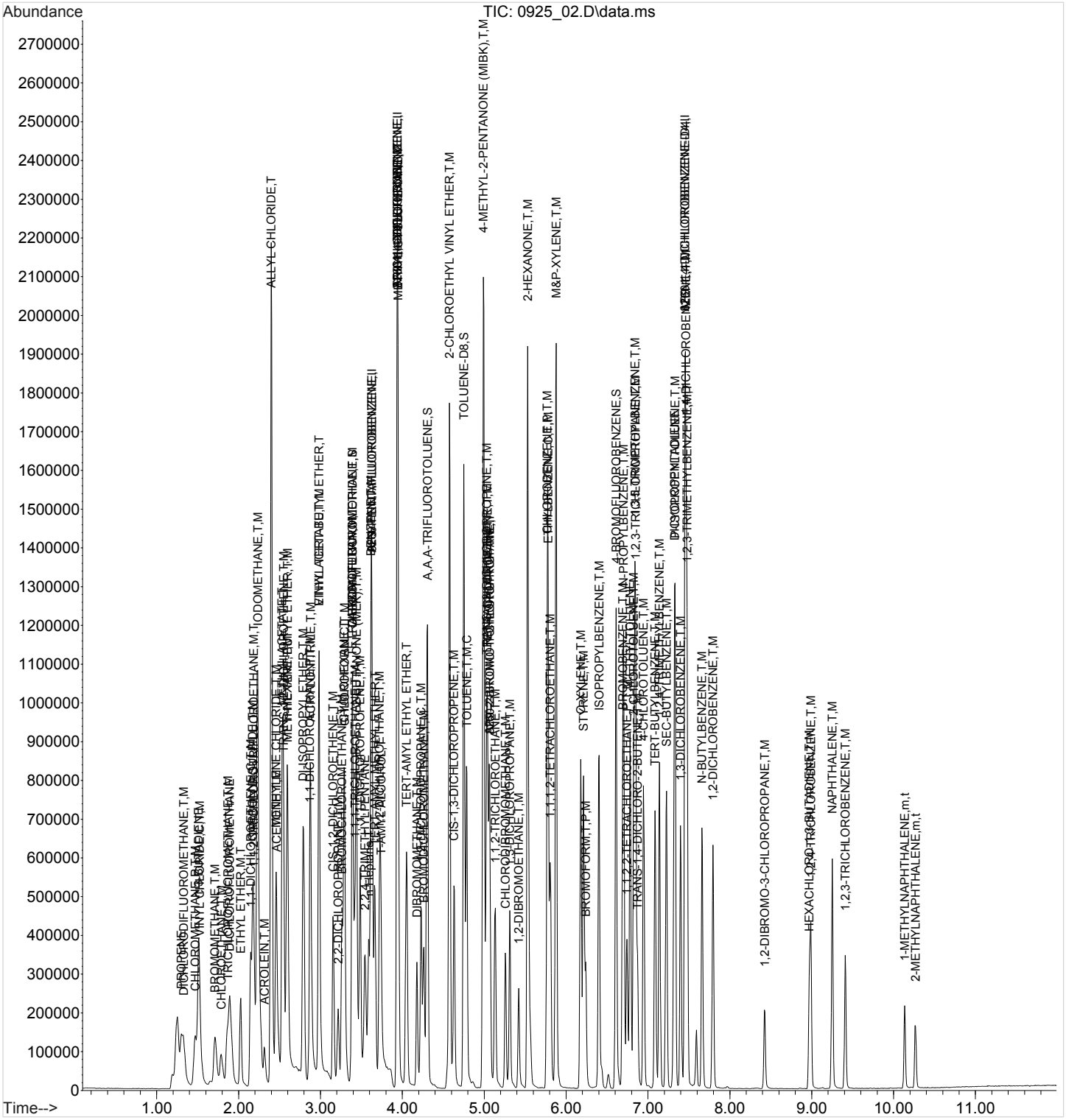
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	296 of 332

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-2

ESC Sample ID:	R3344826-2	**SDG:**	L1028256
Client Sample ID:	LCSD	**Collected Date/Time:**	
Lab File ID:	0925_03	**Received Date/Time:**	
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 09:29
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 09:29
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	118		10.0	50.0
Benzene	71-43-2	3.62	22.2		0.331	1.00
Bromodichloromethane	75-27-4	4.26	22.1		0.380	1.00
Bromochloromethane	74-97-5	3.26	23.6		0.520	1.00
Bromoform	75-25-2	6.24	24.1		0.469	1.00
Bromomethane	74-83-9	1.72	20.3		0.866	5.00
n-Butylbenzene	104-51-8	7.66	22.5		0.361	1.00
sec-Butylbenzene	135-98-8	7.23	23.8		0.365	1.00
tert-Butylbenzene	98-06-6	7.09	26.4		0.399	1.00
Carbon disulfide	75-15-0	2.18	19.8		0.275	1.00
Carbon tetrachloride	56-23-5	3.39	21.9		0.379	1.00
Chlorobenzene	108-90-7	5.77	29.2		0.348	1.00
Chlorodibromomethane	124-48-1	5.26	27.4		0.327	1.00
Chloroethane	75-00-3	1.79	19.9		0.453	5.00
Chloroform	67-66-3	3.29	21.8		0.324	5.00
Chloromethane	74-87-3	1.47	18.6		0.276	2.50
Cyclohexane	110-82-7	3.29	22.6		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	8.43	23.9		1.33	5.00
1,2-Dibromoethane	106-93-4	5.42	28.2		0.381	1.00
1,2-Dichlorobenzene	95-50-1	7.79	25.8		0.349	1.00
1,3-Dichlorobenzene	541-73-1	7.40	24.7		0.220	1.00
1,4-Dichlorobenzene	106-46-7	7.46	24.0		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.33	23.2		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	21.7		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	23.9		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	23.4		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.15	22.1		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	2.55	22.1		0.396	1.00
1,2-Dichloropropane	78-87-5	4.23	23.3		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	4.64	24.4		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	5.03	24.6		0.419	1.00
Ethylbenzene	100-41-4	5.78	28.9		0.384	1.00
2-Hexanone	591-78-6	5.53	155		3.82	10.0
Isopropylbenzene	98-82-8	6.40	23.7		0.326	1.00
p-Isopropyltoluene	99-87-6	7.33	25.3		0.350	1.00
2-Butanone (MEK)	78-93-3	3.44	147		3.93	10.0
Methyl Acetate	79-20-9	2.53	135		4.30	20.0
Methyl Cyclohexane	108-87-2	3.95	22.7		0.380	1.00
Methylene Chloride	75-09-2	2.46	21.1		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	4.99	165		2.14	10.0
Methyl tert-butyl ether	1634-04-4	2.60	21.9		0.367	1.00
Naphthalene	91-20-3	9.25	23.7		1.00	5.00
n-Propylbenzene	103-65-1	6.70	25.4		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-2

ESC Sample ID:	R3344826-2	**SDG:**	L1028256
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0925_03	**Received Date/Time:**	_____
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 09:29
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 09:29
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**MDL**	**RDL**
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	6.21	23.8		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	6.74	21.4		0.130	1.00
Tetrachloroethene	127-18-4	5.04	25.2		0.372	1.00
Toluene	108-88-3	4.79	25.2		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	2.18	23.4		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	9.41	20.3		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	8.99	21.3		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	23.1		0.319	1.00
1,1,2-Trichloroethane	79-00-5	5.14	27.0		0.383	1.00
Trichloroethene	79-01-6	3.94	25.9		0.398	1.00
Trichlorofluoromethane	75-69-4	1.88	21.6		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	7.14	24.6		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	6.84	23.6		0.387	1.00
Vinyl chloride	75-01-4	1.53	20.6		0.259	1.00
o-Xylene	95-47-6	6.18	27.7		0.341	1.00
m&p-Xylenes	1330-20-7	5.88	53.9		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_03.D
Acq On : 25 Sep 2018 9:29 am
Operator : 605
Sample : LCSD 1x WG1170992
Misc : water
ALS Vial : 3 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	541137	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.940	114	745597	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	108789	40.0000000	ppb	#	0.00
76) 8260-1,4-DICHLOROBENZE...	7.452	152	338932	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	543580	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.940	114	745597	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	108789	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.452	152	338932	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	281383	39.4323281	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 98.58%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	392427	37.8150156	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 94.54%				
60) TOLUENE-D8	4.751	98	841204	45.3521106	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 113.38%				
80) 4-BROMOFLUOROBENZENE	6.611	95	317794	42.2654370	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 105.66%				
Target Compounds							Qvalue
4) PROPENE	1.301	41	90863	37.7768742	ppb		97
5) DICHLORODIFLUOROMETHANE	1.331	85	139333	23.1646637	ppb		99
6) CHLOROMETHANE	1.471	50	172273	18.5957683	ppb	#	86
7) VINYL CHLORIDE	1.526	62	169642	20.6049555	ppb		99
8) 1,3-BUTADIENE	1.514	39	154825	28.1120725	ppb		92
9) BROMOMETHANE	1.715	94	109785	20.3495950	ppb		98
10) CHLOROETHANE	1.795	64	76134	19.8787103	ppb	#	91
11) TRICHLOROFLUOROMETHANE	1.880	101	182968	21.5658892	ppb		99
12) DICHLOROFLUOROMETHANE	1.898	67	176660	17.7397181	ug/l		99
13) ETHYL ETHER	2.026	59	114632	23.0448532	ppb		92
14) ACROLEIN	2.319	56	108918	118.4885518	ppb		96
15) 1,1-DICHLOROETHENE	2.148	96	115386	23.4236285	ppb		99
16) 1,1,2-TRICHLOROTRIFLUO...	2.185	101	130627	23.4250158	ppb		98
17) ACETONE	2.465	43	271922	118.1340866	ppb		99
18) IODOMETHANE	2.233	142	1327756	115.4045676	ppb		97
19) CARBON DISULFIDE	2.179	76	356907	19.7893543	ppb	#	96
20) ALLYL CHLORIDE	2.404	76	321043	102.2578431	ppb	#	57
21) METHYLENE CHLORIDE	2.459	84	134248	21.1365730	ppb		85
22) METHYL ACETATE	2.532	43	1037065	135.1877206	ppb	#	91
23) ACRYLONITRILE	2.880	53	541288	137.5949730	ppb		99
24) n-HEXANE	2.593	56	104209	23.4796914	ppb		80
25) TRANS-1,2-DICHLOROETHENE	2.550	96	121357	22.1013059	ppb		99
26) METHYL TERT-BUTYL ETHER	2.599	73	306371	21.9252796	ppb		90
27) 1,1-DICHLOROETHANE	2.874	63	260435	21.6555703	ppb		99
28) VINYL ACETATE	2.983	43	742774	56.9998699	ppb		97
29) DI-ISOPROPYL ETHER	2.788	45	554946	26.5108301	ppb		98
30) ETHYL TERT-BUTYL ETHER	2.983	59	411917	23.1829958	ppb		97
31) 2,2-DICHLOROPROPANE	3.215	77	95860	19.2458737	ppb		96
32) CIS-1,2-DICHLOROETHENE	3.154	96	134968	22.1445397	ppb		99
33) 2-BUTANONE (MEK)	3.441	43	840144	147.0721363	ppb		94
34) BROMOCHLOROMETHANE	3.264	130	94342	23.6017587	ppb		88
35) TETRAHYDROFURAN	3.386	42	80857	26.2090509	ppb		98
36) CHLOROFORM	3.294	83	236054	21.8273353	ppb		100
37) CYCLOHEXANE	3.288	84	144159	22.5587118	ppb		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_03.D
Acq On : 25 Sep 2018 9:29 am
Operator : 605
Sample : LCSD 1x WG1170992
Misc : water
ALS Vial : 3 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	184225	23.0861588	ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	169518	21.8888604	ppb		96
41)	1,1-DICHLOROPROPENE	3.483	75	170343	21.9085352	ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	290901	22.7027735	ppb		99
43)	n-Heptane	3.593	71	46859	17.0439357	ppb	#	62
44)	BENZENE	3.617	78	486068	22.2329487	ppb	#	90
45)	TERT-AMYL METHYL ETHER	3.666	73	299069	20.2751387	ppb	#	91
46)	1,2-DICHLOROETHANE	3.721	62	193905	23.9137443	ppb		99
47)	T-AMYL ALCOHOL	3.745	59	175324	129.7710930	ppb		90
49)	TRICHLOROETHENE	3.940	130	154969	25.9163744	ppb	#	99
50)	METHYL CYCLOHEXANE	3.947	83	168962	22.6803843	ppb	#	85
51)	TERT-AMYL ETHYL ETHER	4.050	59	356176	25.9276553	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.227	62	109439	23.3258768	ppb		98
53)	DIBROMOMETHANE	4.178	93	94327	22.2250589	ppb		95
54)	BROMODICHLOROMETHANE	4.264	83	171652	22.0832858	ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.574	63	636377	140.5926186	ppb	#	88
58)	CIS-1,3-DICHLOROPROPENE	4.635	75	202048	24.3957428	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.989	43	1481921	164.9328246	ppb		95
61)	TOLUENE	4.788	91	464444	25.1913382	ppb		99
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	178199	24.6298169	ppb	#	94
63)	1,1,2-TRICHLOROETHANE	5.135	97	118243	27.0251820	ppb		96
64)	TETRACHLOROETHENE	5.044	164	104349	25.2159531	ppb		93
65)	1,3-DICHLOROPROPANE	5.312	76	174536	24.4434266	ppb		100
66)	2-HEXANONE	5.532	58	603328	155.0294035	ppb		91
67)	CHLORODIBROMOMETHANE	5.257	129	151126	27.4016179	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	146761	28.1644515	ppb		100
69)	CHLOROBENZENE	5.769	112	350630	29.2419696	ppb		96
70)	1,1,1,2-TETRACHLOROETHANE	5.806	133	124195	28.5711421	ppb		97
71)	ETHYLBENZENE	5.782	106	172758	28.9046418	ppb		94
72)	M&P-XYLENE	5.879	106	398241	53.9125384	ppb		99
73)	O-XYLENE	6.178	106	204175	27.6799955	ppb		97
77)	STYRENE	6.214	104	303578	23.8028749	ppb		97
78)	BROMOFORM	6.239	173	124009	24.0657872	ppb		99
79)	ISOPROPYLBENZENE	6.403	105	469979	23.7393502	ppb		97
81)	BROMOBENZENE	6.690	77	222567	23.6513563	ppb		96
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	168764	21.4186390	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.848	110	47414	23.7904740	ppb		81
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	67308	24.8547419	ppb		94
85)	N-PROPYLBENZENE	6.702	91	595235	25.4291642	ppb		98
86)	4-ETHYLTOLUENE	6.781	105	481963	25.5313315	ppb		96
87)	2-CHLOROTOLUENE	6.824	91	354393	25.0085933	ppb		97
88)	4-CHLOROTOLUENE	6.946	91	348729	24.2086847	ppb		97
89)	1,3,5-TRIMETHYLBENZENE	6.842	105	366711	23.5741200	ppb		97
90)	TERT-BUTYLBENZENE	7.086	119	320985	26.4069384	ppb		95
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	377219	24.6146790	ppb		96
92)	SEC-BUTYLBENZENE	7.226	105	437302	23.7678822	ppb		97
93)	1,3-DICHLOROBENZENE	7.397	146	231218	24.7130259	ppb		100
94)	P-ISOPROPYLTOLUENE	7.330	119	396612	25.3181764	ppb		99
95)	DICYCLOPENTADIENE	7.324	66	559670	23.4903237	ppb		97
96)	1,4-DICHLOROBENZENE	7.464	146	232903	23.9574190	ppb		91
97)	1,2,3-TRIMETHYLBENZENE	7.476	105	366359	23.4380648	ppb		96
98)	1,2-DICHLOROBENZENE	7.793	146	221360	25.7956097	ppb		99
99)	N-BUTYLBENZENE	7.659	91	308651	22.5357161	ppb		98
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	51972	23.9256383	ppb		99
101)	1,2,4-TRICHLOROBENZENE	8.988	180	96423	21.2854931	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_03.D
Acq On : 25 Sep 2018 9:29 am
Operator : 605
Sample : LCSD 1x WG1170992
Misc : water
ALS Vial : 3 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

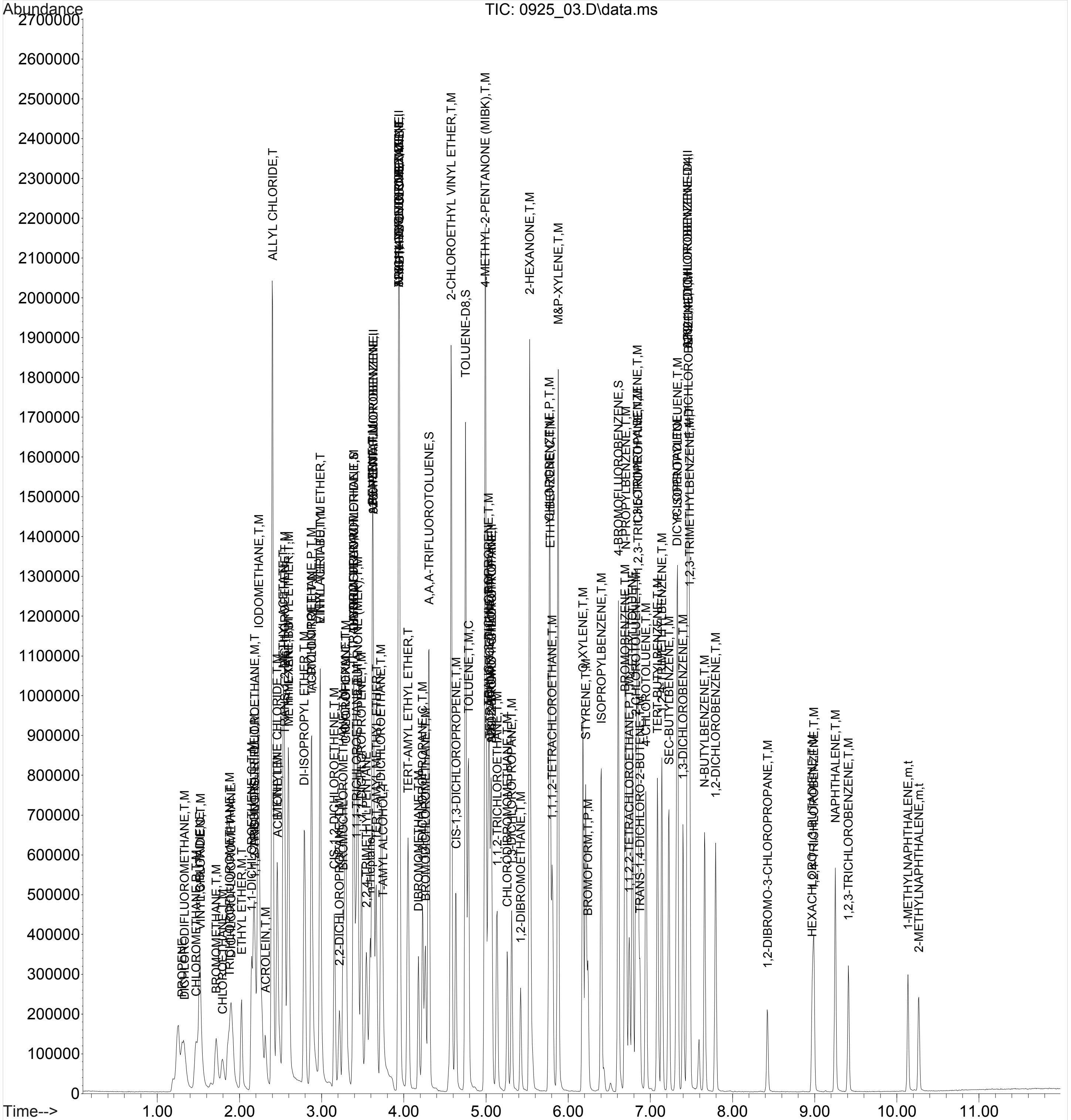
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) HEXACHLORO-1,3-BUTADIENE	8.970	225	43430	19.9944077 ppb	98
103) NAPHTHALENE	9.250	128	360994	23.7365879 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.409	180	85341	20.2957109 ppb	99
105) 1-METHYLNAPHTHALENE	10.134	142	115912	19.2966553 ppb	99
106) 2-METHYLNAPHTHALENE	10.268	142	96629	16.6544971 ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_03.D
Acq On : 25 Sep 2018 9:29 am
Operator : 605
Sample : LCSD 1x WG1170992
Misc : water
ALS Vial : 3 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 25 13:05:45 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-4

ESC Sample ID:	R3344826-4	**SDG:**	L1028256
Client Sample ID:	MS	**Collected Date/Time:**	09/19/18 10:25
Lab File ID:	0925_27	**Received Date/Time:**	09/21/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 18:52
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 18:52
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	145		10.0	50.0
Benzene	71-43-2	3.62	23.1		0.331	1.00
Bromodichloromethane	75-27-4	4.26	24.2		0.380	1.00
Bromochloromethane	74-97-5	3.26	25.2		0.520	1.00
Bromoform	75-25-2	6.24	22.9		0.469	1.00
Bromomethane	74-83-9	1.71	18.3		0.866	5.00
n-Butylbenzene	104-51-8	7.67	24.4		0.361	1.00
sec-Butylbenzene	135-98-8	7.23	26.1		0.365	1.00
tert-Butylbenzene	98-06-6	7.09	29.6		0.399	1.00
Carbon disulfide	75-15-0	2.18	21.2		0.275	1.00
Carbon tetrachloride	56-23-5	3.39	24.9		0.379	1.00
Chlorobenzene	108-90-7	5.78	29.0		0.348	1.00
Chlorodibromomethane	124-48-1	5.26	27.3		0.327	1.00
Chloroethane	75-00-3	1.79	18.9		0.453	5.00
Chloroform	67-66-3	3.29	24.2		0.324	5.00
Chloromethane	74-87-3	1.47	21.0		0.276	2.50
Cyclohexane	110-82-7	3.29	24.8		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	8.43	24.6		1.33	5.00
1,2-Dibromoethane	106-93-4	5.42	26.8		0.381	1.00
1,2-Dichlorobenzene	95-50-1	7.80	26.0		0.349	1.00
1,3-Dichlorobenzene	541-73-1	7.40	25.7		0.220	1.00
1,4-Dichlorobenzene	106-46-7	7.47	25.6		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.33	25.7		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	25.1		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	24.7		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	27.5		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	24.3		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	2.55	24.8		0.396	1.00
1,2-Dichloropropane	78-87-5	4.23	24.8		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	4.64	24.4		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	5.03	26.4		0.419	1.00
Ethylbenzene	100-41-4	5.78	29.8		0.384	1.00
2-Hexanone	591-78-6	5.53	149		3.82	10.0
Isopropylbenzene	98-82-8	6.40	25.6		0.326	1.00
p-Isopropyltoluene	99-87-6	7.34	26.5		0.350	1.00
2-Butanone (MEK)	78-93-3	3.44	151		3.93	10.0
Methyl Acetate	79-20-9	2.54	133		4.30	20.0
Methyl Cyclohexane	108-87-2	3.95	25.1		0.380	1.00
Methylene Chloride	75-09-2	2.46	22.0		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	161		2.14	10.0
Methyl tert-butyl ether	1634-04-4	2.60	22.4		0.367	1.00
Naphthalene	91-20-3	9.26	26.9		1.00	5.00
n-Propylbenzene	103-65-1	6.71	26.1		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-4

ESC Sample ID:	R3344826-4	**SDG:**	L1028256
Client Sample ID:	MS	**Collected Date/Time:**	09/19/18 10:25
Lab File ID:	0925_27	**Received Date/Time:**	09/21/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 18:52
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 18:52
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	6.21	23.9		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	6.74	24.1		0.130	1.00
Tetrachloroethene	127-18-4	5.04	28.2		0.372	1.00
Toluene	108-88-3	4.79	26.0		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	2.18	26.8		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	9.42	23.5		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	8.99	25.6		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	27.4		0.319	1.00
1,1,2-Trichloroethane	79-00-5	5.14	25.3		0.383	1.00
Trichloroethene	79-01-6	3.95	94.2		0.398	1.00
Trichlorofluoromethane	75-69-4	1.87	24.1		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	7.14	26.3		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	6.85	25.5		0.387	1.00
Vinyl chloride	75-01-4	1.53	23.1		0.259	1.00
o-Xylene	95-47-6	6.18	27.4		0.341	1.00
m&p-Xylenes	1330-20-7	5.88	57.4		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_27.D
Acq On : 25 Sep 2018 6:52 pm
Operator : 605
Sample : MS 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 27 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards								
1)	8260-PENTAFLUOROBENZENE	3.630	168	495013	40.0000000	ppb		0.00
48)	8260-1,4-DIFLUOROBENZENE	3.940	114	704285	40.0000000	ppb		0.00
56)	8260-2-BROMO-1-CHLOROP...	5.068	79	111676	40.0000000	ppb	#	0.00
76)	8260-1,4-DICHLOROBENZE...	7.458	152	349444	40.0000000	ppb		0.00
107)	AP9-PENTAFLUOROBENZENE	3.630	168	497664	40.0000000	ppb		0.00
119)	AP9-1,4-DIFLUOROBENZENE	3.940	114	704285	40.0000000	ppb		0.01
124)	AP9-2-BROMO-1-CHLOROPR...	5.068	79	111676	40.0000000	ppb	#	0.00
128)	AP9-1,4-DICHLOROBENZEN...	7.458	152	349444	40.0000000	ppb		0.00
System Monitoring Compounds								
38)	DIBROMOFLUOROMETHANE	3.392	111	271952	41.6617440	ppb		0.00
	Spiked Amount 40.000	Range 79 - 121			Recovery = 104.15%			
55)	A,A,A-TRIFLUOROTOLUENE	4.306	146	390555	39.8422007	ppb		0.00
	Spiked Amount 40.000	Range 90 - 116			Recovery = 99.61%			
60)	TOLUENE-D8	4.757	98	875926	46.0032724	ppb		0.00
	Spiked Amount 40.000	Range 90 - 115			Recovery = 115.01%#			
80)	4-BROMOFLUOROBENZENE	6.611	95	317116	40.9065461	ppb		0.00
	Spiked Amount 40.000	Range 80 - 120			Recovery = 102.27%			
Target Compounds								Qvalue
4)	PROPENE	1.307	41	97742	44.3982257	ppb		97
5)	DICHLORODIFLUOROMETHANE	1.331	85	141608	25.7365557	ppb		98
6)	CHLOROMETHANE	1.471	50	178228	21.0311716	ppb	#	86
7)	VINYL CHLORIDE	1.526	62	173661	23.0585089	ppb		99
8)	1,3-BUTADIENE	1.514	39	154047	30.5770544	ppb		93
9)	BROMOMETHANE	1.709	94	90273	18.2920031	ppb		100
10)	CHLOROETHANE	1.788	64	66042	18.8503926	ppb		96
11)	TRICHLOROFLUOROMETHANE	1.868	101	187321	24.1362237	ppb		99
12)	DICHLOROFLUOROMETHANE	1.898	67	172718	18.9599293	ug/l		98
13)	ETHYL ETHER	2.026	59	106754	23.4608023	ppb		90
14)	ACROLEIN	2.319	56	133594	158.8745422	ppb		99
15)	1,1-DICHLOROETHENE	2.148	96	123988	27.5151150	ppb		98
16)	1,1,2-TRICHLOROTRIFLUO...	2.185	101	136654	26.7892104	ppb		97
17)	ACETONE	2.471	43	305940	145.2973754	ppb		94
18)	IODOMETHANE	2.233	142	1306194	124.1089310	ppb		97
19)	CARBON DISULFIDE	2.179	76	349975	21.2131032	ppb	#	95
20)	ALLYL CHLORIDE	2.404	76	332647	115.8264269	ppb	#	52
21)	METHYLENE CHLORIDE	2.459	84	127784	21.9934750	ppb		84
22)	METHYL ACETATE	2.538	43	935032	133.2442165	ppb	#	92
23)	ACRYLONITRILE	2.886	53	492050	136.7332162	ppb		100
24)	n-HEXANE	2.593	56	109264	26.9125517	ppb		87
25)	TRANS-1,2-DICHLOROETHENE	2.551	96	124723	24.8307751	ppb		98
26)	METHYL TERT-BUTYL ETHER	2.599	73	286620	22.4230458	ppb	#	79
27)	1,1-DICHLOROETHANE	2.874	63	275590	25.0509590	ppb		99
28)	VINYL ACETATE	2.983	43	2030849	170.3669819	ppb		98
29)	DI-ISOPROPYL ETHER	2.794	45	564250	29.4669234	ppb		99
30)	ETHYL TERT-BUTYL ETHER	2.989	59	410178	25.2361342	ppb		98
31)	2,2-DICHLOROPROPANE	3.221	77	112508	24.6930216	ppb		95
32)	CIS-1,2-DICHLOROETHENE	3.160	96	135207	24.2507764	ppb		98
33)	2-BUTANONE (MEK)	3.441	43	786877	150.5823766	ppb		94
34)	BROMOCHLOROMETHANE	3.264	130	92296	25.2413623	ppb		87
35)	TETRAHYDROFURAN	3.386	42	80629	28.5703506	ppb		99
36)	CHLOROFORM	3.294	83	239675	24.2271716	ppb		100
37)	CYCLOHEXANE	3.294	84	145146	24.8295147	ppb	#	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_27.D
Acq On : 25 Sep 2018 6:52 pm
Operator : 605
Sample : MS 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 27 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	199743	27.3631006	ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	176530	24.9181891	ppb		97
41)	1,1-DICHLOROPROPENE	3.489	75	172825	24.2988791	ppb		97
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	305371	26.0526628	ppb		98
43)	n-Heptane	3.593	71	53177	21.1442035	ppb	#	71
44)	BENZENE	3.623	78	461086	23.0553966	ppb	#	91
45)	TERT-AMYL METHYL ETHER	3.666	73	289462	21.4523374	ppb	#	89
46)	1,2-DICHLOROETHANE	3.721	62	183223	24.7018334	ppb		100
47)	T-AMYL ALCOHOL	3.751	59	174853	141.4817117	ppb		94
49)	TRICHLOROETHENE	3.947	130	532182	94.2204794	ppb	#	51
50)	METHYL CYCLOHEXANE	3.953	83	175690	25.0582072	ppb		89
51)	TERT-AMYL ETHYL ETHER	4.056	59	331290	25.5306947	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.233	62	109895	24.7970209	ppb		97
53)	DIBROMOMETHANE	4.178	93	90084	22.4703726	ppb		97
54)	BROMODICHLOROMETHANE	4.264	83	177578	24.1857578	ppb		100
58)	CIS-1,3-DICHLOROPROPENE	4.635	75	207565	24.4139893	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.995	43	1482380	160.7188166	ppb		95
61)	TOLUENE	4.788	91	492129	26.0029113	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	196372	26.4399493	ppb	#	97
63)	1,1,2-TRICHLOROETHANE	5.135	97	113678	25.3101516	ppb		96
64)	TETRACHLOROETHENE	5.044	164	119876	28.2191855	ppb		94
65)	1,3-DICHLOROPROPANE	5.318	76	180507	24.6261347	ppb		99
66)	2-HEXANONE	5.532	58	593527	148.5683191	ppb		88
67)	CHLORODIBROMOMETHANE	5.263	129	154606	27.3079121	ppb		99
68)	1,2-DIBROMOETHANE	5.422	107	143536	26.8334559	ppb		99
69)	CHLOROBENZENE	5.775	112	357435	29.0388732	ppb		97
70)	1,1,1,2-TETRACHLOROETHANE	5.812	133	125254	28.0698588	ppb		97
71)	ETHYLBENZENE	5.782	106	183034	29.8322720	ppb		93
72)	M&P-XYLENE	5.879	106	435173	57.3892947	ppb		99
73)	O-XYLENE	6.184	106	207836	27.4479150	ppb		99
77)	STYRENE	6.214	104	314767	23.9377486	ppb		97
78)	BROMOFORM	6.245	173	121461	22.8622361	ppb		100
79)	ISOPROPYLBENZENE	6.403	105	523539	25.6492341	ppb		97
81)	BROMOBENZENE	6.696	77	222079	22.8895766	ppb		97
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	195525	24.0685175	ppb		100
83)	1,2,3-TRICHLOROPROPANE	6.848	110	48769	23.7342404	ppb		83
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	75276	26.9608818	ppb		89
85)	N-PROPYLBENZENE	6.708	91	630151	26.1109842	ppb		98
86)	4-ETHYLTOLUENE	6.787	105	501935	25.7894590	ppb		97
87)	2-CHLOROTOLUENE	6.830	91	355133	24.3069319	ppb		98
88)	4-CHLOROTOLUENE	6.952	91	369674	24.8906949	ppb		98
89)	1,3,5-TRIMETHYLBENZENE	6.848	105	409084	25.5069794	ppb		97
90)	TERT-BUTYLBENZENE	7.092	119	370501	29.5636250	ppb		95
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	415265	26.2821525	ppb		97
92)	SEC-BUTYLBENZENE	7.226	105	495903	26.1421165	ppb		98
93)	1,3-DICHLOROBENZENE	7.403	146	247763	25.6847724	ppb		100
94)	P-ISOPROPYLTOLUENE	7.336	119	427534	26.4711138	ppb		98
95)	DICYCLOPENTADIENE	7.324	66	584763	23.8052006	ppb		97
96)	1,4-DICHLOROBENZENE	7.470	146	256592	25.6001815	ppb		99
97)	1,2,3-TRIMETHYLBENZENE	7.482	105	413454	25.6552983	ppb		96
98)	1,2-DICHLOROBENZENE	7.799	146	230032	25.9997932	ppb		99
99)	N-BUTYLBENZENE	7.665	91	344759	24.4148619	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	55102	24.6034750	ppb		98
101)	1,2,4-TRICHLOROBENZENE	8.994	180	119586	25.6046239	ppb		100
102)	HEXACHLORO-1,3-BUTADIENE	8.976	225	49385	22.0520393	ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_27.D
Acq On : 25 Sep 2018 6:52 pm
Operator : 605
Sample : MS 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 27 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

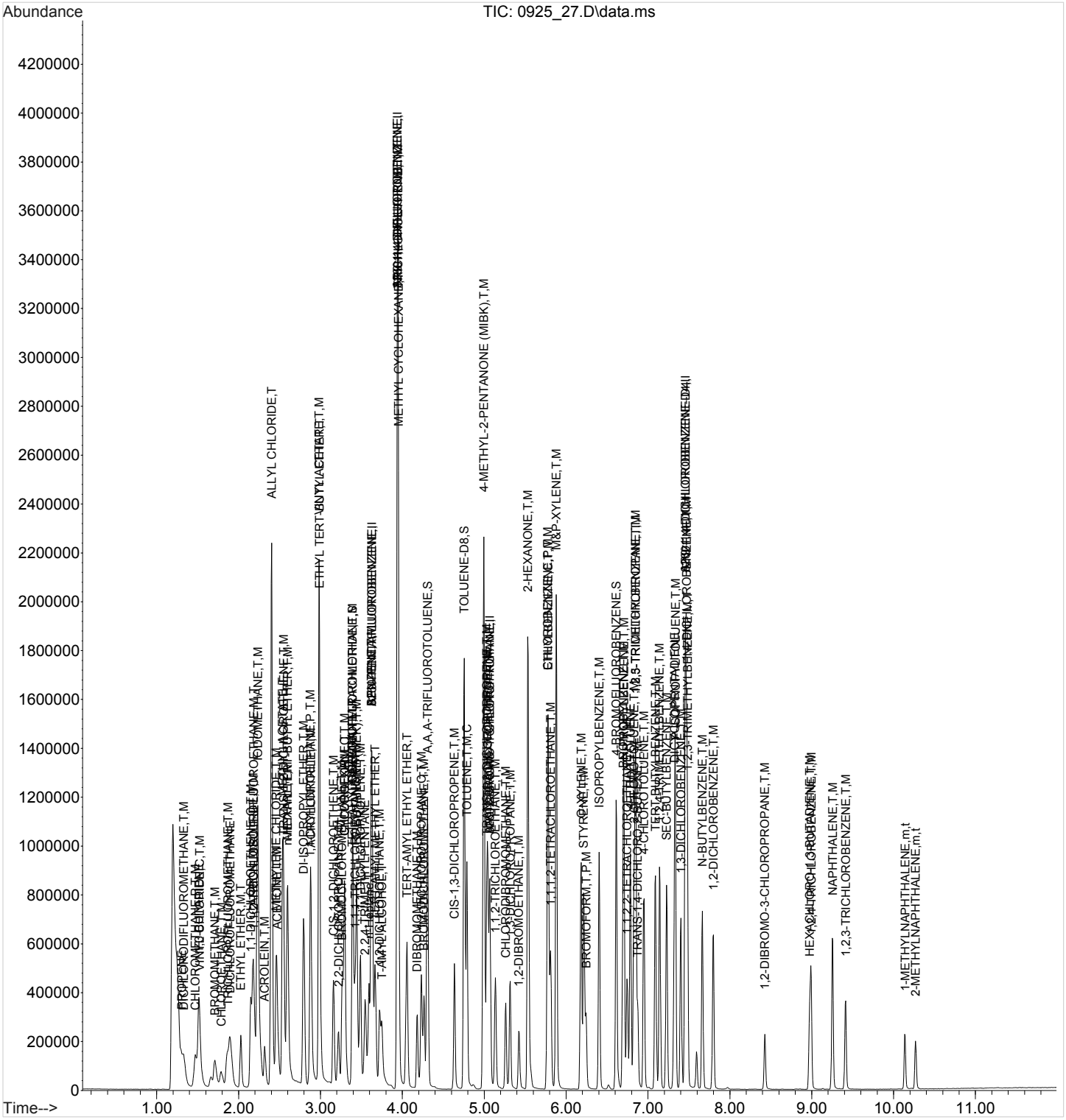
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
103) NAPHTHALENE	9.257	128	421088	26.8550619 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.415	180	101863	23.4962194 ppb	100
105) 1-METHYLNAPHTHALENE	10.140	142	96343	15.5563889 ppb	99
106) 2-METHYLNAPHTHALENE	10.269	142	75735	12.6606398 ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_27.D
Acq On : 25 Sep 2018 6:52 pm
Operator : 605
Sample : MS 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 27 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:12 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	308 of 332

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-6

ESC Sample ID:	R3344826-6	**SDG:**	L1028256
Client Sample ID:	MS	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_29	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 19:31
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 19:31
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	157		10.0	50.0
Benzene	71-43-2	3.62	23.6		0.331	1.00
Bromodichloromethane	75-27-4	4.26	23.3		0.380	1.00
Bromochloromethane	74-97-5	3.26	25.2		0.520	1.00
Bromoform	75-25-2	6.24	23.0		0.469	1.00
Bromomethane	74-83-9	1.71	18.8		0.866	5.00
n-Butylbenzene	104-51-8	7.67	25.1		0.361	1.00
sec-Butylbenzene	135-98-8	7.23	26.3		0.365	1.00
tert-Butylbenzene	98-06-6	7.09	29.2		0.399	1.00
Carbon disulfide	75-15-0	2.18	21.4		0.275	1.00
Carbon tetrachloride	56-23-5	3.39	24.3		0.379	1.00
Chlorobenzene	108-90-7	5.78	28.4		0.348	1.00
Chlorodibromomethane	124-48-1	5.26	29.7		0.327	1.00
Chloroethane	75-00-3	1.78	18.3		0.453	5.00
Chloroform	67-66-3	3.29	24.3		0.324	5.00
Chloromethane	74-87-3	1.47	21.5		0.276	2.50
Cyclohexane	110-82-7	3.29	25.1		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	8.43	25.0		1.33	5.00
1,2-Dibromoethane	106-93-4	5.42	28.8		0.381	1.00
1,2-Dichlorobenzene	95-50-1	7.79	26.6		0.349	1.00
1,3-Dichlorobenzene	541-73-1	7.40	26.5		0.220	1.00
1,4-Dichlorobenzene	106-46-7	7.47	25.9		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.33	24.1		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	25.2		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	25.0		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	27.9		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	24.8		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	2.55	24.4		0.396	1.00
1,2-Dichloropropane	78-87-5	4.23	24.4		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	4.64	24.7		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	5.03	27.2		0.419	1.00
Ethylbenzene	100-41-4	5.78	30.1		0.384	1.00
2-Hexanone	591-78-6	5.53	171		3.82	10.0
Isopropylbenzene	98-82-8	6.40	26.6		0.326	1.00
p-Isopropyltoluene	99-87-6	7.34	27.4		0.350	1.00
2-Butanone (MEK)	78-93-3	3.44	143		3.93	10.0
Methyl Acetate	79-20-9	2.54	131		4.30	20.0
Methyl Cyclohexane	108-87-2	3.95	23.7		0.380	1.00
Methylene Chloride	75-09-2	2.46	22.1		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	173		2.14	10.0
Methyl tert-butyl ether	1634-04-4	2.60	21.9		0.367	1.00
Naphthalene	91-20-3	9.25	40.0		1.00	5.00
n-Propylbenzene	103-65-1	6.71	25.8		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-6

ESC Sample ID:	R3344826-6	**SDG:**	L1028256
Client Sample ID:	MS	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_29	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 19:31
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 19:31
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	6.21	24.2		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	6.74	24.7		0.130	1.00
Tetrachloroethene	127-18-4	5.04	29.1		0.372	1.00
Toluene	108-88-3	4.79	28.7		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	2.18	25.7		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	9.41	24.7		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	8.99	27.1		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	26.3		0.319	1.00
1,1,2-Trichloroethane	79-00-5	5.14	28.5		0.383	1.00
Trichloroethene	79-01-6	3.94	25.7		0.398	1.00
Trichlorofluoromethane	75-69-4	1.87	26.1		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	7.14	26.0		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	6.85	26.1		0.387	1.00
Vinyl chloride	75-01-4	1.53	23.9		0.259	1.00
o-Xylene	95-47-6	6.18	30.6		0.341	1.00
m&p-Xylenes	1330-20-7	5.88	62.4		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_29.D
Acq On : 25 Sep 2018 7:31 pm
Operator : 605
Sample : MS 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 29 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:22 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards								
1)	8260-PENTAFLUOROBENZENE	3.630	168	498039	40.0000000	ppb		0.00
48)	8260-1,4-DIFLUOROBENZENE	3.940	114	721676	40.0000000	ppb		0.00
56)	8260-2-BROMO-1-CHLOROP...	5.068	79	107590	40.0000000	ppb	#	0.00
76)	8260-1,4-DICHLOROBENZE...	7.458	152	355415	40.0000000	ppb		0.00
107)	AP9-PENTAFLUOROBENZENE	3.630	168	498039	40.0000000	ppb		0.00
119)	AP9-1,4-DIFLUOROBENZENE	3.940	114	721676	40.0000000	ppb		0.01
124)	AP9-2-BROMO-1-CHLOROPR...	5.068	79	107590	40.0000000	ppb	#	0.00
128)	AP9-1,4-DICHLOROBENZEN...	7.458	152	355415	40.0000000	ppb		0.00
System Monitoring Compounds								
38)	DIBROMOFLUOROMETHANE	3.392	111	261703	39.8480562	ppb		0.00
	Spiked Amount 40.000	Range 79 - 121			Recovery = 99.62%			
55)	A,A,A-TRIFLUOROTOLUENE	4.306	146	402952	40.1162758	ppb		0.00
	Spiked Amount 40.000	Range 90 - 116			Recovery = 100.29%			
60)	TOLUENE-D8	4.757	98	808202	44.0584457	ppb		0.00
	Spiked Amount 40.000	Range 90 - 115			Recovery = 110.15%			
80)	4-BROMOFLUOROBENZENE	6.611	95	315168	39.9722512	ppb		0.00
	Spiked Amount 40.000	Range 80 - 120			Recovery = 99.93%			
Target Compounds								Qvalue
4)	PROPENE	1.301	41	110103	49.6921561	ppb		97
5)	DICHLORODIFLUOROMETHANE	1.331	85	133594	24.1325293	ppb		99
6)	CHLOROMETHANE	1.471	50	183290	21.4970842	ppb	#	86
7)	VINYL CHLORIDE	1.526	62	180857	23.8680807	ppb		100
8)	1,3-BUTADIENE	1.514	39	163165	32.1901246	ppb		92
9)	BROMOMETHANE	1.709	94	93197	18.7697537	ppb		99
10)	CHLOROETHANE	1.782	64	64576	18.3199622	ppb		96
11)	TRICHLOROFLUOROMETHANE	1.868	101	203881	26.1103601	ppb		99
12)	DICHLOROFLUOROMETHANE	1.892	67	190823	20.8201131	ug/l		99
13)	ETHYL ETHER	2.026	59	117144	25.5877444	ppb		90
14)	ACROLEIN	2.319	56	142576	168.5260482	ppb		99
15)	1,1-DICHLOROETHENE	2.148	96	126369	27.8731132	ppb		98
16)	1,1,2-TRICHLOROTRIFLUO...	2.185	101	131796	25.6798833	ppb		98
17)	ACETONE	2.471	43	332949	157.1637830	ppb		94
18)	IODOMETHANE	2.233	142	1327514	125.3682929	ppb		97
19)	CARBON DISULFIDE	2.179	76	355596	21.4228527	ppb	#	96
20)	ALLYL CHLORIDE	2.404	76	340026	117.6764143	ppb	#	54
21)	METHYLENE CHLORIDE	2.459	84	129378	22.1325299	ppb		85
22)	METHYL ACETATE	2.538	43	921741	130.5521568	ppb	#	92
23)	ACRYLONITRILE	2.880	53	489010	135.0628114	ppb		99
24)	n-HEXANE	2.593	56	101546	24.8595839	ppb		77
25)	TRANS-1,2-DICHLOROETHENE	2.550	96	123120	24.3627095	ppb		98
26)	METHYL TERT-BUTYL ETHER	2.599	73	281918	21.9211922	ppb		84
27)	1,1-DICHLOROETHANE	2.874	63	278921	25.1996998	ppb		99
28)	VINYL ACETATE	2.983	43	2118228	176.6175081	ppb		98
29)	DI-ISOPROPYL ETHER	2.794	45	546633	28.3734616	ppb		100
30)	ETHYL TERT-BUTYL ETHER	2.989	59	424021	25.9293174	ppb		98
31)	2,2-DICHLOROPROPANE	3.221	77	120333	26.2499710	ppb		98
32)	CIS-1,2-DICHLOROETHENE	3.160	96	138979	24.7758695	ppb		97
33)	2-BUTANONE (MEK)	3.441	43	751811	142.9977564	ppb		94
34)	BROMOCHLOROMETHANE	3.264	130	92760	25.2141251	ppb		88
35)	TETRAHYDROFURAN	3.386	42	79364	27.9512411	ppb		99
36)	CHLOROFORM	3.294	83	242123	24.3259202	ppb		100
37)	CYCLOHEXANE	3.288	84	147533	25.0845079	ppb	#	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_29.D
Acq On : 25 Sep 2018 7:31 pm
Operator : 605
Sample : MS 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 29 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:22 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	193152	26.2994218	ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	173463	24.3364967	ppb		97
41)	1,1-DICHLOROPROPENE	3.489	75	170612	23.8419900	ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	294045	24.9339668	ppb		100
43)	n-Heptane	3.593	71	50549	19.9771402	ppb	#	65
44)	BENZENE	3.617	78	473884	23.5513582	ppb	#	90
45)	TERT-AMYL METHYL ETHER	3.666	73	297846	21.9395686	ppb	#	89
46)	1,2-DICHLOROETHANE	3.721	62	186206	24.9514691	ppb		99
47)	T-AMYL ALCOHOL	3.745	59	155468	125.0320872	ppb		90
49)	TRICHLOROETHENE	3.940	130	148707	25.6934674	ppb	#	99
50)	METHYL CYCLOHEXANE	3.953	83	170553	23.6916474	ppb		87
51)	TERT-AMYL ETHYL ETHER	4.056	59	345816	26.0079166	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.233	62	110973	24.4368418	ppb		98
53)	DIBROMOMETHANE	4.178	93	88308	21.4965536	ppb		96
54)	BROMODICHLOROMETHANE	4.264	83	175145	23.2795435	ppb		97
58)	CIS-1,3-DICHLOROPROPENE	4.635	75	202488	24.7213315	ppb		99
59)	4-METHYL-2-PENTANONE (...	4.995	43	1540980	173.4171816	ppb		95
61)	TOLUENE	4.788	91	523413	28.7061840	ppb		99
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	194415	27.1705711	ppb	#	97
63)	1,1,2-TRICHLOROETHANE	5.135	97	123118	28.4529838	ppb		96
64)	TETRACHLOROETHENE	5.044	164	118994	29.0753691	ppb		95
65)	1,3-DICHLOROPROPANE	5.318	76	182619	25.8604517	ppb		99
66)	2-HEXANONE	5.532	58	659987	171.4782542	ppb		90
67)	CHLORODIBROMOMETHANE	5.263	129	161988	29.6983922	ppb		99
68)	1,2-DIBROMOETHANE	5.422	107	148194	28.7563879	ppb		100
69)	CHLOROBENZENE	5.775	112	336622	28.3865833	ppb		97
70)	1,1,1,2-TETRACHLOROETHANE	5.812	133	126326	29.3852447	ppb		96
71)	ETHYLBENZENE	5.782	106	177851	30.0883805	ppb		93
72)	M&P-XYLENE	5.879	106	455948	62.4125897	ppb		98
73)	O-XYLENE	6.184	106	223255	30.6039668	ppb		97
77)	STYRENE	6.214	104	324120	24.2349301	ppb		96
78)	BROMOFORM	6.245	173	124298	23.0031774	ppb		100
79)	ISOPROPYLBENZENE	6.403	105	551670	26.5733657	ppb		97
81)	BROMOBENZENE	6.696	77	224827	22.7835065	ppb		97
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	203962	24.6852849	ppb		100
83)	1,2,3-TRICHLOROPROPANE	6.848	110	52140	24.9484947	ppb		79
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	75178	26.4734268	ppb		93
85)	N-PROPYLBENZENE	6.708	91	632305	25.7600715	ppb		98
86)	4-ETHYLTOLUENE	6.787	105	542383	27.3995012	ppb		96
87)	2-CHLOROTOLUENE	6.830	91	378175	25.4491784	ppb		97
88)	4-CHLOROTOLUENE	6.952	91	384164	25.4317716	ppb		98
89)	1,3,5-TRIMETHYLBENZENE	6.848	105	426264	26.1316618	ppb		97
90)	TERT-BUTYLBENZENE	7.092	119	372152	29.1964798	ppb		95
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	417978	26.0094316	ppb		97
92)	SEC-BUTYLBENZENE	7.226	105	507804	26.3197623	ppb		98
93)	1,3-DICHLOROBENZENE	7.403	146	259594	26.4591420	ppb		100
94)	P-ISOPROPYLTOLUENE	7.336	119	450614	27.4314063	ppb		98
95)	DICYCLOPENTADIENE	7.324	66	611537	24.4769068	ppb		97
96)	1,4-DICHLOROBENZENE	7.470	146	264248	25.9211029	ppb		99
97)	1,2,3-TRIMETHYLBENZENE	7.482	105	428715	26.1553409	ppb		97
98)	1,2-DICHLOROBENZENE	7.793	146	239164	26.5778155	ppb		99
99)	N-BUTYLBENZENE	7.665	91	359792	25.0513998	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	56903	24.9807854	ppb		98
101)	1,2,4-TRICHLOROBENZENE	8.994	180	128951	27.1459229	ppb		100
102)	HEXACHLORO-1,3-BUTADIENE	8.976	225	56684	24.8860532	ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_29.D
Acq On : 25 Sep 2018 7:31 pm
Operator : 605
Sample : MS 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 29 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:22 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

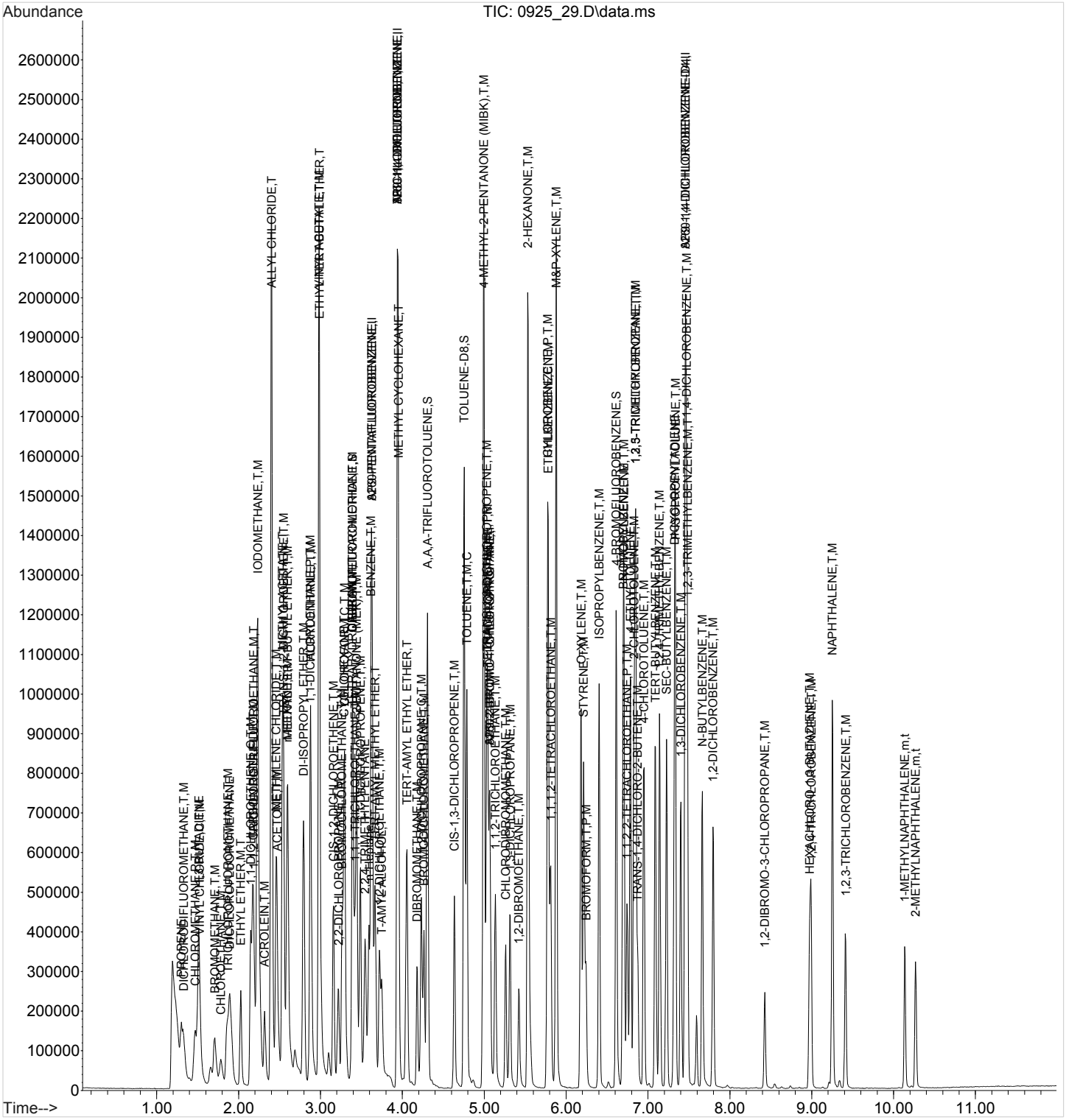
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) NAPHTHALENE	9.250	128	637629	39.9818778	ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.415	180	109120	24.7472941	ppb	100
105) 1-METHYLNAPHTHALENE	10.134	142	144310	22.9100949	ppb	99
106) 2-METHYLNAPHTHALENE	10.268	142	127400	20.9396919	ppb	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_29.D
Acq On : 25 Sep 2018 7:31 pm
Operator : 605
Sample : MS 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 29 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:22 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	314 of 332

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-5

ESC Sample ID:	R3344826-5	**SDG:**	L1028256
Client Sample ID:	MSD	**Collected Date/Time:**	09/19/18 10:25
Lab File ID:	0925_28	**Received Date/Time:**	09/21/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 19:11
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 19:11
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	149		10.0	50.0
Benzene	71-43-2	3.62	23.3		0.331	1.00
Bromodichloromethane	75-27-4	4.26	24.4		0.380	1.00
Bromochloromethane	74-97-5	3.26	25.1		0.520	1.00
Bromoform	75-25-2	6.24	23.3		0.469	1.00
Bromomethane	74-83-9	1.71	17.9		0.866	5.00
n-Butylbenzene	104-51-8	7.67	24.1		0.361	1.00
sec-Butylbenzene	135-98-8	7.23	25.7		0.365	1.00
tert-Butylbenzene	98-06-6	7.09	28.6		0.399	1.00
Carbon disulfide	75-15-0	2.18	20.6		0.275	1.00
Carbon tetrachloride	56-23-5	3.39	24.6		0.379	1.00
Chlorobenzene	108-90-7	5.78	27.3		0.348	1.00
Chlorodibromomethane	124-48-1	5.26	26.3		0.327	1.00
Chloroethane	75-00-3	1.78	18.6		0.453	5.00
Chloroform	67-66-3	3.29	24.6		0.324	5.00
Chloromethane	74-87-3	1.47	21.1		0.276	2.50
Cyclohexane	110-82-7	3.29	26.1		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	8.43	23.8		1.33	5.00
1,2-Dibromoethane	106-93-4	5.42	26.2		0.381	1.00
1,2-Dichlorobenzene	95-50-1	7.79	25.9		0.349	1.00
1,3-Dichlorobenzene	541-73-1	7.40	23.8		0.220	1.00
1,4-Dichlorobenzene	106-46-7	7.47	25.1		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.33	24.2		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	24.6		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	25.1		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	26.6		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	24.8		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	2.55	23.8		0.396	1.00
1,2-Dichloropropane	78-87-5	4.23	24.3		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	4.64	24.0		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	5.03	24.7		0.419	1.00
Ethylbenzene	100-41-4	5.78	28.0		0.384	1.00
2-Hexanone	591-78-6	5.54	157		3.82	10.0
Isopropylbenzene	98-82-8	6.40	25.1		0.326	1.00
p-Isopropyltoluene	99-87-6	7.34	26.2		0.350	1.00
2-Butanone (MEK)	78-93-3	3.44	155		3.93	10.0
Methyl Acetate	79-20-9	2.54	134		4.30	20.0
Methyl Cyclohexane	108-87-2	3.95	24.0		0.380	1.00
Methylene Chloride	75-09-2	2.46	21.3		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	151		2.14	10.0
Methyl tert-butyl ether	1634-04-4	2.60	21.5		0.367	1.00
Naphthalene	91-20-3	9.25	26.4		1.00	5.00
n-Propylbenzene	103-65-1	6.71	23.3		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-5

ESC Sample ID:	R3344826-5	**SDG:**	L1028256
Client Sample ID:	MSD	**Collected Date/Time:**	09/19/18 10:25
Lab File ID:	0925_28	**Received Date/Time:**	09/21/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 19:11
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 19:11
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	6.21	25.2		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	6.74	23.3		0.130	1.00
Tetrachloroethene	127-18-4	5.04	26.3		0.372	1.00
Toluene	108-88-3	4.79	25.5		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	2.18	26.2		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	9.42	23.3		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	8.99	25.4		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	27.0		0.319	1.00
1,1,2-Trichloroethane	79-00-5	5.14	27.2		0.383	1.00
Trichloroethene	79-01-6	3.94	95.6		0.398	1.00
Trichlorofluoromethane	75-69-4	1.86	24.4		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	7.14	24.2		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	6.85	25.0		0.387	1.00
Vinyl chloride	75-01-4	1.53	23.4		0.259	1.00
o-Xylene	95-47-6	6.18	27.6		0.341	1.00
m&p-Xylenes	1330-20-7	5.88	52.0		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_28.D
Acq On : 25 Sep 2018 7:11 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 28 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:17 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards								
1)	8260-PENTAFLUOROBENZENE	3.630	168	506430	40.0000000	ppb		0.00
48)	8260-1,4-DIFLUOROBENZENE	3.941	114	707509	40.0000000	ppb		0.00
56)	8260-2-BROMO-1-CHLOROP...	5.068	79	113640	40.0000000	ppb	#	0.00
76)	8260-1,4-DICHLOROBENZE...	7.458	152	360942	40.0000000	ppb		0.00
107)	AP9-PENTAFLUOROBENZENE	3.630	168	508074	40.0000000	ppb		0.00
119)	AP9-1,4-DIFLUOROBENZENE	3.941	114	707509	40.0000000	ppb		0.01
124)	AP9-2-BROMO-1-CHLOROPR...	5.068	79	113640	40.0000000	ppb	#	0.00
128)	AP9-1,4-DICHLOROBENZEN...	7.458	152	360942	40.0000000	ppb		0.00
System Monitoring Compounds								
38)	DIBROMOFLUOROMETHANE	3.392	111	277788	41.5964099	ppb		0.00
	Spiked Amount 40.000	Range 79 - 121		Recovery = 103.99%				
55)	A,A,A-TRIFLUOROTOLUENE	4.306	146	422577	42.9124630	ppb		0.00
	Spiked Amount 40.000	Range 90 - 116		Recovery = 107.28%				
60)	TOLUENE-D8	4.757	98	815816	42.1058222	ppb		0.00
	Spiked Amount 40.000	Range 90 - 115		Recovery = 105.26%				
80)	4-BROMOFLUOROBENZENE	6.611	95	326405	40.7635151	ppb		0.00
	Spiked Amount 40.000	Range 80 - 120		Recovery = 101.91%				
Target Compounds								Qvalue
4)	PROPENE	1.301	41	99268	44.0758881	ppb		98
5)	DICHLORODIFLUOROMETHANE	1.331	85	136175	24.1911882	ppb		98
6)	CHLOROMETHANE	1.472	50	182681	21.0706578	ppb	#	85
7)	VINYL CHLORIDE	1.526	62	180671	23.4484722	ppb		99
8)	1,3-BUTADIENE	1.514	39	157042	30.4688033	ppb		94
9)	BROMOMETHANE	1.709	94	90523	17.9291421	ppb		99
10)	CHLOROETHANE	1.782	64	66614	18.5850132	ppb	#	88
11)	TRICHLOROFLUOROMETHANE	1.862	101	194044	24.4388211	ppb		99
12)	DICHLOROFLUOROMETHANE	1.898	67	179180	19.2258622	ug/l		100
13)	ETHYL ETHER	2.026	59	113240	24.3251621	ppb		91
14)	ACROLEIN	2.319	56	149411	173.6789204	ppb		98
15)	1,1-DICHLOROETHENE	2.148	96	122523	26.5770320	ppb		99
16)	1,1,2-TRICHLOROTRIFLUO...	2.179	101	136725	26.1988770	ppb		97
17)	ACETONE	2.471	43	321760	149.3656524	ppb		95
18)	IODOMETHANE	2.234	142	1319475	122.5444640	ppb		97
19)	CARBON DISULFIDE	2.179	76	347341	20.5788174	ppb	#	95
20)	ALLYL CHLORIDE	2.404	76	338662	115.2624102	ppb	#	52
21)	METHYLENE CHLORIDE	2.459	84	126756	21.3247074	ppb		84
22)	METHYL ACETATE	2.538	43	961070	133.8671736	ppb	#	91
23)	ACRYLONITRILE	2.880	53	521804	141.7324770	ppb		100
24)	n-HEXANE	2.593	56	103034	24.8059305	ppb		99
25)	TRANS-1,2-DICHLOROETHENE	2.551	96	122051	23.7510192	ppb		100
26)	METHYL TERT-BUTYL ETHER	2.599	73	281603	21.5338939	ppb	#	80
27)	1,1-DICHLOROETHANE	2.874	63	276543	24.5708823	ppb		99
28)	VINYL ACETATE	2.983	43	2168946	177.8499371	ppb		98
29)	DI-ISOPROPYL ETHER	2.794	45	532027	27.1577683	ppb		98
30)	ETHYL TERT-BUTYL ETHER	2.990	59	431976	25.9780928	ppb		97
31)	2,2-DICHLOROPROPANE	3.221	77	115043	24.6801736	ppb		96
32)	CIS-1,2-DICHLOROETHENE	3.160	96	141360	24.7827894	ppb		100
33)	2-BUTANONE (MEK)	3.441	43	826040	154.5131882	ppb	#	89
34)	BROMOCHLOROMETHANE	3.264	130	93919	25.1061750	ppb		87
35)	TETRAHYDROFURAN	3.386	42	82579	28.6016505	ppb		100
36)	CHLOROFORM	3.294	83	248708	24.5734942	ppb		100
37)	CYCLOHEXANE	3.288	84	155894	26.0669213	ppb	#	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_28.D
Acq On : 25 Sep 2018 7:11 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 28 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:17 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	201628	26.9986321	ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	178491	24.6269971	ppb		98
41)	1,1-DICHLOROPROPENE	3.489	75	182789	25.1204209	ppb		97
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	315806	26.3355191	ppb		98
43)	n-Heptane	3.593	71	52717	20.4887453	ppb	#	76
44)	BENZENE	3.617	78	477088	23.3177335	ppb	#	90
45)	TERT-AMYL METHYL ETHER	3.666	73	299085	21.6658071	ppb	#	88
46)	1,2-DICHLOROETHANE	3.721	62	190470	25.0999560	ppb		99
47)	T-AMYL ALCOHOL	3.745	59	167327	132.3397841	ppb		95
49)	TRICHLOROETHENE	3.941	130	542174	95.5521108	ppb	#	99
50)	METHYL CYCLOHEXANE	3.953	83	169457	24.0229516	ppb		88
51)	TERT-AMYL ETHYL ETHER	4.056	59	347916	26.6897912	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.233	62	107992	24.2565834	ppb		98
53)	DIBROMOMETHANE	4.178	93	89529	22.2301716	ppb		95
54)	BROMODICHLOROMETHANE	4.264	83	179917	24.3926627	ppb		99
58)	CIS-1,3-DICHLOROPROPENE	4.636	75	207997	24.0419850	ppb		99
59)	4-METHYL-2-PENTANONE (...	4.995	43	1416452	150.9168271	ppb		95
61)	TOLUENE	4.788	91	490529	25.4704331	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	186904	24.7302369	ppb	#	96
63)	1,1,2-TRICHLOROETHANE	5.135	97	124252	27.1863144	ppb		95
64)	TETRACHLOROETHENE	5.044	164	113526	26.2625077	ppb		94
65)	1,3-DICHLOROPROPANE	5.318	76	170794	22.8983104	ppb		99
66)	2-HEXANONE	5.538	58	639271	157.2531516	ppb		89
67)	CHLORODIBROMOMETHANE	5.263	129	151643	26.3216521	ppb		100
68)	1,2-DIBROMOETHANE	5.422	107	142369	26.1553074	ppb		99
69)	CHLOROBENZENE	5.776	112	342173	27.3185124	ppb		97
70)	1,1,1,2-TETRACHLOROETHANE	5.812	133	125842	27.7142329	ppb		96
71)	ETHYLBENZENE	5.782	106	174999	28.0297194	ppb		94
72)	M&P-XYLENE	5.879	106	401107	51.9825777	ppb		100
73)	O-XYLENE	6.184	106	212389	27.5644436	ppb		98
77)	STYRENE	6.215	104	342505	25.2174512	ppb		97
78)	BROMOFORM	6.245	173	127876	23.3029586	ppb		100
79)	ISOPROPYLBENZENE	6.403	105	529190	25.1001986	ppb		97
81)	BROMOBENZENE	6.696	77	209464	20.9016141	ppb		97
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	195753	23.3289741	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	51374	24.2055544	ppb		78
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	74912	25.9758111	ppb		90
85)	N-PROPYLBENZENE	6.708	91	581746	23.3373847	ppb		98
86)	4-ETHYLTOLUENE	6.788	105	509049	25.3217962	ppb		97
87)	2-CHLOROTOLUENE	6.830	91	376951	24.9783750	ppb		97
88)	4-CHLOROTOLUENE	6.946	91	373327	24.3359152	ppb		98
89)	1,3,5-TRIMETHYLBENZENE	6.849	105	413702	24.9732075	ppb		96
90)	TERT-BUTYLBENZENE	7.092	119	370158	28.5953626	ppb		95
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	395176	24.2139885	ppb		97
92)	SEC-BUTYLBENZENE	7.226	105	503474	25.6957457	ppb		97
93)	1,3-DICHLOROBENZENE	7.403	146	237450	23.8315128	ppb		99
94)	P-ISOPROPYLTOLUENE	7.336	119	437160	26.2048780	ppb		99
95)	DICYCLOPENTADIENE	7.324	66	614447	24.2167889	ppb		97
96)	1,4-DICHLOROBENZENE	7.470	146	260245	25.1375238	ppb		97
97)	1,2,3-TRIMETHYLBENZENE	7.483	105	420090	25.2366894	ppb		97
98)	1,2-DICHLOROBENZENE	7.793	146	237121	25.9472791	ppb		100
99)	N-BUTYLBENZENE	7.665	91	351126	24.0736431	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.427	157	54967	23.7613599	ppb		99
101)	1,2,4-TRICHLOROBENZENE	8.988	180	122517	25.3965418	ppb		100
102)	HEXACHLORO-1,3-BUTADIENE	8.976	225	53523	23.1384528	ppb		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_28.D
Acq On : 25 Sep 2018 7:11 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 28 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:17 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

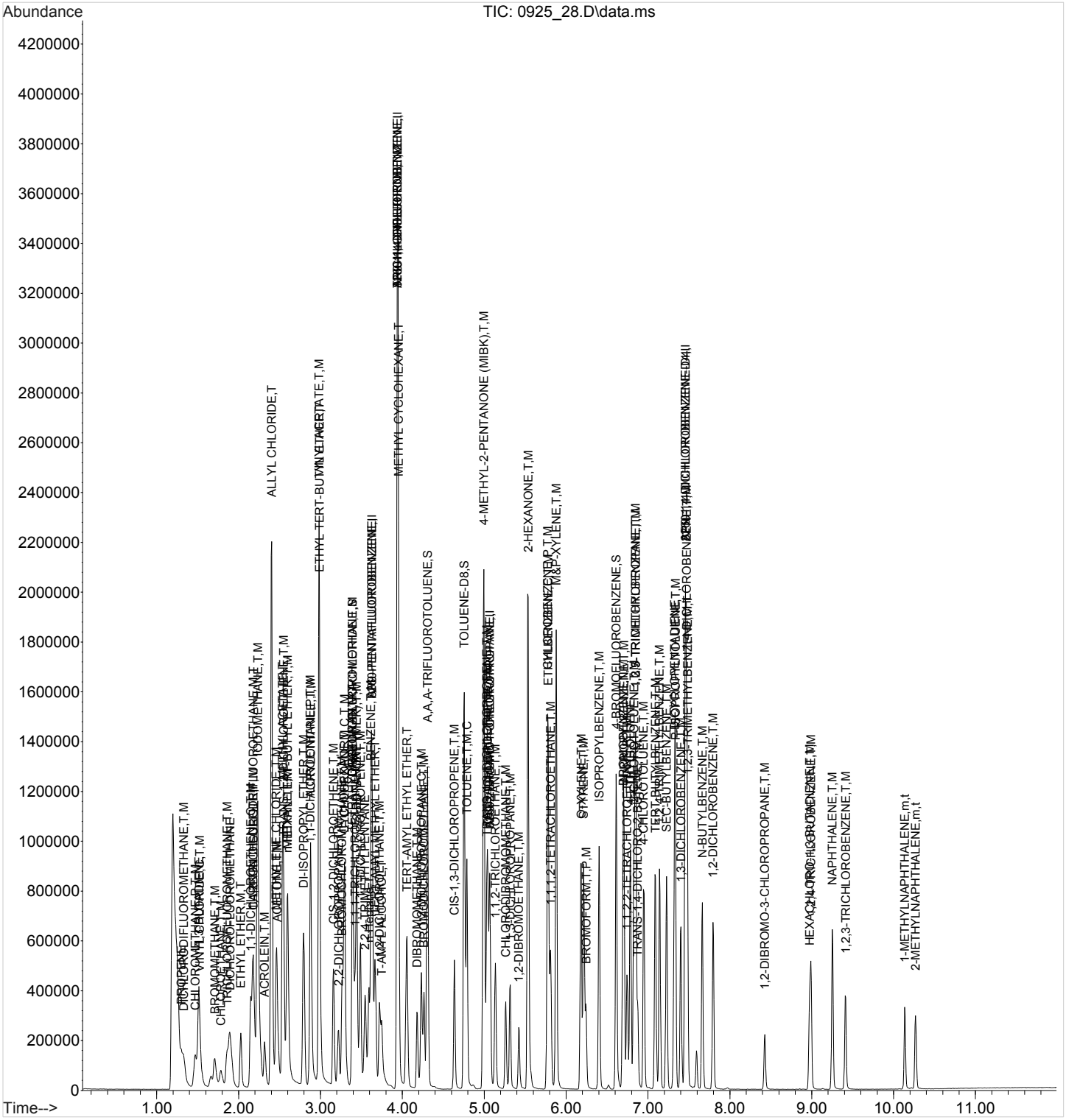
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
103) NAPHTHALENE	9.251	128	428148	26.4354909 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.415	180	104500	23.3366216 ppb	100
105) 1-METHYLNAPHTHALENE	10.134	142	132788	20.7581011 ppb	99
106) 2-METHYLNAPHTHALENE	10.269	142	119023	19.2632732 ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_28.D
Acq On : 25 Sep 2018 7:11 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028028-12
Misc : water
ALS Vial : 28 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:17 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
LaBella Associates, P.C.	2182451	L1028256	10/29/18 10:15	320 of 332

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-7

ESC Sample ID:	R3344826-7	**SDG:**	L1028256
Client Sample ID:	MSD	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_30	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 19:51
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 19:51
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	165		10.0	50.0
Benzene	71-43-2	3.62	24.0		0.331	1.00
Bromodichloromethane	75-27-4	4.26	24.4		0.380	1.00
Bromochloromethane	74-97-5	3.26	26.4		0.520	1.00
Bromoform	75-25-2	6.25	23.6		0.469	1.00
Bromomethane	74-83-9	1.71	18.4		0.866	5.00
n-Butylbenzene	104-51-8	7.67	26.6		0.361	1.00
sec-Butylbenzene	135-98-8	7.23	25.9		0.365	1.00
tert-Butylbenzene	98-06-6	7.09	28.1		0.399	1.00
Carbon disulfide	75-15-0	2.18	21.6		0.275	1.00
Carbon tetrachloride	56-23-5	3.39	24.7		0.379	1.00
Chlorobenzene	108-90-7	5.78	28.9		0.348	1.00
Chlorodibromomethane	124-48-1	5.26	28.2		0.327	1.00
Chloroethane	75-00-3	1.79	19.2		0.453	5.00
Chloroform	67-66-3	3.29	24.2		0.324	5.00
Chloromethane	74-87-3	1.47	21.2		0.276	2.50
Cyclohexane	110-82-7	3.29	26.4		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	8.43	25.2		1.33	5.00
1,2-Dibromoethane	106-93-4	5.42	26.5		0.381	1.00
1,2-Dichlorobenzene	95-50-1	7.80	27.9		0.349	1.00
1,3-Dichlorobenzene	541-73-1	7.40	26.2		0.220	1.00
1,4-Dichlorobenzene	106-46-7	7.47	25.2		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.34	26.4		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	24.5		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	24.4		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	27.5		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	26.0		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	2.55	25.0		0.396	1.00
1,2-Dichloropropane	78-87-5	4.23	26.0		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	4.64	24.4		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	5.03	25.4		0.419	1.00
Ethylbenzene	100-41-4	5.78	30.4		0.384	1.00
2-Hexanone	591-78-6	5.53	154		3.82	10.0
Isopropylbenzene	98-82-8	6.40	25.8		0.326	1.00
p-Isopropyltoluene	99-87-6	7.34	29.4		0.350	1.00
2-Butanone (MEK)	78-93-3	3.44	152		3.93	10.0
Methyl Acetate	79-20-9	2.54	136		4.30	20.0
Methyl Cyclohexane	108-87-2	3.95	24.7		0.380	1.00
Methylene Chloride	75-09-2	2.46	22.4		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	152		2.14	10.0
Methyl tert-butyl ether	1634-04-4	2.60	23.0		0.367	1.00
Naphthalene	91-20-3	9.25	43.9		1.00	5.00
n-Propylbenzene	103-65-1	6.70	26.8		0.349	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344826-7

ESC Sample ID:	R3344826-7	**SDG:**	L1028256
Client Sample ID:	MSD	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_30	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 19:51
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 19:51
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Styrene	100-42-5	6.21	25.2		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	6.74	25.0		0.130	1.00
Tetrachloroethene	127-18-4	5.04	27.5		0.372	1.00
Toluene	108-88-3	4.79	28.2		0.412	1.00
1,1,2-Trichlorotrifluoroethane	76-13-1	2.18	27.6		0.303	1.00
1,2,3-Trichlorobenzene	87-61-6	9.42	26.7		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	8.99	28.0		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	26.9		0.319	1.00
1,1,2-Trichloroethane	79-00-5	5.14	26.6		0.383	1.00
Trichloroethene	79-01-6	3.95	24.8		0.398	1.00
Trichlorofluoromethane	75-69-4	1.87	27.2		1.20	5.00
1,2,4-Trimethylbenzene	95-63-6	7.14	25.8		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	6.85	25.8		0.387	1.00
Vinyl chloride	75-01-4	1.53	24.7		0.259	1.00
o-Xylene	95-47-6	6.18	28.4		0.341	1.00
m&p-Xylenes	1330-20-7	5.88	61.8		0.719	2.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_30.D
Acq On : 25 Sep 2018 7:51 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 30 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 27 16:56:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 8260-PENTAFLUOROBENZENE	3.630	168	490001	40.0000000	ppb		0.00
48) 8260-1,4-DIFLUOROBENZENE	3.941	114	680224	40.0000000	ppb		0.00
56) 8260-2-BROMO-1-CHLOROP...	5.068	79	108773m	40.0000000	ppb		0.00
76) 8260-1,4-DICHLOROBENZE...	7.458	152	341832	40.0000000	ppb		0.00
107) AP9-PENTAFLUOROBENZENE	3.630	168	492180	40.0000000	ppb		0.00
119) AP9-1,4-DIFLUOROBENZENE	3.941	114	680224	40.0000000	ppb		0.01
124) AP9-2-BROMO-1-CHLOROPR...	5.068	79	108773	40.0000000	ppb	#	0.00
128) AP9-1,4-DICHLOROBENZEN...	7.458	152	341832	40.0000000	ppb		0.00
System Monitoring Compounds							
38) DIBROMOFLUOROMETHANE	3.392	111	268422	41.5415727	ppb		0.00
Spiked Amount 40.000	Range 79 - 121		Recovery = 103.85%				
55) A,A,A-TRIFLUOROTOLUENE	4.306	146	376550	39.7722587	ppb		0.00
Spiked Amount 40.000	Range 90 - 116		Recovery = 99.43%				
60) TOLUENE-D8	4.758	98	816394	44.0209951	ppb		0.00
Spiked Amount 40.000	Range 90 - 115		Recovery = 110.05%				
80) 4-BROMOFLUOROBENZENE	6.611	95	302830	39.9335965	ppb		0.00
Spiked Amount 40.000	Range 80 - 120		Recovery = 99.83%				
Target Compounds							Qvalue
4) PROPENE	1.307	41	119947	55.0077377	ppb		97
5) DICHLORODIFLUOROMETHANE	1.337	85	143528	26.3523231	ppb		100
6) CHLOROMETHANE	1.472	50	177938	21.2117196	ppb	#	85
7) VINYL CHLORIDE	1.526	62	184083	24.6923398	ppb		99
8) 1,3-BUTADIENE	1.514	39	171817	34.4530893	ppb		91
9) BROMOMETHANE	1.709	94	89666	18.3548494	ppb		100
10) CHLOROETHANE	1.789	64	66462	19.1643117	ppb		97
11) TRICHLOROFLUOROMETHANE	1.868	101	209048	27.2112511	ppb		99
12) DICHLOROFLUOROMETHANE	1.898	67	186477	20.6796901	ug/l		100
13) ETHYL ETHER	2.026	59	117967	26.1902037	ppb		91
14) ACROLEIN	2.319	56	143357	172.2288496	ppb		98
15) 1,1-DICHLOROETHENE	2.148	96	122681	27.5035418	ppb		100
16) 1,1,2-TRICHLOROTRIFLUO...	2.185	101	139278	27.5828873	ppb		98
17) ACETONE	2.471	43	343837	164.9657380	ppb		95
18) IODOMETHANE	2.234	142	1283410	123.1914047	ppb		97
19) CARBON DISULFIDE	2.179	76	353338	21.6360097	ppb	#	96
20) ALLYL CHLORIDE	2.404	76	333559	117.3319664	ppb	#	55
21) METHYLENE CHLORIDE	2.459	84	128893	22.4112637	ppb		84
22) METHYL ACETATE	2.538	43	946987	136.3281522	ppb	#	92
23) ACRYLONITRILE	2.880	53	500747	140.5732829	ppb		99
24) n-HEXANE	2.599	56	112615	28.0216472	ppb		81
25) TRANS-1,2-DICHLOROETHENE	2.551	96	124132	24.9658938	ppb		98
26) METHYL TERT-BUTYL ETHER	2.599	73	291103	23.0067054	ppb	#	82
27) 1,1-DICHLOROETHANE	2.874	63	266559	24.4778850	ppb		100
28) VINYL ACETATE	2.983	43	1947574	165.0522324	ppb		97
29) DI-ISOPROPYL ETHER	2.794	45	521906	27.5343706	ppb		88
30) ETHYL TERT-BUTYL ETHER	2.990	59	397690	24.7180823	ppb		98
31) 2,2-DICHLOROPROPANE	3.221	77	117405	26.0313722	ppb		95
32) CIS-1,2-DICHLOROETHENE	3.160	96	143745	26.0458692	ppb		98
33) 2-BUTANONE (MEK)	3.441	43	784280	151.6205523	ppb		95
34) BROMOCHLOROMETHANE	3.264	130	95586	26.4085063	ppb		91
35) TETRAHYDROFURAN	3.386	42	81972	29.3433346	ppb		99
36) CHLOROFORM	3.294	83	237437	24.2464418	ppb		99
37) CYCLOHEXANE	3.288	84	152649	26.3801197	ppb	#	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_30.D
Acq On : 25 Sep 2018 7:51 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 30 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 27 16:56:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	1,1,1-TRICHLOROETHANE	3.422	97	194148	26.8686780	ppb		99
40)	CARBON TETRACHLORIDE	3.392	117	172971	24.6655549	ppb		96
41)	1,1-DICHLOROPROPENE	3.489	75	174355	24.7647369	ppb		96
42)	2,2,4-TRIMETHYLPENTANE	3.544	57	292830	25.2382671	ppb		96
43)	n-Heptane	3.593	71	54211	21.7758218	ppb	#	71
44)	BENZENE	3.617	78	474248	23.9560829	ppb	#	90
45)	TERT-AMYL METHYL ETHER	3.666	73	299077	22.3916302	ppb	#	88
46)	1,2-DICHLOROETHANE	3.721	62	179200	24.4065752	ppb		99
47)	T-AMYL ALCOHOL	3.745	59	169561	138.6030620	ppb		94
49)	TRICHLOROETHENE	3.947	130	135025	24.7511739	ppb	#	99
50)	METHYL CYCLOHEXANE	3.953	83	167173	24.6734175	ppb	#	84
51)	TERT-AMYL ETHYL ETHER	4.056	59	334545	26.6934886	ppb	#	1
52)	1,2-DICHLOROPROPANE	4.233	62	111416	26.0294880	ppb		97
53)	DIBROMOMETHANE	4.178	93	89022	22.9909251	ppb		97
54)	BROMODICHLOROMETHANE	4.264	83	173106	24.4106390	ppb		99
57)	2-CHLOROETHYL VINYL ETHER	4.556	63	746	0.1648355	ppb	#	44
58)	CIS-1,3-DICHLOROPROPENE	4.636	75	202412	24.4432880	ppb		100
59)	4-METHYL-2-PENTANONE (...	4.995	43	1369069	152.3951898	ppb		94
61)	TOLUENE	4.788	91	518960	28.1524143	ppb		100
62)	TRANS-1,3-DICHLOROPROPENE	5.032	75	183443	25.3583471	ppb	#	97
63)	1,1,2-TRICHLOROETHANE	5.135	97	116228	26.5685486	ppb		97
64)	TETRACHLOROETHENE	5.044	164	113728	27.4864325	ppb		94
65)	1,3-DICHLOROPROPANE	5.318	76	180406	25.2692251	ppb		98
66)	2-HEXANONE	5.532	58	598628	153.8443317	ppb		89
67)	CHLORODIBROMOMETHANE	5.263	129	155491	28.1972109	ppb		99
68)	1,2-DIBROMOETHANE	5.422	107	138291	26.5429036	ppb		100
69)	CHLOROBENZENE	5.776	112	346926	28.9373179	ppb		97
70)	1,1,1,2-TETRACHLOROETHANE	5.812	133	126259	29.0502392	ppb		98
71)	ETHYLBENZENE	5.782	106	181718	30.4082376	ppb		94
72)	M&P-XYLENE	5.879	106	456517	61.8108397	ppb		98
73)	O-XYLENE	6.184	106	209634	28.4242523	ppb		99
77)	STYRENE	6.215	104	324256	25.2084997	ppb		97
78)	BROMOFORM	6.245	173	122731	23.6157095	ppb		99
79)	ISOPROPYLBENZENE	6.404	105	514817	25.7835738	ppb		97
81)	BROMOBENZENE	6.696	77	224837	23.6898832	ppb		98
82)	1,1,2,2-TETRACHLOROETHANE	6.745	83	198275	24.9505359	ppb		99
83)	1,2,3-TRICHLOROPROPANE	6.849	110	48666	24.2115175	ppb		79
84)	TRANS-1,4-DICHLORO-2-B...	6.873	53	69991	25.6262246	ppb		91
85)	N-PROPYLBENZENE	6.702	91	631511	26.7500381	ppb		98
86)	4-ETHYLTOLUENE	6.788	105	526002	27.6278456	ppb		97
87)	2-CHLOROTOLUENE	6.830	91	373254	26.1161081	ppb		97
88)	4-CHLOROTOLUENE	6.952	91	364526	25.0906260	ppb		98
89)	1,3,5-TRIMETHYLBENZENE	6.849	105	405317	25.8348670	ppb		97
90)	TERT-BUTYLBENZENE	7.092	119	344926	28.1357894	ppb		96
91)	1,2,4-TRIMETHYLBENZENE	7.141	105	399447	25.8439944	ppb		97
92)	SEC-BUTYLBENZENE	7.227	105	480589	25.8989828	ppb		99
93)	1,3-DICHLOROBENZENE	7.403	146	247299	26.2075548	ppb		99
94)	P-ISOPROPYLTOLUENE	7.336	119	464242	29.3839961	ppb		98
95)	DICYCLOPENTADIENE	7.324	66	627678	26.1212370	ppb		96
96)	1,4-DICHLOROBENZENE	7.470	146	247055	25.1975579	ppb		97
97)	1,2,3-TRIMETHYLBENZENE	7.476	105	396613	25.1583230	ppb		96
98)	1,2-DICHLOROBENZENE	7.800	146	241728	27.9301629	ppb		100
99)	N-BUTYLBENZENE	7.665	91	367927	26.6357661	ppb		99
100)	1,2-DIBROMO-3-CHLOROPR...	8.428	157	55295	25.2394463	ppb		97
101)	1,2,4-TRICHLOROBENZENE	8.988	180	127869	27.9877640	ppb		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_30.D
Acq On : 25 Sep 2018 7:51 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 30 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 27 16:56:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

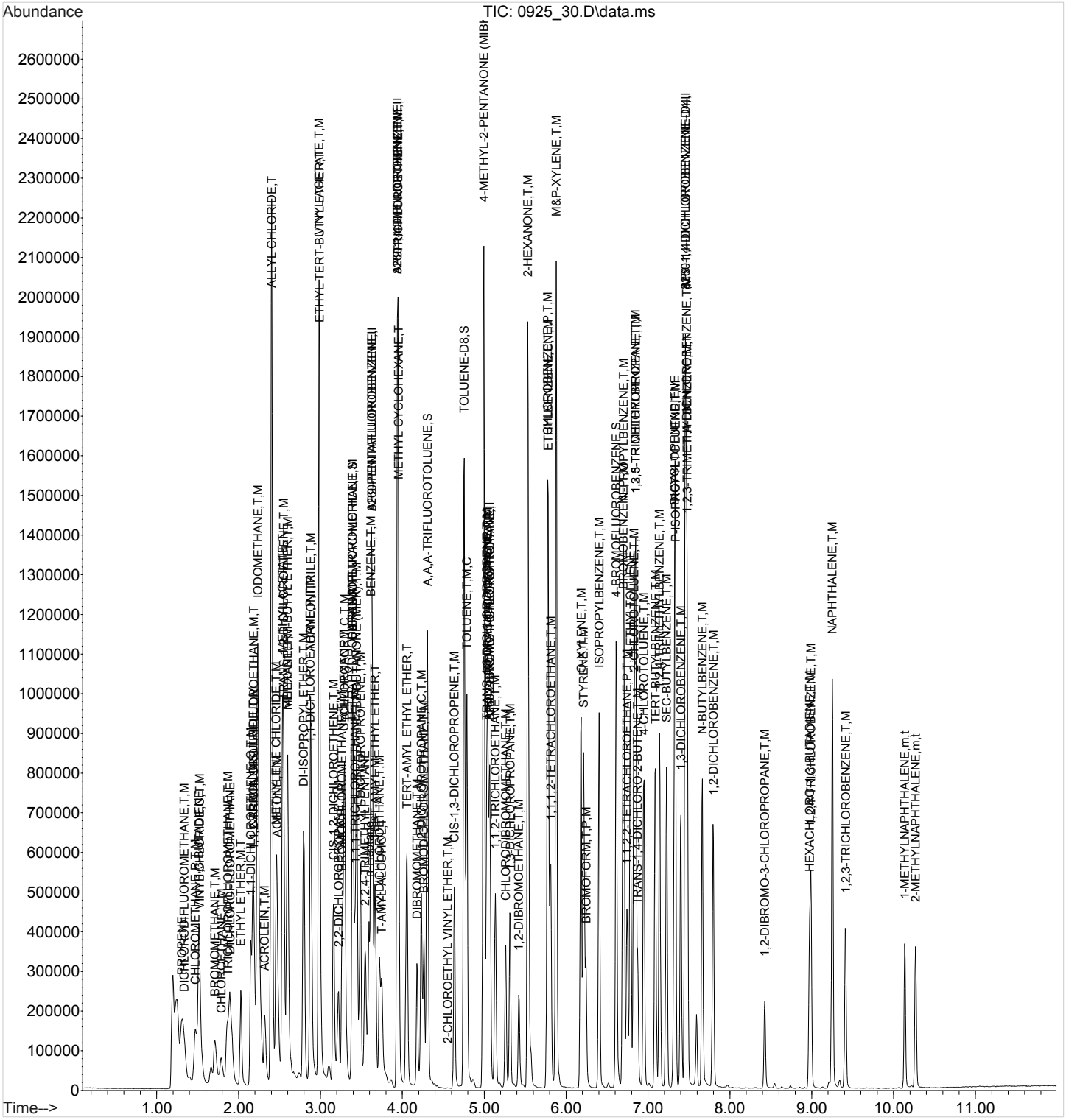
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
102) HEXACHLORO-1,3-BUTADIENE	8.976	225	56628	25.8493601 ppb	99
103) NAPHTHALENE	9.251	128	673733	43.9244148 ppb	100
104) 1,2,3-TRICHLOROBENZENE	9.415	180	113316	26.7200726 ppb	99
105) 1-METHYLNAPHTHALENE	10.134	142	151140	24.9478380 ppb	99
106) 2-METHYLNAPHTHALENE	10.269	142	139912	23.9099607 ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_30.D
Acq On : 25 Sep 2018 7:51 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 30 Sample Multiplier: 1
InstName : VOCMS25

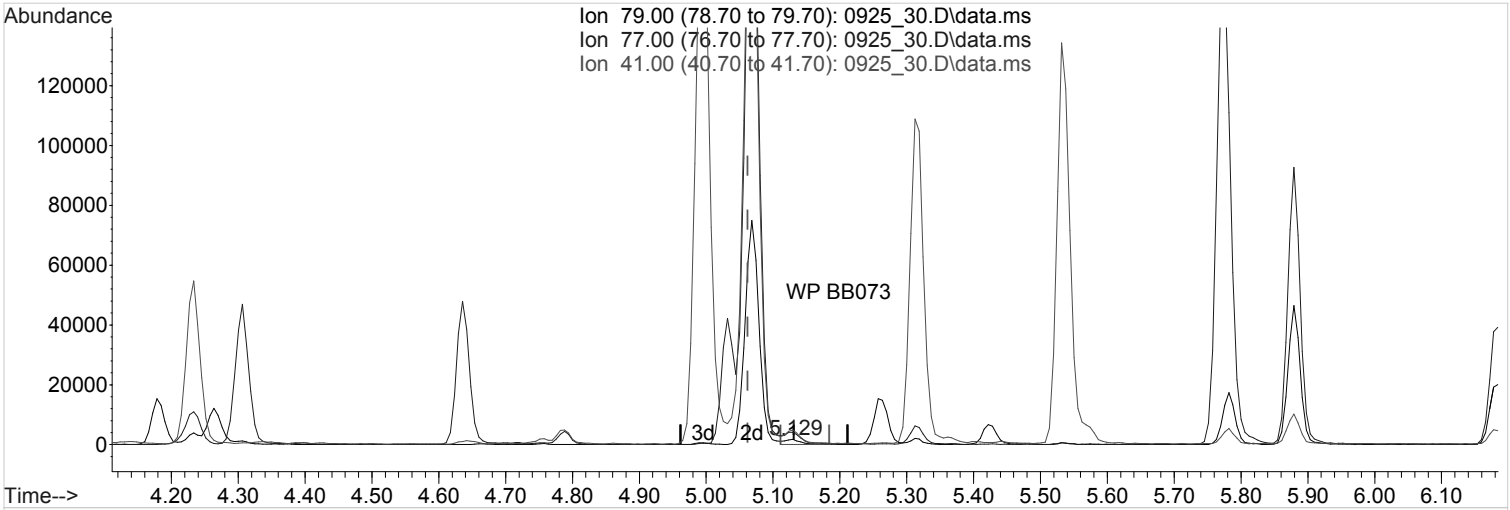
Quant Time: Sep 27 16:56:19 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration

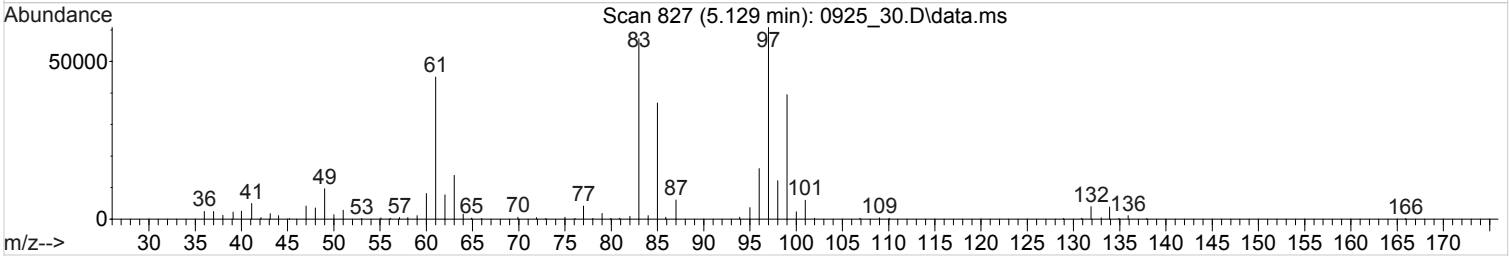


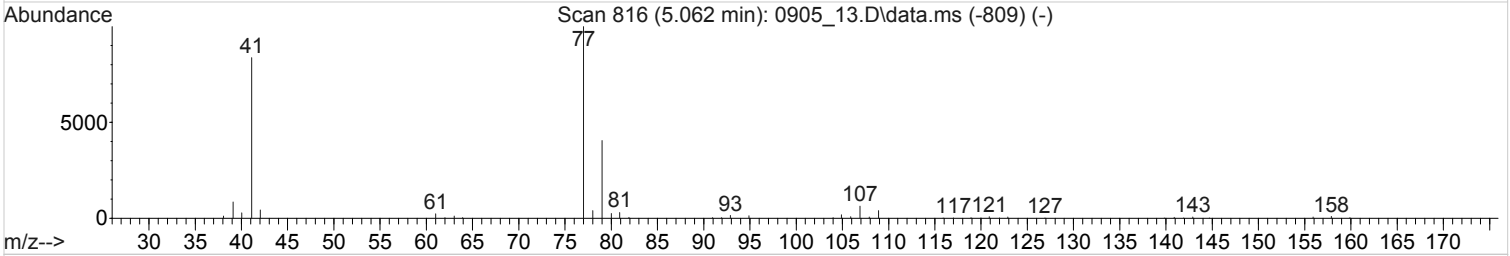
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_30.D
Acq On : 25 Sep 2018 7:51 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 30 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:27 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration







TIC: 0925_30.D\data.ms

(56) 8260-2-BROMO-1-CHLOROPROPANE (I)

5.129min (+0.067) 40.0000000 ppb

Qvalue = 79

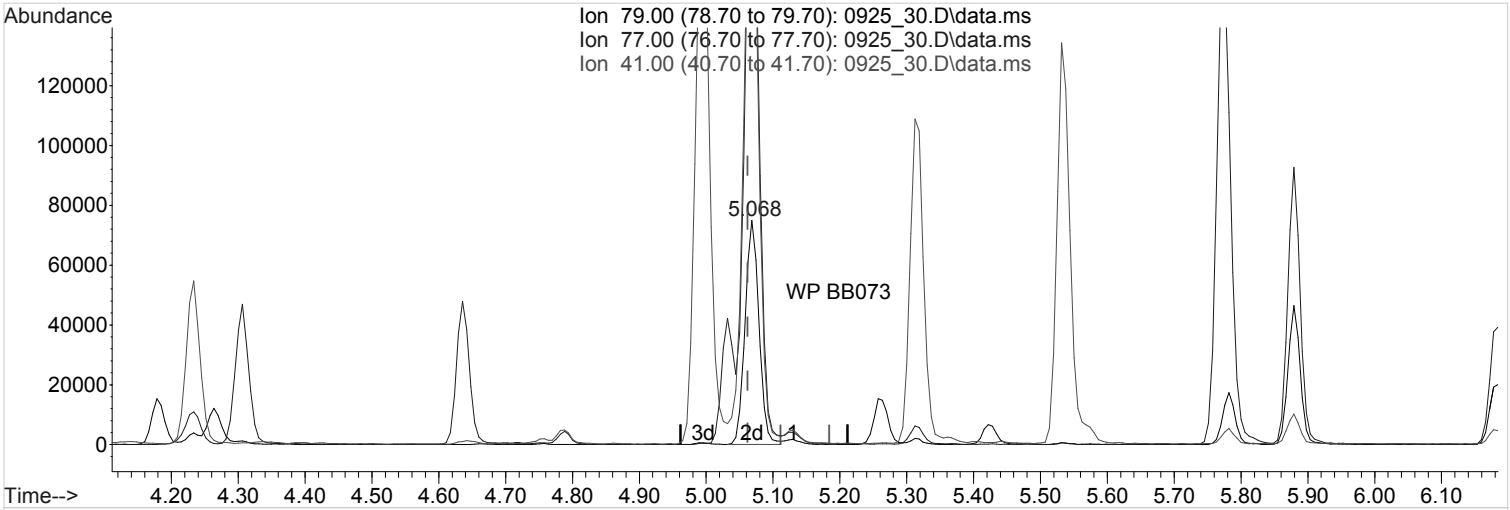
response 2815

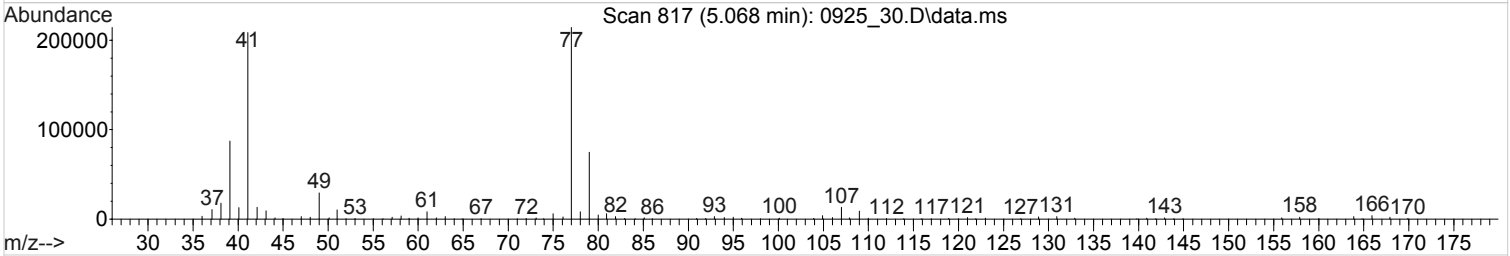
Ion	Exp%	Act%
79.00	100	100
77.00	290.50	235.60
41.00	226.10	244.80
0.00	0.00	0.00

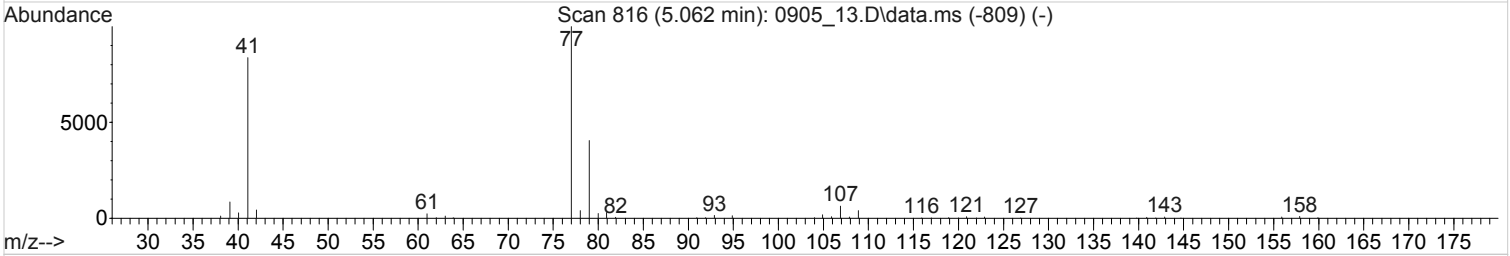
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\092518\
Data File : 0925_30.D
Acq On : 25 Sep 2018 7:51 pm
Operator : 605
Sample : MSD 1x WG1170992 L1028256-01
Misc : water
ALS Vial : 30 Sample Multiplier: 1
InstName : VOCMS25

Quant Time: Sep 26 17:28:27 2018
Quant Method : C:\msdchem\1\methods\V825I05R.M
Quant Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
QLast Update : Thu Sep 06 14:18:48 2018
Response via : Initial Calibration







TIC: 0925_30.D\data.ms

(56) 8260-2-BROMO-1-CHLOROPROPANE (I)

5.068min (+0.006) 40.0000000 ppb m

response 108773

Ion	Exp%	Act%
79.00	100	100
77.00	290.50	6.10#
41.00	226.10	6.34#
0.00	0.00	0.00

8260 Water VOCs Benchsheet

Batch: WG1170992

Analyst: ADM925 **40mLVOAVial Lot#:** 38292 **Batch Date/Time:** 09/25/18 12:03-12:09 **Prep End Date/Time:** 09/25/18 13:13 **SOP:** 330363 **Method:** 8260

ICV Standard: 18I25461 Amt. Used: 2.50 µL Exp. Date:10/02/18 **LCS/D/MS/D Standard:** 18I25461 Amt. Used: 2.50 µL Exp. Date:10/02/18
Internal Standard/Surrogate: 18G31464 Amt. Used: 1 µL Exp. Date:01/18/19

Sample Number	Prep Flags	Dilution Factor	Sample Vol Used (mL)	Final Volume (mL)	pH	Collection Date	Review Analyst	Review Date	Sample Comments
BLANK		1	5	5	7		KMC697	09/26/18 17:34:18	
LCS		1	5	5	7		KMC697	09/26/18 17:34:18	
LCSD		1	5	5	7		KMC697	09/26/18 17:34:18	
MS(L1028256-01)		1	5	5	<2		KMC697	09/26/18 17:34:18	
MS(L1028028-12)		1	5	5	<2		KMC697	09/26/18 17:34:18	
MSD(L1028256-01)		1	5	5	<2		KMC697	09/26/18 17:34:18	
MSD(L1028028-12)		1	5	5	<2		KMC697	09/26/18 17:34:18	
1. L1025149-12	G2	1	5	5	<2	09/07/18 00:00	KMC697	09/26/18 17:34:18	Use 1 of the TBs currently labeled on -11. Added per CW. AV 9/24
2. L1025149-13	G2	1	5	5	<2	09/07/18 00:00	KMC697	09/26/18 17:34:18	Use 1 of the TBs currently labeled on -11. Added per CW. AV 9/24
3. L1028028-12	G2	1	5	5	<2	09/19/18 10:25	KMC697	09/26/18 17:34:18	ms/msd
4. L1028049-01		1	5	5	<2	09/20/18 15:45	KMC697	09/26/18 17:34:18	
5. L1028049-02		1	5	5	~7	09/20/18 13:35	KMC697	09/26/18 17:34:18	
6. L1028049-03		1	5	5	~7	09/20/18 14:25	KMC697	09/26/18 17:34:18	
7. L1028049-04		1	5	5	~7	09/20/18 15:15	KMC697	09/26/18 17:34:18	
8. L1028049-05		1	5	5	<2	09/20/18 12:45	KMC697	09/26/18 17:34:18	
9. L1028049-06		1	5	5	<2	09/20/18 11:25	KMC697	09/26/18 17:34:18	
10. L1028049-07		1	5	5	<2	09/20/18 12:05	KMC697	09/26/18 17:34:18	
11. L1028049-08		1	5	5	<2	09/20/18 10:45	KMC697	09/26/18 17:34:18	
12. L1028256-01		1	5	5	<2	09/20/18 11:50	KMC697	09/26/18 17:34:18	ms/msd
13. L1028256-02		1	5	5	<2	09/20/18 14:50	KMC697	09/26/18 17:34:18	
14. L1028256-03		1	5	5	<2	09/21/18 10:32	KMC697	09/26/18 17:34:18	
15. L1028256-04		1	5	5	<2	09/21/18 08:45	KMC697	09/26/18 17:34:18	
16. L1028256-05		1	5	5	<2	09/20/18 11:55	KMC697	09/26/18 17:34:18	
17. L1028268-01	G2	1	5	5	<2	09/21/18 09:09	KMC697	09/26/18 17:34:18	
18. L1028268-02	G2	1	5	5	<2	09/21/18 09:25	KMC697	09/26/18 17:34:18	
19. L1028334-01		1	5	5	<2	09/11/18 14:03	KMC697	09/26/18 17:34:18	Relogged from L1025586-04. AV 9/24
20. L1028394-01		1	5	5	<2	09/20/18 12:00	KMC697	09/26/18 17:34:18	

Comments:

Reviewed By:KMC697 on 09/26/18 17:34:18

1 Cp
2 Tc
3 Ss
4 Cn
5 Su
6 Gl
7 Al
8 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

COD	Coefficient of Determination.
Corr.	Correlation Coefficient.
Incpt	Intercept.
Mass	Mass of parameter.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RRF	Relative Response Factor.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Slope	Slope of calibration curve.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

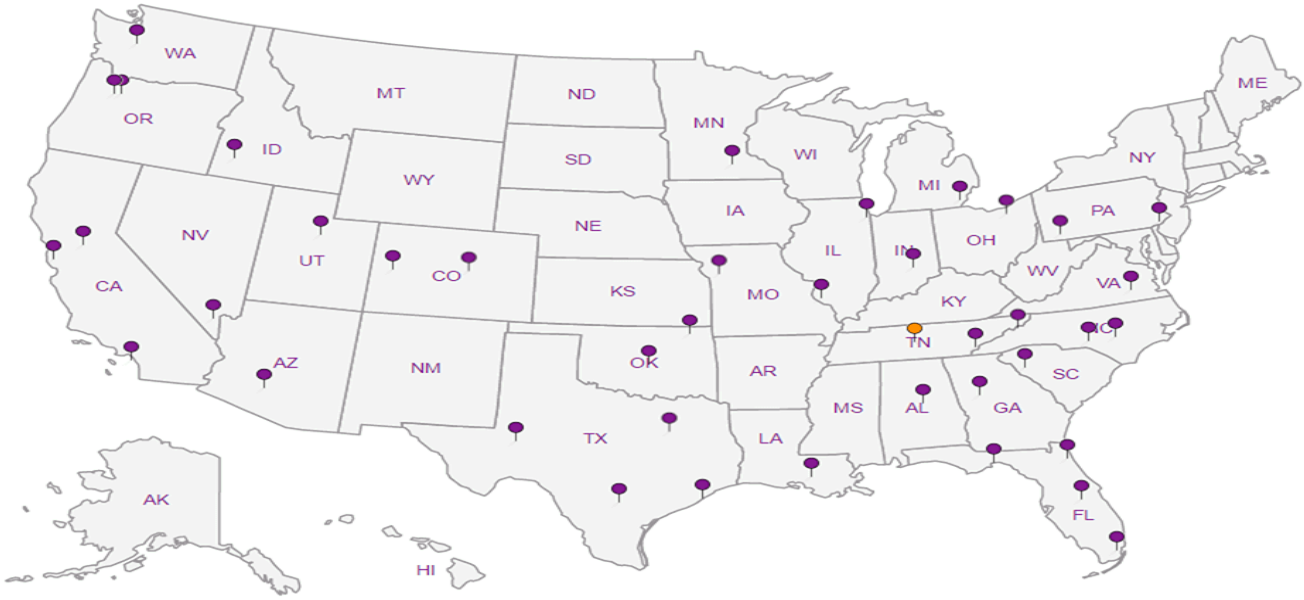
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



LaBella Associates, P.C.

300 State Street, Suite 201
Rochester, NY 14614

Billing Information:
Attn: Accounts Payable
300 State St., Ste. 201
Rochester, NY 14614

Report to: adaSilva@Labellapc.com
mpelychaty@Labellapc.com

Email To: adaSilva@Labellapc.com
mpelychaty@Labellapc.com

Project Description: Former Photech Imaging - GW Sampling

City/State Collected: Rochester/N.Y.

Phone: 585-454-6110
Fax:

Client Project # 2182451

Lab Project #

Collected by (print): Alex daSilva

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ✓ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCL VOCs	RCRA METALS	Remarks	Sample # (lab only)
RMW-4	GRAB	GW	16ft	9/20/18	1150	12	X	X	MS/MSD	-01
RMW-3		GW	9.7ft	9/20/18	1450	4	X	X		-02
RMW-9		GW	10ft	9/21/18	1032	4	X	X		-03
Well-09		GW	14ft	9/21/18	0845	4	X	X		-04
DUPE		GW	16ft	9/20/18	1155	4	X	X		-05

Chain of Custody Page ___ of ___

ESC LABORATORIES
a subsidiary of Pace Analytical
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1028256
D140

Acctnum: LABRNY
Template:
Prelogin:
TSR: 364 - T. Alan Harvill
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: (ASP) CAT B

RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking # 4361 6928 9394

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR	
	9/21/18	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 3.6 ±0	Bottles Received: 28
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/22/18	Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

LaBella
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APPENDIX 2

DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 State Street

Rochester, NY 14614

PHOTECH SITE
Aqueous Samples
SDG: L1028256
Sampled September 2018

VOLATILE ORGANICS, METALS

RMW-4	(L1028256-01)
RMW-3	(L1028256-02)
RMW-9	(L1028256-03)
WELL-09	(L1028256-04)
DUPE	(L1028256-05)

DATA ASSESSMENT

An ASP Category B data package containing analytical results for five aqueous samples was received from Labella Associates, P.C. on 30Oct17. The deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Photech Site, were identified by Chain of Custody documents and traceable through the work of ESC Lab Sciences, the laboratory contracted for analysis. Analyses, performed according to SW-846 methods, addressed determinations of volatile organics, arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. 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 NO. HW-33, Rev. #3, March 2013, Low/Medium Volatile Data Validation and SOP HW-2a, Rev. 15, Dec. 2012, ICP-AES Data Validation) were used as a technical reference.

The trichloroethene results from this project have been qualified as estimations and the selenium results have been rejected due to poor calibration performance.

The naphthalene concentration from RMW-4 and the 1,1-dichloroethane result from WELL-09 have been qualified as estimations due to high surrogate standard recoveries.

CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. 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 strict 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: _____ Date: 3/5/18

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 time of sample collection. Samples must remain chilled to 4±2°C between the time of collection and the time of analysis. Acid preserved VOC samples must be analyzed within 14 days of collection, unpreserved VOC samples within 7 days. The holding time for VOC soils is 14 days. Aqueous semivolatile organics, pesticides and PCB samples must be extracted within seven days of collection, soils within 14 days. The extracts must then be analyzed within forty days of extraction. The holding times for cyanide and mercury samples are 14 and 28 days, respectively. Metals samples must be analyzed within six months.

This sample delivery group contained five aqueous samples that were collected from the Photech site on 18Sep17. The samples were shipped to the laboratory, via FedEx, on 19Sep17 and were delivered the next morning. At the time of receipt, the cooler of samples was found to be intact and properly chilled, with a custody seal in place. A cooler temperature of 2.8°C was recorded at the time of receipt.

Proper sample preservation was documented in the field custody record and verified at the time of receipt. A pH<2 was recorded for each VOC sample at the time of analysis.

VOLATILE ORGANICS

This group of samples was analyzed for volatile organics on 25Sep18. The SW-846 holding time limitations were satisfied.

Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Trip blanks monitor 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 was 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.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence that included samples from this program. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

Calibrations

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 for VOC was performed on 05Sep18. Standards of 0.25, 0.5, 1.0, 2.0, 5.0, 25, 75, 100 and 200 µg/l were included. With the exception of trichloroethene, the standards of each analyte targeted by this program produced the required levels of instrument response and demonstrated an acceptable degree of linearity during this calibration. Trichloroethene standards, however, failed to produce the required levels of instrument response. The trichloroethene (TCE) results from this project have been qualified as estimations based on this performance.

A calibration check standard was analyzed on 25Sep18, prior to the 12-hour period of instrument operation that included samples from this program. During this check each targeted analyte demonstrated an acceptable level of instrument stability. It is noted that the response of trichloroethene remained low.

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.

Surrogate Summary Sheets were properly prepared using the laboratory's acceptance criteria. However, when compared to the ASP requirements, high recoveries were reported for the toluene-d8 additions to RMW-4 (111%) and WELL-09 (112%). The positive results reported from RMW-4 and WELL-09 have been qualified as estimations based on these indications of positive bias. The remaining surrogate additions to this group of samples were recovered successfully.

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 a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. When compared to this criteria, acceptable performance was reported for the internal standard additions to this group of samples.

Matrix Spikes

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.

RMW-4 and a sample from an unrelated program were selected for matrix spiking (MS/MSD). The entire list of targeted analytes was added to two aliquots of each of these samples. With the exception of the acetone (132%), 2-hexanone (137%) and 4-methyl-2-pentanone (139%) recoveries from RMW-4, each analyte targeted by this program demonstrated acceptable levels of measurement precision and accuracy. The positive bias indicated by the high recoveries of acetone, 2-hexanone and 4-methyl-2-pentanone warrant no concern because these analytes were not detected in RMW-4.

A pair of spiked blanks (LCS/LCSD) was also analyzed with this group of samples. These LCS samples produced acceptable recoveries of each analyte targeted by this program.

Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The 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.

A blind duplicate sample was included in this delivery group but not identified.

Reported Analytes

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Tentatively Identified Compounds (TIC) were not reported.

METALS

This group of samples was digested for mercury analysis on 24Sep18 and the digestates were analyzed on 28Sep18. Samples for ICP analysis were digested and analyzed on 25Sep18. The SW-846 holding time limitations were satisfied.

Calibrations

Calibration curves are constructed, using certified materials, to define the linear range of each analytical instrument. Beyond this range, measurements cannot be made with confidence. The calibration curve is immediately tested by analyzing an initial calibration verification standard (ICV). Continuing verifications (CCV) must bracket each group of up to ten samples. ICV and CCV recoveries must meet established criteria.

Each instrument calibration was immediately verified by the analysis of an ICV standard. Continuing calibration checks were made following each group of 10 samples. The calibration checks associated with this group of samples demonstrated acceptable levels of instrument performance and stability.

Low level calibration checks standards (CRI) also bracketed the analysis of program samples. The low level check that followed the analysis of program samples produced a high recovery of lead (148%). The selenium standard was completely unrecovered (0%). The high recovery of lead warrants no concern because lead was not detected in this group of samples. The negative selenium result reported from each program sample has been rejected.

Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Preparation blanks are carried through the digestion process with each group of samples to evaluate general laboratory technique. Calibration blanks are run periodically to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

An initial blank (ICB) was analyzed following the calibration in each analytical sequence. Additional blanks were analyzed after every ten samples (CCB) and at the end of each sequence. Preparation blanks were digested and analyzed with this group of samples. Each laboratory prepared blank was free of targeted analyte contamination exceeding the laboratory's reporting limit.

Interference Check Sample (ICS)

ICS standards are analyzed at the beginning and end of each ICP analysis sequence to verify background and interelement correction factors. The recoveries of specified analytes are measured in the presence of interfering concentrations of aluminum, calcium, magnesium and iron.

Interference check standards, ICSA and ICSAB, bracketed the analysis of program samples. The ICS performance associated with this group of samples satisfied the program acceptance criteria.

Predigestion Spikes

The recovery of spike concentrations added to samples prior to

digestion and analysis demonstrates measurement bias caused by sample matrix effects. Predigestion spikes must be recovered within control limits of 75% - 125%.

RMW-4 was selected for matrix spiking. Each targeted metal was added to two aliquots of this sample. The recoveries reported for these additions demonstrated acceptable levels of measurement precision and accuracy.

Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The results produced by 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.

Although laboratory split duplicate samples were not prepared, the MS/MSD samples that have been previously addressed demonstrated an acceptable level of measurement precision.

Laboratory Control Standard

Laboratory control samples are prepared by adding analytes to clean sand or reagent water. Analyte concentrations are then determined without interferences caused by sample matrix effects.

A pair of mercury spiked blanks (LCS/LCSD) and an LCS/LCSD pair containing each targeted ICP metal were digested and analyzed with this delivery group. The recoveries reported from each of these LCS samples satisfied the program acceptance criteria.

Serial Dilution Sample

Possible matrix effects are verified by the process of serial dilutions. Samples are diluted 1:5 to reduce matrix contributions that might bias measurements. The original sample result, and the corrected concentration of the diluted sample are compared. Sample data is qualified if the original concentrations are not recovered within 10%. Analytes with initial concentrations below 50 times the reporting limit are not considered.

RMW-4 was prepared as a serial dilution. Of the metals present in this sample, at a concentrations exceeding fifty times IDL, none differed from the diluted results by more than 10%. The ASP acceptance criteria was satisfied.

SUMMARY OF QUALIFIED DATA

PHOTECH SITE

SAMPLED: September 2018

		CALIBRATE TCE	SURROGATE NAPHTHALENE	SURROGATE 1,1-DICHLOROETHANE	CALIBRATE SELENIUM
RMW-4	(L1028256-01)	1.0UJ	12.5J		REJECT
RMW-3	(L1028256-02)	8.74J			REJECT
RMW-9	(L1028256-03)	1.0UJ			REJECT
WELL-09	(L1028256-04)	1.0UJ		6.57J	REJECT
DUPE	(L1028256-05)	1.0UJ			REJECT

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_26	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 18:32
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 18:32
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.49	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	2.18	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	3.30	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.36	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.89	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	5.78	ND		0.384	1.00
2-Hexanone	591-78-6	5.54	ND		3.82	10.0
Isopropylbenzene	98-82-8	6.40	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	2.49	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.47	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	9.26	12.5 J		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	4.79	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

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SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	0925_26	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 18:32
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 18:32
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.43	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.95	~~ND~~ UJ		0.398	1.00
Trichlorofluoromethane	75-69-4	1.89	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	6.18	ND		0.341	1.00
m&p-Xylenes	1330-20-7	5.89	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	7.15	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	0925_18	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 15:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 15:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.46	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	0925_18	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 15:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 15:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.94	8.74	J	0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	0925_19	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:15
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:15
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.48	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	11.6		0.259	1.00
1,2-Dichloroethane	107-06-2	3.72	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.16	2.62		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.46	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	0925_19	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:15
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:15
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	0	~~ND~~ UJ		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	1.53	79.2		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	0925_20	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:35
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:35
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	6.57	J	0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	2.15	1.93		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.47	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.04	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	0925_20	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:35
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:35
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.42	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.95	~~ND~~ UJ		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	0925_21	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
Acetone	67-64-1	2.47	ND		10.0	50.0
Benzene	71-43-2	3.62	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	2.18	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	3.29	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	1.34	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	2.87	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	5.79	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	6.40	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	3.45	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	2.46	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	5	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	9.26	12.2		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	4.79	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	0925_21	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	VOCMS25	**Preparation Date/Time:**	09/25/18 16:55
Analytical Batch:	WG1170992	**Analysis Date/Time:**	09/25/18 16:55
Dilution Factor:	1	**Prep Method:**	8260C
Analytical Method:	8260C	**Sample Vol Used:**	5 mL
Matrix:	GW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		*ug/l*	*ug/l*
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	3.95	~~ND~~ UJ		0.398	1.00
Trichlorofluoromethane	75-69-4	1.87	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	6.18	ND		0.341	1.00
m&p-Xylenes	1330-20-7	5.89	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
1,2,4-Trimethylbenzene	95-63-6	7.15	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00

2A-OR

SURROGATE RECOVERY

Analytical Method: 8260C **SDG:** L1028256
Matrix: GW

Sample ID	ESC Sample ID	Instrument	File ID	DMC-1	DMC-2	DMC-3	DMC-4	TOT Out
				% Rec.	% Rec.	% Rec.	% Rec.	
RMW-4	L1028256-01	VOCMS25	0925_26	111	110 ✓	106 ✓	94.1 ✓	0
RMW-3	L1028256-02	VOCMS25	0925_18	110	104	103	97.3	0
RMW-9	L1028256-03	VOCMS25	0925_19	110	105	99.1	103	0
WELL-09	L1028256-04	VOCMS25	0925_20	112	104	98.5	95.1	0
DUPE	L1028256-05	VOCMS25	0925_21	108	105	101	103	0
MS	R3344826-6	VOCMS25	0925_29	110	99.6	100	99.9	0
MSD	R3344826-7	VOCMS25	0925_30	110	104	99.4	99.8	0
MS	R3344826-4	VOCMS25	0925_27	115	104	99.6	102	0
MSD	R3344826-5	VOCMS25	0925_28	105	104	107	102	0
BLANK	R3344826-3	VOCMS25	0925_05	102	109	95.1	103	0
LCS	R3344826-1	VOCMS25	0925_02LCS	99.7	106	98.9	103	0
LCSD	R3344826-2	VOCMS25	0925_03	113	98.6	94.5	106	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	Toluene-d8	~~80.0 - 120~~ 88-110
DMC-2	Dibromofluoromethane	75.0 - 120
DMC-3	a,a,a-Trifluorotoluene	80.0 - 120
DMC-4	4-Bromofluorobenzene	~~77.0 - 12~~6 86-115

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

ONE LAB. NATIONWIDE.

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-4
R3344826-5

MS Sample / File ID:	R3344826-4 / 0925_27	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-5 / 0925_28	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028028-12 / 0925_25	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%
Acetone	125	U	145	149	116	119	1	10.0 - 160	2.76	35
Benzene	25.0	U	23.1	23.3	92.2	93.3	1	17.0 - 158	1.13	27
Bromodichloromethane	25.0	U	24.2	24.4	96.7	97.6	1	31.0 - 150	0.852	27
Bromochloromethane	25.0	U	25.2	25.1	101	100	1	38.0 - 142	0.537	26
Bromoform	25.0	U	22.9	23.3	91.4	93.2	1	29.0 - 150	1.91	29
Bromomethane	25.0	U	18.3	17.9	73.2	71.7	1	10.0 - 160	2.00	38
n-Butylbenzene	25.0	U	24.4	24.1	97.7	96.3	1	31.0 - 150	1.41	30
sec-Butylbenzene	25.0	U	26.1	25.7	105	103	1	33.0 - 155	1.72	29
tert-Butylbenzene	25.0	U	29.6	28.6	118	114	1	34.0 - 153	3.33	28
Carbon disulfide	25.0	U	21.2	20.6	84.9	82.3	1	10.0 - 156	3.04	28
Carbon tetrachloride	25.0	U	24.9	24.6	99.7	98.5	1	23.0 - 159	1.18	28
Chlorobenzene	25.0	U	29.0	27.3	116	109	1	33.0 - 152	6.11	27
Chlorodibromomethane	25.0	U	27.3	26.3	109	105	1	37.0 - 149	3.68	27
Chloroethane	25.0	U	18.9	18.6	75.4	74.3	1	10.0 - 160	1.42	30
Chloroform	25.0	U	24.2	24.6	96.9	98.3	1	29.0 - 154	1.42	28
Chloromethane	25.0	U	21.0	21.1	84.1	84.3	1	10.0 - 160	0.188	29
Cyclohexane	25.0	U	24.8	26.1	99.3	104	1	19.0 - 160	4.86	23
1,2-Dibromo-3-Chloropropane	25.0	U	24.6	23.8	98.4	95.0	1	22.0 - 151	3.48	34
1,2-Dibromoethane	25.0	U	26.8	26.2	107	105	1	34.0 - 147	2.56	27
1,2-Dichlorobenzene	25.0	U	26.0	25.9	104	104	1	34.0 - 149	0.202	28
1,3-Dichlorobenzene	25.0	U	25.7	23.8	103	95.3	1	36.0 - 146	7.49	27
1,4-Dichlorobenzene	25.0	U	25.6	25.1	102	101	1	35.0 - 142	1.82	27
Dichlorodifluoromethane	25.0	U	25.7	24.2	103	96.8	1	10.0 - 160	6.19	29
1,1-Dichloroethane	25.0	0.519	25.1	24.6	98.1	96.2	1	25.0 - 158	1.93	27
1,2-Dichloroethane	25.0	U	24.7	25.1	98.8	100	1	29.0 - 151	1.60	27
1,1-Dichloroethene	25.0	0.893	27.5	26.6	106	103	1	11.0 - 160	3.47	29
cis-1,2-Dichloroethene	25.0	0.310	24.3	24.8	95.8	97.9	1	10.0 - 160	2.17	27
trans-1,2-Dichloroethene	25.0	U	24.8	23.8	99.3	95.0	1	17.0 - 153	4.45	27
1,2-Dichloropropane	25.0	U	24.8	24.3	99.2	97.0	1	30.0 - 156	2.20	27
cis-1,3-Dichloropropene	25.0	U	24.4	24.0	97.7	96.2	1	34.0 - 149	1.54	28
trans-1,3-Dichloropropene	25.0	U	26.4	24.7	106	98.9	1	32.0 - 149	6.68	28
Ethylbenzene	25.0	U	29.8	28.0	119	112	1	30.0 - 155	6.23	27
2-Hexanone	125	U	149	157	119	126	1	21.0 - 160	5.68	29
Isopropylbenzene	25.0	U	25.6	25.1	103	100	1	28.0 - 157	2.16	27
p-Isopropyltoluene	25.0	U	26.5	26.2	106	105	1	30.0 - 154	1.01	29
2-Butanone (MEK)	125	U	151	155	120	124	1	10.0 - 160	2.58	32
Methyl Acetate	125	U	133	134	107	107	1	18.0 - 151	0.466	30
Methyl Cyclohexane	25.0	0.948	25.1	24.0	96.4	92.3	1	11.0 - 160	4.22	24
Methylene Chloride	25.0	U	22.0	21.3	88.0	85.3	1	23.0 - 144	3.09	28
4-Methyl-2-pentanone (MIBK)	125	U	161	151	129	121	1	29.0 - 160	6.29	29
Methyl tert-butyl ether	25.0	U	22.4	21.5	89.7	86.1	1	28.0 - 150	4.05	29
Naphthalene	25.0	U	26.9	26.4	107	106	1	12.0 - 156	1.57	35
n-Propylbenzene	25.0	U	26.1	23.3	104	93.3	1	31.0 - 154	11.2	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-4
R3344826-5

MS Sample / File ID:	R3344826-4 / 0925_27	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-5 / 0925_28	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028028-12 / 0925_25	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%
Styrene	25.0	U	23.9	25.2	95.8	101	1	33.0 - 155	5.21	28
1,1,2,2-Tetrachloroethane	25.0	U	24.1	23.3	96.3	93.3	1	33.0 - 150	3.12	28
Tetrachloroethene	25.0	U	28.2	26.3	113	105	1	10.0 - 160	7.18	27
Toluene	25.0	U	26.0	25.5	104	102	1	26.0 - 154	2.07	28
1,1,2-Trichlorotrifluoroethane	25.0	U	26.8	26.2	107	105	1	23.0 - 160	2.23	30
1,2,3-Trichlorobenzene	25.0	U	23.5	23.3	94.0	93.3	1	17.0 - 150	0.682	36
1,2,4-Trichlorobenzene	25.0	U	25.6	25.4	102	102	1	24.0 - 150	0.816	33
1,1,1-Trichloroethane	25.0	U	27.4	27.0	109	108	1	23.0 - 160	1.34	28
1,1,2-Trichloroethane	25.0	U	25.3	27.2	101	109	1	35.0 - 147	7.15	27
Trichloroethene	25.0	71.8	94.2	95.6	89.6	94.9	1	10.0 - 160	1.40	25
Trichlorofluoromethane	25.0	U	24.1	24.4	96.5	97.8	1	17.0 - 160	1.25	31
1,2,4-Trimethylbenzene	25.0	U	26.3	24.2	105	96.9	1	26.0 - 154	8.19	27
1,3,5-Trimethylbenzene	25.0	U	25.5	25.0	102	99.9	1	28.0 - 153	2.11	27
Vinyl chloride	25.0	U	23.1	23.4	92.2	93.8	1	10.0 - 160	1.68	27
o-Xylene	25.0	U	27.4	27.6	110	110	1	45.0 - 144	0.424	26
m&p-Xylenes	50.0	U	57.4	52.0	115	104	1	43.0 - 146	9.89	26

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-6
R3344826-7

MS Sample / File ID:	R3344826-6 / 0925_29	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-7 / 0925_30	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028256-01 / 0925_26	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%
Acetone	125	ND	157	165	126	132	1	10.0 - 160	4.84	35
Benzene	25.0	ND	23.6	24.0	94.2	95.8	1	17.0 - 158	1.70	27
Bromodichloromethane	25.0	ND	23.3	24.4	93.1	97.6	1	31.0 - 150	4.74	27
Bromochloromethane	25.0	ND	25.2	26.4	101	106	1	38.0 - 142	4.63	26
Bromoform	25.0	ND	23.0	23.6	92.0	94.5	1	29.0 - 150	2.63	29
Bromomethane	25.0	ND	18.8	18.4	75.1	73.4	1	10.0 - 160	2.24	38
n-Butylbenzene	25.0	ND	25.1	26.6	100	107	1	31.0 - 150	6.13	30
sec-Butylbenzene	25.0	ND	26.3	25.9	105	104	1	33.0 - 155	1.61	29
tert-Butylbenzene	25.0	ND	29.2	28.1	117	113	1	34.0 - 153	3.70	28
Carbon disulfide	25.0	ND	21.4	21.6	85.7	86.5	1	10.0 - 156	0.990	28
Carbon tetrachloride	25.0	ND	24.3	24.7	97.3	98.7	1	23.0 - 159	1.34	28
Chlorobenzene	25.0	ND	28.4	28.9	114	116	1	33.0 - 152	1.92	27
Chlorodibromomethane	25.0	ND	29.7	28.2	119	113	1	37.0 - 149	5.19	27
Chloroethane	25.0	ND	18.3	19.2	73.3	76.7	1	10.0 - 160	4.51	30
Chloroform	25.0	ND	24.3	24.2	97.3	97.0	1	29.0 - 154	0.327	28
Chloromethane	25.0	ND	21.5	21.2	86.0	84.8	1	10.0 - 160	1.34	29
Cyclohexane	25.0	ND	25.1	26.4	100	106	1	19.0 - 160	5.03	23
1,2-Dibromo-3-Chloropropane	25.0	ND	25.0	25.2	99.9	101	1	22.0 - 151	1.03	34
1,2-Dibromoethane	25.0	ND	28.8	26.5	115	106	1	34.0 - 147	8.01	27
1,2-Dichlorobenzene	25.0	ND	26.6	27.9	106	112	1	34.0 - 149	4.96	28
1,3-Dichlorobenzene	25.0	ND	26.5	26.2	106	105	1	36.0 - 146	0.955	27
1,4-Dichlorobenzene	25.0	ND	25.9	25.2	104	101	1	35.0 - 142	2.83	27
Dichlorodifluoromethane	25.0	ND	24.1	26.4	96.5	105	1	10.0 - 160	8.79	29
1,1-Dichloroethane	25.0	ND	25.2	24.5	101	97.9	1	25.0 - 158	2.91	27
1,2-Dichloroethane	25.0	ND	25.0	24.4	99.8	97.6	1	29.0 - 151	2.21	27
1,1-Dichloroethene	25.0	ND	27.9	27.5	111	110	1	11.0 - 160	1.33	29
cis-1,2-Dichloroethene	25.0	ND	24.8	26.0	99.1	104	1	10.0 - 160	5.00	27
trans-1,2-Dichloroethene	25.0	ND	24.4	25.0	97.5	99.9	1	17.0 - 153	2.45	27
1,2-Dichloropropane	25.0	ND	24.4	26.0	97.7	104	1	30.0 - 156	6.31	27
cis-1,3-Dichloropropene	25.0	ND	24.7	24.4	98.9	97.8	1	34.0 - 149	1.13	28
trans-1,3-Dichloropropene	25.0	ND	27.2	25.4	109	101	1	32.0 - 149	6.90	28
Ethylbenzene	25.0	ND	30.1	30.4	118	119	1	30.0 - 155	1.06	27
2-Hexanone	125	ND	171	154	137	123	1	21.0 - 160	10.8	29
Isopropylbenzene	25.0	ND	26.6	25.8	106	103	1	28.0 - 157	3.02	27
p-Isopropyltoluene	25.0	ND	27.4	29.4	110	118	1	30.0 - 154	6.87	29
2-Butanone (MEK)	125	ND	143	152	114	121	1	10.0 - 160	5.85	32
Methyl Acetate	125	ND	131	136	104	109	1	18.0 - 151	4.33	30
Methyl Cyclohexane	25.0	ND	23.7	24.7	94.8	98.7	1	11.0 - 160	4.06	24
Methylene Chloride	25.0	ND	22.1	22.4	88.5	89.6	1	23.0 - 144	1.25	28
4-Methyl-2-pentanone (MIBK)	125	ND	173	152	139	122	1	29.0 - 160	12.9	29
Methyl tert-butyl ether	25.0	ND	21.9	23.0	87.7	92.0	1	28.0 - 150	4.83	29
Naphthalene	25.0	12.5	40.0	43.9	110	126	1	12.0 - 156	9.40	35
n-Propylbenzene	25.0	ND	25.8	26.8	103	107	1	31.0 - 154	3.77	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-6
R3344826-7

MS Sample / File ID:	R3344826-6 / 0925_29	**SDG:**	L1028256
MSD Sample / File ID:	R3344826-7 / 0925_30	**Analytical Batch:**	WG1170992
OS Sample / File ID:	L1028256-01 / 0925_26	**Matrix:**	GW
Instrument ID:	VOCMS25		
Analytical Method:	8260C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%
Styrene	25.0	ND	24.2	25.2	96.9	101	1	33.0 - 155	3.94	28
1,1,2,2-Tetrachloroethane	25.0	ND	24.7	25.0	98.7	99.8	1	33.0 - 150	1.07	28
Tetrachloroethene	25.0	ND	29.1	27.5	116	110	1	10.0 - 160	5.62	27
Toluene	25.0	ND	28.7	28.2	112	110	1	26.0 - 154	1.95	28
1,1,2-Trichlorotrifluoroethane	25.0	ND	25.7	27.6	103	110	1	23.0 - 160	7.15	30
1,2,3-Trichlorobenzene	25.0	ND	24.7	26.7	99.0	107	1	17.0 - 150	7.67	36
1,2,4-Trichlorobenzene	25.0	ND	27.1	28.0	109	112	1	24.0 - 150	3.05	33
1,1,1-Trichloroethane	25.0	ND	26.3	26.9	105	107	1	23.0 - 160	2.14	28
1,1,2-Trichloroethane	25.0	ND	28.5	26.6	114	106	1	35.0 - 147	6.85	27
Trichloroethene	25.0	ND	25.7	24.8	103	99.0	1	10.0 - 160	3.74	25
Trichlorofluoromethane	25.0	ND	26.1	27.2	93.6	98.0	1	17.0 - 160	4.13	31
1,2,4-Trimethylbenzene	25.0	ND	26.0	25.8	104	103	1	26.0 - 154	0.638	27
1,3,5-Trimethylbenzene	25.0	ND	26.1	25.8	105	103	1	28.0 - 153	1.14	27
Vinyl chloride	25.0	ND	23.9	24.7	95.5	98.8	1	10.0 - 160	3.39	27
o-Xylene	25.0	ND	30.6	28.4	121	112	1	45.0 - 144	7.39	26
m&p-Xylenes	50.0	ND	62.4	61.8	122	121	1	43.0 - 146	0.969	26

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-1
R3344826-2

LCS Sample / File ID:	R3344826-1 / 0925_02LCS	**SDG:**	L1028256
LCSD Sample / File ID:	R3344826-2 / 0925_03	**Analytical Batch:**	WG1170992
Instrument ID:	VOCMS25	**Dilution Factor:**	1
Analytical Method:	8260C	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	%	%	%	%	%
Acetone	125	112	118	89.7	94.5	19.0 - 160	5.26	27
Benzene	25.0	21.9	22.2	87.5	88.9	70.0 - 123	1.61	20
Bromodichloromethane	25.0	22.3	22.1	89.0	88.3	75.0 - 120	0.796	20
Bromochloromethane	25.0	24.1	23.6	96.6	94.4	76.0 - 122	2.25	20
Bromoform	25.0	22.1	24.1	88.2	96.3	68.0 - 132	8.71	20
Bromomethane	25.0	21.2	20.3	84.8	81.4	10.0 - 160	4.12	25
n-Butylbenzene	25.0	21.9	22.5	87.5	90.1	73.0 - 125	2.93	20
sec-Butylbenzene	25.0	24.0	23.8	95.9	95.1	75.0 - 125	0.856	20
tert-Butylbenzene	25.0	23.7	26.4	94.6	106	76.0 - 124	11.0	20
Carbon disulfide	25.0	21.4	19.8	85.5	79.2	61.0 - 128	7.71	20
Carbon tetrachloride	25.0	24.4	21.9	97.5	87.6	68.0 - 126	10.7	20
Chlorobenzene	25.0	27.3	29.2	109	117	80.0 - 121	6.75	20
Chlorodibromomethane	25.0	26.5	27.4	106	110	77.0 - 125	3.43	20
Chloroethane	25.0	22.3	19.9	89.3	79.5	47.0 - 150	11.6	20
Chloroform	25.0	23.3	21.8	93.0	87.3	73.0 - 120	6.36	20
Chloromethane	25.0	21.4	18.6	85.5	74.4	41.0 - 142	13.9	20
Cyclohexane	25.0	24.0	22.6	95.9	90.2	71.0 - 124	6.10	20
1,2-Dibromo-3-Chloropropane	25.0	22.7	23.9	90.8	95.7	58.0 - 134	5.26	20
1,2-Dibromoethane	25.0	26.4	28.2	105	113	80.0 - 122	6.57	20
1,2-Dichlorobenzene	25.0	24.5	25.8	97.8	103	79.0 - 121	5.33	20
1,3-Dichlorobenzene	25.0	23.8	24.7	95.0	98.9	79.0 - 120	3.93	20
1,4-Dichlorobenzene	25.0	23.9	24.0	95.8	95.8	79.0 - 120	0.0691	20
Dichlorodifluoromethane	25.0	25.0	23.2	100	92.7	51.0 - 149	7.69	20
1,1-Dichloroethane	25.0	23.9	21.7	95.5	86.6	70.0 - 126	9.72	20
1,2-Dichloroethane	25.0	24.3	23.9	97.2	95.7	70.0 - 128	1.61	20
1,1-Dichloroethene	25.0	25.2	23.4	101	93.7	71.0 - 124	7.21	20
cis-1,2-Dichloroethene	25.0	22.8	22.1	91.1	88.6	73.0 - 120	2.83	20
trans-1,2-Dichloroethene	25.0	23.4	22.1	93.6	88.4	73.0 - 120	5.67	20
1,2-Dichloropropane	25.0	23.4	23.3	93.7	93.3	77.0 - 125	0.441	20
cis-1,3-Dichloropropene	25.0	23.6	24.4	94.5	97.6	80.0 - 123	3.22	20
trans-1,3-Dichloropropene	25.0	24.2	24.6	96.9	98.5	78.0 - 124	1.61	20
Ethylbenzene	25.0	27.9	28.9	112	116	79.0 - 123	3.57	20
2-Hexanone	125	150	155	120	124	67.0 - 149	3.42	20
Isopropylbenzene	25.0	23.7	23.7	94.7	95.0	76.0 - 127	0.322	20
p-Isopropyltoluene	25.0	24.0	25.3	96.1	101	76.0 - 125	5.20	20
2-Butanone (MEK)	125	149	147	119	118	44.0 - 160	1.47	20
Methyl Acetate	125	122	135	98.0	108	57.0 - 148	9.87	20
Methyl Cyclohexane	25.0	22.9	22.7	91.7	90.7	68.0 - 126	1.10	20
Methylene Chloride	25.0	22.2	21.1	88.7	84.5	67.0 - 120	4.84	20
4-Methyl-2-pentanone (MIBK)	125	154	165	123	132	68.0 - 142	6.68	20
Methyl tert-butyl ether	25.0	22.1	21.9	88.2	87.7	68.0 - 125	0.573	20
Naphthalene	25.0	23.1	23.7	92.4	94.9	54.0 - 135	2.76	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344826-1
R3344826-2

LCS Sample / File ID:	R3344826-1 / 0925_02LCS	**SDG:**	L1028256
LCSD Sample / File ID:	R3344826-2 / 0925_03	**Analytical Batch:**	WG1170992
Instrument ID:	VOCMS25	**Dilution Factor:**	1
Analytical Method:	8260C	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	*ug/l*	*ug/l*	%	%	%	%	%
n-Propylbenzene	25.0	22.6	25.4	90.3	102	77.0 - 124	11.9	20
Styrene	25.0	23.0	23.8	91.9	95.2	73.0 - 130	3.50	20
1,1,2,2-Tetrachloroethane	25.0	20.2	21.4	80.7	85.7	65.0 - 130	6.00	20
Tetrachloroethene	25.0	25.4	25.2	102	101	72.0 - 132	0.868	20
Toluene	25.0	23.4	25.2	93.5	101	79.0 - 120	7.50	20
1,1,2-Trichlorotrifluoroethane	25.0	25.1	23.4	100	93.7	69.0 - 132	6.82	20
1,2,3-Trichlorobenzene	25.0	20.5	20.3	82.0	81.2	50.0 - 138	1.06	20
1,2,4-Trichlorobenzene	25.0	21.2	21.3	84.7	85.1	57.0 - 137	0.473	20
1,1,1-Trichloroethane	25.0	25.5	23.1	102	92.3	73.0 - 124	9.99	20
1,1,2-Trichloroethane	25.0	25.8	27.0	103	108	80.0 - 120	4.45	20
Trichloroethene	25.0	26.0	25.9	104	104	78.0 - 124	0.330	20
Trichlorofluoromethane	25.0	23.9	21.6	95.5	86.3	59.0 - 147	10.1	20
1,2,4-Trimethylbenzene	25.0	23.1	24.6	92.3	98.5	76.0 - 121	6.43	20
1,3,5-Trimethylbenzene	25.0	23.7	23.6	95.0	94.3	76.0 - 122	0.722	20
Vinyl chloride	25.0	22.8	20.6	91.2	82.4	67.0 - 131	10.2	20
o-Xylene	25.0	24.4	27.7	97.6	111	80.0 - 122	12.6	20
m&p-Xylenes	50.0	55.4	53.9	111	108	80.0 - 122	2.67	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3344826-3

ESC Sample ID:	R3344826-3	**SDG:**	L1028256
Lab File ID:	0925_05	**Preparation Date/Time:**	09/25/18 10:09
Instrument ID:	VOCMS25	**Analysis Date/Time:**	09/25/18 10:09
Analytical Batch:	WG1170992	**Dilution Factor:**	1
Analytical Method:	8260C	**Matrix:**	GW

Sample ID	ESC Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3344826-1	VOCMS25	0925_02LCS	09/25/18 09:09
LCSD	R3344826-2	VOCMS25	0925_03	09/25/18 09:29
RMW-3	L1028256-02	VOCMS25	0925_18	09/25/18 15:55
RMW-9	L1028256-03	VOCMS25	0925_19	09/25/18 16:15
WELL-09	L1028256-04	VOCMS25	0925_20	09/25/18 16:35
DUPE	L1028256-05	VOCMS25	0925_21	09/25/18 16:55
OS	L1028028-12	VOCMS25	0925_25	09/25/18 18:12
RMW-4	L1028256-01	VOCMS25	0925_26	09/25/18 18:32
RMW-4	L1028256-01	VOCMS25	0925_26	09/25/18 18:32
MS	R3344826-4	VOCMS25	0925_27	09/25/18 18:52
MSD	R3344826-5	VOCMS25	0925_28	09/25/18 19:11
MS	R3344826-6	VOCMS25	0925_29	09/25/18 19:31
MSD	R3344826-7	VOCMS25	0925_30	09/25/18 19:51

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0905_05-1	**SDG:**	L1028256
Instrument ID:	VOCMS25	**Analytical Method:**	8260C
Analysis Date/Time:	09/05/18 11:04		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	20
75	95	30	60	45
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	95
175	174	5	9	8
176	174	95	101	98
177	176	5	9	6

Sample ID	ESC Sample ID	File ID	Analysis date/time
STD-0.25	0.25	0905_08	09/05/18 13:52
STD-0.5	0.5	0905_09	09/05/18 14:12
STD-1	1	0905_10	09/05/18 14:32
STD-2	2	0905_11	09/05/18 14:52
STD-5.0	5.0	0905_12	09/05/18 15:12
STD-25	25	0905_13	09/05/18 15:32
STD-75	75	0905_14	09/05/18 15:52
STD-100	100	0905_15	09/05/18 16:12
STD-200	200	0905_16	09/05/18 16:33
SSCV	VOCMS250905180905_19-1455793	0905_19-1	09/05/18 17:33

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID: 0925_01T-1
Instrument ID: VOCMS25
Analysis Date/Time: 09/25/18 08:49
SDG: L1028256
Analytical Method: 8260C

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	22
75	95	30	60	42
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	94
175	174	5	9	7
176	174	95	101	96
177	176	5	9	6

Sample ID	ESC Sample ID	File ID	Analysis date/time
ICV	VOCMS250925180925_02-1455793	0925_02-1	09/25/18 09:09
LCS	R3344826-1	0925_02LCS	09/25/18 09:09
LCSD	R3344826-2	0925_03	09/25/18 09:29
BLANK	R3344826-3	0925_05	09/25/18 10:09
RL	VOCMS250925180925_06-1455793	0925_06-1	09/25/18 11:32
RMW-3	L1028256-02	0925_18	09/25/18 15:55
RMW-9	L1028256-03	0925_19	09/25/18 16:15
WELL-09	L1028256-04	0925_20	09/25/18 16:35
DUPE	L1028256-05	0925_21	09/25/18 16:55
OS	L1028028-12	0925_25	09/25/18 18:12
OS	L1028256-01	0925_26	09/25/18 18:32
RMW-4	L1028256-01	0925_26	09/25/18 18:32
MS	R3344826-4	0925_27	09/25/18 18:52
MSD	R3344826-5	0925_28	09/25/18 19:11
MS	R3344826-6	0925_29	09/25/18 19:31
MSD	R3344826-7	0925_30	09/25/18 19:51

8A-OR

INTERNAL STANDARD AND RETENTION TIME

SDG:	L1028256	**Analytical Method:**	8260C
Instrument ID:	VOCMS25	**Calibration Start Date:**	09/05/18 13:52
Std File:	0925_02-1	**Calibration End Date:**	09/05/18 16:33
		Std Analysis Date:	09/25/18 09:09

Sample ID	File ID	1,4-DCB		DFB		BCP		PFB	
		Response	*RT*	*Response*	*RT*	*Response*	*RT*	*Response*	*RT*
STANDARD		361316	7.45	751890	3.94	116198	5.07	510716	3.63
UPPER LIMIT		722632		1503780		232396		1021432	
LOWER LIMIT		180658		375945		58099		255358	
LCS R3344826-1 WG1170992 1x	0925_02LCS	361316	7.45	751890	3.94	116198	5.07	510716	3.63
LCSD R3344826-2 WG1170992 1x	0925_03	338932	7.45	745597	3.94	108789	5.07	541137	3.63
BLANK R3344826-3 WG1170992 1x	0925_05	375337	7.45	769959	3.94	118500	5.07	515878	3.63
L1028256-02 WG1170992 1x	0925_18	356968	7.46	748913	3.94	114256	5.07	536782	3.63
L1028256-03 WG1170992 1x	0925_19	355421	7.46	728040	3.94	112331	5.07	519316	3.63
L1028256-04 WG1170992 1x	0925_20	354183	7.46	739232	3.94	109702	5.07	511179	3.63
L1028256-05 WG1170992 1x	0925_21	335267	7.46	747517	3.95	115717	5.07	527913	3.64
OS L1028028-12 WG1170992 1x	0925_25	375070	7.46	759012	3.95	114714	5.07	523732	3.64
OS L1028256-01 WG1170992 1x	0925_26	416747	7.46	794603	3.95	127513	5.07	541946	3.64
L1028256-01 WG1170992 1x	0925_26	416747	7.46	794603	3.95	127513	5.07	541946	3.64
MS R3344826-4 WG1170992 1x	0925_27	349444	7.46	704285	3.94	111676	5.07	495013	3.63
MSD R3344826-5 WG1170992 1x	0925_28	360942	7.46	707509	3.94	113640	5.07	506430	3.63
MS R3344826-6 WG1170992 1x	0925_29	355415	7.46	721676	3.94	107590	5.07	498039	3.63
MSD R3344826-7 WG1170992 1x	0925_30	341832	7.46	680224	3.94	108773	5.07	490001	3.63

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4 DFB - 8260-1,4-DIFLUOROBENZENE
BCP - 8260-2-BROMO-1-CHLOROPROPANE PFB - 8260-PENTAFLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180925122940	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:29
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	29.5		6.50	10.0
Barium	7440-39-3	9.60		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	~~ND~~ R		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-4

ESC Sample ID:	L1028256-01	**SDG:**	L1028256
Client Sample ID:	RMW-4	**Collected Date/Time:**	09/20/18 11:50
Lab File ID:	20180928112819	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:28
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):		**Final Wt/Vol:**	30.0 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	20180925130035	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:00
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		6.50	10.0
Barium	7440-39-3	51.7		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	~~ND~~ R		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-3

ESC Sample ID:	L1028256-02	**SDG:**	L1028256
Client Sample ID:	RMW-3	**Collected Date/Time:**	09/20/18 14:50
Lab File ID:	20180928114031	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:40
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):		**Final Wt/Vol:**	30.0 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	20180925130321	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:03
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		6.50	10.0
Barium	7440-39-3	97.8		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	~~ND~~ R		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
RMW-9

ESC Sample ID:	L1028256-03	**SDG:**	L1028256
Client Sample ID:	RMW-9	**Collected Date/Time:**	09/21/18 10:32
Lab File ID:	20180928114258	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:42
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):		**Final Wt/Vol:**	30.0 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	20180925130607	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:06
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	ND		6.50	10.0
Barium	7440-39-3	45.5		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	~~ND~~ R		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WELL-09

ESC Sample ID:	L1028256-04	**SDG:**	L1028256
Client Sample ID:	WELL-09	**Collected Date/Time:**	09/21/18 08:45
Lab File ID:	20180928114524	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:45
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):		**Final Wt/Vol:**	30.0 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	20180925130855	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:45
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 13:08
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	30.6		6.50	10.0
Barium	7440-39-3	5.65		1.70	5.00
Cadmium	7440-43-9	ND		0.700	2.00
Chromium	7440-47-3	ND		1.40	10.0
Lead	7439-92-1	ND		1.90	5.00
Selenium	7782-49-2	~~ND~~ R		7.40	10.0
Silver	7440-22-4	ND		2.80	5.00

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
DUPE

ESC Sample ID:	L1028256-05	**SDG:**	L1028256
Client Sample ID:	DUPE	**Collected Date/Time:**	09/20/18 11:55
Lab File ID:	20180928114752	**Received Date/Time:**	09/22/18 08:45
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:45
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:47
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):		**Final Wt/Vol:**	30.0 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	ND		0.0490	0.200

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13
Concentration Units:	mg/l		

	ICV				ICVLL				CCV			
Sample ID:	ICP130925180941-2				ICP130925180952-2				ICP130925181212-2			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ARSENIC	1	0.9653521	96.50	0.896000	0.01	0.01008443	101	70.200000	1	1.0096	101	1.290000
BARIUM	1	1.027663	103	0.139000	0.0050	0.005338363	107	2.860000	0.50	0.5089495	102	0.284000
CADMIUM	1	0.9925033	99.30	0.182000	0.0020	0.001717181	85.90	19.700000	0.50	0.4994124	99.90	0.213000
CHROMIUM	1	0.9991224	99.90	0.404000	0.01	0.0100127	100	7.280000	1	1.010668	101	0.411000
LEAD	1	0.9926386	99.30	0.325000	0.0050	0.005005193	100	45.400000	0.50	0.4991884	99.80	1.130000
SELENIUM	1	0.9798715	98	0.868000	0.01	0.007467689	74.70	151.000000	1	0.9832672	98.30	2.610000
SILVER	1	0.9775499	97.80	0.094600	0.0050	0.005007763	100	9.700000	0.50	0.4889042	97.80	0.272000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCV Limits: 90 - 110 CCVLL Limits: 70 - 130

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13
Concentration Units:	mg/l		

	CCV				CCV				CCVLL			
Sample ID:	ICP130925181249				ICP130925181325				ICP130925181348-2			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ARSENIC	1	1.017136	102	0.427000	1	1.013593	101	0.112000	0.01	0.01076691	108	13.300000
BARIUM	0.50	0.5087063	102	0.253000	0.50	0.5085206	102	0.303000	0.0050	0.005418526	108	1.100000
CADMIUM	0.50	0.497808	99.60	0.358000	0.50	0.4993538	99.90	0.182000	0.0020	0.001551583	77.60	11.200000
CHROMIUM	1	1.010102	101	0.073400	1	1.01302	101	0.331000	0.01	0.01033111	103	6.930000
LEAD	0.50	0.499924	100	0.552000	0.50	0.5045607	101	0.144000	0.0050	0.007420245	148	38.400000
SELENIUM	1	1.000213	100	0.888000	1	0.9845507	98.50	1.730000	0.01	-0.005149632	0	206.000000
SILVER	0.50	0.4890387	97.80	0.177000	0.50	0.4906026	98.10	0.231000	0.0050	0.005127309	103	16.500000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCV Limits: 90 - 110 CCVLL Limits: 70 - 130

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13
Concentration Units:	mg/l		

CCVLL

Sample ID: ICP130925181407-2

Analyte	True	Found	%R	%RSD
ARSENIC	0.01	0.007058503	70.60	111.000000
BARIUM	0.0050	0.005040508	101	9.460000
CADMIUM	0.0020	0.001608429	80.40	26.800000
CHROMIUM	0.01	0.009344286	93.40	6.600000
LEAD	0.0050	0.005145512	103	17.600000
SELENIUM	0.01	0.008260789	82.60	40.100000
SILVER	0.0050	0.004764667	95.30	2.670000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCV Limits: 90 - 110 CCVLL Limits: 70 - 130

3-IN

BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20180925094433-2		20180925121525-2		20180925122138		20180925125155	
Analyte	mg/l		mg/l		mg/l		mg/l	
ARSENIC	-0.003200317	U	0.007510844	U	ND		-0.003573566	U
BARIUM	-0.0001221891	U	-0.0004328221	U	ND		0.000008278435	U
CADMIUM	-0.0002897999	U	-0.0004702492	U	ND		-0.0001633401	U
CHROMIUM	0.0007181058	U	0.0004873887	U	ND		0.0007519114	U
LEAD	0.001570207	U	-0.001657701	U	ND		0.0006344326	U
SELENIUM	-0.01149915	U	-0.02033162	U	ND		-0.009110148	U
SILVER	0.0003900013	U	-0.0004691841	U	ND		0.0005228268	U

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3344895-1

ESC Sample ID:	R3344895-1	**SDG:**	L1028256
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20180925122138	**Received Date/Time:**	
Instrument ID:	ICP13	**Preparation Date/Time:**	09/25/18 07:43
Analytical Batch:	WG1170427	**Analysis Date/Time:**	09/25/18 12:21
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010C	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Arsenic	7440-38-2	U		6.50	10.0
Barium	7440-39-3	U		1.70	5.00
Cadmium	7440-43-9	U		0.700	2.00
Chromium	7440-47-3	U		1.40	10.0
Lead	7439-92-1	U		1.90	5.00
Selenium	7782-49-2	U		7.40	10.0
Silver	7440-22-4	U		2.80	5.00

3-IN

BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/25/18 09:19
Instrument ID:	ICP13	**Calibration (end) date/time:**	09/25/18 09:38
Analytical Method:	6010C	**Analytical Run:**	092518ICP13

	Sample ID:	**CCB Result**	**CCB Qual**
	File ID:	20180925132808	
Analyte		mg/l	
ARSENIC		0.002953834	U
BARIUM		-0.0003013687	U
CADMIUM		-0.0005623109	U
CHROMIUM		0.0003997025	U
LEAD		-0.00149562	U
SELENIUM		-0.01615926	U
SILVER		0.0003735213	U

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Date:**	09/25/18 10:03
Instrument Run:	092518ICP13		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	502.0835	100	500	503.5302	101
ANTIMONY	0	-0.005304535		0.50	0.5004786	100
ARSENIC	0	-0.04209281		0.50	0.4659808	93.20
BARIUM	0	0.002190955		0.50	0.4946687	98.90
BERYLLIUM	0	0.00002534815		0.50	0.4917634	98.40
BORON	0	-0.1140817		1	0.8863283	88.60
CADMIUM	0	0.0000564461		1	1.035831	104
CALCIUM	500	500.8576	100	500	501.8091	100
CERIUM	0	0.3439768		0	0.3871136	
CHROMIUM	0	0.002086854		0.50	0.4919825	98.40
COBALT	0	-0.002492696		0.50	0.522204	104
COPPER	0	0.003324833		0.50	0.5290533	106
IRON	200	197.2701	98.60	200	198.0609	99
LANTHANUM	0	-0.004811011		0	-0.006320731	
LEAD	0	-0.03255129		1	0.9784543	97.80
LITHIUM	0	0.008986447		0	0.008932932	
MAGNESIUM	500	506.2256	101	500	507.4899	101
MANGANESE	0	0.004558789		0.50	0.495926	99.20
MOLYBDENUM	0	-0.0002925881		0.50	0.480748	96.10
NICKEL	0	-0.003226502		1	1.033258	103
PHOSPHORUS	0	-0.01508778		0	-0.01466029	
POTASSIUM	0	-0.02073136		0	-0.02914809	
SELENIUM	0	-0.02686818		0.50	0.4828054	96.60
SILICON	0	-0.002312111		1	0.9711941	97.10
SILVER	0	0.0009712783		1	1.095538	110
SODIUM	0	-0.02045438		0	-0.04835644	
STRONTIUM	0	-0.004754229		0	-0.004745638	
SULFUR	0	-0.03583872		0	-0.06629199	
THALLIUM	0	-0.02620037		0.50	0.4502903	90.10
TIN	0	-0.0008615589		0.50	0.4431175	88.60
TITANIUM	0	-0.004366733		0.50	0.4983637	99.70
VANADIUM	0	-0.02640264		0.50	0.4605412	92.10
ZINC	0	0.004472979		1	0.9193251	91.90

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1028256	**Analytical Method:**	6010C
Instrument ID:	ICP13	**Date:**	09/25/18 14:21
Instrument Run:	092518ICP13		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	499.8905	100	500	502.7562	101
ANTIMONY	0	0.004035763		0.50	0.5075787	102
ARSENIC	0	-0.04394514		0.50	0.4773837	95.50
BARIUM	0	0.002154566		0.50	0.4960565	99.20
BERYLLIUM	0	-0.00004666011		0.50	0.4904465	98.10
BORON	0	-0.1099579		1	0.9023569	90.20
CADMIUM	0	0.0004487536		1	1.041845	104
CALCIUM	500	499.8405	100	500	501.7187	100
CERIUM	0	0.3685199		0	0.3899311	
CHROMIUM	0	0.002664665		0.50	0.4973789	99.50
COBALT	0	-0.002732709		0.50	0.526086	105
COPPER	0	0.003489445		0.50	0.5304102	106
IRON	200	196.8919	98.40	200	197.7463	98.90
LANTHANUM	0	-0.004338202		0	-0.0086799	
LEAD	0	-0.03035842		1	0.9823334	98.20
LITHIUM	0	0.008986685		0	0.009345256	
MAGNESIUM	500	506.7418	101	500	509.5413	102
MANGANESE	0	0.004492358		0.50	0.4977028	99.50
MOLYBDENUM	0	-0.001021858		0.50	0.4815807	96.30
NICKEL	0	-0.003329094		1	1.039298	104
PHOSPHORUS	0	-0.007245041		0	-0.01097173	
POTASSIUM	0	0.03897791		0	0.0006740713	
SELENIUM	0	-0.03236416		0.50	0.5011159	100
SILICON	0	-0.001019133		1	0.9802184	98
SILVER	0	0.0007245846		1	1.104511	110
SODIUM	0	0.2196707		0	0.1694594	
STRONTIUM	0	-0.004710589		0	-0.004714641	
SULFUR	0	-0.06256519		0	-0.0248184	
THALLIUM	0	-0.02681168		0.50	0.4470868	89.40
TIN	0	-0.004142202		0.50	0.4445064	88.90
TITANIUM	0	-0.004429262		0.50	0.4963633	99.30
VANADIUM	0	-0.02699762		0.50	0.4629485	92.60
ZINC	0	0.003959069		1	0.9207955	92.10

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344895-5
R3344895-6

MS Sample / File ID:	R3344895-5 / 20180925123506	**SDG:**	L1028256
MSD Sample / File ID:	R3344895-6 / 20180925123743	**Analytical Batch:**	WG1170427
OS Sample / File ID:	L1028256-01 / 20180925122940	**Matrix:**	GW
Instrument ID:	ICP13		
Analytical Method:	6010C		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%
Arsenic	1000	29.5	1020	1000	99.3 ✓	97.5 ✓	1	75.0 - 125	1.73	20
Barium	1000	9.60	1050	1020	104	101	1	75.0 - 125	2.36	20
Cadmium	1000	ND	1010	987	101	98.7	1	75.0 - 125	2.54	20
Chromium	1000	ND	1010	985	100	98.1	1	75.0 - 125	2.07	20
Lead	1000	ND	1020	1000	102	99.8	1	75.0 - 125	2.09	20
Selenium	1000	ND	1020	1010	102	101	1	75.0 - 125	1.60	20
Silver	200	ND	198	193	99.0	96.5	1	75.0 - 125	2.55	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ONE LAB. NATIONWIDE.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3344895-2
R3344895-3

LCS Sample / File ID:	R3344895-2 / 20180925122415	**SDG:**	L1028256
LCSD Sample / File ID:	R3344895-3 / 20180925122651	**Analytical Batch:**	WG1170427
Instrument ID:	ICP13	**Dilution Factor:**	1
Analytical Method:	6010C	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	%	%	%	%	%
Arsenic	1000	988	990	98.8	99.0	80.0 - 120	0.177	20
Barium	1000	1050	1060	105	106	80.0 - 120	0.726	20
Cadmium	1000	1000	1010	100	101	80.0 - 120	0.724	20
Chromium	1000	1010	1020	101	102	80.0 - 120	1.52	20
Lead	1000	1010	1020	101	102	80.0 - 120	0.564	20
Selenium	1000	1000	1000	100	100	80.0 - 120	0.256	20
Silver	200	196	199	97.8	99.7	80.0 - 120	1.91	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ONE LAB. NATIONWIDE.

ICP AND ICP/MS
SERIAL DILUTIONS
L1028256-01,02,03,04,05

SAMPLE NO.:
R3344895-4

SD Sample / File ID:	R3344895-4 / 20180925123230	**SDG:**	L1028256
OS Sample / File ID:	L1028256-01 / 20180925122940	**Analytical Batch:**	WG1170427
Lab File ID:	20180925123230	**Dilution Factor:**	5
Instrument ID:	ICP13	**Matrix:**	GW
Analytical Method:	6010C		

Analyte	OS Result	SD Result	RPD	RPD Limits
	ug/l	*ug/l*	%	%
Arsenic	29.5	ND	0.000	10
Barium	9.60	9.46	1.47	10
Cadmium	ND	ND	0.000	10
Chromium	ND	ND	0.000	10
Lead	ND	ND	0.000	10
Selenium	ND	ND	0.000	10
Silver	ND	ND	0.000	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W
Concentration Units:	mg/l		

	ICV				ICVLL				CCVLL			
Sample ID:	CVAA50928180724				CVAA50928180734				CVAA50928181034			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
MERCURY	0.0030	0.003091	103 ✓	0.192000	0.0002	0.0002340	117 ✓	1.360000	0.0002	0.0002077	104 ✓	0.230000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCVLL Limits: 70 - 130 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W
Concentration Units:	mg/l		

	CCV				CCV				CCV			
Sample ID:	CVAA50928181101				CVAA50928181130-2				CVAA50928181200			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
MERCURY	0.0025	0.0026303	105 ✓	0.551000	0.0025	0.0026587	106 ✓	0.565000	0.0025	0.0025676	103 ✓	0.651000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCVLL Limits: 70 - 130 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W
Concentration Units:	mg/l		

CCVLL

Sample ID: CVAA50928181216

Analyte	True	Found	%R	%RSD
MERCURY	0.0002	0.0002268	113 ✓	0.322000

ICV Limits: 90 - 110 ICVLL Limits: 70 - 130 CCVLL Limits: 70 - 130 CCV Limits: 90 - 110

3-IN

BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20180928072647		20180928110351		20180928112059		20180928113311-2	
Analyte	mg/l		mg/l		mg/l		mg/l	
MERCURY	-0.00003850	U ✓	-0.00003710	U ✓	ND ✓		-0.00003300	U ✓

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SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3346032-1

ESC Sample ID:	R3346032-1	**SDG:**	L1028256
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20180928112059	**Received Date/Time:**	
Instrument ID:	CVAA5	**Preparation Date/Time:**	09/24/18 12:44
Analytical Batch:	WG1170490	**Analysis Date/Time:**	09/28/18 11:20
Dilution Factor:	1	**Prep Method:**	7470A
Analytical Method:	7470A	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	30 mL
Total Solids (%):		**Final Wt/Vol:**	30.0 mL

Analyte	CAS	Result	Qualifier	MDL	RDL
		ug/l		*ug/l*	*ug/l*
Mercury	7439-97-6	U		0.0490	0.200

3-IN

BLANKS

SDG:	L1028256	**Calibration (begin) date/time:**	09/28/18 07:02
Instrument ID:	CVAA5	**Calibration (end) date/time:**	09/28/18 07:14
Analytical Method:	7470A	**Analytical Run:**	092818CVAA5 W

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20180928120232	
Analyte	mg/l	
MERCURY	-0.00004380	U

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3346032-4
R3346032-5

MS Sample / File ID:	R3346032-4 / 20180928113538	**SDG:**	L1028256
MSD Sample / File ID:	R3346032-5 / 20180928113805	**Analytical Batch:**	WG1170490
OS Sample / File ID:	L1028256-01 / 20180928112819	**Matrix:**	GW
Instrument ID:	CVAA5		
Analytical Method:	7470A		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	%	%		%	%	%
Mercury	3.00	ND	3.31	3.08	110 ✓	103 ✓	1	75.0 - 125	7.28	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ONE LAB. NATIONWIDE.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1028256-01,02,03,04,05

SAMPLE NO.:
R3346032-2
R3346032-3

LCS Sample / File ID:	R3346032-2 / 20180928112325	**SDG:**	L1028256
LCSD Sample / File ID:	R3346032-3 / 20180928112552	**Analytical Batch:**	WG1170490
Instrument ID:	CVAA5	**Dilution Factor:**	1
Analytical Method:	7470A	**Matrix:**	GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*%*	*%*	*%*	*%*	*%*
Mercury	3.00	3.30	3.20	110	107	80.0 - 120	3.10	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

APPENDIX 3

LaBella
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300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: RMW-4

Project Name: Former Photech Imaging Site, NYSDEC ERP Site No. B00016
Location: 1000 Driving Park Ave, Rochester, New York
Project No.: 2182451
Sampled By: A. daSilva
Date: 9/20/2018
Weather: Cloudy 70°F

WELL SAMPLING INFORMATION

Well Diameter:	2 inches	Static Water Level:	11.22 ft
Depth of Well:	18.3 ft	Length of Well Screen:	10.0 ft
Measuring Point:	Black mark on PVC stick up	Depth to Top of Pump:	~16.0 ft
Pump Type:	Bladder	Tubing Type:	

FIELD PARAMETER MEASUREMENT

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Water Level (ft)		Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV			
1036	250mL/min		8.05	18.5	0.8	660	18.1	26.7	11.62		Water is milky light brown.
1045	250mL/min		8.79	17.9	0.8	1919	5.4	16.0	11.6		
1050	250mL/min		8.86	17.6	0.79	1823	4.1	-10.4	11.62		
1055	250mL/min		9.17	17.5	0.76	1116	3.4	-57.1	11.62		
1100	250mL/min		9.32	17.4	0.75	745	3.4	-83.6	11.62		
1105	250mL/min		9.46	17.4	0.74	205	4.1	-104.4	11.62		
1110	250mL/min		9.59	17.5	0.72	128	3.0	-122.0	11.62		
1115	250mL/min		9.68	17.5	0.72	109.8	3.0	-136.0	11.62		
1120	250mL/min		9.75	17.4	0.72	79.1	2.9	-142.7	11.6		
1125	250mL/min		9.77	17.3	0.73	68.8	2.8	-148.5	11.61		
1130	250mL/min		9.81	17.3	0.73	57.9	2.8	-153.8	11.62		
1135	250mL/min		9.82	17.3	0.73	44.4	2.8	-154.5	11.62		
1145	250mL/min		9.88	17.4	0.73	32.1	2.6	-162.4	11.62		Start Sampling: MS, MSD, DUPE, RWM-4

Total ~4.0 Gallons Purged

Purge Time Start: 1036 Purge Time End: 1145 Final Static Water Level: 11.62 ft

OBSERVATIONS

Recharge appears to be same as discharge (250ml/min).
MS/MSD taken.
DUPE taken.
SAMPLE: RMW-4 taken.

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300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: RMW-3

Project Name: Former Photech Imaging Site, NYSDEC ERP Site No. B00016
Location: 1000 Driving Park Ave, Rochester, New York
Project No.: 2182451
Sampled By: A. daSilva
Date: 9/20/2018
Weather: Cloudy 71°F

WELL SAMPLING INFORMATION

Well Diameter:	2 inches	Static Water Level:	9.95 ft
Depth of Well:	~16-17 feet	Length of Well Screen:	9.7 ft
Measuring Point:	Black mark on PVC stick up	Depth to Top of Pump:	~12-14 ft
Pump Type:	Bladder	Tubing Type:	

FIELD PARAMETER MEASUREMENT

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Water Level (ft)		Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV			
1425	125ml/min		6.85	19.3	1.33	35.2	10.2	36.5	10.05		Red Bacteria/Fe Particles in GW.
1430	125ml/min		6.83	19.2	1.33	NA	6.5	28.3	10.18		
1435	125ml/min		6.83	19.2	1.32	26.8	5.3	24.4	10.23		
1440	125ml/min		6.32	19.3	1.33	13.3	5.1	22.2	10.23		
1445	125ml/min		6.81	19.3	1.37	11.8	5.2	20.6	10.25		Sample @ 1450

Total ~0.84 Gallons Purged

Purge Time Start: 1425 Purge Time End: 1450 Final Static Water Level: 10.25ft

OBSERVATIONS

Sample I.D.: RMW-3

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300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
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WELL I.D.: Well-09

Project Name: Former Photech Imaging Site, NYSDEC ERP Site No. B00016
Location: 1000 Driving Park Ave, Rochester, New York
Project No.: 2182451
Sampled By: A. daSilva
Date: 9/21/2018
Weather: Windy, Partly Cloudy ~72°F

WELL SAMPLING INFORMATION

Well Diameter:	2 inches	Static Water Level:	10.44 ft
Depth of Well:	19.5 ft	Length of Well Screen:	11-16 ft BGS
Measuring Point:	Black mark on PVC stick-up	Depth to Top of Pump:	~14 ft
Pump Type:	Bladder	Tubing Type:	

FIELD PARAMETER MEASUREMENT

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Water Level (ft)		Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV			
0808	125ml/min		6.72	18.9	1.59	86.2	23.0	87.6	10.44		Water is fairly clear
0815	125ml/min		6.71	18.6	1.65	91.5	8.4	42.4	10.64		
0820	125ml/min		6.71	18.5	1.67	75.0	6.4	15.9	10.64		
0825	125ml/min		6.72	18.4	1.68	53.9	5.0	0.1	10.63		
0830	125ml/min		6.71	18.4	1.69	36.9	4.9	-6.7	10.65		
0835	125ml/min		6.71	18.3	1.70	23.3	4.4	-11.8	10.65		
0840	125ml/min		6.71	18.4	1.70	18.4	4.4	-14.9	10.64		Sample Collected @ 0845

Total 1.05 Gallons Purged

Purge Time Start: 0808 Purge Time End: 0840 Final Static Water Level: 10.64 ft

OBSERVATIONS

Sample I.D.: Well-09

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300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: RMW-9

Project Name: Former Photech Imaging Site, NYSDEC ERP Site No. B00016
Location: 1000 Driving Park Ave, Rochester, New York
Project No.: 2182451
Sampled By: A. daSilva
Date: 9/21/2018
Weather: Sunny, Windy 75°F

WELL SAMPLING INFORMATION

Well Diameter:	2 inches	Static Water Level:	14.3 ft
Depth of Well:	19 ft	Length of Well Screen:	10.0 ft
Measuring Point:	Black mark on PVC stick up	Depth to Top of Pump:	~12-13 ft
Pump Type:	Bladder	Tubing Type:	

FIELD PARAMETER MEASUREMENT

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Water Level (ft)		Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV			
0955	125ml/min		6.85	17.9	2.65	43.2	20.0	46.2	14.3		Red Bacteria/Fe Particles in GW.
1000	125ml/min		6.86	17.6	2.68	20.8	8.7	37.4	14.3		
1005	125ml/min		6.86	17.3	2.70	11.4	5.2	28.8	14.3		
1010	125ml/min		6.87	17.4	2.70	4.86	4.0	24.0	14.3		
1015	125ml/min		6.87	17.3	2.70	6.74	3.3	20.1	14.3		
1020	125ml/min		6.88	17.3	2.70	5.22	3.2	16.0	14.3		
1025	125ml/min		6.88	17.4	2.68	3.47	2.6	11.6	14.3		
1030	125ml/min		6.88	17.4	2.69	NA	2.6	8.6	14.3		Sample Collected @ 1032

Total _____ Gallons Purged

Purge Time Start: _____ Purge Time End: _____ Final Static Water Level: _____

OBSERVATIONS

Sample I.D.: RMW-9
1022- Appears as though storm is approaching. Down pour @ 1045. A. daSilva leaves Site @ 1100 to return equipment to Eco Rental and to prepare/ship samples out.

APPENDIX 4

LaBella
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300 STATE STREET, SUITE 201
ROCHESTER, NEW YORK 14614
PHONE: (585) 454-6110
FAX: (585-454-3066

SOIL COVER SYSTEM INSPECTION FORM

PROJECT NAME: FORMER PHOTECH IMAGING SITE, NYSDEC ERP SITE NO. B00016
LOCTION: 1000 DRIVING PARK AVE, ROCHESTER, NEW YORK
PROJECT NO.: 2182451
INSPECTED BY: A DaSilva
DATE: 9/21/2018
WEATHER: cloudy, ~70s °F, some showers

TYPE	OVERALL CONDITION	ANY LOCATIONS REQUIRE REPAIR OR MAINTENANCE	PHOTOS TAKEN*	COMMENTS AND/OR ACTIONS TAKEN
INSPECTION OF SOIL COVER SYSTEM	Appears to be in good condition. No disturbance or erosion observed.	YES / (NO)	(YES) / NO	None
GENERAL SITE CONDITIONS	CURRENT USE OF SITE: Site is maintaine and grass is mowed, Vacant commercial land with new street	YES / (NO)	(YES) NO	None

*PHOTOS SHOULD INCLUDE DRAINAGE OUTFALL AREAS

1000 Driving Park, 2018 Periodic Review Report NYSDEC Site No. B00016 Photos

Overall Site

RMW-3

RMW-4

RMW-9

Well-09

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APPENDIX 5

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Site Management Periodic Review Report Notice

Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **B00016**

Site Name Former Photec Imaging

Site Address: 1000 Driving Pk. Avenue Zip Code: 14613-
City/Town: Rochester
County: Monroe
Site Acreage: 12.5

Reporting Period: October 08, 2017 to October 08, 2018

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. B00016

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
090.63-001-001	City of Rochester	Ground Water Use Restriction Landuse Restriction Site Management Plan Soil Management Plan Monitoring Plan IC/EC Plan

The Environmental Easement limits site use to commercial and/or industrial uses, prohibits the use of groundwater as a potable source, requires a site management plan, and requires periodic certification that all institutional and engineering controls are in place.

The Site Management Plan addresses: excavation of soils that may contain residual contamination; soil characterization and disposal/reuse in accordance with NYSDEC regulations; the potential for vapor intrusion into any buildings developed on the site; and operation and maintenance of the components of the remedy.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
090.63-001-001	Vapor Mitigation

Periodic groundwater monitoring to determine the effectiveness of the remedy. The need for groundwater remediation and/or continued monitoring will be periodically evaluated. Groundwater monitoring will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued monitoring is no longer required.

A sub-slab mitigation system will be required for all new building construction. The SSDS shall be monitored on a periodic basis. The SSDS can be shutdown if NYSDEC determines the system is no longer required. See Note 1 below

Note 1: In accordance with the Site Management Plan (SMP) a SSDS is required during the construction of any new buildings which are constructed within an identified area of concern and designed for full or part time occupancy. The SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates the SSDS is no longer required, a proposal to discontinue the SSDS will be submitted by the property owner to the NYSDEC and NYSDOH.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. B00016

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Joseph Biondolillo at City Hall, 30 Church St., Room 300B, Rochester, NY 14614
print name print business address

am certifying as Representative of Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Joseph Biondolillo
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

11-5-2018
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, Daniel Noll (print name) at LaBella Associates 300 State Street, Rochester NY (print business address)

am certifying as a Professional Engineer for the Remedial Party (Owner or Remedial Party)

STATE OF NEW YORK
DANIEL P. NOLL
No. 081996
LICENSED PROFESSIONAL ENGINEER

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

10/29/18
Date